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SEMIOTICS, COMMUNICATION AND COGNITION



Susan Petrilli Sign Studies and Semioethics

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Susan Petrilli

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Preface

In the era of globalization, communication serves dominant production, circulation and consumption cycles. In other words, communication supports dominant sign systems and related values as they inform social reproduction in its diverse aspects. This book proposes a critical approach to communication thus described. A critique of communication necessarily involves semiotics understood as the science that studies signs and communication. Moreover, insofar as it concerns values our critique orients semiotic studies in the direction of what we propose to call "semioethics."

A crucial issue in today's globalized world is the problem of responsibility. Responsibility is now understood in ever more limited terms and is mostly reduced to "technical responsibility," responsibility circumscribed by alibis. This type of limited responsibility is functional to dominant codes and dominant emitter and receiver roles, always ready to reproduce the same codes and roles as established by mainstream social planning.

The expression "semioethics" was first introduced with co-author Augusto Ponzio as a critical response to communication today, in a world where communication is subservient to dominant social reproduction systems (Petrilli and Ponzio 2003a, 2010). In keeping with the early vocation of semiotics understood as medical *semeiotics* (or symptomatology with reference to the ancient "protosemioticians," Hippocrates and Galen), semioethics proposes to examine symptoms – in our case symptoms of worldwide social *malaise* – generated by the current communication order and its passive reproduction. Semioethics proposes a critical reading of the world-as-it-is and is committed to the search for possible remedies and improvements.

But this book does not only aim to critique the social programmes, goals and values that condition and pervade the globalized communication order today. The general science of signs itself, semiotics, is also called into question; not only when it presents itself as "quisling," "collaborationist" semiotics, that is, when it collaborates in supporting the globalized communication order, making sure it runs smoothly – with its transactions, markets, propaganda – and obtaining consensus for it; but also when in the face of growing social *malaise* the practitioners of semiotics persist in not contributing to any changes, in not acting to transform this order, to humanize it. This aspect of semiosis must also be addressed if the semiotician is to take responsibility in semioethical terms, being a question of "ethical responsibility," which is "unlimited responsibility," and not just "technical responsibility," as described above. In a semioethical framework tending toward critical and responsible awareness, the semiotician

can delineate new possible scenarios for communication which contrast the contemporary communication order, the world-as-it-is, with its limitations and short-sighted goals.

A critical discussion of semiotics today is, firstly, a critique of "decodification semiotics," of semiotics understood as *sémiologie* – a distorted derivation from the Saussurean approach to signs and semiosis. Consequently, it involves a critical discussion of structuralism, the dominant trend in the semiological approach to semiotics, and its glottocentric perspective (Cobley 2008: 198–199). In contrast to "decodification semiotics" and its various expressions, the approach advocated in the present volume following such authors, among others, as Charles S. Peirce, Victoria Welby, Charles Morris, Mikhail Bakhtin, Ferruccio Rossi-Landi and Thomas A. Sebeok, can be characterized in terms of "semiotics of interpretation" and "global semiotics." In this framework, the inferential processes of abduction are favoured over deduction and induction; the short-sighted and mystifying nature of glottocentrism is unveiled; and structures are not at all ontological, but rather instrumental to understanding.

Certain sign typologies call for reconsideration and reassessment. Reference here, among all else, is especially to the broad and articulate sign analyses carried out by Sebeok in his *Contributions to the Doctrine of Signs* (1976) as much as in more recent books, such as *Signs. An Introduction to Semiotics* (1994a). From this point of view and considering the semiotic tradition that most interests me (where Sebeok plays a major role), an unavoidable point of reference is Peirce and his tripartition of the sign into symbol, index and icon. This triad is connected to the three fundamental categories that subtend the architecture of Peircean logic and semiotics – deduction, induction and abduction. Most significant is the relation between the triad index, symbol and icon and abductive inference. The latter cuts across human experience, from basic levels of perception to the most advanced expressions of scientific discourse, and is closely associated with deduction and induction. In relation to this problematic, the role of iconicity is also investigated at the lowest levels of perception (primary iconism) and the highest levels of understanding and abductive reasoning.

In the language of semiotics, the logical process of abduction is associated with the iconic relation between the sign and its object; this is to say that the relation of resemblance allows for the translational processes necessary to interpretation and understanding. Translation is a structural part of modelling devices, the very condition even for creativity, innovation, simulation, ultimately for what with Peirce we may indicate as the "play of musement" in the human world (*CP* 6.460–465, 486; Sebeok 1981; *cf.* 15.4). Iconicity, as amply demonstrated by Peirce, carries out a decisive role in all such processes. The role of metaphor in the development of human understanding and verbal expression is also useful to remember here

(Danesi 2004; Petrilli 2012a: 191–229). And metaphor is a sign that Peirce reconducts to the icon.

We have briefly mentioned medical semeiotics from its early appearance with Hippocrates and Galen (to limit our attention to the Western tradition). This reference reveals the role that the symptom and its subclasses, as described by Peirce, can carry out in a critique of the social from a semioethic perspective.

Moreover, the Peircean distinction between symbol, index and icon can also be used to effect in the study of translation processes broadly understood – and not merely in the more familiar sense of transfer across different languages (interlingual translation). The concept of translation – more specifically "biotranslation," also "transmission" – is implemented in biosemiotics for the relation between the species and the single individual (think of the genetic code and the DNA function in the organism; see Kull and Torop 2003; Hoffmeyer 2003). With reference to Peirce's typology, the icon in particular can be implemented to advantage in this context. But, clearly, translation is not just a specific topic of semiotic inquiry like any other.

Translation does not only play a decisive role in the study of signs from a transdisciplinary perspective; nor is it of interest solely to critical semiotic research. More than this, translation is an unavoidable, even structural aspect of semiotics. And this is because the object of study of semiotics, the sign, is nothing less than a translative process in itself. More specifically, translation is pivotal in the interpretive approach to the sign. According to the latter, meaning flourishes in translative processes thanks to another sign, its interpretant. Signs becoming other signs, other than what they were becoming, are signs in the process of translation, echoing the words of another great contemporary semiotician, Floyd Merrell (1991, 2010).

Semiotics understood as global semiotics focuses on translation processes interconnecting different sign systems and different languages, which implies the language of different domains, ordinary languages and special languages. As a non specialized and non sectorial domain, one that is not closed, but rather practices an interdisciplinary approach, semiotics is a dialogical science ready to experiment different signs and sign systems and translate them into its own language. This also means to invent "Signs to Talk about Signs," as states the title of an essay by Augusto Ponzio (1985d) which, in turn, recalls the title of a renowned essay by Charles Morris, "Signs about Signs about Signs" (1948b).

A conviction driving this book is that semiotic analysis can provide a valid scientific framework with reliable analytical instruments for improvement of the human condition. As a scientific method and philosophical vision of life, semiotics is adequately equipped to contribute to the quest for social change – hence the invitation to eventual "semioticians," or if you please "semioethicians," whether by profession or simply as actors on the stage of life, to take up the challenge.

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Contents

Preface — v Acknowledgments — viii			
Introduction	n. The semioethic turn in sign studies —— xv		
Part I:	Critical semiotics, structures and models		
Chapter 1 Signposts le	eading to semioethics: on signs, values and the non-neutrality of —— 3		
1.1	The sign science and its developments —— 3		
1.2	From "decodification semiotics" to "interpretation semiotics" —— 4		
1.3	The relation between sign theory and value theory —— 5		
1.4	Significance as a lead for significs and semioethics — 7		
1.5	Humani nihil a me alienum puto —— 12		
Chapter 2	a atmostore and atmostore Barra 44		
_	o structure and structuralism —— 14		
2.1	Structuralism and its range — 14		
2.2	Structuralism, dialogism and biosemiotics —— 17		
2.3	Dialogism, communication and modelling from a global semiotic perspective —— 21		
2.4	Criteria and differences in the interpretation of structure —— 23		
2.5	Two conceptions of structure —— 28		
2.6	Binarism and triadism in structuralist approaches to sign theory —— 31		
2.7	Interpretive structures between signality and semioticity —— 32		
2.8	The role of interpretation in the structural dimensions of semiosis —— 34		
2.9	Critical structuralism, a pioneer bigradual approach to language —— 35		
2.10	Limitations and preconceptions in the generative-transformational approach —— 38		
2.11	Marxian proto-structuralism and the homological structures of verbal and nonverbal communication —— 41		
2.12	Ontologic structuralism and methodologic structuralism —— 43		
2.13	The human being, a semiotic animal, a structuralist animal —— 45		

Chapter 3	
Human mod	delling, puzzles and articulations —— 47
3.1	Three modelling systems —— 47
3.2	Form and puzzle —— 50
3.3	Analogy and homology —— 51
3.4	Levels of articulation —— 52
3.5	Puzzles in logic —— 55
3.6	Modelling and the jigsaw puzzle —— 58
3.7	Modelling and primary iconism —— 59
Part II:	Signification, logic, iconicity
Chapter 4	
	y cosmology, logic and semioethics —— 65
4.1	A universe perfused with signs —— 65
4.2	Logic and cosmology —— 66
4.3	Agape, the self and the other —— 70
4.4	Agape and abduction —— 74
4.5	Mother-sense, agapasm and logic — 76
4.6	Definitional aspects of abduction —— 83
4.7	Ubiquity of abduction, dialogism and translation —— 85
4.8	Abduction and genesis of the signified world —— 87
4.9	Abduction and linguistic experience —— 91
Chapter 5	
	nary iconism and otherness —— 94
5.1	Iconicity, similarity and critique of representation —— 94
5.2	Image and similarity —— 96
5.3	Primary iconism —— 99
5.4	Image and the pragmatic instance in primary iconism —— 103
5.5	Signifying processes and the associative capacity —— 108
Chapter 6 Signs of sile	ence —— 111
6.1	Silence and responsive understanding —— 111
6.2	Toward a typology of silence: conventionality, indexicality and
	iconicity —— 114
6.3	Silence, iconicity and listening —— 117

Part III: Understanding, significs and dialogism

Chapter 7	
Reading sig	nifics as semioethics —— 123
7.1	Prefigurations of semioethics in significs —— 123
7.2	Problems of language and terminology —— 124
7.3	Triadic highlights on meaning —— 127
7.4	Significance, modelling and translational processes —— 130
7.5	Geosemiosis, heliosemiosis, cosmosemiosis —— 135
7.6	"A new geneology of semiotics" —— 136
Chapter 8	
The objectiv	e character of misunderstanding. When the mystifications of
language ar	e the cause —— 139
8.1	Significs and the "maladies of language" —— 139
8.2	Ambiguity and the "panacea of definition" —— 140
8.3	"Critique of imagery": Toward a "significal education" —— 145
8.4	"Universal language," "common speech"
	and "common sense" —— 148
8.5	Critical common sensism and pragmaticism —— 152
8.6	Vagueness and generality —— 154
Chapter 9	
The live wor	d, value and otherness —— 158
9.1	A case of chronotopic otherness —— 158
9.2	Philosophy of language as philosophy of the live word —— 159
9.3	The problem of interpretation, the linguistic conscience and significance —— 162
9.4	The sign in sociality, the human psyche and language —— 165
9.5	The human sciences, the artistic dimension of sign systems and the critique of language —— 171
9.6	Extralocalization, responsive understanding and translation —— 178
9.7	Dialogization, translation and the properly human —— 184
Part IV:	The centrality of translation for semiotics

Chapter 10

Translational semiotics, life processes and ideology —— 189

10.1 Looking back to new frontiers in translation theory —— 189

xii	 Contents

10.2	Translation, communication and life —— 194
10.3	Communication, responsive understanding and freedom —— 199
10.4	Translatability versus untranslatability —— 200
10.5	Common speech and plurilingualism —— 206
10.6	Translation, alterity and responsibility —— 208
10.7	Translation and ideology, toward a semioethic turn in translation studies —— 211
10.8	Intermezzo. Humanism and antihumanism, responsibility without alibis and voluntarism —— 220
Chapter 11	
Translation	, iconicity and dialogism —— 226
11.1	Dialogical otherness and translation —— 226
11.2	Similarity and intertextuality in interpretation/translation —— 227
11.3	Metaphor, modelling and translation —— 229
11.4	The paradox of translation, the same other —— 230
11.5	Metamorphoses of the text in translation —— 233
11.6	Translation, signs and meaning —— 236
11.7	Communication and expressibility across languages —— 240
11.8	Translating the untranslatable. On language as absence, equivocation and silence —— 244
Chapter 12	
The semioti	ic machine, linguistic work and translation —— 248
12.1	Semiosis in the interaction between humans and machines —— 248
12.2	Biosemiosis, translation and culture —— 254
12.3	Humans and machines at work, or sociality in translation —— 259
Part V:	From global semiotics to semioethics
Chapter 13	
Extending s	semiotic horizons —— 269
13.1	Prolegomena for a theory of signs —— 269
13.2	Semiotic dimensions and new philosophical trends —— 271
13.3	Beyond the limits of nonreferential semantics —— 273
13.4	For nonsectorial pragmatics, sensible to values —— 275
13.5	Openings on global semiotics and semioethics —— 277

Chapter 14	F. Communication of the Commun		
From the me	ethodica of common speech to the methodica of		
common se	miosis —— 282		
14.1	Sidelights —— 282		
14.2	Language and social reproduction —— 283		
14.3	On language and work —— 285		
14.4	From common speech to common semiosis, the homological method —— 287		
14.5	Philosophical <i>methodica</i> , the science of signs and social reproduction —— 289		
14.6	Considering together models, meaning and values —— 292		
14.7	The correspondence between Morris and Rossi-Landi —— 294		
14.8	Language and critique, a common quest —— 295		
14.9	On language according to Rossi-Landi and Sebeok,		
	more convergences —— 297		
Chapter 15			
Global sem	iotics and the vocation for translation —— 300		
15.1	Global semiotics as intersemiotic translation —— 300		
15.2	Interpretation/translation, the criterial attribute of life —— 306		
15.3	The self is a verb: to translate —— 311		
15.4	The play of musement between reality and illusion —— 312		
15.5	The task of the translator in semiotics and philosophy —— 319		
Chapter 16			
	otomatology and semioethics —— 322		
16.1	On the dual meaning of "global communication" —— 322		
16.2	Translating today's sense of <i>malaise</i> into symptoms of the destructive character of globalization —— 326		
16.3	Communication and the other —— 330		
16.4	Translating "semiotics" – a prerogative of humanity – into responsibility —— 332		
16.5	Reading the present as the future perfect of semiosis <i>alias</i> life —— 336		
16.6	To sum up looking ahead —— 341		
Notes —— 345			
References			
Name and s	ubject index 387		

Introduction

The semioethic turn in sign studies

To introduce a topic and outline the specific perspective inevitably means to contextualize that topic on both the diachronic and synchronic levels. Contextualization is diachronical in the sense that it calls for a historical description (as brief as it may be) of how the topic was treated in the past, the authors who dealt with it, the domains and fields involved. And insofar as contextualization is also of the synchronical order, a description (again however brief) of the "current state of the art" is also necessary. With reference to the present, this involves explaining the reasons – whether theoretical, scientific, or social, etc. – for concentrating on the topic in question, such as to justify dedicating a book to it and requesting the reader's attention once that book has been released.

Our topic falls within the scope of that area of studies now commonly known as semiotics. Semiotics is a discipline or theory or doctrine of signs, as Thomas A. Sebeok preferred – not only recovering a term, "doctrine," but with it a trend, exactly the one which begins with John Locke and is developed by Kant and his continuators (Sebeok 1989a). Semiotics today is so broad - far broader than the sign science foreseen by Ferdinand de Saussure and indicated as sémiologie – that it comprises fields and domains that range from the natural world to the historicosocial world. My reference here is specifically to "global semiotics," as tagged by Sebeok (1994b, 2001; see also Danesi 2001; Danesi, Petrilli, Ponzio 2004),1 which largely intersects with biosemiotics (Sebeok 2010). But this junction does not only consist in sharing the same objects. It also involves the fact that semiotics understood as "global semiotics" has developed categories, methods and perspectives that involve biosemiotics, whether directly or indirectly. From a diachronical perspective there is a very close connection between semiotics in the terms that interest me here, that is, global semiotics, and the pioneering research conducted by that scholar, a "cryptosemiotician" in Sebeok's description, who lived between the end of the 19th century and first half of the twentieth, namely Jakob von Uexküll. This author is a good starting point for an excursus that aims to be at once historical and theoretical.

The founder of biosemiotics, the Estonian born, German biologist Jakob von Uexküll made a truly extraordinary contribution to research on signs and meaning, communication and understanding in the human world. On the basis of his scientific research in biology, which he conducted in dialogue with the general science of signs, he evidenced the species-specific character of human modelling. Modelling precedes and is the condition for human communication through verbal and nonverbal signs. According to Sebeok, Uexküll made a crucial

contribution to renewing the sign science itself, or "doctrine of signs," especially when it elects an issue like the problem of modelling as one of its main objects of research. "Biosemiotics" is at once the name of a relatively new branch of semiotics (which includes zoosemiotics and as part of the latter anthroposemiotics) and a foundational dimension of general semiotics (Favareau 2010; Petrilli 1998a: 3-14, 29-37; Petrilli and Ponzio 2013a, b).

According to J. von Uexküll, every organism enacts different inward and outward modelling processes for the construction of its *Umwelt*, its own speciesspecific world (Kull 2001). The concept of *Umwelt* concerns the species in general, whether human or nonhuman, and is also a characteristic endowment of each living organism from any given species (specifically on the concept of *Umwelt* and modelling in biosemiotics, see Kull 2010a, 2010b). But while in nonhuman living beings the Umwelt is fixed and static, on the contrary, in human beings it is programmed for change and involves each individual in its singularity (see below, 2.3, 3.1). In other words, a species-specific feature of the human Umwelt and modelling is the capacity for creativity, innovation and transformation. All this led Uexküll, the biologist specialized in zoology, physiology and ethology to move beyond the strictly specialized domain of biology and the life sciences to focus on problems of an ethical-political order in the human world. As he stated explicitly – for example, toward the conclusion in Streifzüge durch die Umwelten von Tieren und Menschen (1934) - the human Umwelt is a prerogative that endows human beings with a great advantage by comparison to other living beings. However, our human species-specific *Umwelt* is also equipped to put us at risk and in danger, for it is not only the condition for different forms of collaboration, but also for competition and conflict, to the point even of war. Most significantly, in 1920, the biologist Uexküll had already published a book titled Staatsbiologie. (Anatomie-Physiologie-Pathologie des Staates) (followed by a new enlarged edition in 1933) where the focus is mainly on sociological and political issues.

Our considerations so far mostly concern contextualization of our topic on a diachronic level (though not only this). Now we may proceed to contextualization in more specifically synchronical terms. The basic assumptions subtending this volume can be traced in semiotic inquiry as it has been developing in recent decades. This also means to keep account of developments in the biosemiotic movement (Petrilli 2012a: 85: 92). The main signpost in this sense, certainly for what concerns our present discourse, is Thomas Sebeok's research, particularly as it finds expression in such books as Signs. An Introduction to Semiotics (1994, 2nd edition 2001), The Forms of Meaning, with its important subtitle, Modelling Systems Theory and Semiotic Analysis (co-authored with Marcel Danesi, 2000), and Global Semiotics (2001). Studies on Sebeok, his lifelong semiotic inquiry and biosemiotics generally are very much alive today as testified by another volume

which has just recently appeared in this same book series, "Semiotics, Communication, Cognition," directed by Paul Cobley and Kaleyi Kull, The volume is entitled Semiotics Continues to Astonish and is entirely dedicated to Sebeok and his doctrine of signs (Cobley, Deely, Kull, and Petrilli 2011).

Though contextualized in such a broad framework as is that provided by "global semiotics" (or "semiotics of life," to use another expression introduced by Sebeok) and current developments in biosemiotics, the interests pursued in this volume are mostly relevant to so-called "anthroposemiotics." And at this point it is important to underline that in the light of a semiotic theory of modelling, semiotics, when referred to human behaviour and environments (human Umwelten), clearly cannot avoid taking a turn in the direction of ethics understood in a broad sense. (As observed, Uexküll's own research and observations prefigure this type of development).

"Ethics understood in a broad sense" includes all that which concerns human social behaviour as established by models, plans and programmes. Following Ferruccio Rossi-Landi (1972: 203–204) who defined "ideology" as "social planning", the implication is that human behaviour is oriented by social planning and ideologies which inevitably involve ethics, religion, politics, etc. The meaning of the word "ethics" as implemented in the present context is well explicated when translated with the interpretant "responsibility."

As Uexküll had already observed, the open character of human modelling favours differentiation between one individual and another. Moreover, it inevitably involves making choices, taking a stance and accepting responsibility for that stance. This process also foresees forms of dissent and conflictuality in relationships that are more or less under control, more or less violent.

"Responsibility" is understood here in terms of "responding," of "answering to/for oneself as much as to/for others." The expression "semioethics" was introduced as the title of a monograph in Italian by Augusto Ponzio and myself, Semioetica, 2003, though its history is antecendent.2 "Semioethics" indicates what we preconize as an inevitable turn in semiotic studies relatively to the human world (or more exactly, multiple human worlds, real and possible, that characterize anthroposemiosis). If this notion has an international "echo" today we owe this to Paul Cobley who commissioned us with the essay "Semioethics" for his Routledge Companion to Semiotics (2010: 150–162).

The question "Why is every single human being responsible for semiosis or life over the whole planet?" is a pivotal one in semioethics. The answer calls for a distinction between "ethics" and "semioethics": ethics does not necessarily have to provide an answer given that to be responsible for life is a moral principle, a categorical imperative; but semioethics does. Unlike ethics, semioethics involves scientific research, argumentation and interpretation. We have defined the human being as a "semiotic animal" and this also means to define it as a "semioethic animal."

Thanks to the human modelling capacity and its species-specific characteristic or syntactics:

[...] the human being is described as a "semiotic animal" – an animal capable not only of semiosis, but also of *semiotics*, that is, of using signs to reflect on signs, therefore capable of being fully aware, of acting in full awareness. [...] the expression "semiotics" refers both to the specificity of human semiosis and to the general science of signs. According to the first meaning, semiotics relates to the specific human capacity for metasemiosis. In the world of life which converges with semiosis, human semiosis is characterized as metasemiosis - that is, as the possibility of reflecting on signs. We can approach signs as objects of interpretation undistinguished from our response to them. But we can also approach signs in such a way as to suspend our responses to them laying the conditions for deliberation. Human semiosis, anthroposemiosis, presents itself as semiotic. That the homo is a rational animal means that s/he is a semiotic animal. This implies that the human being is a unique animal, that is, an animal capable of responsibility for the health of semiosis, for life, over the entire planet.

As semiotic animals human beings are capable of a global view on life and communication: consequently, the question is "What is our responsibility toward life and the universe in its globality?" (Petrilli and Ponzio 2010: 157)

The semioethical turn in semiotics proceeds from confrontation with different trends in semiotic inquiry, as part of ongoing dialogues that have merged into the material of this book ("material" alludes to content, but also to the texture or grain of discourse). This orientation is necessarily critical – not only toward other stances, trends and research itineraries in the history of semiotics, its developments and current configuration, but also toward itself. This is what is understood by the expression "Critical Semiotics" which appears in the title of the first section in this book. A whole philosophical tradition can be evoked here beginning from Kant, if this can be an element of clarification for the reader. In fact, the concept of "critique" in relation to Kant's studies has a special value that characterizes all his work. This can be described as "ethical" value as outlined above, that is, in the sense of the obligation to "answer to/for self," even before, or at least simultaneously to the request from others for reasons and justifications.

On the concept of "critique," another series of key authors figure in this particular philosophical tradition beyond Kant, signalled above à propos the expression "doctrine of signs," used by Sebeok. (Kant was also an important reference for J. von Uexküll who cited him explicitly and insistently). The key authors alluded to include Marx with his "critique of political economy" – an expression that recurs in the titles and subtitles of his works; and Mikhail Bakhtin who recovers and reformulates neo-Kantism in original terms (with special reference to the Marburg School and such prominent representatives as Cohen and Cassirer). On this account, noteworthy is Bakhtin's programmatic text (a sort of prolegomena), Toward a Philosophy of the (Responsible) Act (1920–1924, see Bakhtin 1993). Still another important author to remember in this context is the English scholar Victoria Welby with her critical and rigorous theory of language (denominated Significs); and obviously Peirce with his return to Kantianism and critique of Cartesian dogmatism. This orientation had already clearly emerged in his early writings, for example, "On a New List of Categories" (1867, in CP 1.545-549), followed by "Some Consequences of Four Incapacities" (1868, CP 5.264-317), through to "Ethics of Terminology" (1903, in CP 2.219-226), and beyond. (These titles are eloquent and particularly relevant to our present discourse).

Semiotic research as we are describing it inevitably relates signs and values, semiotics and axiology, signification and significance, meaning and sense, semantics and pragmatics. It also involves detailed analysis of the concept of "model" and confrontation with that of "structure." This, in turn, calls for a survey of the relations between modelling systems theory and a range of different positions (sometimes very different) that have gone under the name of "structuralism." And inevitably all this leads to confrontation between so-called "global semiotics" (Sebeok 2001) and semiotics, more precisely semiotics as practiced under the denomination of sémiologie as it emerged at the beginning of the twentieth century. Semiology interrupted continuity not only with semiotics as conceived by John Locke, but also with much earlier roots, the origins as traced by Sebeok in ancient medical semeiotics (symptomatology) with Hippocrates of Cos and Galen of Pergamon. All these aspects are treated in Part I of the present volume, "Critical Semiotics, Structures and Models."

Part II, "Signification, Logic, Iconicity," returns to Peirce's semiotics reread in a semioethical key. Sebeok's interpretation of Peirce through Charles Morris is also taken into account. The Peircean distinction between iconicity, indexicality and symbolicity (conventionality) is critically reconsidered in this framework. Among the misunderstandings related to this triad is that which considers the distinction as responding to three different "types" of signs. Instead, iconicity, indexicality and symbolicity name three characteristic features, dimensions or aspects of semiosis that cannot be separated, but rather coexist in different combinations and to varying degrees in all signs generally. Signs are distinguished from each other on the basis of the feature that predominates over the other two in any given instance of semiosis. In any case, all three features are always co-present, but to varying degrees and in changing balances according to the nature of the semiosis in question.

Part II in this volume opens to the specific discourse subsequently developed in Part III. The human propensity for responsive understanding and listening is thematized here and the relation to silence is also taken into account. Silence does not exclude the word, but this is a question of the indirect, intransitive word. As Bakhtin explains, unlike quietude or the absence of noise, silence is a specific characteristic of the human world insofar as it implies sign systems characterized by "language":

Quietude and sound. The perception of sound (against the background of quietude). *Quietude and silence* (absence of the word). The pause and the beginning of the word. The disturbance of quietude by sound is mechanistic and physiological (as a condition of perception); the disturbance of silence by the word is personalistic and intelligible: it is an entirely different world. In quietude nothing makes a sound (or something does not make a sound); in silence nobody *speaks* (or somebody does not speak). (Bakhtin 1986: 133)

Precisely because of the relation between silence and listening where silence is understood as the condition for listening to the other, the question of dialogue also comes into play. This is not dialogue as it is commonly understood, dialogue as the exchange of rejoinders. As we are describing it, dialogue is *structural* to the word itself, a vocation of the word. With the expression "vocation of the word" we are alluding to the fact that the word is oriented by dialogue and consequently by the human propensity for listening. This interpretation of dialogue derives from Bakhtin and his own profound studies on dialogism and its connection to the logic of otherness. The dialogic component of signs, especially the word, is a pivotal aspect of Bakhtin's research. Part III in this volume features the research of Victoria Welby, the ideator of Significs, and includes a study on the ideal relation with Bakhtin on a theoretical level. Welby has been left backstage far too long as an author in her own right. A vast selection of her writings is now available in Signifying and Understanding, Reading the Works of Victoria Welby and the Signific Movement (Petrilli 2009a) thanks to Paul Cobley who welcomed this volume as well into this same book series with Kalevi Kull.

And now we come to the topic of translation featured in the subtitle of this book. Welby's analysis of sign and meaning inevitably foregrounds the concept of translation in the terms thematized in this volume – translation which as indicated more recently by Roman Jakobson (1959) is all but restricted to the question of the relation among languages. Peirce's own conception of the sign is based on the translational relation to its interpretant: the interpretant confers meaning upon the sign, translating it. Moreover, the interpretant carries out its function as interpretant on the condition that it too is a sign, which means to say on the condition that it too has another interpretant that translates it. This relation comes into play in the generation of ongoing interpretive/translative processes from one sphere of knowledge into another and ultimately into pragmatic terms (Gorlée 1994, 2012b: 343–348).

But the question of translation oversteps the human world and its boundaries to the point that we can speak of "biotranslation." Biotranslation constitutes an important theme in biosemiotics. To this theme is dedicated a section in one of the three volumes of a trilogy dedicated to the problem of translation for the series Athanor (Petrilli 1999/2000, 2000a, 2001). The middle volume is entitled Tra segni (Among/between signs) and presents contributions by the renowned biosemioticians Kalevi Kull, co-author with Peeter Torop of the essay "Biotranslation: Translation between *Umwelten*," and Jesper Hoffmeyer with "Origin of Species by Natural Translation" (now also available in the volume Translation Translation, Petrilli 2003a: 315-328 and 329-346).

Part IV in this volume, "The Centrality of Translation for Semiotics," is specifically dedicated to translation and the relation between bodies, signs and values in the sphere of anthroposemiosis. A characteristic feature of this relation is precisely translation. In other words, bodies, signs and values are interconnected on the basis of translational processes that form the condition for the synechetic flux of signs and meaning in the signifying universe.

The chapters forming Part V, "From Global Semiotics to Semioethics," develop the itineraries followed across the preceding parts and conclude the course. In addition to translation, these chapters amply dwell on semioethics considered as a development on global semiotics. In this fifth and last part of the volume, a major role is assigned to Charles Morris, though the findings of his research are present throughout the entire volume, even if implicitly. Morris is the middle man between Peirce and Sebeok, but I would also add between Peirce's interpretation of semiotics and the biosemiotic movement.

Closely connected to Morris is Ferruccio Rossi-Landi's research, another actor constantly behind the scenes in this volume and now figuring front stage. Rossi-Landi has the merit, among many others, of having translated Morris onto the scene of semiotic studies in Italy. In fact, he inaugurated his lifetime commitment to semiotic inquiry with the first Italian monograph on Morris, published in 1953. This was followed the year after with his translation into Italian of Morris's epochal booklet, Foundations of the Theory of Signs (1938). Signs, Language, and Behavior (1946) had already appeared in Italy in 1949, translated by Silvio Ceccato. But despite such input, at that stage in Italy, as Rossi-Landi recounts in his paper "A Fragment in the History of Semiotics" (1988, in Rossi-Landi 1992a: 7–16), the times were not ripe for Morris and his work was not as well received as he had hoped for. Since then Morris's research has proven to be nothing short of seminal for semiotic inquiry internationally. In 1975 Rossi-Landi's monograph on Morris appeared in a new enlarged edition with Feltrinelli (Milan), at last receiving the attention it deserved. Reflecting on the conditions for successful cultural communication, Rossi-Landi explains like this:

For cultural communication to obtain, the codes and subcodes must be sufficiently similar already; and noise and disturbance must be relatively low. Alternatively, an enormous redundancy is required. To make clearer what I mean: if one wants to be properly understood, one has to repeat the same things in a high number of different occasions, through a high number of different channels. Cultural communication must become a sort of propaganda. Each author is then compelled to choose between concentrating on the production of ideas and waging a sort of warfare for conquering an audience. Here, again, we can see how inextricably fortuitous the tangle of theoretical and practical factors can be. And, as Caesar put it, "multum cum in omnibus rebus, tum in re militari potest fortuna". (Rossi-Landi 1992a: 14-15)

The role that global semiotics can play in the present day and age not only on the scientific and theoretical levels, but also on the social and economic, in practical life, is extraordinarily important. At this point, confrontation between global semiotics and globalization is inevitable. Global semiotics and its developments in the sphere of biosemiotics provide the territory and the instruments for a critique of so-called "global communication" in the present day and age. This expression refers to the current phase in the development of the economic system in which communication itself has become productive. A characteristic feature in the overall organization of the economic system today is the pervasiveness of communication in all three phases in the production cycle. So that communication has now become "communication-production," "communication-exchange" and "communication-consumption" (Petrilli and Ponzio 2005a: 491–502, 520–526).

From all this it follows that semiotics is capable of critique and that such critique also implies critique of the current socio-political system. If semiotics today is prepared to follow the direction indicated by semioethics, chances are that it will be in a better position to deal with problems not only of the theoreticalgnoseological order, but also the practical on an everyday basis. The quality of life is a priority. To commit is indispensable.

Part I: Cr	itical semio	otics, struc	ctures and r	nodels

Chapter 1 Signposts leading to semioethics: on signs, values and the non-neutrality of semiotics

"Logic came about for the sake of reasonableness, not reasonableness for the sake of logic."

Let us never lose sight of that truth, forgotten though it is, every day, in every walk of life ...

(Charles S. Peirce, Collected Papers 2.195)

1.1 The sign science and its developments

After various phases in the development of sign studies across the twentieth century, commonly tagged "code semiotics" (or "decodification semiotics") and "interpretation semiotics," the boundaries of this field are now expanding to include studies that focus more closely upon the relation between signs and values. In truth, this relation is inscribed in the make-up of semiotics and in its very history. To concentrate on the relation between signs and values is important for a better understanding of expression, interpretation and communication in their specific difference and in their mutual interconnectedness. This is the aspect privileged in the present text. In any case, for an even broader view on the development of sign studies we refer the interested scholar to the Communication Theory Reader edited by Paul Cobley, published in 1996. With this volume Cobley offers a significant range of theoretical perspectives on signs and communication through a substantial collection of key texts by major authors, providing a welcome purview of theories from an array of different disciplines. Moreover, this work is continued and updated with another two volumes edited by the same Cobley, The Routledge Companion to Semiotics and Linguistics, published in 2001, subsequently revised and enlarged in 2010 as The Routledge Companion to Semiotics.

But to return to the specific question of the relation between signs and values, Ferdinand de Saussure founded his sign theory on the theory of exchange value adapted from marginalist economics. Instead, Charles S. Peirce breaks with the equilibrium of equal exchange logic thanks to a sign model based on the concept of infinite semiosis (or, if we prefer, infinite deferral from one sign to the next). This approach is oriented by the logic of otherness. It allows for opening toward the other and for the concept of a signifying surplus. Charles Morris emphasized the need to address the relation between signs and values explicitly and oriented a large part of his own research in this direction (Morris 1956, 1964, 1988, 2012). However, official semiotics has largely emerged as a predominantly theoretistic or gnoseological science, a descriptive science with claims to neutrality. We propose

to recover and develop that special bent in semiotics which is open to questions of the axiological order in the world of lived experience and which consequently aims at a global understanding of humanity and its signs.

The term "semioethics" captures the sense of this orientation (Petrilli and Ponzio 2003a, 2010). Semioethics evidences the relation between signs and sense, hence the question of significance as value. However, if we go back to the nineteenth century we soon discover that Victoria Lady Welby, a fascinating figure from the Victorian age, had already introduced the term "significs" for the same purpose, marking her distance from what was commonly understood at the time as both "semantics" and "semiotics." In addition to the renowned classics just mentioned – Saussure, Peirce and Morris – Welby too deserves a place in the reconstruction of the history of semiotics for her invaluable contribution to furthering our understanding of signs and meaning not only from a historico-chronological perspective, but also in theoretical terms. In relatively recent times, she has been described as the mother-founder of modern semiotics alongside Peirce, the father-founder (Petrilli and Ponzio 2005a: 35–79, 80–137).

1.2 From "decodification semiotics" to "interpretation semiotics"

When considering the philosophical question of "communication" with reference to semiotics and the contribution that can come from it, contemporary commentators think less and less in terms of "sender," "message," "code," "channel" and "receiver," while practitioners of the popular version of the sign science still tend to cling to such concepts (Cobley 2010b). This particular way of presenting the communication process mainly derives from an approach to semiotics which would be better tagged "semiology," given its prevalently Saussurean matrix. The approach I am alluding to is commonly identified with such expressions as "code semiotics," "decodification semiotics," "code and message semiotics" (Bonfantini 1981), or "equal exchange" (Ponzio 1973, 1977). It was amply criticized by Ferruccio Rossi-Landi as early as the 1960s in his monograph, *Il linguaggio come lavoro e come mercato*, 1968 (translated into English as *Language as Work and Trade*, 1983).

This orientation is counteracted by what is now commonly indicated as "interpretation semiotics," thanks in particular to the recovery of Charles S. Peirce (1931–1958, 1992–1998) and his writings, consequently of such concepts as "infinite semiosis" and the dialogic relation between signs and interpretation. The interpretive approach describes interpretation as a phenomenon that results from the dialogic interrelation among "interpretants," or, more precisely, among "in-

terpreted signs" and "interpretant signs" (Ponzio 1990: 15-62). According to this approach, meaning is not preestablished outside sign processes, but rather is identified in the "interpretant," in another sign that takes the place of the preceding sign. The interpretant, as a sign, subsists uniquely by virtue of another interpretant and so forth, in an open chain of deferrals. This movement represents semiosis as an open process dependent on the potential creativity of the interpretant in the dialectic-dialogic relation with the interpretive "habit," convention, or "encyclopedia" of a given social community (Eco 1990; Eco et al. 1992). Unlike decodification, or code and message, or equal exchange semiotics, in the case of interpretation semiotics sign activity is not guaranteed by a code. This is because the code (including choice of an adequate code) only comes into play as a part of the interpretive process, as a result of interpretive practice and as such is susceptible to revision and substitution.

However, in terms of the possibility of committing to a global understanding of humanity and its signs - of humans in the totality of their relations to themselves, to the world and to others - interpretation semiotics also has its limits. Semiotics has characteristically tended to concentrate on the gnoseological aspect of signs and to neglect the problem of the relation between signs and values – which obviously cannot be reduced to the problem of "truth" merely in a gnoseological sense. From this point of view, semiotics has often presented itself in terms of theoretism, adopting a unilaterally and abstractly gnoseological approach to the life of signs, which implies neglect of those aspects that concern values different from truth value.

1.3 The relation between sign theory and value theory

Irrespective of the philosophical importance of dealing with the relation between signs and values, there are at least another two reasons – the first historical, the second theoretical - for treating the question of values in the context of sign theory: (1) research in this direction has already been inaugurated (especially by Peirceans); (2) an adequate critique of decodification semiotics calls for close study of the value theory that subtends it.

Sign theory as elaborated by Saussure in his Cours de Linguistique générale (1916), the "official Saussure," but actually written by a handful of students on the course, is based on the theory of equal exchange value formulated by the School of Lausanne with such representatives as Leon Walras and Vilfredo Pareto and marginalist economics (Ponzio 1986, 1990: 117-118). Consequently, Saussure associates language with the market in an ideal state of equilibrium. Language is analyzed using the same categories developed by "pure economics" which studies the laws that regulate the market leaving aside the social relations of production, what Rossi-Landi (1968, 1975a, 1992a) calls "social linguistic work" and its social structures. This approach orients the Saussurean sign model in the direction of equal exchange logic, establishing a relation of equivalence between *signifiant* and *signifié* and between communicative intention, on the one hand, and interpretation understood as decodification, on the other.

However, this particular sign model and the value theory it implies had already been radically critiqued by Rossi-Landi in Italy by the mid-1960s. Rossi-Landi evidenced the limits of language theories that ground linguistic value in equal exchange logic, in the light of historico-dialectical materialism. In other words, he applied theoretical instruments originally developed in the context of the Marxian critique of exchange value in relation to questions of a more strictly socio-economic order to the analysis of language (Rossi-Landi 1972, 1975a, 1985, 1992a). However, his critique can be traced back even further to his monograph, Comunicazione, significato, e parlare comune [Communication, meaning and common speech], published in 1961, where he discusses what he calls (with ironic overtones) the "postal package theory" (cf. Ch. 14). This expression was intended to underline the inadequacy of those approaches that describe signs, language and communication as messages that, like a postal package, are sent off from one post office and received by another. With this metaphor, Rossi-Landi aimed to critique communication analyzed in terms of univocal intentionality, that is to say, as though formed from pieces of communicative intention neatly assembled by the sender and just as neatly identified by the receiver.

Rossi-Landi's work can be related to Mikhail M. Bakhtin's research. Bakhtin's name is commonly associated with a monograph entitled Marxism and the Philosophy of Language, published in 1929, by Valentin N. Voloshinov, his friend and collaborator. However, this volume only became accessible to a wider reading public in 1973, when the Russian original was at last translated into English, after having been surrounded by silence during the Stalinist period, sharing the same fate as other works by Bakhtin and his "Circle." In this book, but even earlier, in 1927 with Freudianism. A Critical Sketch (Voloshinov 1927), Bakhtin and Voloshinov critique Saussure's Cours, illustrating how it does not account for real interpretation processes, for the specificity of human communicative interaction, that is, for phenomena that qualify human communication as such. The phenomena alluded to include, for example, the capacity for plurilingualism or heteroglossia, for plurivocality, ambiguity, polysemy, dialogism and otherness. Bakhtin and Voloshinov maintain that the complex life of language cannot be contained between two poles, that of the "unitary language system," on the one hand, and "individual speaking," on the other, that the signifiant and the signifié do not relate to each other on a one-to-one basis, that the sign is not at the service of meaning pre-established outside the signifying process (Voloshinov 1929: Part II, Chs. II, III).

In such a perspective, "linguistic work" (Rossi-Landi 1968, 1992a), which is interpretive work (see Bakhtin 1981; Voloshinov 1927, 1929) is obviously not limited to decodification, to the mechanical substitution of an interpreted sign with an interpretant sign; in other words, interpretation is not merely a question of recognizing the interpreted sign. In contrast, interpretive work develops through complex processes which may be described in terms of "infinite semiosis" (Peirce) and "unending deferral" (Derrida 1967) (on the difference between these two concepts, see Eco 1990), of "renvoi" (Jakobson 1963, 1975) from one sign to another, activated in the dialectic-dialogic relation among signs. Like all those working in the sphere of "interpretation semiotics," Bakhtin and Voloshinov place the sign in the context of dialogism, responsive understanding and otherness, thereby describing interpretive work in terms of dialogic responsiveness among the parts in communication (Bakhtin 1986, 1990; Ponzio 1992, 2008; Todorov 1981). Thus analyzed, interpretive work is articulated through the action of deferral, in this sense translation, constitutive of sign activity or semiosis. In such a framework, interpretation/translation is thematized in terms of signifying excess with regard to communicative intention, of the generation of signifying surplus value in the dialectic-dialogic relation between the interpreted sign and the interpretant sign.

Bakhtin already saw in the 1920s what interpretation semiotics recognizes today: in real signifying processes the sign does not function in a state of equilibrium or on the basis of equal exchange between the signifié and the signifiant. Interpretation semiotics proposes a sign model that is far broader, more flexible and inseparable from its pragmatic and valuative components; and that with its analyses of sense, signification and significance is better able to account for the specificity of human signifying processes and communicative interaction.

1.4 Significance as a lead for significs and semioethics

The title of Morris's 1964 book, Signification and Significance. A Study of the Relations of Signs and Values is significant in itself. In it he draws attention to the relation between signs and values as made explicit in the subtitle. As Rossi-Landi observes in his 1953 monograph (new enlarged edition 1975), Morris dealt with values almost as much as he dealt with signs and opposed the idea that the mere fact of describing signs would give an insight into values (Rossi-Landi 1992a: 17-30, 59–74; Petrilli 1992a: 1–36). Morris devoted a large part of his research to the problem of ethical and aesthetic value: after his Foundations of the Theory of Signs (1938) and Signs, Language, and Behavior (1946), where such topics had already been proposed in a semiotic framework, he concentrated specifically on value theory in his book *Varieties of Human Value*, published in 1956, almost a decade before *Signification and Significance*.

The latter opens with considerations on the two senses according to which the expression "to have meaning" can be understood: as having value and being significant, on the one hand, and as having a given linguistic meaning, a given signification, on the other. Morris uses the term "meaning" to indicate a global concept analyzable into "signification" and "significance." He aimed to recover the semiotic consistency of signifying processes in the human world as testified by the ambiguity of the term "meaning." Meaning understood as signification is the object of semiotics, while significance is the object of axiology. An important aspect of the relation of signs to values is that it calls for recognition of the inevitable relation of semiotics to axiology. Though working from different perspectives, these disciplines converge in their object of study, namely human behavioural processes. Morris was intent upon rediscovering the semiotic consistency of the signifying process to which the ambiguity of the term itself "meaning" testifies. As he explains in the Preface to the volume in question:

That there are close relations between the terms "signification" and "significance" is evident. In many languages there is a term like the English term "meaning" which has two poles: that which something signifies and the value or significance of what is signified. Thus if we ask what is the meaning of life, we may be asking a question about the value or significance of living or both. The fact that such terms as "meaning" are so widespread in many languages (with the polarity mentioned) suggests that there is a basic relation between what we shall distinguish as *signification and significance*. (Morris 1964: vii)

Keeping account of considerations like this one, as well as similar comments traceable in other authors, above all Welby, that special bent in semiotics indicated with the expression "semioethics" becomes ever more significant. This expression was originally introduced by Augusto Ponzio and myself to describe an approach to the study of signs that contrasts with approaches that tend toward abstract theoretism characteristic of so-called "official semiotics." "Semioethics" signals the direction we believe contemporary semiotics is called to follow more decisively. Strictly speaking, the term "semiotics" – understood as the global science of signs, hence as covering the domains of both signification and significance in Morris's sense relative to semiosis in the human world – should suffice. Nonetheless, "semioethics" alludes to an approach to sign studies that is not purely descriptive with claims to neutrality, but rather extends beyond abstract logico-epistemological boundaries of sign processes to concentrate on problems of an axiological order, that is, on problems pertaining to values, to ethics and aesthetics and to ideology theory.

Indications in this sense can be traced in Peirce who, coherently with his pragmatism, developed a cognitive approach to semiotics in close relation to the study of the social behaviour of human beings and the totality of their interests. From a Peircean perspective, it follows that the problem of knowledge necessarily involves considerations of a valuational and pragmatical order. In addition to his Collected Papers, here we shall simply recall the telling title of his posthumous collection of essays, which is indicative of his orientation: Chance, Love and Logic (1923). In the final phase of his production (which overall spans approximately from 1887 to 1914) – what Gérard Deledalle in his 1987 monograph on Peirce calls the Arisbe period (the name Peirce gave to his home in Milford, Pennsylvania, where he lived to the end of his days) – Peirce specifically turned his attention to the normative sciences: in addition to logic these include aesthetics and ethics and hence the question of ultimate ends or of the summum bonum.

Peirce identified the latter neither in individual pleasure (hedonism), nor in the good of society (Utilitarianism), but rather in a principle regulating the evolutionary development of the universe, what he calls "reasonableness" (CP 5.4). In Peirce's view, the ultimate value of the concept of summum bonum is reason and the development of reason, that is, reason understood as an open, dialectic process, as unprejudiced research, or as Bakhtin would say, as an ongoing dialecticaldialogical process, a movement oriented by the logic of otherness. This process is never complete or finished, but rather is rooted in the principle of continuity or synechism (*CP* 1.172). Therefore Peirce himself transcended the limits of a merely gnoseological semiotics working in the direction of what can be described as an ethical-pragmatic or valuative-operative approach to the study of signs and human behaviour.

From this perspective, the English scholar Victoria Welby as well – another significant figure contemporary to Peirce, mainly remembered because of her correspondence with him (Hardwick 1977), though nowadays appreciated more and more as a scholar in her own right (Welby 1983, 1985a; Petrilli 1998b, 2009a)3 – proposed a broader view of semiotics with her theory of meaning called "significs" than had been theorized up to then, evidencing significance as her ultimate object of study. The term "significance" designates the disposition toward valuation. Reference is to the value that we confer upon something, or the relevance, import and value of meaning itself. Another way of putting this is to say that reference is to the *condition of being significant*. This is determined by the involvement of human beings in the life of signs at the theoretical, emotional, ethical and pragmatic levels together. Welby oriented a large part of her own research in terms of the relation of signs to values, what we have indicated as "semioethics" as a development on "global semiotics." Rather than "semiotics" and other similar expressions such as "semantics" (Bréal 1897), "semasiology" (Reisig 1839),

"sematology" (Smart 1831, 1837), etc. which circulated at the time to indicate the study of sign and meaning, Welby herself privileged the term "significs" to underline the special direction of her own approach.

Welby distinguished between three levels of meaning and expression value which she labelled "sense," "meaning" and "significance," present throughout the different spheres of human language, thought and behaviour. "Sense" corresponds to the most primitive level of pre-rational life, that of one's response to the environment, it concerns the use of signs and emerges as a necessary condition for all experience; "meaning" concerns rational life, the intentional, volitional aspects of signification; "significance" implies both sense and meaning and extends beyond these to concern the "import" and "value" that signs have for each one of us. As such, this notion can be associated with Morris's own interpretation of the concept of "significance" (Welby 1983 [1903: 5–6, in Petrilli 2009a: 264, see also pp. 265–272; and *cf.* 7.3]). According to Welby, "sense," "meaning" and "significance" indicate three simultaneous and interacting dimensions in the development of expressiveness, interpretive capacity and operative force (*cf.* Heijerman and Schmitz 1991; Schmitz 1985, 1990).

In a letter to Welby dated the 14 March 1909 (in Hardwick 1977: 108-130), Peirce established a correspondence between Welby's triad, "sense," "meaning" and "significance" and his own that distinguishes between "immediate interpretant," "dynamical interpretant" and "final interpretant." Peirce's "immediate interpretant" concerns meaning as it is normally used by the interpreter. As Welby says in relation to sense, it concerns the interpreter's immediate response to signs. The "dynamical interpretant" concerns the sign's signification in a specific context. So, as Welby claims in relation to meaning, it is used according to a specific intention. But even more interesting is the connection established by Peirce between his concept of "final interpretant" and Welby's "significance" (Petrilli 2009a: 288-293). According to Peirce, the final interpretant concerns the sign at the extreme limits of its interpretive possibilities. In other words, it concerns all possible responses to a sign in a potentially unlimited sequence of interpretants. As attested by the correspondence to Welby's "significance," the "final interpretant" also alludes to signifying potential, to the capacity for creativity and critique and is fundamentally concerned with valuational attitudes.

As Welby claimed in a letter of 18 November 1903 to Peirce (in which she mentions her intellectual solidarity with the Italian philosopher and mathematician, Giovanni Vailati), "significs" is a "practical extension" of semiotics: "Prof. G. Vailati, ... shares your view of the importance of that – may I call it, practical extension? – of the office and field of Logic proper, which I have called Significs" (Hardwick 1977: 5–8; see also Vailati 1971, 1987). Though this specification may seem superfluous given that the pragmatic dimension is inscribed in Peirce's ap-

proach to semiotics, that the ethical-valuational aspects of signifying processes are closely interrelated with the operative-pragmatic is important to underline.

In the Preface to her monograph Significs and Language (1911), Welby describes significs as "the study of the nature of Significance in all its forms and relations and thus of its workings in every possible sphere of human interest and purpose"; and the interpretive function as "that which naturally precedes and is the very condition of human intercourse, as of man's mastery of his world" (Welby 1985a: vii). In Significs and Language, as in all her writings, the problem of analysing signifying processes is also the problem of investigating the processes of the production of values as a structural part of the production of meaning in human sign activity. The epistemological, ethical and pragmatic dimension of signifying processes finds expression in unconsciously philosophical questions asked by the "man in the street," as Welby says, in everyday language: "What do you mean by ...?," "What does it signify?," "What is the meaning of ...," etc. In what may be described as her most complete published work on the problem of signs and meaning, What Is Meaning? (1903), Welby observes that

Man questions and an answer is waiting for him... He must discover, observe, analyse, appraise, first the sense of all that he senses through touch, hearing, sight and realize its interest, what it practically signifies for him; then the meaning – the intention – of action, the motive of conduct, the cause of each effect. Thus at last he will see the Significance, the ultimate hearing, the central value, the vital implication - of what? of all experience, all knowledge, all fact and all thought. (Welby 1983: 5-6)

Further on in the same volume she goes on to specify that "significs in a special sense aims at the concentration of intellectual activities on that which we tacitly assume to be the main value of all study and vaguely call 'meaning'" (Welby 1983: 83). Therefore, in the face of accumulating knowledge and experience, the socalled "significian," whether scientist, philosopher, or everyday person, is urged to ask such questions as: "What is the sense of ...?," "What do we intend by ...?," "What is the meaning of ...?," "Why do we take an interest in such things as beauty, truth, goodness?," "Why do we give value to experience?," "What is the expression value of a certain experience?" In Welby's view, such questions and their responses concern the sense of science and philosophy and are at the basis of all controversies concerning aesthetics, ethics and religion. Consequently, significs is relevant to all spheres of life not because it claims semiotic omniscience, but because it turns its attention to interpretation and meaning value as the condition of experience and understanding.

As the study of significance, significs advocates an approach to everyday life and to science that is oriented by the capacity for critique and creativity, release from dogmatism, dialectic-dialogic answerability, by the capacity for listening and responsibility. Significs results from relating the study of signs and sense to ethics. Ethics not only constitutes the object of study, but is also the perspective. The measure itself of the semantico-pragmatical validity of all human knowledge and experience is ethical insofar as they produce sense and value.

1.5 Humani nihil a me alienum puto

Thinkers such as those briefly figuring in this chapter can be considered as the representatives of a theoretical tendency which thematizes the relationship between social signs, values and human behaviour in general, by contrast with philosophical analyses conducted exclusively in abstract epistemological terms divorced from social practice.

If, in agreement with Peirce we can say that the human being is a sign, a direct consequence is that with respect to signs, *humani nihil a me alienum puto (nothing human is alien to me)*. An important implication of this statement is that signs in the human world should not be studied separately from valuative orientations, nor should the focus be exclusively on truth value and its conditions. Instead, a general sign theory that is truly general should be capable of accounting for all aspects of human life and for all values, not just truth value. Signs are the material out of which the self is modelled and developed, just as they are the material of values. While signs can exist without values, values cannot exist without signs (Petrilli 2010a: 137–158). From the point of view of human social life, to evidence the *sign* nature of the human person has a counterpart (particularly on a practical level) in asserting the *human*, the *properly human* nature of signs (Petrilli 1990a).

To work in this direction leads to the possibility of identifying a new form of humanism which critiques the reification and hypostatization of signs and values and, instead, investigates the processes that produce them. The relation between signifying processes and values subtends the human capacity for establishing relations with the world, with the self and with others and as such requires the critical work of demystification. In this framework, signs and values emerge as the live expression of historically specified human operations. With respect to social signs, this means to recover their sense and value for mankind, rather than accept them as naturally given. Ultimately, such an approach recovers a project originally conceived by Edmund Husserl with his transcendental constitutive phenomenology.

However, all this is possible on a condition: that any claim to pure descriptiveness, to neutrality be left aside. Practiced in these terms, the general science of signs can contribute significantly to philosophical investigation for a better understanding of our relations to the world, to others, to the self. This means

to recover our search, as proposed by Husserl and his phenomenology, for the sense of knowledge, experience and practical action and of the sciences that study them. It is well worth noting that Husserl authored an important essay entitled "Semiotik" and dealt extensively with signs and their typology in his *Logische Untersuchungen* (Husserl 1900–1901). Such a philosophical framework favours a more adequate understanding of the problem of communication, meaning, value and interpretation. And by working in this direction, the general science of signs or semiotics may operate more fully as a *human science*, where the "properly human" is a pivotal value (Petrilli 2010a: 205–209).

Semioethics arises as a response and continuation of the critical approach to sign studies outlined in this chapter. It is inevitably associated with the proposal of a new form of humanism. This new humanism is inscribed in the analysis, understanding and production of values in signifying processes and is qualified as the "humanism of otherness."

Chapter 2 Insights into structure and structuralism

The inclusion of the listener (reader, viewer) in the system (structure) of the work. The author (bearer of the word) and the person who *understands*. The author when creating his work does not intend it for a literary scholar and does not presuppose a specific scholarly *understanding*; he does not aim to create a collective of literary scholars. He does not invite literary scholars to his banquet table.

(Mikhail M. Bakhtin: "Toward a Methodology for the Human Sciences," 1974, Eng. trans.: 165)

2.1 Structuralism and its range

Structuralism spans the entire twentieth century and covers a broad range of trends in a variety of different fields, even strongly diversified in theoretical and methodological terms. An important outcome of such heterogeneity is that the expression itself, "structuralism," is plurivocal. Though it was originally formulated in linguistics, structuralism ended up shaping the human and natural sciences generally, including philosophy of language, semiotics, anthropology and biology. In regard to linguistics, the term "structuralism" has been applied to a number of important schools of thought including (among the most renowned) the Saussurean Geneva School as represented by Charles Bally and Albert Sechehaye, the Moscow Linguistic Circle with such exponents as Nikolaj Trubetzkoy, author of the monograph *Principles of Phonology* (1939) and Roman Jakobson, author of the essays collected in *Essais de linguistique générale* (1963, see also Jakobson 1957, 1965) and the Prague Linguistic Circle with Vilém Mathesius, Jan Mukařovský and again Trubetzkoj and Jakobson.

The Prague Linguistic Circle (founded on 6 October 1926) counted members from the Russian Formalist School. Their participation proved to be a real asset. In the years 1915–1916 Russian Formalism revolved around the Moscow Linguistic Centre and the Society for the Study of Poetic Language in Saint Petersburg (Erlich 1964). Many concepts that influenced structuralism in linguistic and semiotic circles were introduced by the Prague School (Garroni and Pautasso 1966, in particular Emilio Garroni's "Introduction" to the Prague Theses of 1929). Considering that "language" is multifunctional and that the structures of language cannot be separated from the dynamic, innovative and polysemic processes of their development (regulated by intrinsic laws as well as by external social factors), the Prague Linguistic Circle posited that "(historico-natural) language" cannot be reduced to the notion of "code." Language develops in relation to the great plurality of internal languages (internal plurilingualism), special languages, and cultural dif-

ferences generally in the social. To study (historico-natural) language means to study different types of verbal sign systems including the signs of verbal art, literature. Moreover, verbal signs cannot be conceived separately from the nonverbal sign systems that go to form the culture of which they are a part (see Culler 1975, 2003; Garroni 1972; Hinde 1972; Malinowski 1923; Prieto 1975; Rossi-Landi 1972; Voloshinov 1926, 1929).

Another structuralist approach is that delineated by Vladimir Propp (1927) and his pioneering analysis of Russian magic tales. Further contributions to the development of structuralism in the Soviet Union also came from the so-called Moscow-Tartu (Estonia) School between the early 1960s and late 1980s, with its special focus on linguistic studies and semiotics of culture. The most representative scholars of this school include Jurij M. Lotman, Boris Uspenskij, Sebastian K. Shaumvan, Vjačeslav V. Ivanov, Isaak I. Revzin, and Vladimir Toporov.

The term "structuralism" applies to American linguistic-culturalogical studies associated with Edward Sapir (1949) and American linguistics, inspired by formalism and behaviourism represented by Leonard Bloomfield (1933) and Zellig Harris (1966). It also applies to taxonomic linguistics as represented by André Martinet and his theory of double articulation (monemes and phonemes), relative to "surface" verbal structure (Martinet 1960, 1965, 1985). At the same time, however, the term "structuralism" is implemented in relation to Noam Chomsky's generative grammar which, instead, opposes taxonomic linguistics and explains "surface structure" in terms of transformations that proceed from "deep structure" (Chomsky 1957, 1965).

The term "structuralism" was also used to classify different approaches flourishing in France. These include structural anthropology as represented by Claude Lévi-Strauss (1958a, 1958b), semiology with Roland Barthes (1964), and semiotic theory with Algirdas Julien Greimas (1966).

The structuralist approach tends to explain its objects in terms of relations of dependency or reciprocal determination. From this point of view, it draws on Ferdinand Saussure's thesis that *langue* is form rather than substance, which is extended to the domain of semiotics. But a crucial element that diversifies the various approaches influenced by Saussurean linguistics concerns the relationship between synchronic interconnection and the diachronic processes of formation and transformation, between structure and history. By contrast with the Geneva School, for example, which establishes a relation of opposition between structure and process, structure and dynamics, synchrony and diachrony, structure and the historical dimension, the French linguist Emile Benveniste (1971) claimed that the idea of opposition between such elements was untenable. A similar view was expressed by the Prague Linguistic School and by Vladimir Propp.

Generativist structuralism also establishes a relation of opposition between structure and dynamics, but the terms of opposition are different: a supporter of dynamic and generative structural linguistics is the Russian scholar Sebastian K. Shaumyan (1965, 1987).

The Danish linguist and semiotician Louis Hjelmslev founded the Linguistic Circle of Copenhagen with Viggo Brøndal in 1931 and was deeply influenced by the Saussurean approach to signs and language. However, though his point of departure was Saussure, he developed a completely independent and original theory of language denominated glossematics (Caputo 2010b, 2012). Hjelmslev analyzed sign structure in terms of a relation of interdependency between two planes, expression and content. These correspond respectively to Saussure's signifiant and signifié. But Hielmsley's dichotomy is based on a trichotomy: purport, substance and form (Hjelmslev 1928, 1943). "Purport" is an amorphous continuum where boundaries are established by the formative action of language. Each language articulates the formless material of expression and content in a specific way. Human phonic material, for example, is divided and organized into different figurae (phonemes) by different languages, just as the *continuum* of the solar colour spectrum is divided into different colours. Variables on the two planes are "expression substance" and "content substance," articulated by "expression form" and "content form." Signs are produced in a specific substance of expression (e.g., in the acoustic material of a language) and in a specific substance of content (e.g., the semantic content of a text). Structural semantics and glossematics as developed by Hjelmslev can be applied to all sign systems, verbal and nonverbal, thereby opening to new venues in semiotics and philosophy of language (Caputo 2006).

As observed by Cosimo Caputo in his monograph Hjelmslev e la semiotica (2010a: 36-37, 41-43), Hjelmslevian language theory is connected to the Kantian tradition by a relation of contiguity, mediated by Ernst Cassirer's Philosophie der Symbolischen Formen (1923–1929). An important aspect of the convergence between Hjelmslev and Cassirer's neo-Kantianism consists in the fact that Hjelmslev, like Cassirer, criticizes the concept of language as a natural organism (à la Schleicher, or as "Geisteswissenschaft" which was very much in vogue during the first half of the nineteenth century). Moreover, like Cassirer, Hjelmslev also criticizes the mechanistic conception of the system of language conceived as being supported by inflexible laws, as in the physical sciences – a thesis maintained by the Neogrammarians above all (see Cassirer's 1946 essay on structuralism). Vice versa, Cassirer cites Hjelmslev in An Essay on Man (1944) à propos the general approach to language. In Philosophy of Symbolic Forms (expressly referred to by Hjelmslev in Principes de grammaire générale, 1928), Cassirer further develops the functional principle, that is, the idea of the primacy of function elaborated earlier in Substanzbegriff und Funktionsbegriff (1910). Hjelmslev identifies this principle

as the crutch of structural linguistics. In Philosophy of Symbolic Forms Cassirer extends his functional principle from language to other manifestations of human thought and in general to the human capacity to give form to the multiplicity -"to give form," a notion which plays a central role in linguistics as much as in Hjelmslevian semiotics.

With his interpretation of "structuralism" Cassirer contributed to a better understanding of the human being in semiotical terms. Most importantly, Cassirer defined the human being as a "symbolic animal" (animal symbolicum), instead of "rational animal" (animal rationale). He also explained the latter and more ancient definition of the human being as a rational animal in semiotical terms. In any case, more recent research with Charles Morris has demonstrated the validity of Cassirer's own definition of the human being as a symbolic animal (Morris 1971: 402).

Cassirer connects structure to form and to two other concepts announced in the title of his 1910 monograph, Substanzbegriff und Funktionsbegriff – substance and function. He also analyzes concept formation (Begriffsbildung) in the same monograph in terms of substance and function. In Philosophie der Symbolischen Formen (1923–1929), Die Sprache (Vol. 1, 1923), Cassirer presents language as form and the study of language as analysis of the functions that generate linguistic form. But he also adds another concept, the "symbol." Form is "symbolic form." (Augusto Ponzio dedicates a whole chapter to the relation between Cassirer's theory and the notion of form in his early 1974 monograph, Filosofia del linguaggio e prassi sociale).

Cassirer's approach may be described in terms of linguistic structuralism (as testified by his renowned 1946 essay, "Structuralism in modern linguistics"). However, the matrix of his conception is Kantian, which distinguishes it from Chomsky's approach to structuralism and his Cartesian linguistics (1966). All the same, like Chomsky and unlike structuralist approaches of the descriptive and taxonomic order, Cassirer highlights the formation processes of linguistic structures, rather than reducing them to the status of pre-constituted forms. His structural linguistics is better defined as a "dynamical theory" in Shaumyan's sense: a theory that evidences the dynamical aspect of the synchrony of language rather than the static. With this stance, Cassirer's theory not only differs from structural linguistics of the taxonomical type, but also from Chomsky's own language theory.

2.2 Structuralism, dialogism and biosemiotics

As much as the structuralist enterprise is mostly associated with the human sciences, it has also shaped other research areas. These include: mathematical information theory; catastrophe theory and morphogenesis developed by René Thom (1972); and the biosemiotic "functional cycle" theory proposed by the Estonian biologist Jakob von Uexküll (1934) – a "pivotal model," a "simple, albeit not linear, diagram," which "constitutes a cybernetic theory of modelling so fundamental that the evolution of language cannot be grasped without it," as Thomas Sebeok claimed (1994a: 122, 144).

The "functional cycle" (Funktionskreis) in J. von Uexküll's Umweltlehre (the term Umwelt was introduced in 1909 to indicate the organism's subjective world) provides a structural model for semiosis, operating as a basic structure for semiosis globally. In the "functional cycle," a "perceptual cue carrier" (Merkmal) (signalling behaviour) – produced by the "objective connecting structure" (Gegengefüge), the interpretatum (Object), and represented in the organism by a "perceptual mark" (signalling disposition) – is translated by the interpretant sign into an "operational cue carrier" (Wirkmal) (behavioural disposition). This "operational cue carrier" triggers a behaviour that produces an "action-mark" in the "connecting structure" (cf. T. von Uexküll 1998). Expressed differently, in the "functional cycle" the interpretandum (that to be interpreted) produced by the "objective connecting structure" effectively becomes an interpretatum and, represented in the organism by a signalling disposition, is translated by the interpretant sign into a behavioural disposition which triggers a behaviour onto the "connecting structure" (Krampen 1997: 252–253).

In reference to communication models, the functional cycle and other models which describe communication in terms of a self-referential, autopoietic and semiotically closed system (such as the model proposed by Humberto Maturana and Francisco Varela 1973, 1980), radically contrast with both linear (Claude E. Shannon and Warren Weaver) and circular (Saussure) paradigms. Uexküll's biosemiotic functional cycle is characterized by closure and autonomy. At the same time, however, it reacts dialogically to its environment according to its internal needs. Consequently, the theory of autopoietic systems is not at all incompatible with communication processes. However, it is incompatible with an oversimplified conception of communication. Reference here is to the linear model, which describes communication as a linear cause and effect process moving from source to destination, as much as to the conversation model, which is governed by the turning around together rule and foresees an exchange in roles between emitter and receiver. As Maturana (1978: 54–55) evidences on closer observation, it is clear that communication understood either as a linear process proceeding from source to destination, or as a circular process in which the participants take turns in playing the part of sender and receiver, should really be considered as "pre- or anticommunicative interaction."

Dynamic and morphogenetic structuralism, inspired by early twentieth century biology and the debate connected with philosophy of vitalism, has made an important contribution to our understanding of communicative structure. The "self" is dialogically implied in otherness, just as the "grotesque body" is inseparably connected to other bodies (Bakhtin 1965). Dialogue and body are strictly interconnected. Dialogism in Mikhail Bakhtin cannot be separated from the biosemiotic conception of the sign (Bakhtin 1984a, 2008; Ponzio 2008d). In 1926, Bakhtin – who maintained that dialogue is dialogue among voices, "incarnate voices," the intercorporeal expression of involvement among bodies (evidenced by the image of the "grotesque body") – most significantly authored an essay entitled "Contemporary Vitalism" (signed by the biologist Ivan I. Kanaev), published in 1926. In this essay, Bakhtin was concerned with issues of both the biological and philosophical orders. Like Uexküll and the direction of his own research, Bakhtin too took an early interest in biology relatedly to the study of signs. He mentions Uexküll as an exponent of vitalism - a conception which explains the processes that characterize life in terms of some special extramaterial force in living beings. In reality, Uexküll did not undersign vitalism unconditionally, just as he remained constantly critical of conceptions with a behaviouristic and mechanistic leaning. Uexküll, too, searched for an explanation to life in signs. In his critique of vitalism, Bakhtin examines writings by Henri Bergson and by the biologist Hans Driesch. The latter established a net separation between life and non-life and interpreted the organism's homeostasis in terms of radical autonomy from its surrounding environment. Instead, Bakhtin, in his own description of the interaction between organism and environment, opposes the dualism of life-force and physical-chemical processes and maintains that the organism forms a monistic unit with its surrounding world.

In works of the 1920s, Bakhtin and members of the Bakhtin Circle (cf. Ch. 1, n. 2) criticize the vitalists and the reflexologists, "Freudianism" and mechanistic materialism (with special reference to the mechanistic relation established between base and superstructure), in the light of their own conception of a dialogical relation between body structure and the sign and between individual consciousness and social dynamics. In Bakhtin's view, such orientations are all vitiated by a false scientific claim that does not keep account of the dialogic interconnection between the body and the world. In front of the living body, these orientations struggle with mechanistic relations between dematerialization and physicalization. Reflection on the sign and its dialogical structure is of prime importance in Bakhtin's critique. His dialogic approach contributes to a better understanding of physical and vital processes and structures, as well as of historico-cultural relations and dynamics, such as the relation between "base and superstructure," described by Marx and Engels, but generally interpreted in mechanistic terms. Substitution of unilinear mechanistic dialectics with the dialogic model and focus on synthesis no doubt offer a better understanding of structural processes. Uexküll's research proceeds in the same direction. The process requiring analysis and explanation for both Bakhtin and Uexküll (in the framework of different research interests) is a semiosic process. And even though Uexküll did not explicitly refer to the dialogic model, it is implied in his "functional cycle."

Considering that semiosis is terrestrial biosemiosis, involving all life-forms over the entire planet, approaches to the structure of semiosis that transcend the domain of the human sciences are clearly important. A pivotal concept in Sebeok's research and in "global semiotics" generally is the axiom that semiosis and life converge (Sebeok 1991b, 1994b, 2001). On the one hand, semiosis is described as "the criterial attribute of life," that which distinguishes the animate from the inanimate (Sebeok 1986a: 73); on the other, semiosis has not always existed in the course of the development of the universe. Sebeok posits that semiosis and the animate originated together with the emergence of life, though he does not neglect to signal the need to investigate the hypothesis of the possibility of semiosis before and beyond life (*cf.* 15.2). From this point of view, it is important to signal John Deely's position concerning "physiosemiosis." In his own words: "The best term proposed so far for a semiosis at work prior to and independent of life once it has emerged is *physiosemiosis*" (Deely 2010a: 40; 1990: Ch. 6, "Physiosemiosis and Phytosemiosis"; 1994: Ch. 6, "How Do Signs Work?").

Life or, more exactly, thematization of life processes in relation to signs, invests semiotics with a completely different role from that attributed to it when the relation to nature is considered as "the lower threshold" of semiotics (Eco 1976 [1975]: 21). In this case, semiotics is reductively understood as semiotics of culture. Instead, from a global semiotic and biosemiotic perspective, semiotics is a science of life. The upshot is that for a proper understanding of human culture, its structure, functioning and status in the overall biosphere, it must be viewed interrelatedly with all other spheres of semiosis over the planet. The condition of interrelatedness is structural. As can be drawn from Peirce's theory of synechism, structural interrelatedness implies that the dynamics driving sign activity – which implies relations among signs, bodies and, in the specifically human world, values – in any given piece in the great semiosic network inevitably generates reverberations through the whole. Interrelatedness is synonymous to translation understood in a broad sense as response and interpretation among signs that transfer from one interpretant to another, and in the human world, from one system of values to another, thereby expanding and enhancing the signifying universe.

Interrelatedness is also synonymous to intercorporeity insofar as it involves relations among signs that are inevitably related to bodies, whether this connection is immediately obvious or not. Therefore, the concept of interrelatedness is connected to dialogism in the biosemiotic understanding of this expression as intercorporeity – following Bakhtin, but also biologists like J. von Uexküll or in more recent times Maturana and Varela. From the point of view of semioethics, to recognize the inevitable condition of interconnectedness means to account for the other, to recognize that the other and its many faces, whether human or nonhuman, cannot be evaded, consequently that recognition in any given circumstance is not a concession made by the subject, but is very simply a response to a structural fact of life. Therefore, the condition of interrelatedness or interconnectedness with its intercorporeal, dialogic and interpretational-translational dynamics, structural to signs always becoming other from what they were becoming, is an essential condition for life, for all of life to flourish and renew itself over the planet (cf. 2.3, 15.2).

2.3 Dialogism, communication and modelling from a global semiotic perspective

All life-forms are endowed with a capacity for modelling, communication and dialogism (Petrilli and Ponzio 2002a, 2002b, 2003c, 2013b). "Modelling" refers to the process by which something is performed or reproduced on the basis of a model or schema. In semiotics, models are based on relations of similarity and are associated with the iconic sign. The expression "modelling system" is used by the so-called Tartu-Moscow School – which features such figures as Vjačeslav I. Ivanov, Jurij M. Lotman, Vladimir N. Toporov, Andrej A. Zaliznjak - to distinguish natural language ("primary modelling system") from other cultural semiotic systems ("secondary modelling system") (Kull 2010b). Sebeok also uses the term "language" for species-specific human modelling as distinct from "speech" (Sebeok 1986c; cf. 3.1; see also Deacon 1997).

"Primary modelling" or "language" accounts for the human potential to construct a multiplicity of different possible worlds. Linguistic creativity with the proliferation of different natural languages in human cultures over the globe are strong indications of the generative capacity of the human primary modelling device. Modelling determines worldview. But unlike other life-forms, the modelling device specific to human animals is endowed with "syntax," or rather "syntactics" (Sebeok and Danesi 2000). Considering its syntactical nature, another term introduced for the human primary modelling device is "writing." Thus understood, "writing" should not be confused with "transcription" (Petrilli and Ponzio 2003b: 7-10). "Writing" and "language" as we are now describing them are a condition of "writing" as transcription and of "language" for (verbal and nonverbal) communication (Petrilli and Ponzio 2008: 28–35).

Thanks to syntactics, human beings are endowed with the capacity to construct, deconstruct and reconstruct an infinite number of worldviews with a finite number of elements. This capacity for combinatorial procedure is no less than structural to the human modelling capacity, unlike nonhuman life-forms where the relation between modelling and *Umwelt* is univocal, unidirectional (see J. von Uexküll 1909, 1934/1992; Hoffmeyer 1996, 2008). Nonhuman animals are born into a world they are not programmed to modify, if not according to an original *bauplan* as established by the genetic patrimony of the species. Instead, the human species-specific attribute called "syntactics" determines the capacity for creativity and for "metasemiosis" beyond the level of direct and immediate semiosic activity. Consequently, *homo* is not just a "semiosic animal" like all other animals, but also a "metasemiosic" or "semiotic animal" (cf. Introduction).

The term "semiotics" (from which derives the adjective "semiotic") has two different meanings: 1) the general science of signs; 2) the capacity for reflection on signs and for narrativity characteristic of human semiosis - another term for this capacity is "metasemiosis." As a "semiotic animal" the human being can suspend action and deliberate. The immediate implication is that the human animal is invested biosemiosically and phylogenetically with an exclusive capacity for creative intervention upon the course of semiosis in the biosphere, for critical awareness and responsibility. It ensues that human beings are invested with a capacity to safeguard semiosis in its joyous and dialogic multiplicity. The "semiotic animal" is also a "semioethic animal" (Petrilli 2004d, 2004e). "Metasemiosis" or "semiotics" understood as "metasemiosis" (and not simply as the name of the theory, or science, or doctrine, or discipline that studies sign activity) has influenced the whole course of homination through to its present phase of development. Moreoever, insofar as it is associated with the logic of otherness, "metasemiosis" favours plurilingualism and multivoicedness (Sebeok, Petrilli, Ponzio 2001). From the point of view of communication, which presupposes modelling and dialogism, the presence of the other is no less than structural.

From a biosemiosic perspective, "modelling," "communication" and "dialogism" are interconnected and presuppose each other. They provide the foundation and condition of possibility for the ongoing generation of life in its heterogeneity and specificities, and only subsequently on the evolutionary scale for the communicative exchange of rejoinders in the human world. The expression "communication" is not only used for message transmission from emitter to receiver (though this is one of its possible manifestations). Far more extensively, communication converges with sign activity globally, with life, which means to say with the universal condition of interrelatedness, interdependency and dialogism implied by life and semiosis. And in this framework, "dialogism" is not simply a matter of choosing to exchange rejoinders among speakers, but rather,

following Bakhtin (1929), it describes the inescapable condition of intercorporeal involvement and reciprocal implication among bodies and signs throughout the semiosic universe, also thematized with the concept of "grotesque realism" in medieval popular culture (Bakhtin 1984b).

"Dialogism" describes the relation of involvement, of implication with the other, a relation that is not decided by the subject, that is not chosen, that does not ensue from initiative taken by a subject that has decided to get involved. "Dialogism" implies a relation of *passive involvement* with the other. Relatively to verbal discourse, dialogism thus described is not necessarily manifest in formal dialogue; whereas discourse that is not formally dialogic can be invested with high degrees of dialogism. Dialogism comes into play in both exterior and interior discourse, it presupposes the logic of otherness, but it is not a prerogative of discourse. Any sign situation or semiosis is a relational process in becoming at different degrees of dialogism. The relation itself between the interpreted (signobject) and the interpretant is structural to the sign and is dialogic to varying degrees. The structure of the sign is dialogic (Ponzio 2006a).

2.4 Criteria and differences in the interpretation of structure

As emerges from the approaches described so far, the terms "structure" and "structuralism" are clearly open to different interpretations. Among the criteria that have marked differences and, consequently, have played a major role in shaping different trends, particularly significant are the following three:

a) First criterion: structure and the worldview it belongs to. Approaches to structure and structuralism can be differentiated on the basis of worldview, whether explicit or implicit. Any given approach can either limit itself to describing structures and the world they belong to, or it can reflect on conditions of possibility. Special reference here is to Edmund Husserl and his 1948 monograph, Erfahrung und Urteil (Experience and Judgment) where he investigates the conditions of possibility of "the existent world," the already pregiven, predetermined world (Husserl 1973 [1948]: 30–31). To investigate the conditions of possibility is necessary for a critical analysis of the world-as-it-is and alternative social planning, for radical social change. The task here is similar to that envisaged by Husserl with his "constitutive phenomenology": to explain the entire complex of operations that lead to the constitution of the actually existing world. This means to investigate modelling structures and processes in the human world not simply in terms of factuality, reality and history, but also in respect to potential and possibility (Husserl 1973 [1948]: 331–338).

Such investigation is specific in the sense that it deals with a species-specific modality of constructing the world. Unlike other animals, the human animal is characterized by the capacity to construct infinite possible worlds. In Sebeok's terminology, the human modelling device of the world is called "language" (Sebeok 1991b: 49–58). This capacity is only available to human beings that, unlike all other species, are equipped to construct infinite worlds, whether real or imaginary, concrete or fantastic and not just a single effective world.

b) Second criterion: use of the notion of "code." Use of the notion of "code" is symptomatic of differences among the various approaches to structure and structuralism. As anticipated, differences depend on the orientation toward the world that the structure belongs to. That is to say, whether a given approach simply limits itself to describing "the already-made-world" or whether, instead, it reflects on its conditions of possibility. As Paul J. Thibault maintains (1998b: 125) in his entry on the code, included by Paul Bouissac in his Encyclopedia of Semiotics, this ambivalent semiotic notion can be used to denote: (1) a preestablished set of rules for decodification; and (2) a meaning-making potential. In the former case, the relative communication model is conceived in terms of information transmission where information is encoded by a sender and decoded by a receiver on the basis of a common code. According to this description, the code is neutral, immune to interpretation and sufficient for successful communication. In this framework, communication is conceived in terms of the "postal package" model described by Rossi-Landi (1961) (cf. 1.2 and Ch. 14). As observed by Thibault, this model derives from a questionable interpretation of Saussure's dichotomy in terms of code (langue) and individual use (parole). It is also connected with first generation research in information theory (Shannon and Weaver 1949) and cybernetics (Wiener 1948; Ashby 1956) and was particularly influential in the development of semiotics during the 1960s and 1970s.

The second model conceives the code in terms of significant meaning-making potential:

Code, in this view, is a semiotic resource – a meaning potential – that enables certain kinds of meanings to be made (in language, in the ways we dress, in our eating rituals, in the visual media and so on) while others are not, or at least in that code. This view differs from the previous one in two important ways. First the internal-design features of the code – its grammar – have a significant potential for constructing meanings... Second, there is no dichotomy between code and behaviour or use. (Thibault 1998b: 126)

Understood as a semiotic expedient, the code allows for the development of given interpretive pathways. That is to say, it allows for orientation in the direction of certain meanings, and not others. According to this description, the code is con-

ceived differently from the first model, for example, in terms of constitutive traits, grammar, potential value for the construction of meanings, Furthermore, it does not establish a dichotomous relation between code and behaviour. On Thibault's account, representatives of this second conception include Bronislaw Malinowski (1923), Gregory Bateson (1951) whose codification model is a multilevel, hierarchical system of contextualized relations, and Michael Halliday (1984).

That conceptions of structure connected with the code understood mechanistically have been transcended and that a transition has taken place from "communication semiotics" to "interpretation semiotics" are largely the result of having "rediscovered" Charles Peirce's semiotics during the first half of the 1970s. Umberto Eco, no doubt, has played a major role in such "rediscovery" with his semiotic research in those years (1962, 1968, 1976). Though, here, we cannot fail to mention the key role played by Massimo A. Bonfantini in recovering and promoting Peirce studies in Italy (Bonfantini 1979, 1980, 2003). But, in truth, in Italy Peirce had already been discovered by Giovanni Vailati, a major exponent of Italian pragmatism, who had come to know of him through the mediation of Victoria Welby (Petrilli 2009a: 288-294). The transition from "code" or "communication semiotics" to "interpretation semiotics" is the expression of "Saussurean semiology" merging into "Peircean semiotics," an orientation that led Sebeok to talk of "ecumenicalism in semiotics" in his epochal monograph, The Sign & Its Masters (1979: 61-83).

With his research, Eco evidences both the role carried out by the notion of code in semiotics during the 1970s and Peirce's influence on its transformation. Eco's interest in Peirce's semiotics goes back to his studies on the triadic relation between sign (representamen), interpretant and object, on sign production, the inferential processes of abduction, the role of the reader in the configuration and interpretation of the text, reformulation of the notions of code and dictionary in terms of the encyclopedia, the concept of "unlimited semiosis" and the "limits of interpretation." In his monographs The Limits of Interpretation (1990) and Interpretation and Overinterpretation (Eco et al. 1992), he revisits the question of "the open work," as per the title of an early monograph (1962), in terms of "unlimited semiosis." In Kant and the Platypus (1997), he turns his attention to the Peircean notions of "Dynamical Object" and "Ground."

Eco gradually distanced himself from Saussurean sémiologie, critiqued ontological structuralism (The Absent Structure, 1968) and dissociated himself from the binarism of code and message. All of this led him to make the following claim as early as 1976 in a paper delivered at the "Peirce Symposium on Semiotics and the Arts," at The Johns Hopkins University (Baltimore), on the notion of interpretant according to Peirce: "I want to make explicitly clear that my present approach has to be labeled *Peircist*" (quoted from Sebeok 1997: xiii).

On Eco's account (1976 [1975]), a code governs information transition from a source to a destination, but a code in itself does not guarantee signification. A connection cannot be established between (1) a set of signals ruled by internal combination restrictions and (3) a set of possible behavioural responses from the destination, without (2) a notion from a set of notions about the state of the world, which provides communicative context. Systems (1), (2) and (3) are called "s-codes." An S-code is "a system (i) in which all values are established on the basis of position and difference and (ii) which only emerges when different phenomena are compared to each other with reference to the same system of relations" (Eco 1976 [1975]: 38). According to Giampaolo Proni in his entry "The position of Eco" in Semiotik/Semiotics. A Handbook on the Sign-Theoretic Foundations of Nature and Culture (edited by R. Posner, R. Klaus and T. A. Sebeok), Eco associates "the Hjelmslevian and structuralist approach with Peirce's theory of interpretation" (Proni 1998: 2314). In another entry on Eco included in Bouissac's Encyclopedia of Semiotics, Gary Genosko explains that

In keeping with his trademark hybrid blend of Hjelmslevian and Peircean categories, Eco reduces the two continua of the expression and content planes of Hjelmslev to one continuum; the matter through which semiosis takes place. Semiotic interpretation involves the application of Peircean concepts to define the segmented portions of the continuum serving as sign vehicles for content segments. (Genosko 1998: 211)

Consequently, another criterion, the third, for differentiation among the various approaches to structure and structuralism is the following.

c) *Third criterion: difference between "code semiotics" and "interpretation semiotics.*" This third criterion of distinction depends on the first ("structure and the worldview it belongs to") and concerns the sign conception orienting any given approach – whether in the direction of "code semiotics" – or if we prefer "decodification semiotics" (Rossi-Landi 1968, new ed. 2003), or "code and message semiotics" (Bonfantini 1984, new ed. 2004) – or "interpretation semiotics" (Eco 1984; Ponzio 1973, 1975b).

For as long as we maintain the notion of code, interpretation is reduced to decipherment, decryption and decodification. In other words, the assumption is that we are simply substituting signs to obtain a solution that is already foreseen, in this sense already given. To reduce interpretation to decodification also has consequences for the concept of translation, as will be obvious. When the logic of decodification prevails, translation is simply conceived as providing a new cover with different signifiers for the same meaning, like changing one's clothes: the same meaning appears on stage in different costumes.

Moreover, translation of the focus of semiotic theory from code to interpretation implies the transition from a perspective on sign activity that is dominated by binary oppositional logic to a perspective that, instead, is oriented by the possibility of open-ended and dialogical deferral among signs.

From a semioethic point of view, this means to liberate signs, language and behaviour from static conceptions and artificial boundaries as created by binarism and the logic of closed identity that subtends the former, and to favour a more responsive, unprejudiced understanding of the dynamic and dialogical nature of semiosis. Given that the logic of otherness is structural to sign relations, the latter cannot be reduced to the biunivocal logic of codes, as we shall see in what follows. And to develop the implications for human culture in terms of signifying practices, interpersonal relations and social programmes, as authors like Bakhtin, Rossi-Landi, Ponzio and Adam Schaff have amply demonstrated, represents a real challenge in the light of dominant ideology today.

We will now take a closer look at different approaches to structure and structuralism, relatively to the distinction between "code semiotics" and "interpretation semiotics" and to the logic in which they are embedded.

The expression "code semiotics" alludes to a general sign model according to which messages are formulated and exchanged on the basis of a code, defined and fixed antecedently to actual sign usage. And given that the code is based on a biunivocal correspondence between signifiant and signifié, it simply calls for decodification of the message, free of any of the risks involved in interpretation. Code semiotics derives from a limited interpretation of Saussure's conception of the sign and reformulation of the communication relationship in terms of the emitter/receiver model, as foreseen by information theory or the mathematical theory of communication (Shannon and Weaver 1949) as well as by Jakobson's communication model (1963; 1996: 292; Jakobson and Halle 1956).

The Saussurean sign model is embedded in a series of dichotomies comprising the notions of langue and parole, signifiant and signifié, diachrony and synchrony, and the syntagmatic and paradigmatic axes of language (Saussure 1916: Introduction, Chs. III, IV; Part I, Chs. 1, III; Part II, Chs. V-VII). Such terms favour association of this particular sign model to the mathematical theory of communication, and consequently its reformulation in terms of code and message, transmitter and receiver. This approach has led to describing Saussurean semiotics as "decodification semiotics" or "code and message semiotics" (Bonfantini 1981; Eco 1976; Ponzio 1973, 1975b, 1981; Rossi-Landi 1968, 1972).

The Saussurean model is ever more inadequate in the light of Peirce's "interpretation semiotics," as much as of Bakhtin's philosophy of language (Ponzio 1990: 251-273). This theoretical orientation now finds confirmation, more than ever before, at the level of praxis by global socio-cultural transformations that tend toward new signifying practices resistant to polarization between code and message. Thanks to such practices which oppose the action of centripetal forces in the life of language, the code's hegemony over the multi-voicedness and multi-availability of the sign is at last questioned and put into crisis. Moreover, it is important to emphasize the semiosic nature of meaning which, as such, is not separate from the work of translation carried out in the processes of interpretation. For as we know, and in agreement with Peirce, signs do not exist without another sign acting as interpretant.

2.5 Two conceptions of structure

Structures play a fundamental role in the life of signs, language and behaviour, but our conceptions of them do not always account for them appropriately. On a theoretical level this, again, ultimately depends on whether the logic underlying our understanding is conditioned by the mechanistic fixity of codes or by the processual dynamism of interpretation. There are at least two fundamentally different ways of conceiving structure: in the first case, structure is an *a priori* with respect to semiosis (sign process or sign activity) and sign relations that are reductively viewed in terms of codification and decodification; in the second case, structure (for example, the triadic structure of a sign or argument according to Peirce) cannot be separated from the effective process of semiosis. In other words, structure is a constitutive part of the interpretive process of semiosis.

As observed by Sebeok (2001: 17–30), the Peircean description (*CP* 5.473) of semiosis or "action of a sign," conceived as an irreducibly triadic process or relation (sign, object and interpretant), has a special focus on the interpretant (*cf.* Petrilli 2010a: Ch. 2). It concerns "what is involved in understanding, or teleonomic (i.e. goal-directed) interpretation of the sign" (Sebeok 2001: 17). This is to say that for semiosis to obtain, there must be a "purposive" action. *Signans* and *signatum*, or, in Saussurean terms, *signifiant* and *signifié*, are part of an irreducibly triadic sign structure.

Peirce himself maintained that the term "representation" was inadequate to indicate the general character of the sign. Instead, signs and sign processes should be described in terms of "mediation" (*CP* 4.3), because they presuppose the work of interpretation. Rather than "represent" the object directly to the interpretant, the sign "stands for" the object and can do so only through mediation by the interpretant. In other words, the semiosic function is best described in terms of "mediation" (interpretation) rather than of "representation." So while the formula *aliquid stat pro aliquo*, "something that stands for something else," describes the sign relation in dyadic terms, Peirce's definition evidences the irre-

ducibly triadic structure of the sign and establishes the condition for theorizing the movement of renvoi and deferral that characterizes it. Sebeok (1979a: viii) emphasizes this aspect of Peirce's analysis of sign structures and relations when he says:

Peirce's definition embodies the core concept of renvoi, or transfer, Jakobson's compressed coinage (Coup d'œil sur le développement de la sémiotique [1975]) for the celebrated antique formulation, aliquid stat pro aliquo, but it contains one very important further feature. Peirce asserts not only that x is a sign of y, but that "somebody" – what he called "a *Quasi*interpreter" (CP 4.551) – takes x to be a sign of y.

Not only is a sign a sign of something else, but "somebody" a "Quasi-interpreter" (CP 4.551) assumes something as a sign of something else. Peirce further analyzes the implications of this description when he says that: "It is of the nature of a sign and in particular of a sign which is rendered significant by a character which lies in the fact that it will be interpreted as a sign. Of course, nothing is a sign unless it is interpreted as a sign" (CP 2.308). And again: "A sign is only a sign in actu by virtue of its receiving an interpretation, that is, by virtue of its determining another sign of the same object" (CP 5.569). Semiosis considered from the point of view of the interpretant – the activity of interpretation or the inference process based on signs – can be described in terms of *interpretation*. Peirce specifies that all "signs require at least two Quasi-minds; a Quasi-utterer and a Quasi-interpreter" (CP 4.551). The interpreter, mind or quasi-mind is also a sign. That is, the interpreter is a response, an interpretant: the interpreter is a responsive "somebody." The activities that engender the sign and process it, that is, expression and interpretation, are essentially interconnected by a relation of continuity. As such they describe two faces of the same "mental" process - where the latter does not necessarily refer to the human brain (cf. 13.1).

The Peircean sign model today is gaining wide consensus in both semiotics and the philosophy of language as it gradually supplants the model of semiosis understood mechanistically in terms of codification and decodification. All the same, with the spread of Saussurean structuralism (or rather, an oversimplifying interpretation of Saussurean structuralism), the mechanistic model has extended its influence from linguistics and semiology to semiotics and other human sciences and still continues to be applied despite growing consensus around the Peircean approach. For example, as Thibault claims:

For Noam Chomsky, a generative grammar is a system of rules for relating signals to their semantic representations. Chomsky claimed that this pairing of signal and semantic representation corresponds to the idealized competence of the speaker-hearer. This competence specifies the underlying mental mechanism that makes this pairing process possible. This model continues to exert influence. (Thibault 1998b: 126)

The complex and dynamic sign model described by Peirce finds further development in Charles Morris's conception from the very first lines in his early booklet, *Foundations of the Theory of Signs*. In his explorations of the nature of the sign, Morris immediately foregrounds the notion of mediation with the following triadic characterization:

S[ign] is a sign of D[esignatum] for I[nterpretant] to the degree that I takes account of D in virtue of the presence of S. Thus in semiosis something takes account of something else mediately, i.e., by means of a third something. Semiosis is accordingly a mediated-taking-account-of. (Morris 1971 [1938]: 19)

The notion of mediation is associated with the notion of process, and the process in which something functions as a sign is called *semiosis*. Morris underlines the relation between continuity of process and specificity in any given sign situation, I would add here its structure or articulation:

There is thus a potential sign continuum in which with respect to every object or situation all degrees of semiosis may be expressed, and the question as to what the designatum of a sign is in any given situation is the question of what characteristics of the object or situation are actually taken account of in virtue of the presence of the sign vehicle alone. (Morris 1971 [1938]: 20)

Structures occur in semiosic processes, flowing from the interconnection among different types, orders and systems of signs. As such, structures are constitutive of signs, verbal and nonverbal, linguistic and non-linguistic and an integral part of semiosis. Again, reading Morris:

From the interconnectedness of events on the one hand, and the interconnectedness of actions on the other, signs become interconnected, and language as a system of signs arises. That the syntactical structure of language is, in general, a function of both objective events and of behavior, and not of either alone, is a thesis which may be called the dual control of linguistic structure. [...] This thesis [...] gives a way of avoiding the extremes of both conventionalism and the traditional empiricism in accounting for linguistic structure. [...] sets of signs tend to become systems of signs; this is as true in the case of perceptual signs, gestures, musical tones, and painting as it is in the case of speech and writing. In some cases, the systematization is relatively loose and variable and may include subsystems of various degrees of organization and interconnectedness; in others, it is relatively close and stable, as in the case of mathematics and scientific languages. Given such structures, it is possible to subject them to a three-dimensional analysis, investigating their structure, their relation to what they denote, and their relations to their interpreters. This will now be done in general terms, discussing in turn the syntactics, semantics, and pragmatics of language, but keeping in mind throughout the relation of each dimension, and so each field of semiotic, to the others. (Morris 1971 [1938]: 27)

Thematization of the condition of interconnection among the different dimensions of semiosis and the different fields of semiotics (he uses the term "semiotic"), leads Morris to evidence the "unity of semiotic," being a unity or totality I would qualify as detotalized, just like the object it studies, semiosis (cf. Ch. 13).

2.6 Binarism and triadism in structuralist approaches to sign theory

The different conceptions of structure in decodification semiotics and interpretation semiotics do not involve opposition between binarism and triadism. The Saussurean/Hjelmslevian/Greimassian approach to semiotics, on the one hand, and the Peircean approach, on the other, do not represent two factions siding either with binarism or with triadism. The difference is not the opposition between binarism and triadism, but rather that between a sign model that tends to oversimplify with respect to the complex processes of semiosis and a model, like that proposed by Peirce/Morris/Sebeok that, instead, keeps account of different aspects and factors in their complexity, in processes where something is or becomes a sign.

The validity of the latter is not given by the fact that it is oriented toward a triadic form, but by the specific contents of Peircean triadism – the categories and sign typologies introduced, the dynamic model elaborated by describing signs in terms of deferral from one interpretant to another, the categories of "firstness," "secondness" and "thirdness," the triad "representamen," "object" and "interpretant," characterization of the sign on the basis of the triple tendency toward "symbolicity," "indexicality," and "iconicity." All these aspects contribute to delineating and supporting a conception of semiosis which thematizes otherness and dialogism as decisive factors.

Peircean logic is dialogic and polylogic. The strength of his sign theory does not consist in the triadic formula in itself. Proof of this is Hegel's dialectics. In Hegelian philosophy, triadism abstracts from the constitutive dialogism of life and gives rise to unilinear and monological dialectics. Strangely enough, in the entry "Binarism", Thibault (1998a: 81) indicates Hegelian philosophy as the way out from the binary oppositional logic characteristic of structuralism as conceived by Lévi-Strauss. In his 1970-71 notebooks, Bakhtin describes how Hegelian dialectics is formed. Though it has its roots in the live dialogic context of semiosis, it transforms dialogic relations into abstract concepts, judgments and standpoints connected with a single and solitary consciousness. The process consists of taking out the voices (division of voices) from dialogue, eliminating any (personal/emotional) intonations, thus transforming live words into abstract concepts and judgments. The result is dialectics achieved in the form of a single abstract and monologic consciousness. Peirce himself also took a clear stance against the constitutive sclerosis of Hegelian dialectics. Rather than presenting itself as an open process, which also means a process prone to contradiction, in Peirce's view, Hegelian dialectics is oriented unilaterally toward a synthesis, the expression of a frantic search for a conclusion (on the relation between dialogue and dialectics in Peirce and Bakhtin, see Bonfantini, Petrilli, Ponzio 2006; Ponzio 2004c).

Rather than between binarism and triadism, the real juxtaposition in linguistic and semiotic conceptions is between *monologism* and *polylogism* (see Ch. 10, below). Saussurean *sémiologie* is grounded in a series of dichotomies including *langue* and *parole*, *signifiant* and *signifié*, *diachrony* and *synchrony*, the *syntagmatic* and *paradigmatic axes of language*. This leads to a connection with the mathematical theory of communication and reformulation of the Saussurean sign model in terms of the relation between *code* and *message*, *transmitter* and *receiver*. But the limitation of this sign model is not binarism – contrary to what Thibault (1998a) claims in his entry, "Binarism." Instead, the limitation of this particular sign model is that it establishes a relation of equal exchange between sign and meaning and reduces complex linguistic life to the relation between code and message – which, as discussed, leads to describing semiotics of Saussurean derivation as "code" or "codification and decodification" or "equal exchange" semiotics.

2.7 Interpretive structures between signality and semioticity

Approaches deriving from Saussurean semiology (or, better, from a distorted understanding of the latter) propounded a reductive view of signifying and interpretive processes. In spite of this, for quite some time they were thought to provide an adequate account of all types of sign processes: simple sign processes of the *signal* type relative to information transmission, but also complex sign processes relative to human communication globally in its different aspects, where signhood reaches high degrees of complexity, otherness and dialogism.

Signals are signs at low degrees of semiosic materiality, at low degrees of signhood or semioticity in terms of otherness logic. As such, they presuppose a code, a system of rules with respect to which the relation between the interpreted sign and interpretant sign is *predetermined*. But the signal is a constitutive component of signs in general. In other words, this term does not just designate one type of sign, but rather a dimension present to varying degrees in all signs. From this point of view, to indicate the lowest level of semioticity or signhood,

rather than use the term "signal" which suggests something separate from "sign," "signality" is more appropriate. As much as the verbal sign is characterized by multi-voicedness, it also contains a margin of signality: under certain aspects verbal signs are signals as well. Therefore, from a certain point of view, signs always present a degree of univocality in the relation between interpreted and interpretant. With signality, the degree of otherness and creativity in a sign is at its lowest and interpretation merely takes place in terms of identification or recognition.

As first proposed by Augusto Ponzio in 1985 in his essay "Signs to Talk about Signs" (now in Ponzio 1990: 15-61) and as a development on Valentin Voloshinov, with special reference to his book *Marxism and the Philosophy of Language* (1929), the interpretant sign relative to the signal may be called an "identification interpretant." In the case of verbal signs, for example, the identification interpretant: (a) permits recognition of phonemic or graphic contour; (b) identifies semantic content, or "immediate interpretant" in Peirce's terminology (cf. 7.3); "meaning" as opposed to "theme" in Bakhtin and Voloshinov's terminology (cf. Ch. 9); and (c) identifies morphological and syntactic configuration. The relation of the identification interpretant to the interpreted sign is predetermined by a code and, as such, is univocal, as in the case of signals. But the signal component of the verbal sign does not characterize it structurally as a sign. This is why a structural description of the verbal sign limited to such aspects does not account for its specificity as a sign. In other words, like all other signs, except for signals *strictu sensu*, the verbal sign, too, contains signality, though its structure cannot be reduced to signality.

To repeat then, the real limit of structuralism in semiology is not binarism, but the fact that binarism finds expression in the logic of equal exchange between signifiant and signifié, in the reduction of complex sign life to the dichotomy between code and message, which means to say in the reduction of signhood to signality. Interpretation semiotics makes evident the inadequacy of the sign model proposed by decodification semiotics. No doubt, the centripetal forces in language and socio-cultural life in general privilege the code with its unitary structure. However, the rise of new socio-cultural signifying practices that do not comply with polarization between code and message, langue and parole, language system and individual speech has favoured "rediscovery" of interpretation semiotics. As the centripetal forces in language weaken, the centrifugal forces flourish and give full play to phenomena - such as dialogism, polylogism, plurilingualism, multiaccentuativity, and pluriavailability - that characterize sign and interpretive processes in their specificity.

An approach to linguistics that does not keep account of both forces in linguistic life can still speak of linguistic creativity, but the expression becomes an empty formula. In fact, once the dynamic between the centripetal and centrifugal forces in language is neglected, the relation between discourse and ideology also tends to be set aside – a rather serious oversight on the scene of semiotic studies that want to account for the relation between signs and values. Emblematic from this point of view is Chomskyan linguistics. In terms of social and political critique, Chomsky has made an extraordinary contribution to the study of contemporary ideologies with special reference to US imperialism, from the time of the Vietnam war to so-called "humanitarian wars." But Chomsky the linguist claims to study linguistic structures from a phonological, syntactical and semantical point of view, neglecting their pragmatic dimension, the connection to values and ideologies. And even if we disregard the separation between sign and ideology in Chomsky's linguistics and limit our focus to his theory *iuxta propria principia*, it still presents a series of important internal limitations in spite of his critique of traditional taxonomic structuralism and the concept of "deep structures," as we shall see in the next section.

2.8 The role of interpretation in the structural dimensions of semiosis

Chomskyan theory of linguistic structures denies that the syntactic component of linguistic competence is interpretive. It limits interpretation to the phonological and semantic components. This leads to Chomsky's distinction between "to *generate*" (which concerns relations between "deep structures" and "surface structures") and "to *interpret*." He privileges syntax and considers it as an *unfounded* fundamental, an absolute foundation. That is, a foundation without a foundation, which he conceives in innatistic terms, free of interpretation – or rather, in our own terminology, free from the dialogic relation between interpreted and interpretant (Ponzio 2004a: 42–44). Thus, Chomskyan grammar with its methodologic suppositions and its dualism between competence and experience, as well as between deep structures and surface structures, would not seem to offer a suitable example of syntactics³ as understood by Roland Posner and Klaus Robering who apply and develop Morris's approach to semiotics.

Ponzio proposes a structural interpretive linguistic theory (as a branch of syntactics which studies combination rules applied to verbal complexes) that explains the "generation" (in Chomsky's sense) of an utterance in terms of its relation to another utterance that interprets it, behaving as its interpretant. All utterances are generated, identified and developed in relation with their interpretants. According to this approach, the interpretant of a "sentence" (the dead cell of a linguistic system), or better "utterance" (the live cell of discourse) is

another verbal sign and not a deep structure grounded in underlying elementary sequences. An interpretant that identifies an utterance or any verbal sign whatever is simply "unexpressed" until the conditions obtain for its expression and explication. We have introduced the expression "identification interpretant" for this type of interpretant which: a) identifies the verbal sign in its phonemic or graphic features; b) identifies the verbal sign in its semantic content; c) identifies the morphological and syntactic physiognomy of the verbal sign.

Given that the three structural dimensions of semiosis (syntactical, semantical and pragmatical) are inseparable, the interpretant engendered in the relation with an utterance or any verbal sign whatever is not only an identification interpretant. It is also a "responsive understanding interpretant," which evidences the pragmatical dimension of signs. Even mere recognition of the sign – at the level of phonemic or graphemic configuration, morphological and syntactic structure and semantic content – is difficult, if not impossible, without the interpretant of responsive understanding (or answering comprehension). Just as syntactics is present in all aspects of signs, meaning (the relation between interpreted and interpretant) is also present at the level of identification of the units composing words, phrases, utterances and texts.

2.9 Critical structuralism, a pioneer bigradual approach to language

A fundamental limitation demonstrated by Shaumyan (1965, 1987) in Chomsky's transformational model is that it confounds elements that belong to two different degrees of abstraction, ideal language and natural language: Chomsky's model cannot be applied to a natural language different from that elected for his description. This led Shaumyan to contrast his own bigradual theory of generative grammar to Chomsky's unigradual theory. Unlike Chomsky, Shaumyan distinguished between two levels of abstraction - genotypical language and phenotypical language.

With his pioneering book of 1961, Significato, comunicazione e parlare comune, which under certain aspects anticipated Shaumyan's book on dynamical linguistics (1965), Rossi-Landi (much like Shaumyan) proposed a bigradual approach to language. In his monograph, Rossi-Landi formulates his "common speech hypothesis." This hypothesis proposes a general methodology for human language and speech. The common speech hypothesis describes a system of operations that are carried out through "speech". Such operations are no less than essential for successful expression and communication in general among human beings and independently of the complications that inevitably arise in the concrete reality of communication. The assumption that subtends this concept is that beyond all possible historical, socio-cultural and geographical differences, there exist basic similarities in the biological and social structure of all human communities.

From the perspective of philosophy of language, a structuralist approach concerned with the general conditions that make meaning and communication possible can be described as *critical structuralism*. Here "possible" is understood in a Kantian sense, as referring to the *a priori* in language, to the conditions that make given occurrences possible, rather than simply describing them. From this point of view, Rossi-Landi's research on the common structures which are shared by the different natural languages and which make them possible is emblematic. He refers to them with the expression "*parlare comune*" ("common speech"). Rossi-Landi describes "common speech" as a "general methodology of language." In other words, "common speech" has a *methodological function*. The study of language is also the search for a general methodology of human language and speech in its signifying capacity (Rossi-Landi 1961: 158ff.).

"Common speech" evidences how language functions, identifying those operations that are inevitably involved when we speak. From this point of view, Rossi-Landi's investigation is inspired by Kantian transcendental logic which he reformulates in his own terms in relation to the study of verbal expression. At the same time, however, common speech theory supersedes Kant because it insists on what Kant left aside – the transcendental character of language. Significantly, Rossi-Landi recovers Kant filtered through his readings of Ernst Cassirer (in particular the latter's "Structuralism in Modern Linguistics," 1945), the "Kantian Peirce" and the British analysts. The *a priori* stands in language. Common speech does not concern the "expressed linguistic" results (which would be an oversimplification), but rather the "internal and hidden structure" of language (Rossi-Landi 1961: 165).

These considerations recall the notion of "innere Sprachform" which Cassirer borrowed from Humboldt, and which is connected with language conceived as energheia rather than as product or ergon. We could make the claim that Rossi-Landi develops an ante litteram critique of Chomsky's "Cartesian linguistics" (in his 1966 essay Chomsky places Humboldt in this line of thought). Chomsky's conception of language continues to be caught up in the classical alternatives consciousness/experience and rationalism/empiricism, with which he neglects Kantian critique and the fact that it supersedes both abstract rationalism and abstract empiricism.

Peirce's semiotics is connected to Kantian philosophy. In his important 1867 essay, "New List of Categories" (*CP* 1.545–559), Peirce reinterprets Kant's *a priori* and transcendental argument in linguistic and semiotic terms. Peirce's approach is explicitly anti-Cartesian. He refuses the rationalism-empiricism dichotomy as

unfruitful and abstract (on this account see his 1868 essays, "Questions Concerning Certain Faculties of Man" and "Some Consequences of Four Incapacities," in CP 5.215–263, CP 5.264–317). For Rossi-Landi too, both the generic opposition of idealism and empiricism and application of the logico-linguistic approach to the study of signifying structures in historical processes is unfounded and arbitrary. Instead, Rossi-Landi implemented Giambattista Vico's historicism to critique the Cartesian model. Insofar as it is based on the notions of evidence and deduction, the latter is not applicable to the historical, human sciences (Rossi-Landi 1961: 85-102; Vico 1744, 1976).

The common speech hypothesis explains and justifies linguistic difference, variety and multiplicity in terms of variety in expedients, solutions and resources offered by each single language to satisfy the social needs of expression and communication common to all languages. Of course, nothing is ever complete and definitive given that language is continuously developing and transforming. By contrast with those trends that conduct the multiplicity of languages to an Ursprache or to the universal linguistic structures of Logos or to a common biological structure, the notion of common speech does not neglect or underestimate what George Steiner (1975) called "the enigma of Babel," an expression which alludes to diversity and multiplicity among languages. Common speech as understood by Rossi-Landi does not imply mythical unity at the origin of all languages – no less, the unity of the human species by natural law. The notion of common speech proposes a model. In other words: though it refers to real processes it is a theoretical construction and not a *direct* description of real processes.

In contrast to the concept of "ordinary language" (analytical philosophy) and to the notions of "performance" and "competence," "deep structure" and "surface structure" (Chomsky's generative grammar), the "methodics of common speech" (Rossi-Landi) proposes a model with an interpretive function, a hypothesis that can be applied to different languages and verified (Rossi-Landi 1961: 153-176; cf. Ch. 14). In other words, the common speech hypothesis proposes a general model that explains linguistic usage, and does not merely describe it. As such, it is applicable to all languages. In this sense, common speech is not mentalistic or ontologically pre-existent to natural language and linguistic usage. On the contrary, Rossi-Landi's common speech model is the result of interpretive hypotheses for a conceptual apparatus that aims to explain real linguistic phenomena. With his "methodics of common speech," Rossi-Landi explains concrete linguistic usage in a given natural language (phenotypical level) in terms of his common speech hypothesis (genotypical level), whose validity increases the more it can be extended to different languages. In the foreword to the first edition of Significato, comunicazione e parlare comune (1961), he clearly states that he excludes any claim to a science of sign behaviour of the bio-psychological or sociological order as much as any form of competition with the analytical and historical work carried out by glottologists on different languages. Rossi-Landi's goal was not to formulate an abstract theory of the speculative order. He simply aimed to develop some sort of structural background for a better understanding of language and to make an attempt at clarification. Nor did thematization of the *a priori* in language mean to adopt a deductive aprioristic approach to the phenomena under analysis. Rossi-Landi employed a hypothetical-deductive, or more properly, an "abductive" method (to evoke Peirce), which means to explain a given event on the basis of hypotheses concerning the general conditions that make that event possible.

2.10 Limitations and preconceptions in the generative-transformational approach

Similar to the Saussurean model, the Chomskyan model too is dichotomous (competence/performance, surface/deep structure, innate rules/experience). However, in the case of Chomskyan structuralism as well the limit is not a question of binarism or triadism. Chomsky's structuralist theory of transformational grammar studies the rules that govern transformation processes from "deep structures" to "surface structures." As demonstrated by Ponzio (1992, 2004, 2011), this distinction (introduced in Chomsky 1965) as much as the earlier distinction between "nuclear" and "non-nuclear sentences" (Chomsky 1957) are both connected to a conception of language and knowledge and to a method of analysis that need to be questioned.

The limitations of Chomskyan linguistics clearly emerge in the light of a Peircean and Morrisian approach to the study of signs. Chomsky sees no alternative to vulgar linguistic behaviourism (such as Skinner's) other than appealing to seventeenth century rationalist philosophy and taking sides with mentalism and innatism. Nor is the fact that he remains tied to the classical alternatives between consciousness and experience, rationalism and empiricism without negative consequences for a theory of language, even with respect to such a specialized branch as syntax. From this point of view, Chomsky's approach is naïve for he ignores developments in philosophical thought from Kant through to Husserl, Peirce and beyond with Charles Morris, Cassirer, Maurice Merleau-Ponty, etc. Chomsky establishes a dichotomy between "linguistic experience" and "linguistic competence" (Chomsky 1975, 1986). "Linguistic experience" indicates a condition of passive exposition to linguistic data, but thus described it does not explain the formation of "linguistic competence." Consequently, Chomsky introduces the concept of the "faculty of language," an innate device which joined to linguistic experience produces linguistic knowledge. To this, we can respond with Ponzio

that if the concept of "linguistic experience" like all experience is described in terms of interpretation, it will suffice to explain "linguistic competence" (1991: 87-104; 2011: 281-285; 2012). In fact, in modern conceptions after Kant experience is described as consisting of different types of interpretive operations, as emerges with all those semiotical-philosophical trends that somehow lead back to Peirce and so-called "interpretation semiotics" as well as to phenomenology with Husserl (see his 1948 monograph, Experience and Judgment) and his continuators (especially Maurice Merleau-Ponty, author of *Phénomenologie de la perception*).

For what concerns Peirce, we know that he thematizes interpretation not only in terms of deductive and inductive inferential processes, but also explicitly in terms of *abduction*. Through abductive inference the subject not only recognizes elements that are always more or less partial and discrete, but can complete, organize and associate them. In abduction interpretation supersedes limitations on the objects experienced. On his part, Chomsky resorts to the concept of innatism (of the Cartesian type), for he believes that (linguistic) experience is not sufficient to achieve (linguistic) competence. So in Chomsky's approach the ancient juxtaposition between empirism and rationalism persists, as if Kant had never existed. But the relation to experience is not passive. Experience is always somehow organized and reelaborated through logical operations not only of the inductive and deductive type, but also the abductive. Consequently, experience cannot be reduced to a complex of bare givens. Instead, experience is achieved through interpretive work that can be highly creative, highly innovative, as when abduction prevails. On this account, experience converges with competence and may well be qualitatively superior with respect to initial input. Thanks to the capacity to associate things and ideas that may even be distant from each other, abduction compensates for the fragmentary and limited nature of input. So the creative aspect of language can be explained in terms of abductive inference. But what Chomsky (1986) calls *Plato's problem* (how full competence derives from limited linguistic experience) is a consequence of the false dichotomy established between competence and experience and of the related conception of experience understood as a passive state that characterizes the subject (cf. 4.9).

For Morris, the concept of syntactics (which includes syntax) is associated with semantics and pragmatics. Instead, for Chomsky (as in Rudolph Carnap's work) syntactics and syntax (inclusive of phonology and morphology) are equated and kept distinct from semantics and pragmatics. As Roland Posner and Klaus Robering (1997: 14–82) clarify referring to Morris's (1938) description of the three branches of semiotics (syntactics, semantics, pragmatics), linguistics, phonology, syntax (in the strict sense) and the morphology of natural language all fall under syntactics. As regards syntactics and syntax, Posner and Robering observe that the relation of identification established between the two terms by Carnap (1934, 1939) has often proven to be misleading. Moreover, it would seem that this equation does not present a problem only in those sign systems where it is not necessary to distinguish between syntax and morphology. This is the case in number systems and most formal languages constructed in logic so far. Posner and Robering distinguish between three aspects of syntactics which are all present in Morris (1971: 13–31), respectively: syntactics¹, the study of the formal aspects of signs; syntactics², the study of the relations of signs to other signs; syntactics³, the study of the way in which signs of various classes are combined to form complex signs (Posner and Robering 1997: 14). A branch of syntactics³, understood as the study of combination rules to form complex signs, is the study of combination rules in a sign system called "string code." An example of syntactics³ is Chomsky's transformational grammar which studies rules of transformation from "deep structures" to "surface structures" (pp. 33–37).

Chomsky confuses levels of analysis mistaking the level of description of the objects of analysis for the level of construction of the models of analysis. From this point of view, unlike Rossi-Landi's (1961) "*methodica* of common speech" (*cf.* Ch. 14), or Shaumyan's (1965) bigradual theory of generative grammar, Chomsky's generative structuralism is unigradual insofar as it fails to distinguish between the level of linguistic abstraction and the level of concrete linguistic usage, or in Shaumyan's terminology between the *genotypical* (ideal) *level* and the *phenotypical* (empirical) *level* of structures (*cf.* 2.9).

Chomsky's error is no different from that made by Oxonian analytical philosophy. Representatives of analytical philosophy claimed they were describing ordinary, daily, or colloquial language-in-general. But, in reality, they were describing the characteristics of a given natural language. Confusion between two levels, the general and abstract level of language, on the one hand, and the particular and concrete level of a given language at a certain moment in its historical development, on the other, is recurrent – and not only in the Oxonian conception or in more recent language analyses inspired by the latter (Rossi-Landi 1961: Chs. IV & VI; 1981; 1983 [1968]: 36–46; Ponzio 2008e). Chomskyan generative grammar also mistakes the specific characteristics of a given language – yet again English – for the universal structures of human language. The sentences used by Chomsky to exemplify his analyses are untranslatable and as such symptomatic of the problem we are signalling (Ponzio 1973, 1993, 2011, 2012). For a linguist who wishes to construct a general linguistics – what's more, based on the assumption of an innate universal grammar that can be demonstrated scientifically (on this account his recourse to biology is an alibi for subscribing to innatism unconditionally) – such a drawback is rather serious (for a critique of Chomsky's innate universal grammar, see also Deacon 1997).

In all this the condition of linguistic multiplicity is underestimated: difference among languages, the determining value of mutual encounter, of so-called "additional value" achieved by each language in interlingual translation. Ultimately, we could even speak of a certain degree of abuse of otherness by identity, whose primacy is sanctioned through recourse to an innate universal grammar. But in reality, this is the primacy of a given historico-natural language with imperialistic fantasies over and against others.

2.11 Marxian proto-structuralism and the homological structures of verbal and nonverbal communication

Another structuralist approach important to mention in this overview is the "proto-structuralist" analysis of economic relations developed by Karl Marx. We shall not refer here to Marxist structuralism in France (Louis Althusser, Maurice Godelier, Lucien Sebag; however, see below 10.7.-10.8.), but directly to Marx whose approach can also be considered as specifically semiotic, even if "cryptosemiotic," to evoke Sebeok (1979).

The study of communication is pivotal in Marxian critique of political economy. In fact, in his analysis of commodities, Marx studies the "language of commodities" and the "commodity's arcanum" (Marx, Capital, I). He overturns the fetishistic view of political economy that describes the relation among commodities as a natural relation among things and not for what it really is, namely a specific type of relation among social individuals. Marxian critique studies the structure of commodities in terms of messages, not only at the level of exchange but also of production and consumption – and from this point of view is, to all effects, a semiotic analysis. A commodity is a commodity not when a product is produced and consumed as use-value, but when it is produced and consumed as exchange-value, as a message. To keep account of such aspects means that economics can be considered as a branch of semiotics (Rossi-Landi 1975a).

The structure of the market emerges as an economic structure involving human relations, precisely the human relations of social production. From this point of view, the Marxian approach to structure is exemplary for semiotics. It indicates that what Marx achieved in his analysis of commodities and capital can be achieved overall in anthroposemiotics: identification of the structure of relations among human individuals in the place of mere relations among things and among individuals reduced to the status of things.

On the other hand, the semiotic approach allows for an appropriate use of the notions of structure and superstructure in a Marxist framework. Recurrent difficulties in the study of the relations between structure and superstructure largely derive from failure to take the mediating element into account, that is, the global complex of sign systems, verbal and nonverbal, operative in all human communities. The pieces in the game are not two, but three: to the modes of production and to the level of ideology represented by the superstructure can now be added mediation by *sign systems*.

From the point of view of semiotics, the structures of verbal and nonverbal communication (e.g. those pertaining to the circulation of commodities) are structures in the circulation of messages, that is, different structures in the same communication process. As Rossi-Landi says (1983 [1968]: 67): "Man communicates with his whole social organization."

All cultural phenomena can be considered as communicative phenomena based on sign structures and systems. Human nonverbal communication is part of a whole that includes verbal communication. Each single cultural fact can be considered as a message organized on the basis of sign systems. After Eco (1968), the upshot is that a general theory of society pertains to general semiotics. The study of any sign system can be useful for the study of any other. Said differently, when we study one sign system or another, what we study is essentially the same thing, homological structures.

This becomes even clearer when we consider that in the case of both verbal and nonverbal messages, semiotics addresses the same problems – the work that produces them and makes communication possible. Claude Lévi-Strauss (1958) made a formidable contribution to cultural anthropology by applying the categories of linguistics, categories originally elaborated in the study of verbal communication, to the rules of matrimony and kinship systems, that is, to nonverbal communication systems. As we have seen, Rossi-Landi (1968) experimented with the opposite procedure: he applied categories elaborated in the study of nonverbal communication structures, in this case, the categories of economics in its classical phase of development (with David Ricardo and Karl Marx) to the study of verbal expression.

On uniting two ancient definitions of man, as *loquens* and as *laborans*, Rossi-Landi analyzed the social in its totality with the intention of evidencing its complexity. This approach led him to deal with the question of ideology in terms of social planning, to develop a critique of the current production system, and to register symptoms of social *malaise* not only in the form of economic alienation, but also more specifically in terms of linguistic alienation. His commitment is noteworthy and cannot leave the practitioner of general semiotics indifferent. Nor is it appropriate to continue describing communication in purely abstract terms as when, for example, we resort to what Rossi-Landi tagged the "postal package model."

2.12 Ontologic structuralism and methodologic structuralism

In spite of similarities, a substantial difference distinguishes the approach adopted by Lévi-Strauss from Rossi-Landi's: what may be indicated as the difference between ontologic structuralism (in the case of the former) - criticized by Eco in Absent structure (1968) – and methodologic structuralism (in the case of the latter).

Lévi-Strauss's reasoning is questionable when he applies categories proper to the study of verbal expression to nonverbal communication, justifying the operation in terms of recurrent hymns to the esprit humain (Lévi-Strauss 1958a, b). This is to say that he appeals to a universal unconscious activity, to the universal structures of the esprit humain. Lévi-Strauss is heavily critiqued on this account by Eco in his 1968 monograph, La struttura assente (The Absent Structure). As Eco observes, to justify his method Lévi-Strauss refers to a combinatorial principle that subtends all codes, an elementary mechanism that functions in the human mind. The universe of social relations, myths and language becomes the stage for a game which takes place behind our backs. In other words, human beings do not determine their own relations but, on the contrary, are "related" passively according to universal laws and structures obeyed automatically.

Instead, Rossi-Landi recognizes human beings as the concrete subjects of history, the responsible agents of culture and communication systems. This leads him to formulate his thesis of the homology between verbal and nonverbal communication. Linguistic and non-linguistic work are both necessary to the production of physical objects and are placed on the same level. "If we don't want to admit that something human can exist for man without the intervention of man himself, we must adhere to the principle that every wealth or value, however understood, is the result of work that man has performed and can repeat" (Rossi-Landi 1983 [1968]: 36).

A global semiotic approach addresses the human being in its dual character as homo loquens and homo laborans (cf. 2.11). In other words: human beings emerge on the scene of history as linguistic and non-linguistic workers endowed with a capacity to produce both verbal and nonverbal artefacts. Methodological structuralism is connected to the homological method, laying the condition for the formulation of a unitary definition of the human being as an animal that speaks and that works, where these two modes of social behaviour are described as homologous.

The homology between material production and linguistic production throws new light on the concept of double articulation in language, as described by André Martinet (1960). As evidenced by the articulation of sentences into words and monemes and of monemes into phonemes, the real processes of linguistic production are oriented in a double direction (Rossi-Landi 1983 [1968]: 119–121, 158–158). Speakers carry out linguistic work – phylogenetically and ontogenetically – proceeding from sounds that initially are disarticulate, to sounds that are gradually articulated into ever more complex words, phrases and sentences.

The structural theory of double articulation assumes that language is no more than a formal machine. This stance means neglecting the influence of experience on language and the needs that orient linguistic behaviour. The theory of double articulation fails to account for the generation of meaning and for language usage, limiting its attention to simply describing their constituent parts. But, as Rossi-Landi observes, when (as Martinet 1960 says) we *analyze* or *order* sentences into words and monemes and, again, monemes into phonemes, we are not saying anything about "semantic content." Instead, semantic content is *added* at the level of sentences as opposed to the level of monemes and words, and at the level of monemes as opposed to the level of phonemes. Nor does Martinet say anything about the human operations through which semantic content is produced and circulates (Martinet 1960, 1965, 1985), which means to say nothing about the "linguistic market" or "linguistic work."

The work of analysing sentences into words and monemes and monemes into phonemes is abstract analytical work that cannot afford to lose sight of the concrete social linguistic work which produces them. These "pieces" are singled out by the linguist for analysis, but in reality they are parts of a complex overall totality. In other words, abstract analytical work should not be mistaken for the concrete social linguistic work that produces languages and continues to be supplied when we speak, when we use the materials, instruments and models of linguistic capital.

On his part, Rossi-Landi proposes a *homological schema for linguistic production*. With this schema, he fosters an interdisciplinary approach to social structures in a semiotic framework, and this implies the intersemiotic translation and integration of different approaches (1983 [1968]: 118–152). Unlike "double articulation theory," his homological schema is potentially interdisciplinary because it is intentionally *pre-disciplinary*. Furthermore, to refer to a pre-categorial level with respect to the categorial "already-made-world" is to question the idea of science as already formed and defined and to criticize scientific specialization when it loses sight of the human needs for which it was originally conceived.

2.13 The human being, a semiotic animal, a structuralist animal

Scientific approaches to the world evidence how it is constantly moving and changing and on this dynamic basis they formulate their relative laws and hypotheses. However, laws can be formulated because movements and transformations present constants, states of equilibrium or stability, aspects that are systematic and essential, structural. Stability in phenomena, in the relation among the elements of reality (organic/inorganic nature and culture), uniquely concerns a system of elements. This system of elements is relatively isolated from other systems, such that its objective existence constitutes a potential object of knowledge. It ensues that not only must we discover and determine the laws of the world, of reality viewed in its capacity for dynamics, movement and development, but that we must also discover the structural laws of systems that are relatively isolated and subsist in a state of relative equilibrium. This means studying the structures of dynamics and the dynamics of structures.

Not only is the study of such laws well founded, but only an approach that keeps account of both the structures of dynamics and the dynamics of structures (which are complementary to each other) can contribute to a global understanding of reality. If we wish to study the (genetic, causal) laws of something's development, we must establish what this "something" is and necessarily be familiar with the (coexistent, morphologic) laws of its structure. In the tradition of morphodynamic structuralism, it is important to signal here studies by René Thom (1972) and Jean Petitot (1985). Both contribute to a deeper understanding of the role played by morphologies in the development and dynamics of structures. Knowledge of structure is just as essential as knowledge of the genesis and development of the objects under study.

Knowledge of coexistential, morphologic law is among the most ancient in human history: this type of awareness dates back to when human beings learnt to differentiate between one plant and another, between one animal and another. In other words, human beings learnt to articulate reality on the basis of the capacity (acquired with practice) to recognize the coexistential characteristics that differentiate one thing from another. From this point of view, the human being is not only a semiotic animal, but also a structuralist animal, as proposed by the Polish philosopher Adam Schaff (1974; Petrilli and Ponzio 2012). Structuralism is not only a tendency among semioticians, but also among human individuals insofar as they are human.

To translate all this into our own language: as a conclusion, we might add that genesis and structure are essential elements through which the human being constructs and reorganizes his own world and does so insofar as he is a semiotic animal. But without planning in a present considered as the future anterior of the future, knowledge of genesis and structure, that is, historical knowledge and morphological knowledge, would remain sterile or senseless. That which transforms the structuralist animal into a semiotic animal – one capable of asking the question raised by Sebeok in the title of his "sketch", "Semiosis and Semiotics: What Lies in their Future?" (Sebeok 1989), that is, what future for life and for semiosis? (where "life" and "semiosis" are the same thing) – is the teleological instance.

Chapter 3

Human modelling, puzzles and articulations

L'uomo senza la cognizione di una favella, non può concepire l'idea di un numero determinato. Immaginatevi di contare trenta o quaranta pietre, senz'avere una denominazione da dare a ciascheduna, vale a dire una, due, tre, fino all'ultima denominazione, cioè trenta o quaranta, la quale contiene la somma di tutte le pietre, e desta un'idea che può essere abbracciata tutta in uno stesso tempo dall'intelletto e dalla memoria, essendo complessiva ma definita ed intera. Voi nel detto caso non mi saprete dire, né concepire in nessun modo fra voi stesso la quantità precisa di dette pietre; perché quando siete arrivato all'ultima per sapere e concepire detta quantità, bisogna che l'intelletto concepisca, e la memoria abbia presenti in uno stesso momento, tutti gli individui di essa quantità, la qual cosa è impossibile all'uomo. Neanche giova l'aiuto dell'occhio, perchè volendo sapere il numero di alcuni oggetti presenti, e non sapendo contarli, è necessaria la stessa operazione simultanea e individuale della memoria. E così se tu non sapessi fuorché una sola denominazione numerica, e contando non potessi dir altro che uno, uno, uno; per quanta attenzione vi ponessi, alfine di raccogliere progressivamente, coll'animo e la memoria, la somma precisa di queste unità, fino all'ultimo; tu saresti sempre nello stesso caso. Così se non sapessi altro che due denominazioni ecc. [...]

(Giacomo Leopardi, 28 novembre 1820, Zibaldone 1991, Vol 2: 137 [361]).1

3.1 Three modelling systems

In Chapter 2 we described the relation that interconnects function, structure and form, with special reference to Ernst Cassirer. We now wish to focus more closely on the concept of modelling, above all according to Thomas Sebeok and his own vision of semiotics, where it is assigned a primary role. One of his books in particular, co-authored with Marcel Danesi (the opening epigraph to this chapter is dedicated to both Sebeok and Danesi), foregrounds the concepts of "form" and "modelling," dealing with them together. From this point of view, the book's title is significant in itself, for it features both terms in the context of a semiotic theory of modelling systems: The Forms of Meaning. Modelling Systems Theory and Semiotic Analysis (2000). My specific interest concerns the implications of form and model, analyzed in semiotic perspective related to the problem of interpretationtranslation. These implications lead to the relation of "resemblance" that associates the interpreted sign and the interpretant sign, the "original" and its translation, the two premises (both of which are explicit or one is explicit and the other implied as in the case of the "enthymeme") and the conclusion. As to the latter, the relation between premises and conclusion, the interpretive pathway uniting them is neither linear nor unidirectional, but rather unfolds in the form of a return backwards such as to change, substitute, find or even invent a rule that acts as a premise (specifically on such issues, see Bonfantini 1987).

We know how important the concept of resemblance is in Charles Peirce's thought system: he dedicated a good part of his attention to analyzing this particular concept characterizing it, specifying it and even breaking it down into different meanings in relation to the concept of "icon" and different forms of interpretation / argumentation. As just stated, in *The Forms of Meaning* Sebeok and Danesi develop a concept that is fundamental in Sebeok's semiotics, that of *model*. Formulated by Sebeok, this concept had already been analyzed by Danesi in his book, *The Body in the Sign* (1998). But Danesi had already focused on inferential processes and the possibility of enhancing the reasoning capacity in another book, one by the attractive title *Increase your Puzzle IQ. Tips and tricks for building your logic power* (1997), at once instructive and entertaining. This book thematizes the close relation between *models* and *puzzles*. Models and types of modelling can be explained in terms of the notion of puzzle and, vice versa, puzzles can be explained in terms of the notion of model, even proposing a typology of puzzles.

As to the concept of resemblance, Sebeok and Danesi (2000) make an interesting distinction between *cohesive resemblance* and *connective resemblance*. This distinction is added to that between *analogy* and *homology*, which it integrates (*cf.* 3.3). Analogy proceeds by assembly and identification, while homology proceeds by what we could call "elective affinity" or attraction. With Peirce, we could also qualify the latter procedure as agapastic. Here the terms are related on the basis of resemblance regulated by the logic of reciprocal otherness and not of assemblative identity, as paradoxical as this may seem (*cf.* 5.1). Indeed, a characteristic of agapastic procedure is that the terms involved and that are attracted to each other maintain a high degree of otherness with respect to one another. In all those cases of interpretation / translation where agapastic procedure prevails, the interpretant transcends the phase of blind and uncritical identification and becomes an *interpretant of responsive understanding*.

To the relation between function, structure, form and modelling is added another, that between modelling and articulation. This mostly characterizes human semiosis and endows modelling with the capacity for combination, a procedure Sebeok describes explicitly as syntactical. Articulation is connected with the concept of syntactics as understood by Morris. (According to Morris, syntax belongs to phonology which the linguists have normally considered separate and still do: phonology is listed separately from syntax – phonology, syntax and semantics; and pragmatics, one of the three dimensions of semiosis, is left aside altogether). Articulation is connected with specifically human modelling, with what Ferruccio Rossi-Landi calls "linguistic work" (*cf.* 1.3, 2.11, 10.4; also Ch. 12).

From this point of view, Rossi-Landi revisits the concept of "double articulation" as formulated by the linguist André Martinet (cf. 2.12).

According to Sebeok, the "modelling capacity" is observable in all life-forms, while "language" is a term he reserves for modelling specific to humans. In *The* Forms of Meaning, Sebeok studies human modelling processes as distinct from other modelling processes that pervade the living universe, in particular the world of superior animals. The concept of modelling was developed by the Tartu-Moscow school of semiotics in the early 1960s (Lucid 1977; Rudy 1986). Originally it was applied to historico-natural verbal expression (French langue; Italian lingua) which was described as a primary modelling system, while all other human cultural systems were described as secondary modelling systems. However, Sebeok went a step further and extended the concept of modelling beyond the limits of anthroposemiotics. With reference to the biologist Jakob von Uexküll and his concept of *Umwelt*, Sebeok's interpretation of model can be translated as "outside world model." On the basis of research in biosemiotics, the modelling capacity is observable in all life-forms (Sebeok 1991b: 49–58, 68–82; Sebeok 1994a: 117–127). The notion of *Umwelt* understood in terms of a "model of the external world" is important to research in different disciplines that come together under the banner of "biosemiotics" (Favareau 2010; Petrilli and Ponzio 2011, 2013a, 2013b).

The study of modelling behaviour in and across all life-forms requires an appropriate methodological framework, and this is provided by biosemiotics, specifically modelling systems theory as proposed by Sebeok in his research on the interface between semiotics and biology. Modelling systems theory studies semiosic phenomena in terms of modelling processes. In the light of modelling systems theory interpreted in a semiotic key, semiosis - a capacity present in all life-forms – is defined as "the capacity of a species to produce and comprehend the specific types of models it requires for processing and codifying perceptual input in its own way" (Sebeok and Danesi 2000: 5). The applied study of modelling theory is called "systems analysis." It distinguishes between three modelling systems: primary, secondary and tertiary.

The primary modelling system is the innate capacity for simulative modelling, in other words, it is a system that allows organisms to simulate something in species-specific ways (Sebeok and Danesi 2000: 44-45). Sebeok proposes that we call the primary modelling system specific to human beings "language," which is distinct from and antecedent to "speech," the secondary modelling system specific to humans. The primary modelling system is present in the mute hominid and is the starting point for a new course in evolution leading into homo sapiens sapiens.

The secondary modelling system is the system that underscores both indicational and extensional modelling processes. The nonverbal form of indicational modelling has been documented in various species, whereas extensional modelling is a uniquely human capacity. It presupposes *language* understood as the primary modelling system of the human species. Instead, highly abstract, symbol-based modelling processes are embedded in the tertiary modelling system. These are exclusively human cultural systems (Sebeok and Danesi 2000: 120–129).

3.2 Form and puzzle

In *The Forms of Meaning* a *model* is defined as a *form*. The form is imagined (*mental form*), or made externally (*externalized form*) to stand for an object, event, feeling, etc. (*referent*), or for a class of objects, events, feelings, etc. (*referential domain*) (Sebeok and Danesi 2000: 2).

Sebeok and Danesi distinguish between four main types of *externalized artificial forms* (these are forms made intentionally by human beings to represent something): *singularized*, *composite*, *cohesive*, *connective*. These different types of forms characterize human representation. The "singularized form" corresponds to what in traditional semiotics is called "sign," e.g., the English word "cat" refers to the familiar domestic animal known by that name. The "composite form" corresponds to a descriptive text: "A popular household pet that is useful for killing mice and rats." A "cohesive form" codifies form types in some cohesive fashion, e.g., "cat" understood as a category for tiger, lion, jaguar, leopard, cheetah, etc. Finally, the "connective form" refers to that type of modelling strategy traditionally described as metaphorical. Metaphors involve linkage among different types of referents or referential domains, e.g., "Marcel is a lion."

These four types of model or form are exemplified by Sebeok and Danesi with reference to two types of puzzle – the toy house model made with a set of plastic building blocks and the jigsaw puzzle. In both cases analogies may be drawn with each of the four different types of modelling.

In the toy house model analogy, *each piece* corresponds to a *singularized form* and consequently to a *sign*. The *complex of pieces* used to build a construction corresponds to the *composite form* and consequently to a *text*. The same *building blocks used in different constructions* (not only a house but also a hut, a cabin) correspond to the *cohesive form* and consequently to a *code*. Lastly, this same set of building blocks combined with a set of different kinds of building blocks (e.g. designed to construct model vehicles) to produce new models (e.g. a mobile home, a caravan, etc.) corresponds to the *connective form* and consequently to the *metaphor*.

In the case of jigsaw puzzles, the following parallels are established: the single piece of a puzzle corresponds to the singularized form and to the sign; the picture that results from assembling the pieces corresponds to the *composite form* and to the text; the jigsaw puzzle itself, as distinct from other games, for example, a chess game, corresponds to the cohesive form and to the code; finally, any link made between the pieces of the jigsaw puzzle and those of a chess game correspond to the *connective form* and to the *metaphor*.

3.3 Analogy and homology

At this stage, the question is: what is it that makes such parallels possible between puzzles and models (or forms)? Sebeok and Danesi (2000) speak of analogy. From this point of view, we could claim that the connection between puzzles and models (or forms) is a connective form, a metaphor. This statement is acceptable on the condition that the similarities or parallels identified between puzzles and models are not simply considered to be subjective. The relation between puzzles and models can be described as metaphorical, but not merely in the sense of a discursive device functional to the exposition of our argument. Quite the contrary: this metaphorical relationship is an objective relationship of a genetical-structural order. In the language of biology, rather than analogy, a more precise term for this type of similarity is "homology." Puzzles and models (or forms) relate to each other homologically.

This homological relation can be explained in terms of the human speciesspecific modelling device, or "language" as distinct from "speech." We know that all nonhuman animals have construction models of the world. Language is humankind's and has been since the appearance of hominids. Even though human and nonhuman animals share the same types of signs (icons, indexes, symbols, etc.), the modelling device called language is different from modelling devices in nonhuman animals. The specific characteristic of language understood as a modelling device (and not as a verbal sign system) is articulation or syntax, as Sebeok says (1991b, 1994a). Thanks to syntax or "writing" (proposed as a synonym for "syntax" or better, "syntactics," writing avant la lettre), it is possible to compose a finite number of elements or pieces in an indefinite number of different ways. Thanks to syntax or writing, the human modelling device or language can create an indefinite number of different forms and models that, in turn, can be deconstructed to construct new forms and models with the same pieces. The outcome is that, by contrast to nonhuman animals, humans are capable of constructing an indefinite number of possible worlds. This capacity is described by Peirce in his 1908 essay "A Neglected Argument for the Reality of God" (CP 6.452–493) as the "play of musement," an expression which Sebeok himself adopts as the title of his 1981 book, *The Play of Musement*, precisely.

Noam Chomsky describes creativity as a specific characteristic of verbal expression (Sebeok's speech). In reality, creativity is a specific characteristic of language understood as primary modelling, syntax or writing and is only a derivative in verbal expression. On this basis, a homological relationship can be established between puzzles and the four types of modelling identified by Sebeok and Danesi. Human modelling involves a capacity for combination, as in the case of puzzles. In this sense, models and puzzles are related homologically. However, the difference is that in the case of puzzles, combination proceeds according to a preestablished plan. In other words, the pieces of a jigsaw puzzle can only be assembled as established previously. By contrast, combination involved in a text, code and metaphor is characterized by innovation and inventiveness, by a creative possibility that is not limited to pure reconstruction, as in jigsaw puzzles. To establish a comparison between this type of puzzle and a text: it would not be a question of constructing a text, but rather of reconstructing it, like the work of the philologist who must restore a text that has been damaged, perhaps because of climate or some other sort of external manipulation. Jigsaw puzzles can be compared to reconstructing the fragments of a broken vase.

But in the case of human modelling, creativity does not only consist of restoring the broken vase's form; far more than this, it also consists of producing new vases with completely different forms and, for that matter, even different types of receptacles.

In any case, the homological resemblance between puzzles and models lies in the fact that both are expressions of the same articulation device, of the same combinatorial capacity.

3.4 Levels of articulation

In their description of singularized forms, Sebeok and Danesi start from words, what the linguists (in particular Martinet 1960, 1965, 1985) call first articulation. At this level, sentences (when verbal) are broken down into units endowed with meaning, "words" or rather "monemes." Meaning is defined as a "particular concept elicited by a specific representational form" (Sebeok and Danesi 2000: 195).

Instead, when reference is to non signifying verbal forms, Martinet's second articulation is involved, namely units devoid of meaning, "phonemes." This means working at the primary level, the level of primary elements devoid of meaning. A finite number of pieces, or phonemes, forming the basic phonolo-

gical repertoire of any given language, can be combined into a high number of signifying units, or monemes, that represent the lexical and morphological resources of a given (historico-natural) language. A finite number of monemes can be used to construct an infinite number of sentences or texts.

Sebeok and Danesi maintain that the cohesive form, the code, is comparable to the jigsaw puzzle as a whole or, as Saussure claims, to a chess game. In contrast to traditional linguistics, which has underestimated the importance of metaphors, and in line with more recent developments, as in so-called *cognitive linguistics*, Sebeok and Danesi invest the metaphor with a role that corresponds to one of the four fundamental forms of human modelling. From this point of view, Danesi (2000, 2004) establishes a close connection between cognitive linguistics and the poetic logic of Giambattista Vico. According to Vico, the metaphor is structural to human thought, in this sense it is an original structure and not just a rhetorical device used for ornamentation, a mere characteristic of the stylistic order (Petrilli 2006a: Ponzio 2006c).

The four forms of human modelling, or the four types of form characterizing human representation, correspond to just as many forms of articulation. A fifth form might be added, a more basic, singularized form corresponding to the phoneme. Ferruccio Rossi-Landi also identifies four levels of articulation: these include phonemes and monemes and two higher level articulations, the syllogism and the automated programming of linguistic performances (Rossi-Landi 1992a: 189). The latter refers to verbal programme-bearing codes. This fourth articulation corresponds in part to what Sebeok and Danesi call "code" in their typology of models (or forms), with the difference that it also includes a form of behaviour programming, that is to say, an ideological component.

Moreover, if Rossi-Landi's schema proposes four articulations similar to Sebeok and Danesi's four types of form, this is because he includes what we have considered as a fifth articulation, namely phonemes. But Rossi-Landi's schema does not refer to metaphors, what Sebeok and Danesi call the connective form. However, a correspondence can be established between Rossi-Landi's syllogism and what Sebeok and Danesi call composite form or text. All the same, the syllogism shares in the characteristics of the cohesive form and the connective form.

Rossi-Landi develops his four articulations across ten levels and does so on the basis of what he identifies as a homological relation between material production and verbal production, similar to the homology between puzzles and forms exemplified in verbal modelling. Material production and verbal production are manifestations of the same modelling device, what Sebeok calls "language," and as such are related homologically. Rossi-Landi's homological schema of production articulated in ten levels of human production is described in his essay "Articulations in verbal and objectual sign systems." These range from the zero level of intact, unworked-upon nature, that is, material nonsound substance and material sound substance, *to the tenth level of global production* which includes all objectual sign systems and all verbal sign systems of a productive unit (Rossi-Landi 1992a: 189–232):

First level: presignificant items: with reference to material production (M.P.), *materemes*; with reference to verbal production (V.P.), *phonemes*.

Second level: *irreducibly significant items*: M.P., *objectemes* (lexobjectemes or morphobjectemes); V.P., *monemes* (lexemes or morphemes).

Third level: completed pieces: M.P., finished pieces of utensils; V.P., word, syntagms, expressions, parts of speech, phrases.

Fourth level: utensils and sentences: M.P., simple utensils; V.P., simple sentences.

Fifth level: aggregates of utensils: M.P., compound utensils; V.P., compound sentences.

Sixth level: mechanism: M.P., machines of a simple type; V.P., syllogisms, organized groupings of interconnected sentences.

Seventh level: complex and self-sufficient mechanisms: M.P., self-sufficient mechanisms; V. P., lectures, speeches, essays, books.

Eighth level: total mechanism or automation: M.P., automated machines; V.P., subcodes and lexicons.

Ninth level: nonreportable production: M.P., special constructions, unique prototypes; V. P., "original" literary and scientific production.

Tenth level: global production: M.P., all objectual sign systems of a "productive unit"; V. P., all verbal sign systems of a "productive unity" (Rossi-Landi 1992a: 221).

Rossi-Landi also describes parking lots for material and verbal artefacts:

- parking lot of matteremes and (respectively) of phonemes;
- parking lot of objectemes and monemes;
- parking lot of utensils and sentences;
- parking lot of mechanisms and syllogisms;
- parking lot of automated machines and of nonverbal and verbal programmebearing codes (Rossi-Landi 1992a: 223).

These five levels involve qualitative leaps in the transition from one to the other; and the pieces parked in them are used to build different constructions.

Though Rossi-Landi's schema foresees more articulations than Sebeok's and Danesi's model systems theory, they can all be referred to the four forms described by the latter: namely, the singularized form, composite form, cohesive form and connective form. The connective form allows for escape from any one code and connection among different codes and plays a fundamental role in human creativity. A parallel is established between the code and the jigsaw puzzle: in codes the *ars combinatoria* is restricted to precise limits. By contrast, in the connective form (which has been compared to the link between the pieces of a jigsaw puzzle and the pieces in a game like chess), the *ars combinatoria* is set free: here the puzzle composition becomes a bricolage. So the connective form corresponds to the metaphor and emerges as the possibility of escaping the repetition of the code, and consequently as a fundamental means for inventiveness and innovation.

3.5 Puzzles in logic

Danesi speaks of an innate "puzzle instinct" which is specific to our species and not traceable in any other (2000: 9; see also Danesi 2002). Puzzle-solving skills and the logical capacity of the human mind are closely related. In the present context, the word "puzzle" does not only refer to jigsaw puzzles. In Italian, the English term "puzzle" is normally used for what in English is understood by "jigsaw puzzle," namely a game which consists in reordering the scattered elements of an object or image, contrived to exercise patience. In English, though, the general term "puzzle" stands for any sort of brainteaser, conundrum or riddle. In what follows, "logic puzzles" are understood as "puzzles" in the second sense of this term, as per English usage.

Logic puzzles are the subject matter of Danesi's book, *Increase Your Puzzle IQ* (1997), the result of his course on logic puzzles held at the University of Toronto. Beyond its immediate goal of providing tips and tricks for building one's logic power, this book offers an insight into the study of the relation between laws or rules of logic and puzzle-solving skills. Danesi relates different types of puzzles to different types of logic: 1) deductive logic; 2) truth logic; 3) trick logic; 4) arithmetical logic; 5) algebraic logic; 6) combinatory logic; 7) geometrical logic; 8) code logic; 9) time logic; 10) paradox logic.

In the light of Sebeok and Danesi's typology of models (or forms), the syllogism can be considered as a composite form insofar as it is a text, but it is also a cohesive form which not only describes but also classifies and, ultimately, it is also a connective form given that it creates a linkage among different types of referents or referential domains. In the "Glossary of technical terms" appended to Sebeok and Danesi (2000), deduction is defined as a "process of applying a mental form

to a specific referent" (p. 192); induction is a "process of deriving a concept from particular facts of instances" (p. 195); and abduction is a "process by which a new concept is formed on the basis of an existing concept which is perceived as having something in common with it" (p. 190). Application of the name "cat" to a given referent may ensue from a deduction of the type "the cat is a carnivorous mammal with a tail, whiskers and retractile claws"; "this is a carnivorous mammal with a tail, whiskers and retractile claws"; "therefore it is a cat." This means that any descriptive text applied to a referent gives rise to a process of deduction as in the case of "a popular household pet that is useful in killing mice and rats." But in a riddle or crossword puzzle requiring that we find a word made of three letters, this same sentence itself becomes a puzzle.

The opening chapter of the volume *Increase your Puzzle IQ* (1997) is dedicated to puzzles in deductive logic. Danesi claims that puzzles in deduction involve no play on words, no guessing and no technical know-how, but only common sense knowledge: for example, that a bachelor is not married; that an only child has no brothers or sisters, that a mother is older than her children. A version of a classic puzzle, included in most collections of deduction puzzles, is the following:

In a certain company, the positions of director, engineer and accountant are held by Bob, Janet and Shirley, but not necessarily in that order. The accountant, who is an only child, earns the least. Shirley, who is married to Bob's brother, earns more than the engineer. What position does each person fill? (Danesi 1997: 2)

Puzzles in truth logic contain statements, a certain number of which are known to be true and others false. The puzzle-solving skill consists in arriving logically at the "truth of the matter." Similarly to puzzles in deductive logic, the two types of puzzles dealt with in relation to truth logic involve no play on words, no guessing, no technical know-how, but only the ability to think clearly and to work methodically. There are two types of truth logic puzzles: the first involves identifying who did what on the basis of certain statements made by different people, some of which are true and others false; the second involves determining the group, tribe, etc. to which an individual, or small group of people belong, on the basis of certain statements that are made.

Example of the first type of truth puzzle:

Billy Bones was found murdered one night in an alley behind the night club he usually frequented. The police caught three suspects the morning after. That afternoon the three men were interrogated by a police investigator. They made the following statements:

Ben: 1. I didn't kill Billy.

- 2. Jim is not my friend.
- 3. I knew Billy.

Jim: 1. I didn't kill Billy.

- 2. Ben and Tim are friends of mine.
- 3. Ben didn't kill Billy.

Tim: 1. I didn't kill Billy.

- 2. Ben lied when he said that Jim is not his friend.
- 3. I don't know who killed Billy.

Only one of the three is guilty and only one of each man's statements is false. Who killed Billy Bones? (Danesi 1997: 34)

Example of the second type of truth puzzle:

The people of an island culture belong to one of two tribes – the Bawi or the Mawi. Since they look and dress alike and since they speak the same language, they are virtually indistinguishable. It is known, however, that the members of the Bawi tribe always tell the truth, whereas the members of the Mawi tribe always lie. The anthropologist who became interested in their fascinating social system, Dr. Mary Titherington, recently came across three male individuals.

"To which tribe do you belong?," Dr. Titherington asked the first individual.

"Doo-too looh-nooh," replied the individual in his native language.

"What did he say?," asked the anthropologist of the second and third individuals, both of whom had learnt to speak some English.

"He said that he is a Bawi," said the second.

"No, he said that he is a Mawi," said the third.

Can you figure out to what tribes the second and third individuals belonged? (Danesi 1997: 42)

Particularly interesting from the present viewpoint are puzzles in combinatory logic. These are associated with that branch of mathematics known as combinatorial analysis, or combinatorics, and with what Gottfried Wilhelm Leibniz called *ars combinatoria*. This expression is implemented by Leibniz for the art of logical reasoning which – beginning from a *characteristica universalis*, i.e. a symbolic language in which a sign corresponds to a primary idea – combines primary signs to produce all possible ideas. Following such procedure, thinking could be replaced by calculation.

Danesi dedicates a section in *Increase Your Puzzle IQ* to puzzles based on some combinatory pattern or principle, puzzles which involve discovering or inventing some arrangement or combination of numbers, colours, weights, balls, coins, etc. However, he excludes puzzles that involve boards (chess, domino) or that deal with tiling and playing card arrangements. An example of a combinatory logic puzzle is the following: "In a box there are 20 balls, 10 white and 10 black. With a blindfold on, what is the least number you must draw out in order to get a pair of balls that matches?" (1997: 98).

The different types of puzzles presented by Danesi also foresee puzzles in paradox logic (1997: 169–179). Famous examples are Zeno's paradoxes and the

paradox in *logical circularity* proposed by Epimenides ("The Cretan philosopher Epimenides once said: 'All Cretans are liars'. Did Epimenides speak the truth?") (Fowler 1869: 163). Puzzles in paradox logic are based on apparently contradictory conclusions deriving from premises or assumptions which would seem to be valid, but which most often turn out to be false or incomplete. Paradox logic puzzles may involve either *authentic paradoxes* or *apparent paradoxes*. Authentic paradoxes entail a *logical inconsistency or fallacy*, or *logical circularity* (think of the paraxodical slogan of the 1960s, "forbidding is forbidden"; or another example similar to Epimenides's paradox is the statement, "everything you have written on this blackboard is false": true or false?). An apparent paradox involves what at first glance would seem to be a paradoxical enigma, but which in reality is easily solved.

3.6 Modelling and the jigsaw puzzle

Let us now return to that kind of puzzle known as jigsaw puzzle used by Sebeok and Danesi (2000) to explain the four types of models (or forms) that characterize human representation.

Modelling systems theory (as described in *The Forms of Meaning*) studies modelling systems in human culture and across species. I think we can claim it proceeds according to jigsaw puzzle logic. The basic piece-concepts in this construction are the four types of models or forms presented above: *singularized form*, *composite form*, *cohesive form* and *connective form*. These are connected with four modelling strategies: *singularized modelling*, *composite modelling*, *cohesive modelling* and *connective modelling*. Combined with the three human modelling systems described above – primary, secondary and tertiary – we obtain twelve types of modelling:

- 1. primary singularized modelling (nonverbal and verbal);
- 2. primary composite modelling (nonverbal and verbal);
- 3. primary cohesive modelling (nonverbal and verbal);
- 4. primary connective modelling;
- 5. secondary singularized modelling;
- 6. secondary composite modelling;
- 7. secondary cohesive modelling;
- 8. secondary connective modelling;
- 9. tertiary singularized modelling (verbal and nonverbal);
- 10. tertiary composite modelling (verbal and nonverbal);
- 11. tertiary cohesive modelling (intellective codes and social codes);
- 12. tertiary connective modelling.

A parallel can be established between Sebeok and Danesi's typology and Rossi-Landi's homological schema of production. The latter identifies four articulations which he develops across ten levels, similar to Sebeok and Danesi's four types of forms, which combined with the three human modelling systems produce twelve different types of modelling processes. Despite a difference of two, these two schemas represent two processes of complexification – the unit of a productive system, on the one hand, and the unit of a culture, on the other hand. Ultimately, these equal each other and are comparable in their overall development. The tertiary modelling system, in which highly abstract symbolization processes are embedded, forms a unit or totality in the human cultural world (Sebeok and Danesi 2000: 129).

3.7 Modelling and primary iconism

This cultural and productive unit, which presents itself as a sort of jigsaw puzzle, is supported by a primary modelling system. The primary modelling system enables an organism to simulate its world in species-specific ways. Systems analysis investigates primary modelling processes and their manifestations across species. A primary modelling system is the innate ability to model sensible properties. It subtends forms or models produced by simulating some sensory property of a referent or referential domain. In the sphere of anthroposemiosis, primary simulation modelling is manifested in modelling phenomena that are singularized (e.g., the thumb and index joined to represent a circular object), composite (e.g., scenes reproduced in a painting), cohesive (e.g., certain bodily features simulated in erotic dancing) and connective (e.g., a metaform – a concept resulting from the linkage of an abstract notion with a concrete source domain, such as "love + a sweet taste" – used in discourse situations).

Two distinct types of primary modelling processes can be traced within the sphere of biosemiosis: osmosis and mimesis (Sebeok and Danesi 2000: 45). Osmosis refers to natural, unintentional, spontaneous forms of simulation in response to a stimulus or need; mimesis refers to intentional and deliberate forms of simulation. These two different types of primary modelling processes together form the gigantic jigsaw puzzle that is our biosphere and includes another big jigsaw puzzle (though doubtlessly smaller with respect to the first), the human cultural world.

This implies the presence of *iconicity* – defined in *The Forms of Meaning* as the process of representing referents in iconic form, in other words, in singularized forms - throughout the whole biosphere. Articulation specific to human modelling is based on iconicity. Modelling systems theory presupposes the a priori icon

and acknowledges *primary iconism* (Eco 1997) as an agent in modelling phenomena in anthroposemiosis as much as across nonhuman species.

That the icon with respect to articulation in the jigsaw puzzle of the human world is primary, a sort of *a priori* is demonstrated in *The Forms of Meaning* by the fact that a primary model is a *simulacrum* of a referent (Sebeok and Danesi 2000: 44–81). Consequently, a primary *singularized model*, i.e. a singularized simulative form, is an *icon*. Moreover, primary *composite modelling* is a representational strategy through which various *iconic signifiants* are combined to encode complex (non unitary) referents. Primary *cohesive modelling* is also a modelling code which involves particular types of *iconic signifiants* serving various simulative representational purposes. Ultimately, primary *connective modelling* is based on the *metaform* (2000: 71–76, 113–114). This results from the linkage, on the basis of similarity, or resemblance (*iconicity*), of abstract referents with concrete source domains, that is, with a set of vehicles (concrete forms) used to deliver the meaning of an abstract form.

As anticipated at the beginning of this chapter, modelling systems theory contextualized in the framework of semiotic analysis according to Sebeok and Danesi is important for our own interests, not least of all because it evidences the role of otherness logic in the properly human. Otherness displaces and destabilizes identity logic, whereby "identity logic" is understood as that form of logic that is associated with the principle of assemblage, cohesion and assimilation. Identity logic proceeds fundamentally by concepts which act as labels. This means to say that the logic of identity proceeds by classifying, cataloguing and differentiating on the basis of agglomerations, groups and genres. In such a framework, difference is established between one agglomeration and another, and is generally oppositional or a question of contrast. Instead, internal to the agglomeration and to the corresponding concept, all differences on the basis of identity logic are generally set aside. Agglomerations and concepts are constructed by eliminating otherness and difference among the elements and individuals that form them. The adjective "cohesive" introduced by Sebeok and Danesi is a good description of the process.

This is the logic of the *concept*, which is the logic of abstraction, the *abtractum* (pulled out), the part detracted from the whole, detached from it, outside singularity, outside unindifferent difference, outside otherness. However, there is another type of logic. This is the logic of the *ad-tractum* (pulled towards), which is the logic of attraction, the logic of the *metaphor*, where understanding works by attraction. In metaphor, each term is put into relation with the other, *ad-tractus*, attracted by it. In this case, the terms of the relation are attracted to each other, while maintaining their difference. Hereby, "difference" is understood as the difference of otherness and non interchangeability. This corresponds to what Danesi

calls metaform, where metaphor is the main actor. Unlike the concept, metaphor does not abrogate or efface otherness. On the contrary, the terms forming a metaphor relate to each other on the basis of otherness logic. In metaphor, otherness is exalted, evidenced, even challenged and the relation among terms is dialogized.

This type of logic also involves the work of translation. As we are now describing it, translation is not substitution of the similar by the similar, but rather encounter and confrontation among terms that are different from each other. Thus described, translation is a necessary condition for the articulation and manifestation of otherness logic and is associated with the work of innovation and renewal.

In translation process, human modelling understood as invention, discovery, creativity, rearticulation, recombination at last finds the possibility of fully manifesting itself. We could also speak of the role of "poetic logic" in Vico's sense here. It is no coincidence that Danesi should draw attention to Vico and the metaphor already in the title of two important monographs: Lingua, metafora, concetto. Vico e la linguistica cognitiva, 2001, and Poetic Logic. The Role of Metaphor in Thought, Language, and Culture, 2004. This is not just a question of evidencing the poetic aspect of human modelling, the sort of logic that characterizes the human being as a "semiotic animal." In addition to this, what is implied is the potential to operate concretely, which also means the capacity for critique, the conditions for its realization and implementation. More specifically, through the translation process of metaphorical procedure and poetic logic, "alienated linguistic work," to use a pivotal expression in Rossi-Landi's research (1983 [1968]: 35–64; 1992), which is linguistic work functional to repetition of the identical, is replaced with linguistic work of the creative and critical type. In this case, linguistic work recovers the capacity for innovation as inscribed in the human primary modelling device.

The puzzle that we need to solve with a certain urgency in today's world is precisely this: how to get out of the bottle in which we are trapped. As Wittgenstein says in his Philosophical Investigations (1953), the problem is "to show the fly the way out of the fly-bottle." We will proceed with Sebeok. Along the way, we will necessarily encounter other "interpreters" of the sign and its properly human nature, the sign that cannot be reduced to "cohesive logic." Victoria Welby and Giovanni Vailati are just two representative names among several who have focused on the innovative and critical dimension of metaphor. In any case, continuing our discourse in the direction of our concern for the health of semiosis and the quality of life, to proceed with Sebeok also means proceeding beyond him and retranslating his "global semiotics" in terms of "semioethics."

Part II: Signification, logic, iconicity

Chapter 4

Evolutionary cosmology, logic and semioethics

The principle that ought to guide the whole life of those who intend to live nobly cannot be implanted either by family or by position or by wealth or by anything else so effectively as by love.

(Plato, The Symposium [178b-179c]: 43)

There is neither a first nor a last word and there are no limits to the dialogic context (it extends into the boundless past and the boundless future). Even *past* meanings, that is, those borne in the dialogue of past centuries, can never be stable (finalized, ended once and for all) – they will always change (be renewed) in the process of subsequent, future development of the dialogue. At any moment in the development of the dialogue there are immense, boundless masses of forgotten contextual meanings, but at certain moments of the dialogue's subsequent development along the way they are recalled and invigorated in renewed form (in a new context). Nothing is absolutely dead: every meaning will have its homecoming festival. The problem of *great time*.

(Mikhail M. Bakhtin, "Toward Methodology for the Human Sciences," 1974, in M. M. Bakthin 1986: 170)

4.1 A universe perfused with signs

Charles S. Peirce conveyed an idea of the broad scope of his semiotic perspective in a letter of 23 December 1908 (by then he was reaching his seventies) to Victoria Lady Welby in which he stated that

[...] it has never been in my power to study anything, – mathematics, ethics, metaphysics, gravitation, thermodynamics, optics, chemistry, comparative anatomy, astronomy, psychology, phonetics, economic, the history of science, whist, men and women, wine, metrology, except as a study of semeiotic. (Hardwick 1977: 85–86)

All existents, whether human or nonhuman, impose themselves upon Peirce's attention insofar as they are signs, or better, insofar as they carry out a sign function. As he claims in "Issues of Pragmaticism" (1905), the entire universe, not only the universe of existents and the universe of our conceptual constructions about them, but that wider universe – with respect to which the universe of existents is only a part – which we are all accustomed to refer to as "the truth," "all this universe is perfused with signs, if it is not composed exclusively of signs" (*CP* 5.448, n. 1).

Peirce listed numerous examples of what he believed classified as signs, in various writings, as he worked toward the formulation of a general description of the sign. In the Preface to a text of 1909, "Essays on Meaning: By a Half-Century's

Student of the Same," he indicated a whole array of such disparate objects as "images, pictures, diagrams, ...," but also "pointing fingers, symptoms, winks, a knot in one's handkerchief, memories, fancies, concepts, indications, tokens, numerals, letters, words, phrases, sentences, chapters, books, libraries, signals, imperative commands, microscopes, legislative representatives, musical notes, concerts, performances, natural cries, in other words, anything able to create mental images which emanate from something external to itself" (*MS* 634: 16–17, Sept., 1909; *CN* 2: 149). In Peirce's view, the universe considered globally is a sign, "a vast representamen, a great symbol [...], an argument" and insofar as it is an argument it is "necessarily a great work of art, a great poem [...], a symphony [...], a painting" (*CP* 5.119). And to state that the universe is perfused with signs (*CP* 5.448, n. 1) implies that it is structurally endowed with a capacity for the potentially infinite generation of signifying and interpreting processes throughout the great semiosic network.

Similarly to Kant, Peirce also deals with conditions of possibility, with signifying conditions, which leads to identifying foundations common to the human sciences and the natural sciences. With Peirce's "doctrine of the categories," two opposite conceptions of reality dominant in Western philosophical thought at last come together: that which originates from Aristotle and states that things exist on their own account, independently from mind and the opposite conception which describes reality as depending on mind. The point of encounter is offered by the semiotic perspective, one which describes objects and minds as part of a common process of semiosis.

4.2 Logic and cosmology

In the architectonics of Peirce's philosophical system, what he denominates as "chance," "love" and "necessity" indicate three modes of development regulating evolution in the cosmos. From his essay of 1893, "Evolutionary Love":

Three modes of evolution have thus been brought before us: evolution by fortuitous variation, evolution by mechanical necessity, and evolution by creative love. We may term them *tychastic* evolution, or *tychasm, anancastic* evolution, or *anancasm,* and *agapastic* evolution, or *agapasm.* The doctrines which represent these as severally of principal importance we may term *tychasticism, anancasticism,* and *agapasticism.* On the other hand the mere propositions that absolute chance, mechanical necessity, and the law of love are severally operative in the cosmos may receive the names of *tychism, anancism,* and *agapism.* (*CP* 6.302)

Connections can be evidenced between Peirce's evolutionary cosmology, his semiotics and logic. The concept of *agapasm* and the connection with abductive

inference is particularly interesting. Abduction is associated with agapasm insofar as it is articulated according to the logic of otherness and excess. This means to say that abductive inference is regulated by the principle of creative love, by the principle of affinity and attraction among signs and not by identity logic functional to self-interest (cf. 4.3–4.5). Peirce made a particularly important contribution to this area of research with a series of five articles published in the journal The Monist, beginning from 1891. In these articles, he develops his evolutionary cosmology, introducing the doctrines of tychasticism (from Greek $\tau \dot{\nu} \chi \eta$, tyche), anancasticism (from Greek ἀνάγχη, ananche), agapasticism (from Greek αyαπ, or ηyαπ, agape) and synechism (from Greek συνεχής, synechḗs): "The Architecture of Theories" (1891, CP 6.7–34), "The Doctrine of Necessity Examined" (1892, CP 6.35-65), "The Law of Mind" (1892, CP 6.102-163), "Man's Glassy Essence" (1892, CP 6.238-268), "Evolutionary Love" (1893, CP 6.287-317) and "Reply to the Necessitarians. Rejoinder to Dr. Carus" (1893, *CP* 6.588–6.615).

Two later writings (1905) on "pragmatism," or the substitute term "pragmaticism," unite the developments of Peirce's cosmology to his theory of semiotics: "What Pragmatism is?" (1905, *CP* 5.411–437) and "Issues of Pragmaticism" (1905, CP 5.438–463). With "pragmaticism," Peirce coherently developed his semiotics in close relation to the study of human social behaviour and the totality of human interests. Such an enterprise meant to contextualize the problem of knowledge, keeping account of its necessary implication with problems of the pragmatic and axiological orders. Beyond "reason," Peirce theorized "reasonableness," understood as open-ended dialectic-dialogic semiosic activity, unfinished and unfinalizable, unbiased by prejudice and regulated by the logic of love, otherness and continuity or "synechism" (see also CP 1.615, 2.195, 5.3). With such an approach he superseded the limits of abstract gnoseologism and oriented his semiotic research in a pragmatic-ethic or evaluative-operative sense. In the Preface to his 1903 Lectures on Pragmatism (CP, Vol. 5, Bk. I), Peirce makes the following statement (from his 1902 dictionary entry "Pragmatic and Pragmatism"):

Almost everybody will now agree that the ultimate good lies in the evolutionary process in some way. If so, it is not in individual reactions in their segregation, but in something general or continuous. Synechism is founded on the notion that the coalescence, the becoming continuous, the becoming governed by laws, the becoming instinct with general ideas, are but phases of one and the same process of the growth of reasonableness. This is first shown to be true with mathematical exactitude in the field of logic, and is thence inferred to hold good metaphysically. It is not opposed to pragmatism in the manner in which C.S. Peirce applied it, but includes that procedure as a step. (CP 5.4)

Peirce had already elaborated upon his doctrine of categories – firstness, secondness and thirdness, which are always co-present, interdependent and irreducible to each other – in his renowned paper "On a New List of Categories" (1867, *CP* 1.545–559).² His doctrine of categories constitutes the foundation of his ontology and cosmology. Consequently, Peirce's doctrine of categories is connected to his ontological-cosmological trichotomy (agapasm, anancasm, tychasm), to his triadic typology of inferential logic (abduction, deduction, induction) and to his sign triads (in particular the tripartition between icon, index, symbol).

As clearly described in the citation above from "Evolutionary Love" (the last of the five papers published in *The Monist*, *CP* 6.302), three strictly interrelated modes of evolutionary development operate in the cosmos: *tychastic evolution* or *tychasm* which indicates development regulated by the action of chance – "evolution by fortuitous variation"; *anancastic evolution* or *anancasm* which is dominated by the effect of necessity – "evolution by mechanical necessity"; and finally *agapastic evolution* or *agapasm*, which is oriented by the law of love – "evolution by creative love." The names of the doctrines that elect these three evolutionary modes as their object of analysis are, respectively, *tychasticism*, *anancasticism* and *agapasticism*. Whereas the terms *tychism*, *anancism* and *agapism* name "the mere propositions that absolute chance, mechanical necessity and the law of love are severally operative in the cosmos..." (*CP* 6.302).

Each of these three main evolutionary modes contains traces of the other two; this means to say that they are not pure, but rather they contaminate each other reciprocally. In other words, they act together in different combinations and to varying degrees, reaching different states of equilibrium in evolutionary processes that are dominated now by chance, now by necessity, now by love. Consequently, far from excluding each other, tychasm, anancasm and agapasm share in the same general elements which (all the same) emerge most clearly in agapastic evolution. Evoking the language of mathematics, Peirce describes tychasm and anancasm as "degenerate forms of agapasm"; in other words, agapasm englobes the former as its degenerate cases (*CP* 6.303).

Tychasm shares a disposition for reproductive creation with agapasm, "the forms preserved being those that use the spontaneity conferred upon them in such wise as to be drawn into harmony with their original" (*CP* 6.304). This, as Peirce continues, "only shows that just as love cannot have a contrary, but must embrace what is most opposed to it, as a degenerate case of it, so tychasm is a kind of agapasm" (*CP* 6.304). However, unlike tychastic evolution which proceeds by exclusion, in genuine agapasm, advance takes place by virtue of a "positive sympathy". In other words, by virtue of attraction or affinity among the "created" – read "interpretants" – "springing from continuity of mind" (or synechism) (*CP* 6.304).

According to Peirce, the overall orientation of anancasm is regulated by "an intrinsic affinity for the good." From this point of view, it, too, is similar to the agapastic type of advance. However, as close to agapasm as it may be, anancasm

lacks in a determinant for evolution. Namely, the factor of "freedom" which, instead, characterizes creative love and subtends tychism (CP 6.305).

With reference to one of Peirce's most important tripartitions of the sign, agapasm, understood as a force of development through affinity and sympathy, is strongly iconic (correlate terms being notoriously the index and symbol). Agapasm is tantamount to the force of attraction, to the relation of similarity or affinity among interpretants. Even though the action of chance and necessity are foreseen here, in agapastic evolution the forces of attraction, affinity, freedom and fortuitousness dominate. This means to say that when agapastic forces prevail in the continuous (synechetic) flow of infinite semiosis, iconicity is the dominant regulating factor over indexicality and symbolicity in the relation among interpretants.

The concept of continuity or synechism involves that of regularity. As emerges from her own philosophy of sign, meaning and interpretation, for Welby, too, development is articulated in an open structure and continuity in development presupposes relations among terms grounded in otherness logic. Such logic may also be considered as a sort of "dia-logic," which means to say logic that recovers the dimension of dialogicality (or dialogism) as understood by Mikhail Bakhtin (1963, 1981; Petrilli 2012c: Part I, Ch. 2, Part III, Ch. 2; Ponzio 2008b, 2008d). In other words, following both Peirce and Bakhtin, dialogicality is understood as a modality of semiosis, which may or may not involve verbal signs and which may or may not take the form of dialogic exchange. Thus described, dialogicality is determined by the degree of opening toward otherness. Agapastic evolution is achieved through the law of love; creative and altruistic love, as Welby would say, love founded on the logic of otherness, what we have described as absolute otherness (cf. 5.5). The concept of agapasm can be used as a platform to discuss Victoria Welby's work in relation to Peirce's.

Welby also identified three progressively broader contexts relative to the development of human experience, knowledge and consciousness: the "planetary," the "solar" and the "cosmic" (Welby 1983: 30, 94-96). This triad corresponds to her trichotomic distinction between "sense," "meaning" and "significance," which refer to three main levels or classes of expression value; with reference to psychic processes the latter corresponds to the triad "instinct," "perception" and "conception"; and, again, to three levels of consciousness and experience classified as "consciousness," "intellect" and "reason" (Welby 1983: 2, 28, 46-48, 128, 216; Petrilli 2009a: 948–949; cf. 7.3, 7.5).

The signifying universe is amplified through the generation/interpretation of signs within continuously expanding networks forming the progressively inclusive spheres of geosemiosis, heliosemiosis and cosmosemiosis (Petrilli 1998a: 8–9). And to contextualize signifying processes in semiosic networks that are ever more global and detotalized means to resist anthropocentric temptations. Semiotics,

understood as the general science of signs, is a prerogative of anthroposemiosis. Indeed, given its metasemiotic vocation (which is determined by the modelling device specific to humans), semiotics thus described is not only capable of extending its gaze beyond anthroposemiosic limitations, but also beyond the geosemiosic and even the heliosemiosic to embrace the broadest sphere possible, that is, the *cosmosemiosic*. Of course, it did not take the "Copernican revolution" to reach a cosmosemiotic perspective. If we limit our considerations to Western thought, the book by Lucretius (2008), *De rerum natura* (*On the Nature of the Universe*, written during the second half of the 1st century BC), is already a significant example. Moreover, as inferred from both Peirce and Welby, for an adequate understanding of anthroposemiosis, semiotics must extend its gaze to consider semiosis not only in its translational interconnectivity with the "cosmosemiosic" dimension (comprehensive of "geosemiosis" and "heliosemiosis"), but also with the "biosemiosic" dimensions of sign activity (Sebeok 2001; Petrilli 1998a; Petrilli and Ponzio 2001, 2002a, 2002b; Cobley *et al.* 2011).

Development in the sphere of anthroposemiosis is not only the result of semiosic activity involving dynamic interconnectivity among objects and occurrences in the external world. It also involves the human propensity to hypothesize future developments and to prefigure possible or only imaginary worlds, which is the human capacity for the "play of musement" (*cf.* 15.4). And semiosic processes in the human world are further empowered in metadiscursive and metasemiosic terms as verbal and nonverbal sign systems interact dialogically, amplifying and enhancing each other in ongoing translational processes across the signifying order. Both Peirce and Welby propose a global approach to sign and meaning, which aims to account for signifying processes in all their complexity, articulation, variation and dialogical multiplicity.

4.3 Agape, the self and the other

It may be inferred from Peirce's semiotic perspective that the dialogic conception of signs – and of human consciousness which is made of signs – and the logic of otherness that orientates it, are a necessary condition for his doctrine of continuity, or synechism: the doctrine that "all that exists is continuous" in the development of the universe and, consequently, of the human subject that inhabits it. Dialogism and otherness account for the logic of synechism, continuity, but also for the driving forces exerted in evolutionary processes by discontinuity, chaos, inexactitude, uncertainty, unascertainability and fallibilism (*CP* 1.172). The dialogic relation between self and other is described as a crucial condition for evolution in the creative process, both the other from self and the other of

self, as Emmanuel Levinas explains so clearly. Another major and correlate force described as most fuelling creativity is love, that is, agape. The most advanced developments in reason and knowledge are achieved through the creative power of reasonableness, governed by the forces of agapasm. (On the relation between logic and love, see also Boole 1931b [1905]; and cf. 4.5).

Peirce maintains that love is directed to the concrete and not to abstractions: toward one's neighbour, not necessarily in a spatial sense, locally, but in the sense of affinity, a person "we live near [...] in life and feeling" (CP 6.288). Love is a driving force in logical procedure characterized in terms of abduction, iconicity and creativity. In accordance with Peirce's interpretation of St. John, the development of mind occurs largely through the power of love. Agape understood as orientation toward the absolute other is capable of transforming the hateful into the loveable. The type of evolution foreseen by synechism, the principle of continuity, is evolution through the agency of love:

Everybody can see that the statement of St. John is the formula of an evolutionary philosophy, which teaches that growth comes only from love, from I will not say self-sacrifice, but from the ardent impulse to fulfill another's highest impulse. [...] It is not dealing out cold justice to the circle of my ideas that I can make them grow, but by cherishing and tending them as I would the flowers in my garden. The philosophy we draw from John's gospel is that this is the way mind develops; and as for the cosmos, only so far as it yet is mind and so has life, is it capable of further evolution. Love, recognizing germs of loveliness in the hateful, gradually warms it into life and makes it lovely. That is the sort of evolution which every careful student of my essay "The Law of Mind" must see that synechism calls for. (CP 6.289, 1893)

The Peircean notion of reason fired by love calls to mind the association Welby herself established between love and logic when, for example, in a letter to Peirce of 22 December 1903, she writes:

May I say in conclusion that I see strongly how much we have lost and are losing by the barrier which we set up between emotion and intellect, between feeling and reasoning. Distinction must of course remain. I am the last person to wish this blurred. But I should like to put it thus: The difference e.g. between our highest standards of love and the animal's is that they imply knowledge in logical order. We know that, what, how and above all, why we love. Thus the logic is bound up in that very feeling which we contrast with it. But while in our eyes logic is merely "formal," merely structural, merely question of argument, "cold and hard," we need a word which shall express the combination of "logic and love." And this I have tried to supply in "significs." (Hardwick 1977: 15)

Peirce polemically contrasts the "Gospel of Christ," according to which progress is achieved through a relation of sympathy among neighbours, with the "Gospel of Greed" which reflects the dominant ideology of his day and encourages the individual to assert its own rights and interests, its own individuality or egoistic identity over the other (CP 6.294). A parallel can be drawn between Peirce's critique of the supremacy of the individual and Welby's analysis of the dynamics between I and self, where she criticizes the self's tendency to transform "selfness" into "selfishness" or "selfism" (Welby, "I and Self (1903-1911)," in Petrilli 2009a: 657-670). On Peirce's account, with his ideas about natural selection, survival of the fittest and the struggle for existence, Darwin, author of *The Origin of Species* (1859), translates this conception of the individual from political economy to the life sciences, that is, from discourse on economic development to discourse on the development of the living organism. This contrasts with the usual vision of things according to which what occurs in economy is the obvious continuation of natural law, of the supremacy and survival of the fittest. Instead, in Peirce's case we could even speak of a historico-materialistic vision where given results in historical development, with special reference to the organization of social relations, are translated into the laws of nature. In any case, Peirce's perspective is completely different from the orthodox. To a vision of the homo homini lupus type, he opposes his agapasm, a conception that concerns the human world as much as the entire universe (CP 6.295).

Welby too, like Peirce, describes the subject as a community of parts that are distinct, but not separate. Far from excluding each other, these parts or selves constitutive of subjectivity are grounded in the logic of otherness and interdependency. As such, they are unique and, at once, interdependent as they flourish in processes of translational interconnectivity with the other. Following Welby, subjectivity emerges as an open entity in becoming where the parts relate to each other according to the logic of unindifferent difference among differences. Such an approach necessarily excludes the possibility of confounding the parts indistinctly – the tendency to level and homologate differences as willed by the logic of identity, or "cohesive logic" (cf. Ch. 3). That the logic of otherness, as we are describing it, should regulate the relations among the multiple parts forming the single individual, means to safeguard singularity in its multiplicity and, therefore, to exclude the possibility of eliminating otherness, as occurs, instead, in the monologic self (Morris 1948a; Petrilli 2013). As Welby states explicitly, to confound is to sacrifice distinction. In other words, interrelation among the constitutive parts of the I – or what introducing a neologism she also calls the "Ident" – does not mean to sacrifice uniqueness, and uniqueness does not call for sacrificing the possibility of dialogic interrelation and communication among the parts. The I does not denote the "individual" separate from the other individual, but rather the "unique," the "singular" and, as such, it represents an excess with respect to the sum of its parts ("I and self," June 1907, now in Petrilli 2009a: 647-648). Welby's conception of "uniqueness" - which has no connection with the monadic separatism characteristic of Max Stirner's (1844) conception of the unique, of the singular – is easily developed in terms of Levinas's notion of "non-relative" or "absolute" otherness (Levinas 1987a, 1989; Petrilli 2013; 222–225).

Reading Henry James, Peirce (CP 6.287) cites the distinction between "selflove" and "creative love". Self-love is directed toward the other identical to self. Instead, creative love is directed toward that which is completely different, even "hostile and negative" with respect to self, toward the other as "absolutely other," as Levinas (1961) would say. A typology of love can be elaborated in terms of the logic of alterity, according to a scale ranging from high degrees of identity to high degrees of alterity. Although, truly creative love, as both Welby and Peirce argue, is love regulated by the logic of otherness, love for the other, directed at the other insofar as that other is absolutely other – significant on its own account, per se. Another image proposed by Peirce describes love as "the impulse projecting creations into independency and drawing them into harmony" (CP 6.288). To limit ourselves to evoking some of the main references in this book, in addition to Peirce, other authors who develop discourse on love, on Agape in terms of the logic of otherness, dialogism and significance include (once again) Levinas, Welby and Bakhtin.

Developing Peirce's discourse in a semioethic key, the self, to evoke Levinas, is endowed with the power of transforming its horror of the stranger, the alien, fear of the other (understood as the self's fear) into fear for the other, attraction to the other, in our own terminology into listening to the other and hospitality. In other words, love transforms fear of the other (whether the subject's fear or the object's fear) into fear for the other, for the other's safety and well-being. Love, reasonableness and creativity are all grounded in the logic of otherness and dialogism and together move the evolutionary dynamics of semiosis in the human world. And given their unique, species-specific capacity as "semiotic animals," human beings are also invested with a major role in terms of responsibility toward semiosis generally, which means to say toward life in all its forms over the entire planet. Fear for the other necessarily implies conscious awareness of one's responsibility for the other, to the point of taking the blame for all the wrongs that that other is subjected to (*cf.* Petrilli 2013: 137–141, 226–228).

From the point of view of human social semiotics, our approach is oriented "semioethically" to embrace questions traditionally pertaining to ethics, aesthetics and ideology (Rossi-Landi 1978 and 1992a). Semioethics extends its gaze beyond the logico-cognitive and epistemological boundaries of semiotics to focus on the relation of signs to values and thus on the axiological dimension of sign activity, which includes the human disposition for evaluation, critique, creativity and responsibility, thereby overcoming any tendency toward dogmatism and unquestioning acceptance. This orientation is prefigured by Welby's significs and its developments across the first half of the twentieth century. The term "significs" indicates the human disposition for evaluation, the import conferred upon something, the signifying potential and significance of human behaviour, participation in the life of signs not only on the cognitive and logical levels, but also in corporeal, emotional, pragmatic and ethical terms. Creative love and reasonableness associate knowledge and experience to the pragmatic-ethical dimension. If we do not persist in proceeding in a contrary sense and separate, even juxtapose processes that, instead, should integrate and complete each other, we soon realize that to transcend the limits of a strictly gnoseological approach in the study of sign activity is not only appropriate, but necessary.

4.4 Agape and abduction

If we shift our attention from the question of chance, love and necessity as modalities of development in the universe, and from the dialogic structure of self, thought and semiosis generally, to the level of logic and inferential procedure, we soon find close correspondences and relations of mutual implication connecting these different aspects. Correspondences between Welby and Peirce can also be evidenced from this point of view.

On the level of reasoning, abduction is the name of a special type of argumentation, inferential development or translation from one interpretant to another. Abductive inferential procedure is foreseen by logic, but is regulated by the logic of otherness and dialogism – especially in its more risky expressions – and supersedes the logic of identity. By contrast with induction and deduction, in abduction, the relation between the interpreted sign and the interpretant sign is one of similarity, affinity, attraction and at once of reciprocal autonomy. Whilst deduction depends on given premises and is incapable of pushing beyond that which is determined as a direct consequence of these premises, and whilst induction does not push beyond that which can be inferred on the basis of accumulated data, thereby allowing for the enhancement of knowledge in quantitative terms, abduction is characterized by a strong potential for creativity, inventiveness and innovation. In abduction, knowledge is enhanced not only in quantitative terms, but also in the qualitative.

In development oriented by tychasm to which symbolicity is associated in semiotic terms and induction in argumentative terms, chance determines new interpretive routes with unpredictable outcomes, some of which are then fixed in "habits." In anancastic development – connected with indexicality and deduction, new interpretive routes are determined by necessity, by causes that are both internal (the logical development of ideas, of interpretants that have already been

accepted) and external (circumstances) with respect to consciousness, without the least possibility of prediction concerning eventual results. Instead, in agapastic development, deferral from one interpretant to the next is regulated by iconicity and the logic of abduction – neither by chance, nor blind necessity, but, as Peirce says, "by an immediate attraction for the idea itself, whose nature is divined before the mind possesses it, by the power of sympathy, that is, by virtue of the continuity of mind" (CP 6.307). As an example of agapasm, of the evolution of thought according to the law of creative love, Peirce cites the divination of genius, the mind affected by the idea before it is comprehended or possessed, by virtue of the force of attraction the idea exercises upon thought in the context of relational continuity among signs in the great semiosic network of the universe, or semiosphere.

Paradoxically, in tychastic development chance generates order. In other words, the fortuitous result engenders the law and the law in turn finds an apparently contradictory explanation in terms of the action of chance. This is the principle that informs the work of Charles Darwin on the origin of the species and natural selection. In Peirce's opinion (CP 6.293–294), one of the reasons why Darwin won so much favour was that the values orienting his research – represented by the principle of the survival of the fittest – measured up to the dominant values of the times, which, in the last analysis, were founded on the logic of egocentrical identity and could be summed up in the word "greed." Logic understood in the strict sense of necessary cause is connected with anancastic development. A limit to this type of development is the belief that only one type of logical development is possible. In terms of inferential procedure, to maintain that the conclusion derives from given premises and cannot be anything different leads to excluding all other argumentative modes and consequently the possibility of free choice (CP 6.313).

In reality, the logic of constriction, contingency and mechanical necessity dominate over the relation between the interpreted sign and the interpretant sign in anancastic development, but this does not exclude the presence of other interpretive modes which are effectively active even when the anancastic procedure prevails. In semiotic terms, the relation between the interpreted and interpretant in anancasm is of the indexical type; in argumentative terms, it is deductive. This means to say that the relation between the conclusion and its premises is regulated on the basis of reciprocal constriction and, as such, operates at low degrees of otherness and dialogism.

The end of agapastic development is development itself of semiosis (in the cosmos, in thought, language, idea, subjectivity), continuity in signifying processes. According to Peirce, in a universe regulated by the principle of continuity and relational logic, where no single fact, datum, idea or individual exists in isolation, creative evolution (beaten out at the rhythm of hypotheses, discoveries and qualitative leaps) is achieved through the combined effect of logical procedure where agapasm prevails and synechism. In Peirce's view, the self as a sign also develops according to the laws of inference (*CP* 5.313) and far from being solitary is a communicating entity grounded in *agape*. By virtue of continuity in thought and relational logic, the main force regulating the deferral among signs from an evolutionary perspective is that of *agapic or sympathetic comprehension and recognition*. And the simultaneous and independent occurrence of an idea congenial to a number of individuals not endowed with any particular powers – a consequence of belonging to the same great semiosphere – may be considered as a demonstration of this (*CP* 6.315–316).

From a semioethic perspective, abduction, iconicity and agapasm may be considered as vectors of increase in knowledge, relations and values; and consequently creativity, dialogism, critique, freedom, responsibility and happiness even, all find in such vectors the sense in which to reflect on signs and their use so as to safeguard the quality of life and living together (see also Csikszentmihalyi 1996).

4.5 Mother-sense, agapasm and logic

In a series of unpublished manuscripts from the beginning of the twentieth century (available in the Welby Collection, York University Archives, Canada, Box 28, Subject File 24; now in Petrilli 2009a: Ch. 6), Welby elaborated the original concept of "mother-sense," also denominated "primal sense" and its variant "primary sense" (other variants include "original sense," "native sense," "racial sense," "racial motherhood," "matrix"). As thematized by Welby, mother-sense plays a central role in the generation/interpretation of signifying processes and construction of worldviews. With this concept she signals the need to recover the critical instance of the intellectual capacity, the capacity for unprejudiced thinking, for shifts in the orientation of sense production, for prediction and anticipation, for translation in the broadest possible sense of this term; that is, translation across space and time, across the different orders of signs and interconnected values.

Welby distinguishes between "sense" or "mother-sense," on the one hand, and "intellect or "father-reason," on the other. However, despite the terminology, this distinction is not limited to the barriers of gender identity, but, quite on the contrary, is intended to transcend them. In Welby's view, while the masculine and feminine *principia* are thus identified in abstract theoretical terms, they are strictly interrelated in praxis, in sense producing practice inclusive of "sense," "meaning" and "significance." And as much as women traditionally emerge as its

main guardian and disseminator from a socio-historical perspective, the concept of mother-sense is not circumscribed to the female gender. The intellect is associated with the capacity for knowledge where, in the balance between identity logic and otherness logic, identity tends to dominate. The intellect derives from mother-sense and must remain connected to it, in order to avoid homologation and levelling according to the logic of identity, which would otherwise restrict the intellect's capacity for sense or significance.

Mother-sense can be associated with the capacity for knowledge that proceeds in the Peircean sense of agapic or sympathetic comprehension, or in the Bakhtinian sense of answering comprehension or responsive understanding. As such, mother-sense belongs to humanity in its totality, an inheritance common to men and women indistinctly (in Petrilli 2009a: 629, 690-692). For their full development, cognitive and expressive potential, knowledge and experience are inevitably grounded in mother-sense, even when a question of scientific research. Mother-sense includes "father-sense" (even if latently), while the obverse is not necessarily true. Mother-sense is both analytical and synthetic. It determines a disposition for knowledge with a capacity for growth at both the quantitative and qualitative level which involves the capacity to change orientation and perspective, to proceed by cognitive leaps and enter different cognitive paradigms. "Calculation gives useful results," says Welby, "but without the sense and judgment of quality it can give no more than a description of fact" (in Petrilli 2009a: Ch. 6.8). For all these reasons, mother-sense and intellect need to be recovered in their original condition of dialectic and dialogic interrelation from both the phylogenetic and ontogenetic perspective.

The intellect understood as rational knowledge involves the processes of asserting, generalizing and reasoning about data as they are observed and experimented on in the sciences and in different fields of experience. Its limitation lies in the tendency to allow for the tyranny of data we wish to possess but which, instead, possess us. The sphere of knowledge covered by the intellect is entrusted fundamentally to the jurisdiction of the male mainly for historical reasons connected to tradition and certainly not because of some exclusive natural propensity for rational thought. As Welby points out, mother-sense is commonly referred to with a series of stereotyped concepts such as "intuition," "judgment," "wisdom," mostly recognized as characteristics of humanity in general. So, even though this primal form of sense tends to be more alive in the female because of the social practices she is called to carry out on a daily basis in her role as caregiver (for example, as mother or wife), it is common to men and women alike; a factor that unites them. Mother-sense is manifest in social practices oriented by the logic of self-donation, giving and responsibility for the other, care for the other. Moreover, as the main repository of mother-sense, women play a major role in the development of verbal and nonverbal expression, in the construction of the symbolic order.

To recover the connection between mother-sense and rational behaviour means to recover the sense of symbolic pertinence already present in the child. Critical work is inevitably mediated by "language," here understood as verbal expression, spoken and written. Welby thematizes the relation between language and consciousness and insists on the need for a "critique of language," evidencing the importance for each single individual of developing a "critical linguistic consciousness" (Welby 1983: Chs. XXVIII and XXIX; Petrilli 2009a: Ch. 4). Linguistic practices plagued by prejudice, ignorance and the lack of a discriminating sensibility obstacle development of the human propensity for "responsive understanding," which is dialogic and participative understanding, it too based on the capacity for listening and hospitality toward the other (Petrilli 2007d).

According to Welby, the history of the evolution of humankind is also the history of the continuous deviations operated by humanity in the social and signifying network, hence it is also the history of loss, loss of the sense of discernment and criticism being among the most serious of deviations. Such loss causes humanity to be satisfied with existence as it is, when what is really needed for improvement and development, for enhancement of the human expressive capacity is the condition of eternal dissatisfaction. In Welby's words: "We all tend now, men and women, to be satisfied ... with things as they are. But we have all entered the world precisely to be dissatisfied with it" (in Petrilli 2009a: Ch. 6.8.).

Mother-sense denotes the generating source of sense and capacity for critique. It is oriented by the logic of otherness and favours the acquisition of knowledge in a broad and creative sense through sentiment, perception, intuition and cognitive leaps. Welby's description recalls Peirce's own when in "Logic and Spiritualism" (c. 1905), he speaks of "mother-wit":

Without attempting accuracy of statement demanding long explanations, and irrelevant to present purposes, three propositions may be laid down. (1) The obscure part of the mind is the principal part. (2) It acts with far more unerring accuracy than the rest. (3) It is almost infinitely more delicate in its sensibilities. Man's fully-conscious inferences have no quantitative delicacy, except where they repose on arithmetic and measurement, which are mechanical processes; and they are almost as likely as not to be downright blunders. But unconscious or semi-conscious irreflective judgments of mother-wit, like instinctive inferences of brutes, answer questions of "how much" with curious accuracy; and are seldom totally mistaken. (*CP* 6.569)

Like Peirce's "mother-wit", Welby's "mother-sense" allows for intuition of the idea before it is possessed or before it possesses us. Mother-sense may be under-

stood in the double sense of the Italian verb sapere, which means both "to know" and "to taste of" (in Latin scio and sapio). That which the intellect must exert itself to understand, mother-sense – with its special capacity for knowing beyond identity logic and gnoseological limits, beyond the conventions of the order of discourse – already inheres in the double sense of scio and sapio.

The term "intellect" as understood by Welby is associated with inferential processes of the inductive and deductive type where the logic of identity dominates over the logic of alterity. Conversely, mother-sense is associated with signifying processes dominated by the logic of otherness, creativity, dialogism, freedom and desire, in semiotic terms by iconicity, in Peirce's cosmological terminology by agapasm. In terms of argumentation, it is associated with logical procedure of the abductive type. In fact, mother-sense alludes to the creative and generative forces of sense resulting from the capacity to associate things which are distant from each other, but that at once attract one another (*cf.* 5.2.).

A large part of Welby's correspondence with Mary Everest Boole – author of such books as Logic Taught by Love (1931 [1905]), Symbolic Methods of Study (1931 [1909]), The Forging of Passion into Power (1931 [1910]) and wife of the famous logician and mathematician George Boole (discussed by Peirce, CP 2.745–746) – is also dedicated to the laws that rule over thought with special attention on the interconnection between logic and love, passion and power (Cust 1929: 86–92, now in Petrilli 2009a: 167-172).

A recurrent theme in Welby's significs (1983, 1985a) is the methodological necessity of grasping the dialectical relationship between distinction (which is never separation or division) and unity. From this point of view, consider Welby's comments in a letter to Peirce, dated 21 June 1904:

But in my logic (if you will allow me any!) I see no great gulf, but only a useful distinction between methods proper to practical and theoretical questions. So then "Never confound and never divide" is in these matters my motto. And I had gathered, I hope not quite mistakenly, that you also saw the disastrous result of digging gulfs to separate when it was really a question of distinction, – as sharp and clear as you like. (Hardwick 1977: 21)

As understood by Welby, logic is grounded in the broader and generative dimension of sense (the original level, the primal level, mother-sense, racial sense, the "matrix"), it develops from a relation of dialectic interdependency and mutual empowering between mother-sense and father-reason. According to Welby, logic to qualify as such must always be associated with primal sense. The significal perspective evidences the need to recover the relation of so-called "responsive understanding" (Bakhtin) or "agapic comprehension" (Peirce) among signs, which presupposes the relation of reciprocal enhancement between primal sense and rational inferential procedure. This relation is a necessary condition for the full development of critical sense, meaning and value in knowledge and experience. Therefore, a central task for significs is to recover the relation of responsive interpretation between the constant *données* of mother-sense, on the one hand, and the continual constructions of the intellect, on the other. Primal sense, says Welby, is the material of "immediate, unconscious and interpretive intuition"; from an evolutionary point of view it constitutes the "subsequent phase, on the level of value, to animal instinct." Primal sense or mother-sense is both "primordial and universal" and as such is present to varying degrees at all stages in the development of humanity, phylogenetically and ontogenetically (Welby1985a: ccxxxviii). To evoke Levinas (1961, 1974), mother-sense denotes significance before and after signification. It concerns the real, insofar as it is part of human practice and the ideal, insofar as it is the condition for the human aspiration to continuity, perfection and beauty, for "desirous striving" (Husserl) in the generation of actual and possible worlds, of signifying processes at large.

Welby's conception of logic can also be associated with Peirce's when he describes the great principle of logic in terms of "self-surrender." With the concept of self-surrender the implication is not that self must lay low for the sake of ultimate triumph; but even when triumph is attained it must not be the governing purpose, or the guiding principle of behaviour (CP 5.402, n.2). A possible interpretant for translation and explication of the concept of "self-surrender" is "passivity" from the Latin passivus, that is, capacity to feel or suffer, from pass-, pp. stem of pati, "to suffer," also associated with "passion." Thus described, the concepts of self-surrender and passion are inevitably associated with the logic of otherness and with the critique of the logic of identity. The self affected by passion is a passive self. Following this line of thought, the concept of self-surrender implies critique of such values as authority, dogmatism, the arrogance of absolute certainty, abuse of the official order, the will to dominion and control. The properly human subject, "subjectum," is constitutively passive, subject to..., dependent on..., interested in... the other. This means to say that the passive subject is characterized by a capacity for listening to or availability toward the other. Read in this light, self-surrender is not associated with the condition of social and linguistic alienation, with the unquestioning subject who passively submits to external constriction, who takes the attitude of unquestioning acceptance. On the contrary, it tells of the capacity to surpass the limits of closed identity and individual self-interest, Peirce speaks of "greed" (CP 6.290–294); self-surrender is connected to a subject understood as a totality open to the other, with a generous propensity for the other, a creative self open to dialogue, interrogation and critique. Peirce's considerations on such notions as "reasonableness," "vagueness" and "generality" are also oriented to this sense (cf. 4.2–4.4, 8.6).

The self's vulnerability and readiness to venture toward the other, with all the risks that such movement implies, were portrayed by Plato and the myth featuring Eros (in the Symposium), a sort of intermediate divinity or demon generated by Penia (poverty, need) and Poros (the God of ingenuity), who finds his way even when it is hidden. According to Welby, a condition for the evolution of humanity is the connection between self-enrichment and risky opening toward the other. With reference to this connection, Welby elaborates a critique of "being satisfied," of accepting things as they are, of resigning to the status quo, as though there were no other possibility than that ensuing from a given hi/story, from a given sequence of events. Instead, her point is that we should not remain tied to being-as-it-is, to the order of discourse, but rather proceed beyond, elsewhere and otherwise in our search for the other: in this sense, in a sense which is all but metaphysical, Welby speaks of "transcendence". Consequently, as anticipated, a significant aspect of "mother-sense" is the condition of "dissatisfaction," an expression she introduces to signal the need to recover the critical instance of the human intellect, the propensity for questioning. This implies the capacity for the dialogic displacement of sense in the deferral among signs – a process characterized by extraneity, étrangeté, which again with Peirce can also be associated with the concept of "outreaching identity" (CP 7.591).

Mother-sense implies the capacity for knowledge that is "instinctively religious," intending by "religious" (with reference to etymology, in the sense of religare - to unite, to relate or link), our feeling consciousness of the solar relationship, a universal sense of *dependency* upon something greater than the mundane, "the already determined and given world (in Petrilli 2009a: 167, 586). The "religious sense" tells of the universal tendency toward a world that is other, vaster, more elevated, a world made of other origins and relationships beyond the merely planetary, a world at the highest degrees of otherness and creativity. Mother-sense is a transcendent sense; it determines our capacity to overcome the limits of sense itself and as such is associated with the true sense and value of the properly human. Nor does it imply "anthropomorphism" but, far more broadly "organomorphism," on the one hand, and "cosmomorphism," on the other.

A relation can also be established between mother-sense and the concept of "language" understood as "modelling device," "modelling procedure" or "writing" (writing ante litteram, writing before the letter) (cf. 2.3, 3.3, 7.4). Similarly to "language" thus understood, mother-sense too is an a priori and condition for the acquisition of knowledge and experience and for expression through verbal and nonverbal sign systems. In other words, secondary or derived forms of signifying behaviour (including intellectual work) are possible on the basis of a primary modelling source - mother-sense, language, or writing ante litteram. These secondary forms of signifying behaviour actualize so-called primal sense or mothersense, representing and developing it in terms of different expressive possibilities and different possible constructions of the world. As a modelling procedure, mother-sense is the original or primary generating material of significance before and after the production of signification and meaning. It is the condition of possibility for abductive logic and creativity, for the production of sense and its continuous translations into a potentially infinite number of new worlds (Petrilli 2010a: 49–89).

With mother-sense, Welby thematizes the need to develop critical social consciousness and supersede the constraints of convention for the sake of a concrete abstraction: future generations. According to Peirce, evolution generated by agapasm ensues from love oriented toward something concrete. Welby too, though independently of Peirce, orients the logic of mother-sense toward something concrete – one's neighbour (that is, one's neighbour in terms of affinity or similarity, however distant in space and time), while criticizing the threat of vague and void abstractions – an example of the latter is the poor use of the concept of "future" (in Petrilli 2009a: 406, 422, 568–585). On the level of inference, the practices of creative love are abductive and are regulated by the logic of otherness, structured in the relation with the other, the other in close "proximity" (as understood by Levinas 1974: 129–155), the other considered as a "concrete abstraction" (to recall Marx 1859), but also in its "concrete sign materiality" (Petrilli 2010: 146–149). The latter is an expression that evidences the self's incarnation in a body, but without reducing the terms to a relation of identification.

In a letter to Peirce dated 21 January 1909, Welby agrees that "logic is only an application of morality" (Hardwick 1977: 83), what we might also call "intellectual ethics" to use another one of Peirce's expressions (*CP* 1.622). Welby's own research can be described overall as proposing an "ethics of critique," an expression which recalls the title of Peirce's 1903 essay on "The Ethics of Terminology" (*CP* 2.219–2.226). As Welby writes to Peirce:

Of course I am fully aware that Semeiotic may be considered the scientific and philosophic form of that study which I hope may become generally known as Significs.... Of course I assent to your definition of a logical inference and agree that Logic is in fact an application of morality in the largest and highest sense of the word. That is entirely consonant with the witness of Primal Sense. (Hardwick 1977: 91)

To qualify as scientifically rigorous, reasoning must be grounded in agapastic logical procedure, therefore in "primal sense." This also implies admitting to the structural necessity of inexactitude, instability and crisis in the very development of semiosis, subjectivity and logical reasoning. Given its vocation for otherness, mother-sense or primal sense opens to the ethical dimension of signifying processes where signs and values are perceived in their interconnectedness.

According to the project proposed by significs, logic must fully recover its connection with primal sense, the matrix of sense, in a relationship of reciprocal interdependency and enhancement. As such logic can recover its original relation to common sense in all its signifying value, from instinctive-biological sense to the sense of significance. By re-establishing the connection between logic and sense and between sense and value, Welby presents the possibility of rendering the boundaries between logic, ethics and aesthetics mutually permeable and interactive.

4.6 Definitional aspects of abduction

After contextualizing logic and abductive processes, indeed inference generally in relation to semiotics on both the cognitive and ethical levels, we will now focus on some definitional and technical aspects of abduction, keeping account of the relation of mutual implication among logic, dialogism and alterity.

Abduction is the inferential process that frames hypotheses. Abductive inference hypothesizes a rule to explain a given fact on the basis of a relation of similarity (iconic relation) to that fact. Abduction proceeds through a relation of fortuitous attraction among signs and this relation is dominated by iconicity. "An icon," says Peirce, "is a sign which would possess the character which renders it significant, even though its object had no existence; such as a leadpencil streak as representing a geometrical line" (CP 2.304). And that iconicity, rather than indexicality or symbolicity, should prevail over abductive reasoning means that abduction is regulated by otherness logic and dialogism to the highest degrees in the relation among signs. Consequently, abductive reasoning can take its distances from the already given world, the already constituted world, from convention and consolidated habit, and evolve as "the process of forming an explanatory hypothesis" (CP 5.172). Peirce's concept of the play of musement has full expression here, opening to the logic of excess, of giving without a counterpart, desire, the interesting. The rule is the general premise and may be taken from a field of discourse that is relatively close or even distant with respect to the fact in question, just as it may be invented ex novo. Therefore, abductive reasoning occurs through interpretation of a fact, on the basis of a rule that is not preestablished before the inference, but rather is hypothesized. The rule that explains the result is contingent and not a logical necessity. If the conclusion is confirmed, it retroacts on the rule and convalidates it. This is why such argumentative procedure is denominated "abduction" or "retroduction." Interpretation retroacts on premises, to the point of determining the major premise, the rule, and in such determination is decided the conclusion. And given that it advances on the basis of arguments that are tentative and hypothetical, with only a minimal margin for convention or symbolicity and mechanical necessity or indexicality, retroactive procedure makes abductive inference risky, exposing it to the possibility of error. However, if the hypothesis is correct, the abduction is innovative, inventive and sometimes even surprising (Bonfantini 1987).

Abduction involves intuition, "instinct," as Peirce says. Guessing also plays a part. Moreover, the validity of abductive reasoning is generally only revealed by the result:

Abduction is the process of forming an explanatory hypothesis. It is the only logical operation which introduces any new idea; for induction does nothing but determine a value, and deduction merely evolves the necessary consequences of a pure hypothesis.

Deduction proves that something *must* be; Induction shows that something *actually* is operative; Abduction merely suggests that something *may be*.

Its only justification is that from its suggestion deduction can draw a prediction which can be tested by induction, and that, if we are ever to learn anything or to understand phenomena at all, it must be by abduction that this is to be brought about.

No reason whatsoever can be given for it, as far as I can discover; and it needs no reason, since it merely offers suggestions. (*CP* 5.172)

The relation between the "premises" and the "conclusion" may be considered in terms of the relation between what we have designated as the "interpreted sign" and the "interpretant sign." In induction, the relation between interpreted and interpretant is determined by habit and is of the symbolic type. In deduction it is indexical, the interpretant conclusion being a necessary derivation from the interpreted premises. In abduction, the relation between premises and conclusion, interpreteds and interpretants, is iconic and not at all unilinear, a relation regulated by reciprocal autonomy. And as claimed above, given the tentative, hypothetical nature of abductive procedure, this makes for a high degree of inventiveness together with a high risk margin for error. The degree of dialogism in the relation between interpreted and interpretant is minimal in deduction: once the premises are accepted, the conclusion is obligatory. Induction is also characterized by unilinear inferential procedure: identity and repetition dominate, though the relation between the premises and the conclusion is no longer compulsory. By contrast, the relation in abduction between argumentative parts is dialogic in a substantial sense. To repeat then, abductive argumentative procedure generates relations at the highest degrees of otherness and dialogism and the higher the degree, the more inventive it becomes (Ponzio 1985b, 2005, 2006a).

Abductions are empowered by metaphors in simulation processes characterized by their potential for creativity, invention and innovation, the capacity to daydream, to let one's imagination wander and picture new worlds. Welby identifies a close relation between hypothetical reasoning and verisimilitude. She claims

that "one of the most splendid of all our intellectual instruments" is the "image or the figure" (Welby 1985a [1911]: 13). Abduction, iconicity and simulation are no doubt closely interconnected. As clearly emerges from Welby's "critique of language," it ensues that the real problem is not to eliminate figurative or metaphorical discourse to the advantage of so-called literal discourse (which is merely an illusion), but to identify and eliminate inadequate images that mystify relations and distort reasoning. As Welby says: "We need a linguistic oculist to restore lost focusing power, to bring our images back to reality by some normalising kind of lens" (Welby 1985a [1911]: 16).

4.7 Ubiquity of abduction, dialogism and translation

In the light of Peirce's semiotics in association with Bakhtin's philosophy of language, not only are we able to place abduction in the dynamic context of inference, interpretation and the dialogic processes of semiosis, but we can also evidence still other aspects of the abductive relation among signs in different signifying fields and at different levels. For example, reference to Peirce and Bakhtin together leads to considering the problem of meaning in verbal and nonverbal signs in terms of interpretive routes (Ponzio 1997c). The conception of meaning as an interpretive route implies a connection between meaning and inference, semantics and logic. Abduction is involved in semantic (and in syntactic and pragmatic) processes. To understand meaning as an "interpretive route" means to place it in the context of inferential and dialogic relations, responding to both the Peircean and Bakhtinian conceptions of the sign. Meaning is described as a possible interpretive route in a sign network, interweaving with other interpretive and inferential routes which can branch out from the same sign. Departing from a sign where multiple meaning trajectories intersect, it is possible to choose and shift among alternative routes. Meaning emerges as a signifying route, a conclusion of an inferential process in a sign network, an interpretive route that is at once well-defined and yet (thanks to continual inferential and dialogic contact with other interpretive routes), subject to continual amplification and variation. The indeterminacy, openness and semantic availability of the sign is explained in terms of its contextualization in dialogic relations. Dialogism is present:

- in the relation between the sign and its interpretant; which is also a
- relation between the premises and the conclusion, to a minor or major degree of dialogism depending on whether we are dealing with deduction, induction or abduction;
- in the relation among the multiple verbal and nonverbal interpretants forming an open-ended inferential route; and

4. in the inferential and dialogic relation among the interpretants of different interpretive routes.

Related to this description, abductive processes contribute to our understanding of the distinguishing features of human communication and dialogism; ambiguity, polysemy, plurivocality, innovation and creativity. Yet the risks, limits and failures of abductive procedure can be explained by keeping account of the "semiotic materiality" of signs (Petrilli 2010a: 137–138). This means keeping account of signifying otherness, the semiotic autonomy and capacity for resistance of signs and meanings with respect to other interpretant signs, as well as of the subject who produced them in the first place. From the perspective of dialogic inferential relations between the interpreted, or premise and the interpretant, or conclusion, what Eco (1990) identifies as the *limits of interpretation* are in reality the limits put forward by alterity; the limits of interpretation are determined by resistance offered by the other, which is greater in interpretive routes where the degree of abductive procedure is highest.

The relationship between interpretation, inference and dialogism also sheds light upon the question of translation. In *Experiences in Translation* (2001), Umberto Eco argues that translation is not about comparing two languages, but rather about the interpretation of a text in two different languages which involves a shift among cultures. If this is true, then translation also involves a dialogic relation of alterity, which calls for recourse to abductive processes able to express the other (which is verbal, nonverbal, cultural). Translation is the result of dialogic inferential discourse between two texts in a relation of reciprocal otherness. From such a perspective, the concept of abductive inference as a high expression of dialogism may be used to reformulate the problem of the limits of interpretation, and contribute to a better understanding of the problem of the relation between translation and interpretation, as conceived by Peirce.

The "translated text," the "interpreted sign" and the "translating text," the "interpretant sign," what we could call simply the "translated" and "translatant" respectively, are interconnected by a relation of otherness (Petrilli 2010a: 234–242). This relation is signalled by Peirce as present in all signs when he claims that their interpretants are somehow always other from themselves, signs becoming other than what they were becoming. Abduction is paradigmatic in the otherness relation. Rather than just "saying almost the same thing" (to evoke the title of Eco's monograph of 2003, *Dire quasi la stessa cosa*), to translate is to commit to a dialogical relation based on difference understood in terms of *otherness* (and not of identity), more than to a relation among elements that are "almost" the same. This has led to our proposal of the expression the *same other* (*Lo stesso altro*) as the title of the third volume in a trilogy dedicated to translation

theory and practice (Petrilli 1999/2000, 2000a, 2001). Rather than simply describing "translation" as that which says almost the same thing as the "original." the expression "same other" characterizes the translatant text as the same text becoming other; even more, as the same text becoming other than what it was becoming, at once the same and the other (Eco 2001). To translate is not only to transfer the already known, but at once to generate new relationships and with them new knowledge.

4.8 Abduction and genesis of the signified world

Another area where abduction applies is represented by semiotics and philosophy of language (from this viewpoint the two are difficult to distinguish) engaged in reflection on the conditions of possibility of the already given, the already done, the already constituted, the already determined world, thus defined following Edmund Husserl. Reflection on such issues is necessary for a critical analysis of the world's current configuration and for alternative planning. In other words, our reference here is to what Husserl calls constitutive phenomenology, which consists of clarifying the whole complex of operations that lead to "the constitution of a possible world" (Husserl 1973 [1948]: 50). This means to investigate the modelling structures and processes of the human world not simply in terms of factuality, reality and history but also in terms of potential and possibility. Such an investigation is also specific in the sense that it deals with a species-specific modality of constructing the world. Unlike other animals, the human animal is characterized by the capacity for constructing infinite possible worlds. If, following Sebeok, we agree to call the human *modelling device* of the world "language," we may also add that this particular type of modelling device exists uniquely in the human species, so that unlike all other species, only humans can construct an infinite number of real or imaginary worlds, concrete or fantasy worlds – and not remain imprisoned in a single world (Sebeok 1991b).

As Husserl would say (1973 [1948]: 11), our considerations are turned to the sphere of the *Ursprungsproblem* (the problem of origins). Moreover, logic and theory of knowledge or gnoseology are inevitably related to *ontology*, the doctrine of something in general or the doctrine of "being" in general. This is because predication, or judgment, is not possible without predicative judgment, which consists of predicating the being of something. On the other hand, as soon as semiotics defines the sign as something that is interpreted by an interpreter, "it must reflect on this something," as Eco says, which, as being, is part of that sphere of philosophical meditation known as ontology (Eco 1997: 6). However, the problem of the origin of the categorial world is also relevant to ontology. Nor can this problem be reduced to the question of how being comes into existence and reveals itself through verbal expression and signs in general, which implies taking an acritical stance with respect to ontology itself.

All this can be summarized by saying that *semiotics*, *philosophy of language*, *theory of knowledge*, *logic* and *ontology* are all closely interrelated. And one of the authors who has related these areas of study most explicitly is Peirce. Our considerations are guided by Peirce's work, but also by Husserl and his phenomenology, particularly in *Erfahrung und Urteil* [*Experience and Judgment*.] It goes without saying that many other authors could contribute to this discussion. In particular, for what concerns the formulation of our own position, other authors who have been taken into consideration include (beyond Peirce and Husserl) Welby, Bakhtin, Levinas, Merleau-Ponty, Eco and Rossi-Landi, author (among many other writings) of a book on meaning, communication and "common speech" entitled, *Comunicazione*, *significato e parlare comune* (1961). In the latter, Rossi-Landi refers explicitly to the problem of the foundations or the conditions of possibility of meaning, expression and communication (*cf.* Chs. 11, 15).

In the present context it is important to underline that semiotics can also present itself as *transcendental logic*, as understood by Husserl, given that the phenomenology of semiosis can explain the problems involved in forming possible worlds. As philosophy of language, semiotics cannot avoid the questions, as articulated by Eco (1997: 4): "what is that something that induces us to produce signs?" or "what makes us speak?" As in Eco's case, this problem may lead to the concept of Peirce's "dynamical object," inducing the reply that it is the dynamical object "that pushes us to produce semiosis": "we produce signs because there is something that demands to be said. Using an expression which is hardly philosophical, but effective, the Dynamical Object is Something-that-gives-us-a-kick and says 'speak' – or 'speak about me!', or again, 'take me into consideration'" (Eco 1997: 5).

As philosophy of language, semiotics, following Eco, must not only address the question of the *terminus ad quem*, the term referred to when talking or producing signs in general. More than this, it must also address the *terminus ad quo*, what it is that makes us speak or produce signs in general. Ultimately, this is the problem of what pushes us to produce semiosis and to come into becoming as a subject, as an "I." If we search for an answer in the object alone, in the dynamical object, claiming, as does Eco, that it is the object that "demands to be said," not only is our response partial with respect to the whole issue, but it fails to account for the overall context in which the need to speak makes itself felt.

In other words, this answer does not account for the fact that the relation with the object is always mediated by the relation with the other, not the other understood as a thing, but as "other." We could make the claim that it is our relation with

others that makes us speak, that demands that the subject should speak. From this point of view, it is not surprising that Eco should use metaphors that allude to the interpersonal relationship in his discussion of the dynamical object: the verb "to demand," the expression "take me into consideration," "speak about me," or that other expression which Eco playfully claims he hopes will be translated into German so that "it may be taken seriously in Italy philosophically" (1997: 389), that is, "something-that-gives-us-a-kick" (1997: 5).

As Levinas says in "Nonintentional consciousness" (Levinas 1998 [1991]: 123-132), the first case in which I is declined is not the nominative but the accusative. The other interrogates the I. The I speaks in response to the other. And the question of the something, of being, is inseparable from the question of the I itself, which must first answer for itself, for the place it occupies in the world and for the way it relates to others. This means that first philosophy, as both Bakhtin (1990, 1993) and Levinas maintain independently of each other, is ethics. According to Levinas, the important question is not "Why is there being instead of nothingness?" but rather, "Why am I here, in this place, in this dwelling, in this situation, while another is excluded?" The origin of human semiosis is not intentional consciousness but, as Levinas says, consciousness that is nonintentional, consciousness understood in an ethical sense and not in an abstractly theoretistic or gnoseological sense; more precisely, a "bad conscience" which attempts to justify itself, to appease itself, to make itself comfortable in the face of questions raised by the other by its mere presence and in so doing, one's "bad conscience" is reconciled as a "good conscience" (Levinas 1998 [1991]: 123–132).

The ground (as we shall see in greater detail below) is firstness and belongs to the sphere of iconicity in terms of Peirce's typology of signs (cf. 5.4; on the relation between phenomenology and semiotics with special reference to Peirce, see Houser 2010). The next phase is that of secondness and indexicality. The problem is whether the ground is a question of intuitive immediacy antecedent to inferential activity, or whether it involves inferential processes, at least in an immediately subsequent phase. On reconstructing the rise of predicative judgment and studying the formation processes of logic, Husserl was concerned with operations carried out by subjectivity, which he distinguished from psychological subjectivity considered as part of a preconstituted world. The operations that interested Husserl and that lead to the formation of predicative judgment, are those carried out by transcendental subjectivity.

In Husserl's view, evidence, however immediate, always involves operations carried out by transcendental subjectivity. All the same, however, in relation to "maximally founded experience," he speaks of "maximally plain experience" or "immediate evidence." Not unlike Peirce (consider above all the essays of 1868, "Questions Concerning Certain Faculties Claimed for Man" [CP 5.213-5.262] and "Some Consequences of Four Incapacities" [*CP* 5.264–5.316]), Husserl does not believe in the possibility of ideas absolutely undetermined by other ideas. With both Peirce and Husserl, we are outside the empiricism-innatism antinomy (which was naively reproposed by Noam Chomsky in 1966, when in terms of language theory he returns to Descartes, as though Peirce and Husserl had never existed). Instead, both Peirce and Husserl proceed from Kant.

Analysis of the formation of predicative judgment can begin from the level of primary iconism, or protosemiosis: indications from Husserl considered in the light of Peirce's approach to semiotics are particularly useful here. Peirce's semiotics is not at all distant from Husserl's phenomenology, while Husserl's thought system is semiotically oriented, though independently from Peirce. (On Husserl's analysis of "passive predata" and the role of primary iconism in the development of predicative judgment, *cf.* 5.3).

Another interesting aspect of the phenomenology of semiosis constituting predicative judgment is connected with the abductive process in the form of "proto-abduction." In the explicative process, the subject assumes given determinations "as-if," as hypotheses, on the basis of which it can continue its explicative operations (Husserl 1973 [1948]: 167–171). This is the "as-if" position of imagination. Obviously, "as-if" perception implicates similarity and iconism. It is an embryonic metaphor. Insofar as it is founded on language understood as a modelling capacity (thanks to which human beings unlike all other animal species are capable of producing an infinite number of possible worlds), predicative judgment can escape the limits of the real world and stroll through the world of the imagination. Nonetheless, the "as-if" relation concerns more than just the possibility of constructing imaginary objects and imaginary worlds. Predicative judgment cannot avoid metaphorical procedure to the point that it is difficult, if not impossible, to distinguish between the literal and the metaphorical. As Welby says (1983 [1903]), even literal expression is metaphorical and enables us to speak of the verbal as if it were writing. The "as-if" relation enables something to be determined on the basis of something else that may act as its interpretant, precisely in the "as-if" form. Therefore, the "as-if" modality is a constitutive part of predication.

Let us now return to the concept of *ground* as the point of departure for that interest which gives rise to semiosis oriented toward a dynamical object. In the light of what has been said so far, we may now claim that the ground is the point of departure for the perception and explication of an undetermined substratum, through the explicative coincidence of this substratum with one or several of its determinations. Once it has transited from the substratum to its determination and eventually to further determinations, interest turns toward the substratum once again, but enriched in sense as a result of the comprehension of its determination.

nations. We then reach the phase where the substratum is explicitly considered as the substratum of a determination; consequently, the object-substratum assumes the form of a predicative subject. What has happened is that the *terminus ad quo* (an expression used by Eco [1997: 4], but also by Husserl to describe the process we are outlining) has been transformed from a ground into a theme-subject; beyond this point predicative activity proceeds toward determination, the predicate, as the correlative terminus ad quem. The dynamical object is the object which, departing from the ground, manifests itself in its different determinations or in the different predicative judgments that concern it.

In semiotic terms, abductive inferential procedure is oriented by iconicity, in other words, iconicity is at the fountain head of abduction. Passive perception involves implicit or unconscious abductive procedure. Abduction is the nucleus, the cell from which the inferential network forms and develops. This means to say that, in the phenomenology of the genesis of predicative judgment and of the predicative world from ante-predicative life (the precategorial level, the lowest level of perceptual activity, that of affection, of passive predata), abduction is associated with the problem of the genesis of the utterance, of predicative judgment: abduction is the generative cell in the text/texture of inferential argumentation globally.

4.9 Abduction and linguistic experience

But before concluding, let us refer to yet another sphere of the semiotic universe where abduction is pivotal - the question of the relation between experience and competence in language learning. As anticipated above (2.8.–10.), Chomsky refers to the issue in question with the expression *Plato's problem*, considering the asymmetrical relation between linguistic experience at the source of the language learning process, on the one hand, and competence in a given language, on the other: the corpus of experiential data is limited with respect to native speaker competence. Chomsky solves the problem with his proposal of an innate and universal grammar, justifying his choice of biological innatism as the solution to the problem concerning the gap between linguistic experience and linguistic competence on the basis of his criticism of behaviourism: recourse to the stimulus-response theory does not explain the gap. However, Chomsky refers to a specific trend in behaviourism, a trend that is particularly limited because it is mechanistic. His main reference is behaviourism in Burrhus F. Skinner's interpretation. But the validity of Chomsky's criticism can be verified in light of yet another trend in American behaviourism, one developed by Charles Morris, that derives from George H. Mead and is connected to Peirce's pragmatism. Peirce's pragmatism plays an important role in the development of Morris's "semiotic," as evidenced by the latter in his monograph of 1937, *Logical Positivism, Pragmatism and Scientific Empiricism* (Ch. 12, n. 1; Petrilli 2000b, 2004c).

Confrontation with Peirce and Morris favours revision of Chomsky's concept of experience, which ignores the whole course of philosophical thought from Kant to Husserl to Peirce. By "linguistic experience," Chomsky understands passive exposure to linguistic data, but we have seen that this approach does not explain the formation of linguistic competence (Ponzio 2011: 261–289; 2012). Chomsky introduces the concept of "innate universal grammar" which is not to be confused with Sebeok's concept of "language" or "primary modelling device." Chomsky's innate language is conceived as a universal language, a universal grammar; on the contrary, in Sebeok's description *language* (which first makes its appearance with early hominids as a modelling device) is clearly distinct from *speech* (verbal expression which arises much later in human evolution and specifically for communication).

In reality, linguistic experience, as all experience from the lowest levels of perception to the highest levels of logical reasoning, proceeds from inferential processes where induction, deduction and abduction occur together. With regard to the limited data of linguistic experience, what occurs in the interpretive processes of language acquisition is no different from the processes involved in the perception of an object: though we only see one side of the object in front of us, we interpret it (let's say) as a table, on the basis of abductive inferential processes and on the assumption that the other three sides exist; or we interpret it as a desk considering the context, the presence of drawers, the type of objects placed on top of it, etc. The acquisition of language, language learning and the creative aspect of language are all explained in terms of the capacity for abductive interpretation.

The Chomskyan theory of generative grammar developed in the light of Peirce's sign model, in particular Peirce's notions of interpretant and abduction, furthers our understanding of the utterance and speaker interpretation. Language and its workings cannot be fully understood without the concept of abduction, nor without the interpretant, especially the *pragmatic interpretant* which depends on abduction.

By "pragmatic interpretant" is understood the "interpretant of responsive understanding" (or of "answering comprehension"), a concept we have nominated on various occasions throughout this book. The expression "responsive understanding" is clearly a derivation from Bakhtin. Here, in more specifically Peircean terminology, and in this particular case related to the concept of abduction, we wish to underline, instead, the adjective "pragmatic": "pragmatic interpretant." This means to draw attention to the connection with a specific semiotical-philosophical orientation, Peirce's pragmatism, but not only that.

As evidenced by Charles Morris (1938a) and again by Rossi-Landi (1972), and contrary to Chomsky, the expression "pragmatic interpretant" recalls that the pragmatic dimension cannot be ignored in its inevitable interrelationship with the syntactical and the semantical dimensions of semiosis.

Thus contextualized, the concept of pragmatic interpretant also fits in well with Chomsky's discussion of vet another important problem, what he designates as Orwell's problem (Chomsky 1975). This is the problem of ideology. The pragmatic interpretant implies that the study of signs should be open to the problem of values, that the problem of meaning should be open to the problem of significance and, consequently, that semiotics should be open to semioethics.

Given the primary role carried out by agapasm, attraction and similarity in the processes of interpretation and association among signs, whether at the level of sense perception or of abstract conceptualization (as in the case of language acquisition for communication), we will now take a closer look at the iconic device and its implications for our signifying and logical capabilities.

Chapter 5

Image, primary iconism and otherness

Remember it is by icons only that we really reason, and abstract statements are valueless in reasoning except so far as they aid us to construct diagrams.

(Charles S. Peirce, *Collected Papers* 4.127)

All'uomo sensibile e immaginoso, che viva, come io sono vissuto gran tempo, sentendo di continuo ed immaginando, il mondo e gli oggetti sono in certo modo doppi. Egli vedrà cogli occhi una torre, una campagna; udrà cogli orecchi un suono d'una campana; e nel tempo stesso coll'immaginazione vedrà un'altra torre, un'altra campagna, udrà un altro suono. In questo secondo genere di obbietti sta tutto il bello e il piacevol delle cose. Trista quella vita (ed è pur tale la vita comunemente) che non vede, non ode, non sente se non che oggetti semplici, quelli soli di cui gli occhi, gli orecchi e gli altri sentimenti ricevono la sensazione.

(Giacomo Leopardi, 30 November 1828, *Zibaldone* 1991, Vol. 2: 1196 [4418]).¹

5.1 Iconicity, similarity and critique of representation

The question of similarity is pivotal for an adequate understanding of signifying and cognitive processes. It involves the relation between image and similarity, which Charles Peirce associates explicitly with the iconic dimension of semiosis. In addition to Peirce, another important contribution to the problem of iconicity and the relation between image and similarity comes from Edmund Husserl and his work on what Peirce would call "primary iconism," which in Husserl concerns the pre-categorial, original perception of the world, the relation with things in themselves, with objects described (particularly in *Erfarung und Urteil*, as we will read in what follows) as given "there in the flesh" (1973 [1948]: 19). Another interesting contribution to the problem of image and similarity is made by Emmanuel Levinas in his early essay, also dated 1948, "La réalité et son ombre" (translated in English as "Reality and Its Shadow," 1987). The concepts of image and similarity are complex in themselves and need specification. From this point of view, a major criteria is whether these concepts are regulated by the logic of identity or of otherness.

A distinction can be established between similarity according to "assemblative logic" and similarity according to "elective" or "agapastic" logic, to evoke Peirce again (CP 6.302–305; Petrilli and Ponzio 2005a: 60–61). "Assemblative similarity" is similarity by convergence or identification, therefore similarity based on the logic of identity. This type of similarity corresponds to the concept. Instead, "elective similarity" is similarity by attraction and affinity, therefore similarity regulated by the logic of alterity. Metaphor corresponds to the latter. Metaphor

proceeds according to the logic of affinity, election, attraction and agapasm; instead, the concept proceeds according to assemblative logic. The utterance "Mary is a woman" classifies Mary according to her identity as a woman, as an undifferentiated member of the class formed by all women indistinctly. But this utterance tells us nothing about Mary in her singularity, her otherness, e.g., "Mary is a woman with a mind of her own" (Petrilli 2010a: 286-291).

Iconicity plays a fundamental role in artistic discourse, whether verbal, nonverbal, gestural, musical or pictorial, etc., as thematized by Maurice Merleau-Ponty and his studies on Cézanne particularly in Sens et non-sens (1966). The artistic vision reveals the iconic dimension of signifying processes, of the indirect word, of singularity as theorized by Husserl, of absolute otherness as theorized by Levinas and by Bakhtin. Throughout his writings, Mikhail Bakhtin evidences the otherness dimension of aesthetic discourse and its relation to ethical discourse (1934–1935, 1938, 1959–1961, 1961). He thematizes the need for opening to the other in the real world horizons of everyday life. The real world is characterized by "representation" in contrast with the capacity for "portrayal" or "picturing." The term "picturing" also evokes Ludwig Wittgenstein's research on picture theory, particularly as elaborated in another early study, his Tractatus Logico-Philosophicus, of 1922 (see also Petrilli 2010a: 279–286). In addition to "picturing," other terms for the image based on otherness logic, for the places of verbal and nonverbal signifying processes where iconicity prevails include "depiction," "figuration," or "portrayal" (Petrilli and Ponzio 1999, 2005b). Such concepts can also be associated with what Levinas (1974) describes as the "shadow," the "otherwise than being".

The distinction we are describing between image and similarity based on the logic of identity, on one hand, or on the logic of alterity, on the other, is also specified in terms of the distinction between the logic of figuration (image-icon) and the logic of representation (image-idol), therefore between the image expressed in terms of depiction, the image-icon, and the image expressed in terms of representation, identification and repetition, the image-idol (L. Ponzio 2000, 2002, 2009). The question of iconicity is connected with the search for the invisible in the visible, with depicting the invisible, the unsaid or the implied. As firstness, iconicity in figuration (image-icon) transcends the image associated with representation, with the logic of adjustment to the object, the image based on the logic of identity (image-idol). Instead, iconicity in relation to depiction tells of the relation of asymmetry, incommensurability between the visible and the invisible; the tendency to transcend objectifying thought and the boundaries of the subject as established by the monologism of representation and official ideology. Firstness, iconicity, the image-icon (whether verbal or nonverbal) favour the capacity to reorganize worldviews thanks to their capacity for distancing from the known, the given, the world-as-it-is, ontological being. The sign most open to the logic of otherness and dialogism, the sign most capable of depiction beyond the boundaries of identity and the logic of representation is the icon. As Peirce evinces so clearly, iconicity is the semiosic dimension most characterized by creativity, inventiveness and innovation.

From a semioethical perspective, iconicity is connected with critique, thanks to the capacity for unconditional opening to the other and for escape from the logic of identity. The iconic sign is associated with the potential for subversion of the dominant order, with critique of dominant ideology, with dissidence rather than passive and unquestioning acceptance of dominant social programming. Insofar as it is abductive, logical procedure regulated by iconicity amplifies and enhances the horizons of the existent, somehow modifying, revisiting, subverting the monological totality with which the subject tends to identify. Iconicity affects the capacity for moral consciousness. Ultimately, it dominates over symbolicity and indexicality in the processes of active participation and responsive understanding toward the other, playing a significant part in the self's capacity for responsibility beyond conventions and roles, which is unlimited responsibility without alibis (cf. Ch. 6; Deacon 1997; Favareau 2008).

5.2 Image and similarity

The question of the image (which enters the larger notion of icon) is amply discussed by Peirce throughout his writings. In his essays published in *The Journal of Speculative Philosophy* between 1867–1868 (in which he outlines a semiotic interpretation of human consciousness), Peirce claims that "whenever we think, we have present to the consciousness some feeling, image, conception, or other representation which serves as a sign" (*CP* 5.314). As he formulated his general theory of sign, Peirce described a whole series of different signs that a general model of sign should account for (*cf.* 4.1). He concluded his list with the observation that a sign is "anything able to create mental images which emanate from something external to itself" (MS 634: 16–17, Sept., 1909; CN 2: 149).

We know that one of Peirce's most famous sign triads distinguishes between symbol, index and icon and that the latter is connected to similarity, comparison and image. Peirce also uses the expression "mental image" as in the citation above, where the concept of "mental" is free from psychologistic connotations. He also implements the term "mind" for the interpreted-interpretant relationship, but his reference is never to a subject understood psychologistically. The mind, according to Peirce, does not presuppose a subject, a self given outside the relationship among signs and independently of it. In Peirce's thought system "mind" does not even necessarily refer to the human mind.

Peirce divides the icon into three subclasses: 1) images, 2) diagrams and 3) metaphors (CP 2.277). In images, similarity is general, direct and simple; in diagrams it concerns relations among parts based on analogy; in metaphors, it involves parallelism and comparison. Having established a connection between icon and "similarity," the notion of "image" ("mental image," to add an obvious specification) also requires reconsideration with reference to the relation of similarity. In particular, the "mental image" is better understood in light of the concept of primary iconism. With primary iconism we are at the very origin, at a constitutive level in the genesis of interpreted-interpretant relationships.

The concept of similarity creates some difficulty in the question of the distinction between the ground and the immediate object. For Peirce, similarity characterizes something that presents itself as *firstness*, such as it is, or pure quality; at the same time, however, thanks to similarity the immediate object presents itself as an interpretant, that is, as the *type* of a given interpreted or *token*.

As anticipated at the beginning of this chapter, significant insights on these issues also come from Levinas, author of the topical essay "La réalité et son ombre," see in particular the section entitled "Image and resemblance" (1987c [1948]: 5–8). Levinas also addresses the problem of the original relation with the object, that is, the object not yet perceived or determined as such with respect to the "symbôle ou signe ou mot." A question he asks is: "In what does an image differ from a symbol, a sign, or a word?" (1987c [1948]: 6). His answer: "By the very way it refers to its object: resemblance" (1987c [1948]: 6); with the rider that this presupposes that the mind stops "on the image itself" and thus on "a certain opacity of the image." "A sign, for its part, is pure transparency, nowise counting for itself". And Levinas continues:

Must we then come back to taking the image as an independent reality which resembles the original? No, but on condition that we take resemblance not as the result of a comparation between an image and the original, but as the very movement that engenders the image. Reality would not be only what it is, what it is disclosed to be in truth, but would be also its double, its shadow, its image. (1987c [1948]: 6)

What Levinas calls image is based on similarity and is at once independent from what it resembles, like Peirce's icon. Paraphrasing Levinas in Peirce's terminology, the claim is that unlike the symbol and index, which are transparent, the image is a sign with a certain degree of opacity. According to this description, the image is the otherness of being, its double, or shadow. As Peirce says: "An icon is a sign which would possess the character which renders it significant, even though its object had no existence; such as a lead-pencil streak as representing a geometrical line" (CP 2.304). This means to say that reality is not exhausted in that which is, in that which is given, in the visible, the said. Besides being itself, reality presents an excess, it has an unretainable otherness of its own, it includes a movement toward something else, something otherwise than being, as Levinas claims in the very title of his 1974 monograph, Autrement qu'être ou au-delà de l'essence. In fact, the approach adopted by Levinas to the problem of "similarity" and the "image" related to the icon as distinct from the sign characterized by thirdness and conceptual interpretation, leads to questioning the primacy of ontology. This approach reveals an "otherwise" (autrement) with respect to that which is, an "otherwise than being" that is not in turn a "being otherwise" (être autrement), but rather an otherwise that is outside and before being, identity, determination or difference.

Here we now enter that part of the discussion which concerns "metaphysics": metaphysics as understood by Levinas, but also as understood by Merleau-Ponty in *Sens et non-sens*. In "La réalité et son ombre," Levinas analyzes "excess" with respect to being, which, in 1936, he had already discussed in terms of "evasion" and subsequently, in 1974, in terms of "otherwise than being" (*autrement qu'être*), precisely. As Levinas says in his 1948 essay: "Being is not only itself, it escapes itself" (Levinas 1987c [1948]: 135). The human individual, the self is not only himself or herself; the self is also his or her alterity. Alterity escapes from identity, which, like a torn sack, is unable to contain it. It is as though in the face of something familiar, the self's qualities, colour, form and position remain behind its being; they do not coincide entirely with its identity:

There is then a duality in this person, this thing, a duality in its being. It is what it is and it is a stranger to itself and there is a relationship between these two moments. We will say the thing is itself and is its image. And that this relationship between the thing and its image is resemblance. (Levinas 1987c [1948]: 6)

The image is the dynamical object that is not exhausted in the identity of the immediate object. As the *ground* or primary icon, the image imposes itself on the interpretant over and over again (*immer wieder*, as Husserl would say), as its irreducible otherness. "The original gives itself," says Levinas (1987c [1948]: 6–7), "as though it were at a distance from itself, as though it were withdrawing itself, as though something in a being delayed behind being." A sort of "consciousness of the absence of the object" characterizes the image with respect to the presence of the immediate object and signifies, according to Levinas, "an alteration of the very being of the object, where its essential forms appear as a garb that it abandons in withdrawing" (1987c [1948]: 7).

5.3 Primary iconism

Let us now return to the issue of *primary iconism*. As Husserl argues in *Erfahrung und Urteil* [*Experience and Judgment*], we can only reach this original level by way of abstraction either through a phenomenological reduction of the *epoché*, by bracketing the already given world and relative interpretive habits, or through artistic vision. The image is the otherness of that which is, its strangeness to itself, its double. And art refers precisely to the image, for it depicts the other face of being. Artistic discourse does not represent reality, but depicts its double. In other words, what Levinas calls image is the image of artistic vision; the image is the otherness of the interpreted object, which artistic extralocalization reveals by showing this object as "double." Therefore, the object is not only the object of knowledge subject to a concept, but it is also the image. In terms of inference, this is the reason why abduction – where, to repeat, iconicity prevails over indexicality and symbolicity – can dissociate itself from the already given world, from conventions and consolidated habits, and evolve, instead, as "the process of forming an explanatory hypothesis" (*CP* 5.172; *cf*. 4.6).

As Merleau-Ponty avers in relation to Cézanne, painting is the search for that which is other with respect to habitual attitudes toward familiar objects and conventions. Cézanne believed it was necessary to have a perspective, where by "perspective" is meant a logical vision. This logical vision is the result of a process of abstraction that permits regression to an original relation with the object. This relation can be described as a relation of primary iconism. In the case of Cézanne's painting, it is a question of returning to a perceptual relation wherein the category of firstness (in Peirce's sense) dominates almost completely, giving the impression of an object in the process of appearing, of agglomerating under our very gaze (Merleau-Ponty 1966: 25). Agglomeration occurs on the basis of associative processes regulated by similarity. As Merleau-Ponty observes in "Le doute de Cézanne":

We live in an environment of objects constructed by human beings, among utensils, in houses, streets, cities and most times we only see them through the human actions of which they may be the points of application. We are in the habit of thinking that all this exists necessarily and is immovable. Cézanne's painting suspends such habit ... This is why his characters are foreign ... as though they are sighted by a being of another species ... His is a world without familiarity ...

His painting denies neither science nor tradition. . . . Setting science completely aside, it is a question of seizing once again the constitution of the panorama as a rising organism, through the sciences. . . . For that painting there, a sole emotion is possible: the feeling of estrangement, a sole lyricism: that of existence beginning again always anew. (Merleau-Ponty 1966: 28–30, Eng. trans. my own)

As Merleau-Ponty observes, Cézanne was especially concerned with perspective and what we might call the *emerging order*; his focus was on the object in the process of appearing under our very gaze. As a programmatic proposition, Cézanne's painting and Merleau-Ponty's philosophical thought system effectively describe the need to escape dominant vision with its set links, references, itineraries and habits; and to rediscover, instead, a connection among objects that would not seem to be related. Such processes occur in metaphor, but also in genetic biology when, for example, it searches for deep, structural and scientifically fruitful homologies, rather than superficial and sterile analogies.

In Erfarung und Urteil Husserl analyzes "passive pregivens" (or, if we prefer, "passive predata") as they originally present themselves, by abstracting from all qualifications of the known, the given, the datum, from all qualifications of familiarity with what affects us. Thanks to such qualifications, passive pregivens subsist at the level of sensation and are somehow already known and interpreted. Similarity plays an important role at this level too. Husserl claims that if, by way of abstraction, we leave aside reference to the already known object that produces the sensation (secondness, indexicality) – and familiarity through habit and convention where what affects us exists as already given (thirdness, conventionality, symbolicity) – and, as much as it is unknown, is already known in some way (the rhinoceros or Umberto Eco's platypus) - we do not end up in pure chaos, in a mere confusion of data (Eco 1997). When colour is not perceived as the colour of a thing, of a surface, as a spot on an object, etc., but as a mere quality - presenting itself, as Peirce would say, at the level of firstness, where something refers to nothing but itself and is significant in itself – this something presents itself, all the same, as a unit on the basis of homogeneity and against the background of something else, against the *heterogeneity* of other data – for example, red on white.

At the level of primary iconism, similarity is homogeneity that stands out against heterogeneity: "homogeneity or similarity," as Husserl says, varies in degree to the very limit of complete homogeneity, to equality without difference (1973[1948]: 71–76). In a relation of contrast with similarity, there often subsists a certain degree of dissimilarity. Homogeneity and heterogeneity ensue from two different fundamental modes of associative unification. Husserl discusses "immediate association" in terms of "primary synthesis," which enables *a* datum, *a* quality to present itself, specifying that an "*immediate association is an association in accordance with similarity*" (1973[1948]: 75). Synthetic unification is achieved in primary iconism on the basis of similarity.

The initial abstraction concerns perceptual semiosic processes involving the *index* and the *symbol*, which means to say perceptions that refer to the object as that which affects us in a causal and/or contiguous relation with perception;

or perceptual semiosic processes that refer to the already given habitual world, on the basis of habits and conventions which now function automatically and passively. In Husserl's terms, abstraction means assuming that there is only one so-called "field of sense" (another effective expression for the same thing is "field of reliefs") which cannot be attributed to an object and which does not belong to an objective world that exists for others as well.

... this field is still not a pure chaos, a mere "swarm" of "data"; it is a field of determinate structure, one of prominences and articulated particularities. A *field of sense* – a field of sensuous data, optical, for example – is the simplest model in which we can study this structure. Although a field of sense, an articulated unity of sensuous data – colours, for example – is not given immediately as an object in experience, for colours are always already "taken" in experience as colours of concrete things, as coloured surfaces, "patches" on an object, etc., still an abstractive turning-of-regard is always possible, in which we make this apperceptive substratum itself into an object. (Husserl 1973[1948]: 73)

The field of reliefs or field of sense as such is already significant. With reference to the sign triad, icon, symbol and index, it is characterized by iconicity. To be precise, we are speaking of "sense" for somebody - for an interpreter who all the same does not yet give itself as an ego, an I, a subject, as consciousness, but rather as a perceptual body according to the modalities described above. This field of sense, of reliefs is not pure chaos, a confusion of data before the ego, the I exercises a production of sense upon it; instead, it is endowed with a sense of its own, it signifies on its own account, is structured iconically on the basis of similarity. As described above, similarity operates in the sense of the relation between homogeneity and heterogeneity, giving rise to original syntheses – for example, to the perception of red on white. Sense data may be perceived on the basis of immediate association by similarity because, as Husserl says, this occurs "always on the basis of such a prominence." (1973 [1948]: 76). Without immediate association by similarity, there could be no "relief," there could be no "standing out." Here, reference is to all types of iconic, auditory, visual, tactile and proprioceptual signs. A propos data as they stand out from a background, Husserl writes:

Through its intensity, the datum stands out from a multiplicity of coaffecting data. This occurs, for example, when, in the sensuous sphere, there is a sound, a noise, or a colour which is more or less obtrusive. These lie in the field of perception and stand out from it and, although not yet apprehended, exercise on the ego a stimulus more or less powerful or weak, as the case may be. In the same way, a thought which suddenly emerges can be obtrusive, or a wish, a desire, can get through to us from the background with insistence. The insistence is determined by the mode, more or less abrupt, of coming-to-prominence; in the sensuous sphere it is determined by contrasts, qualitative discontinuities of considerable degree and the like. In the domain of nonsensuous data there is, to be sure, no question of qualitative discontinuities of this kind; still, there is something analogous here also: among the

different obscure movements of thought which stir us, one thought, for example, stands out from all the rest and has a sensitive effect on the ego, as it, so to speak, forces itself against the ego. (1973 [1948]: 76–77)

This passage from Husserl explains how things come to us, get through to us, the constitution of sense, or of procedure toward something that is significant. This something that stands out can improperly be called "object," just as we improperly speak of the "ego" or the "I." As Husserl clarifies in a note (1973 [1948]: 76–77), we still cannot properly speak of objects at the level of "original passivity." This specification must not only be kept in mind when using the term "object," but, to repeat, it is also relevant for the terms "ego," or "I." The stronger the stimulus, the stronger the "ego's" tendency to turn toward the "object." This turning-toward of the ego may be described as *obeying* the tendency to be attracted by the object or, better, by the stimulus. And from this point onward there begins an active perception of how to grasp the objects that stand out in the perceptual field.

All this concerns the immediate level of perception, where "something comes toward us." But we can also shift this type of analysis from the level of perception to the "eidetic" level, to use another of Husserl's expressions, but here with the intention of referring to the situation in which "something comes to the idea," or rather "an idea comes to us." Expressions in current usage include "an idea has just hit me" or "I've got an idea," or in Italian "mi è venuta un'idea," "ho un'idea," etc. This process is closely connected with the image and is facilitated by the word. What generally comes with an idea is an image. And if this image can be fixed, specified, communicated to myself and to others, it does so through the word. But this word is not an isolated word, nor is it a word isolated in a linguistic field, a "regional ontology" (Husserl), or in a language — whether a sectorial, a special language or even a historico-natural language. The word "that comes to mind" and that enables me to utter "the idea that hits me," may come from afar, sometimes even from another historico-natural language.

At the basis of ideas and words that give themselves over to us, there is the work of translation, whether conscious or unconscious (unconscious and unintentional as in the case of onirical work): intralingual, interlingual and intersemiotic translation (*cf.* 10.1). Whatever the type of translation process characterizing any given instance of semiosis, what we are dealing with is an encounter with something else, with something different, foreign, a surplus. In such places, discourse on similarity is grafted on discourse on alterity. This is the other direction that the similarity relation can take, and it takes this direction when it proceeds in the sense of iconicity, that is, when iconicity dominates over indexicality and symbolicity. Vice versa, similarity can also veer in the direction of the search for the identical, for assemblage, enclosure in the unity of a group, of an agglomeration.

Even when we speak of "our peers," what on the outside seems to be an opening toward the other, an orientation in the sense of hospitality toward the other, can instead hide a tendency toward "assimilation," an attitude hypocritically passed off as "tolerance." On closer consideration, we soon realize that "assimilation" is a word that lends itself automatically to explication in terms of swallowing up, phagocytizing, of digestive processes.

Here, then, is how issues connected with encounter among words, words that mutually replace each other, or help and support each other, as occurs normally in all translational processes in the sphere of signifying and significant (interpretive) attitudes, are involved in the question of iconicity. At the same time, precisely because it is inevitably implied in the way we relate to the other, iconicity does not only fall within the field of semiotic interpretation-translation. Nor is it only involved in identification. It is also involved in "responsive understanding." Iconicity comes into play in the attitude we choose to take toward the other. Consequently, iconicity and similarity are relevant to issues not only of the semiotic order, but also and more properly of the semioethical order.

5.4 Image and the pragmatic instance in primary iconism

Husserl uses the term "image" for the new appearances that the I strives to produce. Here "image" is intended in the sense of "to get a picture of something" which does not necessarily mean to see it. This involves processes where tactile, acoustic, olfactory, proprioceptual images, etc. are constantly changing. The tendency of the ego is to build images, a tendency that is progressively and unitarily turned toward producing an overall and multifaceted image of the object. The dynamical object gradually presents itself on its own account in subsequent appearances following the kinaestheses of the I (moving the eyes or the head, changing position of the body, turning around, and so on). In this process, the object gradually manifests itself on all possible sides. The I is in a relation of activity and passivity with the image/object, of receptivity and productivity:

The coming-into-view of the images is "in my power"; I can also cause the series to break off, e.g., I can close my eyes. But what is not in my power, if I allow the kinaestheses to run their course, is having another image come into view. With regard to this, I am purely receptive; if I put these or those kinaestheses into play vis-à-vis the object, these or those images will come into view. This holds for rest as well as for movement, for alteration as well as for nonalteration. (Husserl 1973 [1948]: 84)

Therefore, from the moment the I turns its attention toward the object, there begins a process of development in attention and interest. This process is characterized by a progressive increase in apprehensions of the object by the I as it obeys the tendency to render that object accessible from various directions. Husserl explicates this tendency as a multiple doing of the I (1973 [1948]: 85). The I turns toward ever new appearances of the object, beginning from the original one so as to make the object present itself from all sides.

The pragmatic character of the relationship between the I and the object is important to underline; the I's "turning-toward" can be characterized as an "I do"; and the turning-toward to comprehend the object, its various kinaestheses are also characterized as an "I do." Husserl distinguishes between: "(1) A doing which is not an 'I do,' *a doing which precedes the turning-toward*," which consists in the attention that wanders and is not yet focused; and "(2) The *I do* which ... need not also include in itself any voluntary action: I move my eyes involuntarily while I am turned attentively toward the object," the I turns its attention progressively toward the object, though not necessarily in a conscious manner (Husserl 1973 [1948]: 85).

Predicative judgment begins to form when the I gives free play to the tendency to "turn toward" the object not merely in a general way, but as a *theme*. To talk properly about a *theme* requires that the I's interest should have its own relative duration and that it should be engaged thematically with the object, that apprehension should have its own process of development. Instead, when one's attention is turned toward something only fleetingly, *en passant* – for example, in response to a noise from the street – and then immediately returns to the object at the centre of attention, this is not a question of theme in the proper sense of the word. A distinction must be made between the acts forming the I's turning-toward which have a duration and engender theme, on the one hand, and the acts which, instead, are fleeting, on the other. With regard to this point, according to Husserl "we can form a *broader concept of interest*, or of acts of interest" (1973 [1948]: 86). Husserl speaks of "every act of the ego's being-with (*inter-esse*)". Among what he calls "acts of interest"

are to be understood not only those in which I am turned thematically toward an object, perceiving it, perhaps, and then examining it thoroughly, but in general every act of turning-toward of the ego, whether transitory or continuous, every act of the ego's being-with (*interesse*). (1973 [1948]: 86)

For the progressive constitution of the being of something to the point of formulating the predicative judgment "s is p," the acts turned toward the being of something as their theme must gradually be distinguished from "every act of the ego's being-with (*inter-esse*)" which, instead, concerns surrounding being, the *Umwelt*.

The I's tending toward explication is not a blind "tending toward" without an orientation, but rather a mode of proceeding according to expectations. Interest for the object is inseparable from such anticipation:

Concrete perception is achieved in the working-out of its progressive striving, its tendency to attain new modes of givenness of the same object. These tendencies can work out in an obstructed or unobstructed way.

... the tendencies are not mere blind strivings toward ever new modes of givenness of the object but go hand in hand with intentions of anticipation, with protentional anticipations which refer to what will attain givenness in the further course of perceptive contemplation of the object. (1973 [1948]: 87)

From one perceptual phase to another, from one image to another, anticipations can be fulfilled or they can remain unsatisfied. The object's appearance can be interrupted as it leaves the perceptual field either because it withdraws from it or is withdrawn from it, or again because another object intervenes, thereby attracting the I's attention to itself. However, anticipations may also be deceived when, for example, a subsequent image of the object denies the overall image that the I was forming of it. This leads to a configuration of the series "not so, but otherwise" (Husserl 1973 [1948]: 88): the earlier phases in the delineation of the general image are cancelled and replaced by a new image. This is how Husserl describes the original phenomenon of negation, of the "other," of nullification or "annulment": "It thus appears that negation is not first the business of the act of predicative judgment but that in its original form it already appears in the prepredicative sphere of receptive experience" (1973 [1948]: 90).

The I's anticipations do not always suffer a net delusion as perception advances. The "intentions of anticipation" can also go into crisis in the mode of doubt, so that anticipation is not completely cancelled by a new perception. This creates two perceptual apprehensions which overlap without excluding each other, in a relation where both are valid, in the mode of discordant being. Here, as in the case of negation, there is an impediment in the course of tendential perceptual interest which negation solves and overcomes in the "not so, but otherwise" form and which doubt maintains for a longer or shorter duration. When one of the two perceptual apprehensions is more credible than the other, a state of probability is developed and no longer of doubt (Husserl's example: Is what I see in the store window a man or a mannequin?) (1973 [1948]: 92–93).

Among the operations carried out by the I that constitute the object by explicating its determinations, those operations where the I posits something "as-if" should also be taken into account. This is the "as-if" position of imagination, which not only concerns the possibility of constructing imaginary worlds, but favours the development of metaphorical procedure with reference to the real world, to the point that the boundary between literal meaning and metaphorical meaning is fuzzy. Even literal expression is metaphorical. Thanks to the "as-if" relation, something is determined on the basis of, or is an interpretant of, something else. Therefore, the "as-if" mode is a constitutive part of predication (*cf.* 4.8).

As observed, another important consideration is that the I's interest turned toward the object is a form of *activity*, just as the cognitive processes that ensue are activity. *To predicate is to act*. From this perspective, predication parallels *practical action*. Husserl distinguishes cognitive activity from practical activity in the following terms:

We prefer to think of action as an external doing, a bringing-about of external objects (things) as self-giving from other self-giving objects. In cognitive activity, new objectivities are indeed also preconstituted, but this production has an entirely different sense from that of the production of things from things [...]; and – what is here important above all – this production of categorial objectivities in cognitive action is not the final goal of this action. All cognitive activity is ultimately referred to the substrates of the judgment – without prejudice to the possibility of moving, on the mere self-evidence of clarity, a great way in the progress of cognition merely in the domain of made objects, of logical *structures*. The goal of this activity is not the *production of objects* but a *production of the knowledge of a self-given object*, therefore the possession of this object in itself as that which is permanently identifiable anew. (1973 [1948]: 200)

The parallel between practical activity and theoretical activity is especially important in order to avoid separating predicative judgment from operations connected with perception, one's body and the surrounding environment. Such operations are the starting point for the genesis of predicative judgment.

Most interesting from this perspective is that the cognitive tendency (this, too, an *as-if* determination) is described as desirous striving. More than just "analogical," the relation between the cognitive tendency and desirous striving can be described as "homological" where the association among terms is profound, generative and structural. Much like the cognitive tendency:

Desirous striving leads to an action which is instituted by a "fiat" and tends toward realization. In the progress of the action, the striving fulfills itself more and more, developing from the initial mere intention into a realization. The path to the goal can be simple, consisting in a simple act, or it can be complex, proceeding through interim goals which are intended in specific acts of will and have the character of being of service to the dominant "aim." With the growing fulfillment of the intention during the activity and with the approach to the goal, a growing feeling of satisfaction sets in [...] (1973 [1948]: 200–201)

Such considerations on the genesis of predicative judgment (beginning from the experiences of the body and its kinaestheses) are essential for structural descriptions, including of syntagmatic structures. I am alluding here to Chomsky's theory

of generative grammar (1956, 1957, 1965): identification in the context of a sentence – a name, verbal or adjectival syntagm – can be explained without resorting to the concept of innate generative grammar. Husserl's phenomenology, with his analyses of perception at the level of non-categorial semiosic processes, is an example (Ponzio 1974: 100-106; 1994: 87-128).

As Husserl demonstrates, the syntactical formation of subject, predicate, etc. can only be explained by returning to another type of formation: the forms of the nucleus. Nuclear formation "is the presupposition for the syntactical formation, for the investing of the core-structure as syntactical material [Stoffe] with functional forms such as the subject-form, etc. Formation as subject presupposes a matter having the form of substantivity" (1973 [1948]: 210).

The *subject* presupposes the nuclear form of *substantivity* which, in turn, presupposes the formation of a *substratum* in the perceptual process. The predicate presupposes the nuclear form of *adjectivity* which, in turn, presupposes identification of something as a determination in the perceptual process. The form of substantivity indicates the condition of being for itself, of being a *substratum*, substantivity which is not already given, but rather derives from a process of substantivation, of creating *substrata*. The form of adjectivity is the form of being in something; it designates the unsubstantivity of the object of determination. Such observations are framed in the context of Husserl's research on a problem to which he had dedicated a good part of his life: the relation between acquired forms of knowledge, including the basic categories of logic, on the one hand, and their sense for the *Lebenswelt*, for the world of lived life, which can be recovered by reconstructing the genesis of given knowledge or of acquired knowledge, on the other. For Husserl, this was a question of passing from the already constituted, empirical subject with its logical and cognitive habits to a co-called transcendental I. The latter, also indicated as "I can," "I do" or "I experience," is no more than that complex of operations that can be reached through a sort of epoché, of bracketing, which allows for return to the original level of lived life that is still completely free of any rift between knowledge and ethics, cognitive value and moral value, where truth resounds simultaneously in the twofold sense of "true" (cognition) and "truthful" (the value elected at a certain time in life), without separations.

Moreover, as we have seen, this "return" from the "categorial" to the "precategorial" inevitably implies the work of translation where what is said in the form of nouns, concepts or notions, which is taken for granted, is resaid in terms of processes, formations or constitutions. This work of translation passes from language that is hardened, frozen or static to language that returns, as Peirce says, to primary iconism; this is language that does not know "facts," "objects" or "predicative judgments" but only "intentionalities," "protentions" (anticipation in our consciousness of the next moment, shift of consciousness toward the future) and "retentions" (process whereby a phase of a perceptual act, of past lived "Erlebnisse" is retained in our consciousness).

This double movement in Husserl's discourse à propos "apophantic, predicative logic" is extremely interesting for reflection on *translation*, when it is not understood in a trivial and reductive sense; as well as for *critical reflection on signs*, *their sense and inseparability from the values of life* (which we have indicated as "semioethics"). This double movement is, precisely: 1) the "ethical," the search for "sense" which precedes "meaning," recovery in the *Lebenswelt* of sense in the relation of the self to the world, the self and others; and 2) the "*translational*," so to say, from the "categorial", from the self-evident or given world, to the "precategorial," which means to say to the processes through which that world was constituted. Such translational processes reveal to us how the world cannot be passed off as "natural," "obvious," "self-evident" or "pre-given," a world "to accept as-it-is," "that cannot be questioned," in a word, "indisputable."

5.5 Signifying processes and the associative capacity

Figurative language, metaphor and imagery are dominated by the iconic dimension of signification and similarity. As such they are oriented by the logic of alterity. As expressive devices, they are endowed with signifying ambiguity, the gift for "double perception," to evoke Giacomo Leopardi, author of Zibaldone (1991, Vol. 2: 1196 [4418]). In Mikhail Bakhtin's terminology, signifying ambiguity is connected with the capacity for plurilingualism and polylogism. The devices of figurative language relate to reality in terms of depiction (cf. 5.1), consequently they escape the repetition of representation. This means to enter what Bakhtin identified as the "great time" (in addition to his 1963 monograph on Dostoevsky, see, for example, his essays "Response to a Question from Novy Mir" and "Toward a Methodology for the Human Sciences," in Bakhtin 1986: 1-9, 159-170; see also Shepherd 2006); in semioethical terms, the sphere of "unlimited answerability" (see Bakhtin's early essays on the question of answerability which he develops in relation to the artistic vision and aesthetic activity, in Bakhtin 1990). Sign processes transcend the official order, the identical, the categorial, the self-evident as they refer to each other and beyond, unfolding according to the logic of otherness and infinite deferral. Such procedure can also be associated with Peirce's "play of musement" as described, for example, in his 1908 essay, "A Neglected Argument for the Reality of God" (CP 6.452–493) and after Peirce, by Sebeok in his 1981 monograph.

Thanks to the "associative capacity," human beings are capable of abductive reasoning and in addition to being rational thinkers, can be characterized

as "guessers." Following Peirce, the claim is that guessing is a characteristic of reasoning and that reasoning is ever more capable of inventiveness and innovation, the more it risks associations among terms that are distant from each other, among terms from different spheres of discourse and scientific investigation in the macro-web of culture. The more logical procedure is creative, the more it is open to the other and the less it is repetition of the identical. As Victoria Welby shows in her own studies, the use of metaphor enhances the processes of knowledge and understanding, interpretation and invention in all types of discourse. Through metaphorical procedure, it is possible to trace relations among interpretants that were previously unsuspected, unexpected or even created *ex novo*.

From this perspective, the concept of truth itself is described in terms of plurality and dialogical complementarity among different viewpoints, as part of inferential procedure dominated by iconicity (Welby 1983: Ch. XVI; Petrilli 2009a: Ch. 4). Through metaphor, the unknown is discovered on the basis of the known, by approximation (in truth the only modality at our disposal given the sign nature of knowledge). The invisible is perceived on the basis of the visible, the impalpable on the basis of the palpable. Research on associative-metaphorical processes structural to thought and language also involves the question of modelling specific to human beings (Petrilli and Ponzio 2005: Part II).

The artistic vision, that is, the capacity for depiction not only finds expression as a special sphere of human cultural activity. Even more, the artistic vision is structural to the reality of everyday life. As we have argued elsewhere, artistic figuration can be distinguished from representation (Petrilli and Ponzio 1999). As depiction, the different expressive modalities of artistic vision evade the monologism of representation and signification. The artistic vision escapes the signifying mechanisms of appropriation and identification – or at least this is its tendency.

Depiction or figuration recovers the capacity for double perception where that which can be seen evokes something which cannot be seen, where presence tells of an absence, where that which offers itself to the gaze defers to something which escapes it, which escapes representation with its norms and stereotypes. All this is possible because the artistic vision evades indexicality (Peirce's index) and conventionality (Peirce's symbol) thanks to its dominant iconic character (Peirce's icon). As described by Peirce (CP 2.276), the icon neither signifies as a passive consequence of a convention (symbol), nor on the basis of a contiguity-causality relationship (index). Where iconicity predominates, the sign fully manifests its autonomy with respect to the mechanical necessity of indexicality and the arbitrary character of symbolic convention (CP 2.274-308).

Iconicity in figuration is characterized by the category that Peirce calls Firstness, Orience or Originality which he describes as "being such as that being is, regardless of aught else" (CP 2.89). This capacity to be and exist regardless of any-

thing else is otherness, not relative otherness as in the case of indexicality (for there to be a teacher there must be a student, for there to be a husband there must be a wife), but absolute otherness. In figuration, otherness makes itself visible while retaining the quality of absolute otherness; it reveals its invisibility. Figuration differs from representation which, instead, can be associated to the referential, to the visible. Figuration reveals that which gives itself in the visible but is not exhausted in the visible: the otherwise than being, the shadow, singularity, that which though giving itself to the gaze is not possessed by it. The fact that Firstness, Orience or Originality is "what it is without reference to anything else within it or without it, regardless of all force and of all reason" (CP 2.85), entails that this something remains external to the totalizing gaze and evades enclosure in the totality. Instead, it elicits new openings which are never finalized or definitive (Petrilli 1998a, especially chapters 8 and 9). And to repeat, all this comes about through inferential processes dominated by the logic of abduction with its characteristic capacity to associate interpretants that are even distant from each other in relations that are altogether new, unforeseen and unexpected (Petrilli 2009a: 361–363; *cf.* Ch. 4).

Human expression and communication involve signifying and interpretive devices subject to developmental processes in the genealogy of logic from sensuous perception to conceptual abstraction constitutive of predicative judgment. As an expressive device, silence as well is subject to similar translational processes through to ever higher levels of perception, consciousness and signifying import. The next chapter is dedicated to silence as an expressive device for the generation of meaning and value.

Chapter 6 Signs of silence

Hamlet: "He has my dying voice. So tell him, with th'occurrents, more or less, Which have solicited – the rest is Silence." (William Shakespeare, *Hamlet*, Act V.ii.1.360)

6.1 Silence and responsive understanding

This chapter deals with the problem of silence understood as the absence of words, silence as it results from suspending the word and not from some physiological or psychopathological dysfunction. There exist a series of *ordinary modalities of suspending the word* which are sanctioned by social norms, just as there exist modalities of word suspension that belong to the *order of the extraordinary, of the exceptional*. In this framework, silence is a semiotic phenomenon, a sign. Moreover, we all know just how eloquent silence can be. It ensues that silence is a modality of communication. Silence speaks. And to make this claim means that silence always implicates the other. Here, then, as we are presenting the problem, silence is not merely the absence of noise.

The signs of silence are nonverbal signs. At this point, a distinction can be made in relation to nonverbal signs: nonverbal signs resulting from the absence of verbal signs, from suspending the word, on the one hand, and nonverbal signs used as the immediate means of expression, on the other. The absence of words as a result of keeping silent is one thing, the absence of words as a result of using nonverbal signs, for example, gestures, dance, photography, signs relating to proxemics, is another (Hall 1990 [1959]). Word suspension enters the sphere of nonverbal signs and can be classified with nonverbal signs in general: the suspended word is a nonverbal sign. The absence of words or not speaking is eloquent insofar as it is non-speech. From this point of view, not to speak is very different from all those forms of expression that also feature gesture, body movement: dance, for example, where no spectator-interpreter would dream of searching for the unsaid word, the word unuttered; or the opposite case, as in the language of deaf-mutes where gesture signifies directly and is simply a translation, according to a precise code, of the verbal into the nonverbal.

In silence that speaks, in silence endowed with value of the requalifying type – in certain cases with the value of protest, of dissidence with respect to customary modalities of expression and communication, to common codes, and shared values – also enter what Mikhail Bakhtin in "From Notes Made in 1970–71"

describes as "forms of silence" (1986: 134): irony, parody, allegory, parable, etc. In these "forms of silence," the speaker appeals to a listener or reader that is different from the "normal audience", an "exceptional" listener capable of intuiting what is implied, what is asserted with emphasis, and in certain cases even courageously, precisely by keeping silent. Here, the implied, the unspoken, is altogether different from that which is commonly understood, from that which is recurrently left unsaid for reasons of "economy" of the word, and also as a way of underlining and substantiating an agreement, shared values, intentions or habits: in these cases to understand implied meaning and behave as a consequence has the same function as responding opportunely to a "password." That which remains implied or unsaid is that which is obvious, easily understood on the basis of common values, previous agreements or shared habits. Silence here carries out the function of confirming, maintaining and preserving, and therefore plays a role which is altogether different from silence intended to open up to a new way, to a pause for reflection and critique, to a break in the communication routine, whether at the level of a community, a group of varying dimensions, a relation among several people or limited to two only. Just as it plays a role that is completely different from that carried out by the "forms of silence" as understood in Bakhtin's sense, as clearly emerges in irony used with a critical and caustic function towards that which is considered obvious and indisputable, out of the question.

To characterize silence in the modality that interests us here, we must also distinguish it from what merely acts as an interval between words, for reasons of the syntactical order so to say, or to achieve effects of the rhetorical order. Our reference here is to the usual gaps or spaces implemented in both oral and written expression. In orality, in speech, however broad these intervals may be, they are simply a way of marking and articulating discourse, of drawing the listener's attention to the words themselves, to what is uttered explicitly. Intervals are auxiliary to the words that are spoken. As regards gaps in written language, they are the white intervals that normally space out words on a page. Gaps between words as foreseen by the *langue*, by the system of language are conventional signs and as such call for interpretation in terms of identification.

However, gaps and intervals can also respond to demands that are altogether different from the ordinary and customary requirements of the syntactical and rhetorical order. They too can belong to the order of the exceptional and be introduced intentionally to create a shift in sense, as in the case of artistic vision (think of the images created by the interplay between words and gaps in the poetic text, for example), whereas in verbal signs their meaning value is enhanced even to high degrees of otherness, dialogism and creativity. But signifying gaps are not limited to the verbal order alone, think of their implementation, for example, in the musical score. Here, too, as in the relation between signs connected

with the verbal, gaps in the relation between musical signs can also be endowed with sense that escapes the order of repetition and recognition, of identification, and requires an interpretant of *responsive understanding*, a creative interpretant. Similarly to the silence of signifying gaps in verbal language, in the musical score, silence calls for responsive listening.

In any case, silence signifies something and on turning toward the other it carries out a pragmatic function. Silence is always the expression of value, of valuation and like all other valuations it implies a social origin. This is what makes semiotical forms of silence interesting, that is, the relation between signs and values in their mutual implication and inseparability. Consequently, a discussion in the direction of semioethics ought not to neglect the "social forms" of silence, those forms where the absence of the sign, precisely the absence of the word (because gesture, mimicry and other bodily forms of expression can, instead, be present) is apparent, in which the responsive understanding of others, the other's response, even in the form of respecting or of observing silence, is strongly requested.

The signs of silence depend on verbal signs, on language. They are significant in relation to speech, to verbal expression. We have referred to irony as a "form of silence" in Bakhtin's sense. We can also refer to Roland Barthes (1964) and what he claims about nonverbal social signs in general, which too can be applied to the signs of silence: that with respect to verbal expression they are parasitical. The signs of silence are situated in speech like islands where speech is suspended and the space of non-speech thus obtained is surrounded by speech and is significant precisely because of this.

In a book of 1961, Significato, comunicazione e parlare comune, Ferruccio Rossi-Landi developed the notion of "common speech." Common speech refers to linguistic practices or operations that recur in different languages, that are common to these languages in spite of the differences among them. Thanks to common speech, it is possible to translate from one language to another. At this point we could make the claim that common speech has a correlate in "common non-speech." The relation between speech and non-speech concerns human language-in-general, more than just this or that language. Silence is common non-speech which leaves aside linguistic difference to concern human languagein-general rather than specific historico-natural languages.

In his notes of 1970-71, Bakhtin distinguishes between "silence" and "quietude". These terms correspond respectively to the Russian "molčanie" and "tišina":

Quietude and sound. The perception of sound (against the background of quietude). Quietude and silence (absence of the word). The pause and the beginning of the word. The disturbance of quietude by sound is mechanistic and physiological (as a condition of perception); the disturbance of silence by the word is personalistic and intelligible: it is an entirely different world. In quietude nothing makes a sound (or something does not make a sound); in silence nobody *speaks* (or somebody does not speak). Silence is possible only in the human world (and only for a person). Of course, both quietude and silence are always relative.

The conditions for perceiving a sound, the conditions for understanding/recognizing a sign, the conditions for intelligent understanding of the word.

Silence – intelligible sound (a word) – and the pause constitute a special logosphere, a unified and continuous structure, an open (unfinalized) totality.

Understanding-recognition of repeated elements of speech (i.e. language) and intelligent understanding of the unrepeatable utterance. Each element of speech is perceived on two planes: on the plane of the repeatability of the language and on the plane of the unrepeatability of the utterance. Through the utterance, language joins the historical unrepeatability and unfinalized totality of the logosphere.

The word as a means (language) and the word as intelligibility. The intelligizing word belongs to the domain of goals. The word as the final (highest) goal. (Bakhtin 1986 [1970–1971]: 133–134)

Bakhtin distinguishes between the conditions for perceiving a sound, the conditions for identifying a sign and the conditions for responding to the sense of a sign. Quietude is associated to the first two cases, silence to the third, i.e. to the conditions for responding to the sign and understanding sense. Quietude is the condition for perceiving sound and the distinguishing features of language; thus for identifying the repeatable elements of language, those belonging to the system of language on the phonological, syntactical and semantical levels. Instead, silence is the condition for understanding the sense of the utterance, sense in its unrepeatability; silence is the condition for response to the utterance in its singularity. Quietude is associated with language understood as the langue and with its physical (acoustic and physiological) substratum. Silence is associated with the utterance and with sense, with the socio-historical materiality of the sign. Whilst quietude is an expression of the logic of identity, silence is associated with high degrees of alterity and is an expression of the properly human (Ponzio 1993: 138-154). It ensues that silence can reach high degrees of critique and creativity. In terms of interpretive capacity it is associated with responsive understanding and responsible engagement. According to this analysis, quietude is associated with signality and silence with semioticity.

6.2 Toward a typology of silence: conventionality, indexicality and iconicity

In an essay entitled "Per una tipologia del silenzio," Gian Paolo Caprettini (1989) proposes a typology of silence based on Roman Jakobson's communication model (1963). With reference to the factors of verbal communication, he describes si-

lence in relation to the: 1) sender, 2) receiver, 3) message, 4) channel, 5) code; and distinguishes between: 1) emotional, 2) connotative, 3) referential, 4) phatic and 5) metalinguistic silence. A typology of silence would also be well founded on Charles S. Peirce's triadic subdivision of signs into symbols, indexes and icons, which is what I propose to do here.

This approach aims to characterize signs of silence and distinguish among them, more than analyze silence in relation to the communicative process and its various functions. With reference to the description above, signs of silence are distinct from the nonverbal signs of sign language used by the Native American peoples, for example, or by deaf-mutes, the signs of gestural language-in-general, or any other form of nonverbal behaviour.

In Peirce's description, a sign is something which stands to somebody for something in some respect. This means that the sign creates an equivalent sign in the mind of the interpreter, or perhaps a more developed sign, namely an interpretant (CP 2.228). That the sign stands for something in some respect means that it does not refer to the object in its entirety (dynamic object), but only to a part of it (immediate object). Furthermore, a sign subsists for Peirce according to the category of thirdness, in other words, it presupposes a triadic relation between itself, the object and the interpretant thought which is a sign itself. And given that it mediates between the interpretant sign and the object, the sign always plays the role of third party.

Signs subsist in the dialectic between symbolicity, indexicality and iconicity. The symbol is never pure but contains varying degrees of indexicality and iconicity; similarly, as much as a sign can be prevalently indexical or iconic, it will always maintain the characteristics of symbolicity. In other words, the sign to subsist as a sign requires the mediation of an interpretant and recourse to a convention. Following this logic, even if at low degrees, the icon too contains traces of indexicality and symbolicity.

Symbolicity refers to the sign's conventional character, to the relation of constriction by convention between a sign and its object, as established on the basis of a code or a law. In the words of Peirce, from a letter dated 12 October 1904, to Victoria Welby:

I define a Symbol as a sign which is determined by its dynamic object only in the sense that it will be so interpreted. It thus depends either on a convention, a habit, or a natural disposition of its interpretant, or of the field of its interpretant (that of which the interpretant is a determination). (Hardwick 1977: 33)

Indexicality refers to the compulsory character of the sign, to the relation of cause and effect, of necessary contiguity between a sign and its object: "I define an Index as a sign determined by its dynamic object by virtue of being in a real relation to it" (Hardwick 1977: 33). Unlike the symbol (where the interpretant determines the object), in the case of the index the relationship between the sign and the object is preexistent with respect to interpretation; as such it is an objective relationship and conditions interpretation. The sign and what it stands for are given together independently of the interpretant. Nonetheless, this does not exclude the need to resort to a convention for recognition of the relation between the sign and the object as a sign relation.

In the case of the icon, the relationship between sign and object is one of similarity. As Peirce states: "I define an Icon as a sign which is determined by its dynamic object by virtue of its own internal nature" (Hardwick 1977: 33). The icon is a sign whose signifying capacity is determined by its quality. Icons realize a maximum degree of independence from the object, while the interpretant can occur in a system that may even be distant, identifiable neither through a relation of necessary contiguity (index), nor of conventionality (symbol), but of hypothetical similarity. The iconic relation is characterized by such factors as affinity, attraction, creativity, innovation and alterity.

That all signs share simultaneously in the character of symbolicity, indexicality and iconicity means, with specific reference to verbal signs, that as much as they are characterized by a high degree of conventionality, they also contain traces of iconicity. This has been illustrated among others by Jakobson (1965) and Paolo Valesio (1967). But the point I wish to make here is that the different signs of silence also contain traces of conventionality, indexicality and iconicity, simultaneously, to different degrees and in different combinations. On this basis, a typology of silence can be developed which distinguishes among different types of signs of silence precisely on the basis of the degree of symbolicity, indexicality, or iconicity which characterizes them.

Those signs which obey a convention, a rule sanctioned and accepted by a group or a community are symbols. The different kinds of signs of silence that belong to this group express silence in different ways and share the fact that they do so on the basis of a norm or convention. Examples include: expressions of respect as observed in religious contexts and foreseen by given rites, for instance, in certain phases of catholic liturgy; monastic silence – monastic signs comprise both nonverbal signs as distinguished from signs of silence and signs of silence as such (Sebeok and Umiker-Sebeok 1987); furthermore, there is military silence, the silence of mourning, commemorative silence, silence in sign of protest, etc.

The indexical character of signs of silence emerges with the relation of cause and effect and of spatio-temporal contiguity. In such cases, the signs of silence could almost seem to be symptoms – silence as the effect of a fright, surprise, suffocated anger, resentment, etc. Silence in symbolic signs is established on the basis of a convention. Instead, when a question of indexical signs, silence is pro-

voked by an immediate cause and in this sense is inevitable, a mechanical response. Both conventional and indexical silence present a necessity or imposition with the difference that in the first case, necessity ensues from accepting a convention; in the second, it is passively endured as the consequence of an external effect.

Conventional signs of silence are dominated by what Peirce calls the category of thirdness. In this case, the relationship between sign and object is mediated by a convention and depends on an interpretant. Signs of silence of the symbolic type, like all other symbolic signs, are not comprehensible if the interpretant is not familiar.

Instead, indexical signs of silence are dominated by the category of secondness. The sign relates to the object independently of the interpretant. The sign and the object are connected by a relation of cause and effect, of contiguity, as in the case of the relation between fire and smoke, spotty skin and a liver disease, a knock at the door and someone behind it wanting to enter.

Signs of silence of the third type are iconic. In this case, silence is neither related to a system of conventional signs, nor to natural causes. Instead, it is the expression of individual intentionality: the absence of verbal signs is not the absence of language - for instance, monastic silence; nor is it the absence of phonation – as in the case of silence caused by fear or surprise; rather, silence here is the absence of the word, of discourse, of the utterance with respect to a presence: the speaking subject says nothing and this nothing is pervaded with meaning. In this case too silence presupposes a participative relation with the other (see above, 6.1.). As such, it is invested with the value of an interpretant that responds to a preceding word and from this point of view too, insofar as it responds to the preceding word, the word of another, silence speaks and in speaking is dialogic.

6.3 Silence, iconicity and listening

Signs of silence of the iconic type present themselves on their own account, i.e. they have their own meaning, their own signifying potential – like the face of the other (Levinas 1961). The iconic sign is eloquent, without the need of resorting to a code or an interpretant, of the conferral of sense by the self. Therefore, iconic signs of silence are dominated by what Peirce calls the category of firstness. That the signs of silence or, if we prefer, "taciturnity," are endowed with signifying value on their own account means that they signify regardless of anything else. The iconic sign of silence is dialogic: it expresses a viewpoint with respect to the word of another. Here, silence is not the result of a convention, nor is it the mechanical effect of a cause; quite the contrary, it tells of interpretive autonomy, of the capacity for self-signification and alterity, of the other's signifying irreducibility and resistance, the other's signifying materiality.

Silence dominated by iconicity offers itself as an image – the image of alterity. It is endowed with signifying value. As Bakhtin would say, insofar as it indicates an evaluation or standpoint or a relation of consensus, perplexity, conflict, or refusal, etc., the sign of silence is always "accentuated" or "intonated." As Victoria Welby says, "silence is often a most significant declaration":

[...] for whether positive or negative, excessive or deficient, present or absent even, our words are of moment always. [...] the *word unsaid*, which has often helped or hindered and in all human ways signified so much. [...] Yet even in silence there is no escape for us either from danger or duty. Silence is often a most significant declaration and a most misleading one. (Welby 1985a [1911]: 40–41)

As Welby argues, silence allows no escape neither from danger nor duty. But no doubt this is only true of iconic silence, where the subject is exposed in its singularity and freedom, and not of symbolic-conventional or indexical silence. Consequently, iconic silence is associated with responsibility. It is also associated with dialogue, insofar as it gives itself as a response in terms of answering comprehension to the verbal or nonverbal standpoint of another, to a provocation, prayer, threat or question, etc. Iconicity, responsibility and dialogue are thus strongly related in the iconic signs of silence.

Bakhtin theorizes the relationship between responsibility, dialogue and alterity in a paper of 1919 entitled "Art and Answerability" (Bakhtin 1990 [1919]: 1–3). The word "answerability" – which involves the concepts of responsiveness, responsibility and accountability – conveys the dialogic character of responsibility itself, which in semiotic terms, is related to iconicity. There is an allusion here to the condition of *absolute answerability*, that is, answerability without alibis and limitations, without appealing to rules, guarantees and boundaries as established by a contract. From this perspective, the self is at last freed from subservience to such values as coherence, unilinearity, oppositional logic, integrity, identity, and from the dogmatism of authority. Consequently, it is enabled to give full play to its capacity for dialogic pluri-availability, answerability and otherness (Bakhtin 1986: 133–134).

Thus described, the self is endowed with a capacity to transcend the limits of the code and give up any guarantees offered by the law. And this opens to the possibility of developing the correlate capacity for *unconditional listening* to the other.

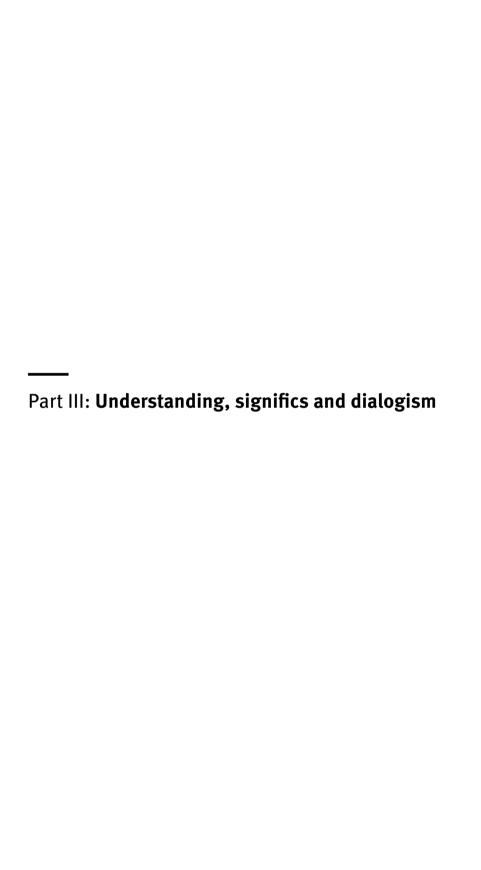
The eloquence of listening is inevitably associated with the eloquence of silence. And in both cases, given the connection with values, we could appropriately speak of the "ethics of listening" and correlate "ethics of silence," as we

are describing it. Following Augusto Ponzio we can propose a "linguistics of silence" ("Filosofia del linguaggio come arte dell'ascolto," in Petrilli and Ponzio 2008: 3–38) as opposed to a "linguistics of quietude" – in his search for appropriate terminology, Ponzio also experiments with the expressions "linguistics of taciturnity" and "linguistics of silence." In any case, apart from terminological preferences, what we are signalling is the need to elaborate an approach to sign and language studies that is open to the word of the other, that is capable of listening to the word of the other and of thematizing the word of the other, by contrast to those approaches that, instead, unfold in terms of the absence of listening and hospitality toward the other. The latter is an attitude characteristic of so-called "official linguistics" where the monologism of quietude prevails over the dialogism of silence (Ponzio 2004a, 2010a, b, c, d, 2012b). But true and unhypocritcal encounter among words requires unprejudiced listening and unlimited responsibility as implied by silence understood in the terms outlined in this chapter.

As described by Bakhtin in the passage cited above, quietude is related to the condition for perceiving sound and recognizing the verbal sign, the repeatable elements of discourse (langue). Instead, silence is species-specific and is only possible in the human world. It enters the "logosphere" as the condition for understanding the word's sense, the utterance in its unrepeatability. All elements of discourse are perceived on two levels: the level of repeatability, the sentence, langue which requires quietude as a condition for perception of sound and identification of the repeatable elements of language – phonological, syntactical and semantical; and the level of unrepeatability, the utterance, the text which requires silence and calls for understanding of sense in its uniqueness, for a response to sense in its singularity, unrepeatability and absolute otherness. "Official linguistics" (both taxonomical linguistics and generative-transformational linguistics) is based on the notion of the system of rules or code. Therefore, it ranges from sound to the verbal sign identified in its phonological, syntactical and semantical value, the space of quietude. Official linguistics is the linguistics of the code, and may also be denominated as the "linguistics of quietude." Instead, the "linguistics of silence" focuses on the interpretant of responsive understanding, on the dialogism and intertextuality of the utterance. In contrast to "official linguistics," the "linguistics of silence," what Bakhtin calls "metalinguistics," and what we also call "philosophy of language" and "semioethics," do not study the elements of the langue, of the sentence, the objects of linguistics as they emerge from the background of quietude. Instead, the "linguistics of silence" elects sense as its object of study, sense as it arises from the dialogical relations interconnecting verbal signs, insofar as they are utterances, and from the work of the interpretants of answering comprehension. The background from which these dialogical relations emerge, from which sense emerges, is silence. Silence is possible only in the human world,

as Bakhtin says in the citation reported above (1986 [1970–1971]: 133). To compel the sign to the space of quietude, to separate it from the dialogism, polysemy and ambiguity of silence, from utterance sense and from the freedom of listening, from listening to the other, all this cancels and removes the properly human from the sign. The result is a sign rendered mechanical and pseudonatural, as it oscillates between the conventionality of signals and the naturalness of sound, naturalness that does not lay claim to sense.

While official linguistics tends to cancel the relation to the other which, instead, is constitutive of the word, the linguistics of silence thematizes dialogue, listening, and hospitality toward the word of the other. From this point of view, the practice of translation, like literary writing, is particularly interesting as a practice whose condition of possibility is the indirect word, the word implicated in the relation to the word of the other. Translative practice best displays the word in its relation to the other, by contrast with the homologation of identity logic as it governs and regulates the official communication order, incapable of hospitality toward the other, of listening.



Chapter 7 Reading significs as semioethics

The question is, whether this state of things is quite so inevitable as most of us seem to think. Certainly, so long as we are content to live in the fool's paradise of supposing that only the perverse, the prejudiced, the stupid, or the ignorant can possibly mistake our meaning, and that our misreadings of others are simply due to their "obscurity" or "quibbling," or literary incapacity, we shall ourselves contribute to the hopelessness of the situation. But this is a subject which cannot be dealt with in an incidental way; it is rather a hope for the future, that one of the most practically serviceable of subjects – that of Meaning, its conditions and its changes – shall be seriously taken up.

(Victoria Welby, "Meaning and Metaphor," in S. Petrilli 2009a: 422)

7.1 Prefigurations of semioethics in significs

The term "significs" was coined by Victoria Lady Welby toward the end of the nine-teenth century to designate her theory of signs and meaning. Significs transcends pure descriptivism and presents itself as a method for the analysis of signs beyond logico-epistemological boundaries in their relation to values – ethical, aesthetic and pragmatic.¹ Beyond the study of meaning understood in strictly gnoseological terms, significs is concerned with the problem of significance and consequently with such issues as responsibility, freedom, creativity and critique. Welby also broadly described her significs as a "philosophy of interpretation," a "philosophy of translation" and a "philosophy of significance" (Welby 1983 [1903]: 89. 161; Petrilli 2009a: 273–275). Given the special slant in her studies on signs and meaning and the broad scope of her special perspective, "significs" can also be read as a prefiguration of "semioethics."

Welby distanced herself from the traditional terms of philological-historical semantics, as developed, for example, by Michel Bréal (Petrilli 2009a: 253–300). Furthermore, she did not limit her attention to what today is known as speech act theory or text linguistics. Instead, she focused on the generative nature of signifying processes and on their capacity for development and transformation as a condition of human experiential, cognitive and expressive capacities. Even more characteristically, she thematized the development of values as a structural aspect in the development of signifying processes. The "significal method" actually arises from the association of the study of signs and meaning with the study of values. The conjunction between signs and values is not only the object of study of significs, but also provides its perspective. Significs is applicable to everyday life as much as to the intellectual, to the ethical and emotional spheres of sign

activity, therefore to problems of meaning, language, communication and value in the broadest sense possible.

Welby was concerned with the entire signifying universe, with a special interest in signifying processes in the human world, particularly in verbal expression. But she knew that to deal with her special interest area adequately, it was necessary to understand its connections to the larger context: consequently, she extended her gaze to ever larger totalities, beyond the verbal to the nonverbal, beyond the human to the nonhuman, and beyond the organic to the inorganic. From this point of view also, Welby may be considered as prefiguring contemporary global semiotics and developments in the direction of biosemiotics as conceived by Thomas Sebeok who enquires into the connection between semiosis and life and asks the question, "Semiosis and Semiotics: What Lies in Their Future?" (Sebeok 1991b: 97–99; cf. Ch. 15). Moreover, given its special focus on significance in human behaviour, Welby's significs may be read as proposing a new form of humanism, by contrast with semiotic analyses conducted exclusively in abstract gnoseological terms. And from this point of view as well, significs, no doubt, may be considered as a prefiguration of semioethics as it is developing today.

7.2 Problems of language and terminology

To carry out research adequately, language, the main instrument at our disposal, must be in good working order. Consequently, for Welby the problem of reflecting on language and meaning in general immediately takes on a dual orientation. It concerns not only the object of research, but also the very possibility of articulating discourse. Welby was faced with the problem of constructing a vocabulary in which to adequately formulate her ideas. She realized that a fundamental problem in reflection on language and meaning concerns language itself, the medium through which reflection takes place. She described the linguistic apparatus at her disposal as antiquated and rhetorical, subject to those same limits she wished to overcome and to those same defects she aimed to correct.

As part of her commitment to logical, expressive, behavioural, ethical and aesthetic regeneration, she advocated the need to develop a "linguistic conscience" against a "bad use of language" which inevitably involved poor reasoning, bad use of logic and incoherent argumentation. The very need to coin the term "significs" – a term difficult to translate into other languages, as discussed in her correspondence, for example, with Michel Bréal or André Lalande regarding French and Giovanni Vailati for Italian (Petrilli 2009a: 302–310, 407–418) – was a clear indication in itself of the existence of terminological obstacles to development in philosophical-linguistic analysis. Welby's condition was typical of

a thinker living in a revolutionary era characterized by the transformation and innovation of knowledge: she was faced with the task of communicating new ideas which involved renewing the language through which she was communicating.

Welby was sensitive to problems of everyday language and in proposing the term "significs" kept account of the everyday expression "What does it signify?" with its focus on ultimate value and significance beyond semantic meaning. But Welby's commitment to the term "significs" risked appearing as the expression of a whimsical desire for novelty, given that such terms as "semiotics" and "semantics" were already available. Charles Peirce and Giovanni Vailati were among those who did not understand her proposal initially, maintaining that the introduction of a new term could be avoided. Yet, she quickly converted them to her view by demonstrating that terminological availability was, in fact, only apparent, for none of the words in use adequately accounted for her own special approach to signs and meaning. Though she proposed a neologism for the study of language, Welby did not fall into the trap of technicalism, just as, despite her constant efforts to render expression as precise as possible, her aim was not to (fallaciously) eliminate the ambiguity of words. Ambiguity understood in the sense of polysemy plays a fundamental role in language and communication, which is something Welby recognized and thematized, distinguishing ambiguity from confusion and bad language usage. She aimed to describe aspects of the problem of language, expression and signifying processes at large, which had not yet been contemplated or which had been mostly left aside by traditional approaches. More precisely, she proposed to reconsider the same problems in a completely different light, from a different perspective: the significal.

In her effort to invent a new terminological apparatus, Welby offered alternatives to terms sanctioned by usage. She introduced the term "sensal" to underline the expression value of words, by contrast with "verbal" for reference to the specifically linguistic or verbal aspect of signs, whether graphic or phonic. The term "interpretation" appears in the title of her 1896 essay, "Sense, Meaning and Interpretation" (in Petrilli 2009a: 430-449) and was initially proposed to designate a particular phase in the signifying process. Subsequently, on realizing that it designated an activity present throughout all phases of signifying processes, the term "interpretation" was replaced with "significance"; this is an example of how Welby's terminological quest was motivated by concrete problems of expression. Unlike "semantics," "semasiology" and "semiotics," the word "significs" was completely free from technical associations. As such, it appeared suitable to Welby as the name of a new science that intended to focus on the connection between sign and sense, meaning and value (pragmatic, social, aesthetic and ethical), as she explained in a letter to the German philosopher and sociologist Ferdinand Tönnies, winner of the "Welby Prize" of 1896 for the best essay on significal questions (Petrilli 2009a: 192–194, 235–248).

Other neologisms related to "significs" include the noun "significian" for the person who practices significs and the adjective "significal." The verb "to signify" indicates the generation of meaning at maximum degrees of signifying value and "to signalize" more specifically the act of investing a sign with a given meaning. In her 1896 essay, Welby had also proposed the terms "sensifics" with the corresponding verb "to sensify." These were subsequently abandoned as being too closely related to the world of the senses. But even when Welby used terms that were readily available, including those forming her meaning triad, "sense," "meaning" and "significance" (1983 [1903]: 5–6), she did so in the context of an impressively articulate theoretical apparatus that clarified the sense of her special use of these terms.

In addition to a theory of meaning, significs develops a "significal method," a method that transcends pure descriptivism and strictly logico-epistemological boundaries in the direction of axiology and of the study of the conditions that make meaningful behaviour possible. Significs is "a method of mental training", which concentrates intellectual activities on "meaning", the main value and condition for all forms of study and knowledge (Welby 1983[1903: 83]). Again, significs is "a method of observation, a mode of experiment" which "includes the inductive and deductive methods in one process" (Welby 1983[1903: 161]). This is what Vailati calls the "hypothetical-deductive method" and Peirce the "abductive" or "retroductive method." The scope and reference of significs is universal. From this point of view it emerges as a *transdisciplinary* method and not as a "supplanting system". Most significantly: "The principle involved forms a natural self-acting critique of every system in turn, including the common-sense ideal" (Welby 1983 [1903: 162]), therefore significs is also *metadisciplinary*.

Welby envisioned significs as the expression of "co-operating minds" in a community context. She worked on her ideas in dialogue with others, and particularly through an international network of epistolary relations with over 450 correspondents. In addition to Peirce and Vailati, these included Bertrand Russell, James M. Baldwin, Herbert Spencer, Thomas A. Huxley, Max Müller, Benjamin Jowett, Frederick Pollock, George F. Stout, H. G. Wells, Mary Everest Boole, Henry and William James, Henri L. Bergson, Michel Bréal, André Lalande, J.-H. Poincaré, Ferdinand Tönnies, Rudolph Carnap, Otto Neurath, Harald Höffding, Frederik van Eeden, and many more (Cust 1929, 1931). Accordingly, we could claim that developments on significs are not necessarily attached to any individual name. One that deserves special mention is Charles K. Ogden, who discovered Welby and her significs as a young university student at Cambridge, and whose research was significantly influenced by her own, even though he only

mentions her briefly in his epochal book with Ivor A. Richards, The Meaning of Meaning, 1923 (where the authors also signal her correspondence with Peirce and the latter's important writings on "existential graphs", see Hardwick 1977; also Petrilli 2009a: 731-747).

With her theory of sign and meaning, Welby conceptualizes ongoing translative processes beyond limits and boundaries as ultimately imposed by identity logic and official discourse. In this sense, her translational theory of meaning can be described as a theory of the "transcendent." Another interesting definition of significs is that formulated by Welby in Significs and Language (1911), which reads as follows: "the study of the nature of significance in all its forms and relations, and thus of its workings in every possible sphere of human interest and purpose" (Welby 1985 [1911]: vii). Welby was concerned with the practical bearing of sense, meaning and significance "not only on language but on every possible form of human expression in action, invention, and creation" (Welby 1985 [1911]: ix). Furthermore, as she had already specified in What Is Meaning?, as the "philosophy of Significance" significs involves the "philosophy of Interpretation, of Translation, and thereby of a mode of synthesis accepted and worked with by science and philosophy alike" (Welby 1983 [1903: 161]). Given its focus on the relation between sign, value and behaviour, in particular the sign's ultimate value, or significance, on the connection, therefore, between sign and value in all its aspects – pragmatic, social, ethic, aesthetic, etc., significs is particularly concerned with the effects, consequences and implications of the conjunction between signs and values for human behaviour. And insofar as it is focused on the pragmaticalethical implications of human signifying processes, significs is a major source of inspiration at the origin of semioethics with which it overlaps. As emerges from Welby's own words reported above, attention on the interpretive-translational dimension of sign activity and the connection with values is programmatic for significs from its very inception.

7.3 Triadic highlights on meaning

"Sense," "meaning" and "significance" indicate three main levels or classes of expression value which variously interact in signifying and interpretive processes. Welby developed her meaning triad from different points of view with corresponding terminology (cf. 1.4): the triad "sense," "meaning" and "significance" corresponds to the distinction between "signification," "intention" and "ideal value." Moreoever, the reference of sense is "sensal" or "instinctive"; the reference of meaning is "volitional"; and the reference of "significance" is "moral". Other triads include the distinction between "instinct," "perception" and "conception" for

different levels in human psychic processes; and "planetary," "solar" and "cosmical" for different types of experience, knowledge and consciousness (Petrilli 2009a: 20–24; the dictionary entry "Significs," by Welby, Stout and Baldwin, now in Petrilli 2009a: 195-196; Welby 1983 [1903]: 46-47, now in Petrilli 2009a: 265-266). The meaning of the term "sense" is ambivalent. It is used to indicate the overall import of an expression, its signifying value. But as one of the three apexes in Welby's meaning triad, "sense" denotes the most primitive level of pre-rational life, the level of initial stages of perception, of immediate response to the environment and practical use of signs. As such it indicates a necessary condition for all experience. "Meaning" concerns rational life, the intentional, volitional aspects of signification. "Significance" implies "sense" in the restricted sense, though not necessarily meaning and is also indicated with the term "sense" understood broadly. "Significance" concerns the sign's import and ultimate value, its overall bearing, relevance and import for each one of us. It denotes expression value in terms of the condition of being significant, of signifying implication, of participative involvement, which ultimately also involves the question of responsibility. Welby continues to specify her triadic model for the analysis of meaning throughout her writings through to her 1911 encyclopedia entry, "Significs," where she gives the following definitions: "Sense" refers to "the organic response to environment" and "essentially expressive element in all experience"; "Meaning" is purposive and refers to the specific sense which a word "is *intended to convey*"; "Significance", which includes sense and meaning and transcends them, refers to "the far-reaching consequence, implication, ultimate result or outcome of some event or experience" (Welby 1977[1911]: 169; now in Petrilli 2009a: 345-350). Triadism is a pivotal characteristic of Welby's thinking (see her unpublished essay of 1886, "Threefold Laws," now in Petrilli 2009a: 331–340; for a more complete picture of triadic correspondences in Welby's writings on significs, see the table of triads presented by H. Walter Schmitz in his 1985 volume, Significs and Language, now in Petrilli 2009a: 948-949).

According to Peirce, Welby's meaning triad coincides with his own tripartition of the interpretant into "immediate interpretant," "dynamical interpretant" and "final interpretant." In his own words from a letter to Welby of 14 March 1909:

Let us see how well we do agree. The greatest discrepancy appears to lie in my Dynamical Interpretant as compared with your "Meaning." If I understand the latter, it consists in the effect upon the mind of the Interpreter that the utterer (whether vocally or by writing) of the sign intends to produce. My Dynamical Interpretant consists in the direct effect actually produced by a Sign upon an Interpreter of it. They agree in being effects of the Sign upon an individual mind, I think, or upon a number of actual individual minds by independent action upon each. My Final Interpretant is, I believe, exactly the same as your Significance; namely, the effect the Sign *would* produce upon any mind upon which circumstances should

permit it to work out its full effect. My Immediate Interpretant is, I think, very nearly, if not quite, the same as your "sense"; for I understand the former to be the total unanalyzed effect that the Sign is calculated to produce; and I have been accustomed to identify this with the effect the sign first produces or may produce upon a mind, without any reflection upon it. I am not aware that you have ever attempted to define your term "sense"; but I gather from reading over what you say that it is the first effect that a sign would have upon a mind wellqualified to comprehend it. Since you say that it is Sensal and has no Volitional element, I suppose it is of the nature of an "impression." It is thus, as far as I can see, exactly my Immediate Interpretant, (Hardwick 1977: 109–110)

As we understand from Peirce's observations above, his "immediate interpretant" concerns meaning as it is ordinarily and customarily used by the interpreter. As such it corresponds more or less to Welby's "sense," that is, the interpreter's immediate response to signs. A discrepancy is identified between Peirce's "dynamical interpretant" and Welby's "meaning." The "dynamical interpretant" concerns meaning in a given context, specifically the effect of the sign on the interpreter. From this point of view, Peirce's "dynamical interpretant" can be correlated with Welby's "meaning." But while Peirce refers to the actual effect produced by the sign, Welby, instead, underlines the intended effect, which is the effect the utterer intends to produce, but which is not necessarily the effect achieved. However, Peirce's "final interpretant" and Welby's "significance" are described as corresponding exactly insofar as they both indicate interpretive potential at the highest degrees of significance and understanding (Petrilli 2009a: 288–294). Moreover, Peirce considered such convergences between his own triad and Welby's as an indication of their validity.

As stated, Welby studies the nature of significance in all its forms and relations evidencing the close relation between the generation of signifying processes in human experience and the production of values. From this point of view, the notion of significance can be associated with Charles Morris's conception of "significance" as developed in his 1964 monograph, Signification and Significance. Furthermore, Welby thematizes the interpretive function as the condition for signifying processes, hence for communication, expression and understanding. The connection between signs and values enhances the human capacity to establish relations with the world, the self and others. This connection also orients translation processes from one sphere of knowledge into another and from one sphere of action into another, from one pragmatic interpretant into another, which is inevitably an ethical-pragmatic interpretant or, if we prefer, a semioethical interpretant (see above, 4.9). Sense, meaning and significance are enhanced through ongoing translation processes.

In Welby's view, the cognitive, pragmatic and ethical perspectives of sign activity emerge in the unconsciously philosophical questions of the man of the street when he asks "What do you mean by ...?," "What does it signify?," etc. In front of accumulating knowledge and experience, the significian, from whatever walk of life, is urged to ask such questions as, "What is the sense of ...?," "What do we intend by ...?," "What is the meaning of ...?," "Why do we take an interest in such things as beauty, truth, goodness?," "Why do we give value to experience?," "What is the expression value of a certain experience?." Such questions lead the significian, whether the intellectual or the everyday man, to reflect on the value of experience which increases the more it is subject to ongoing translation processes.

7.4 Significance, modelling and translational processes

As the variant "matrix" for "mother-sense" especially conveys, this concept, as thematized by Welby (see above, 4.5.), can be associated with the concept of modelling and is a condition for the generation of signifying and interpretive processes in the human world. With her distinction between "mother-sense" and "father-reason," Welby intended to indicate a general difference between two predominant modalities in the generation of sense that transcend the barriers of sexual gender and can only be separated by abstraction. Mother-sense refers to the generating source of sense and determines the human capacity for creativity and critique. It is oriented by the logic of otherness and allows for the development of knowledge and experience in far-reaching and creative ways, through sentiment, perception, intuition and cognitive leaps. Thanks to mother-sense, the idea is intuited before it is possessed or before it possesses us. As the condition for the maximum development of knowledge and experience, mother-sense can also be associated to Peirce's notion of "agapic or sympathetic comprehension" and to Bakhtin's "answering comprehension." Important implications of the concept of mother-sense also surface in light of Sebeok's description of "language" or "primary modelling device." Like mother-sense, the primary modelling device is a necessary condition for the acquisition and generation of knowledge, through different sign systems, verbal and nonverbal. Verbal semiosis is implanted in primary modelling and arises specifically for communication, though in the course of evolution it also takes on a modelling function in the form of what Sebeok tags a "secondary modelling function." Another term proposed for "language" or "modelling device" is "writing." What, then, may be described as secondary or derived signifying behaviour, including verbal semiosis and "intellectual work" generally, is generated by primal matter, mother-sense, the primary human modelling device that contains a verbal and nonverbal faculty and is also commonly called "language." As a modelling procedure, mother-sense, the matrix, is the condition of possibility for the generation of a potentially infinite range of new worlds or worldviews. Insofar as it is dominated by iconicity, mother-sense favours the capacity for homological relations beyond the analogical. In terms of argumentation, it is associated with logical procedure of the abductive type at high degrees of creative and dialogic otherness. Mother-sense empowers the creative and generative forces of sense, through the human capacity to associate objects which are distant, but which ultimately are attracted to each other according to the law of affinity (cf. 3.7, 4.5).

In a letter to Peirce dated 21 January 1909, Welby subscribes to his observation that logic is the "ethics of the intellect." This is in line with what can be indicated as her "ethics of criticism." Scientific rigour in reasoning is connected with "mother-sense" or "primal sense" and with agapastic logical procedure which foresees the structural role of imprecision, instability and crisis and with them the "art of interrogation," to echo the title of an essay by Giovanni Vailati, who corresponded with Welby on these issues (Petrilli 2009a: Ch. 4). Welby's significs can be associated with the horizons of Peirce's philosophy and its implications, where too the processes of signifying and understanding are regulated by otherness logic. Welby not only thematizes "meaning" (here understood as inclusive of "sense," "meaning," and "significance") in terms of "meaning" (understood as one of the three terms in her triad) and "signification," but also and above all in terms of "significance" and "sense" (Petrilli 2009a: 264-272). And, as we have seen, to study signs in merely descriptive terms, with claims to neutrality, is reductive. Understanding, signifying and behavioural performances of the self can only be adequately dealt with in terms of "otherness logic." According to this perspective, reflection on the conjunction between signs and values cannot be neglected.

The logic of otherness is agapastic logic. Absolute, non-relative otherness, iconicity, dialogism and abduction constitute the generative nucleus of signifying processes as they translate across worlds that are real, possible, or only imaginary. The significal theory of meaning thematizes the dimension of signifying otherness, which implies the capacity for excess, critique and escape from the limits of the order of discourse. The capacity to reflect on interpretive and signifying processes and to distinguish *critically* among signs and meanings specifies human beings with respect to nonhuman animals while at once favouring the maximum development of animal instincts, sensations and feelings with progress in practical experience and knowledge (cf. 4.2, 7.5). Given its focus on interpretation, translation and meaning value in all its aspects and signifying complexity - the condition of all experience whether practical or pertaining to the metalevel of reflection and critique -, the significal method applies to all aspects of life in the human world and inevitably involves the question of responsibility (cf. 10.6, 15.4). "Translation" is a key word in "significs." Welby proposes it as an interpretant of significs itself, as an explication and development of its sense and orientation together with the words "interpretation" and "significance":

Significs will bring us the philosophy of Significance; i.e. a raising of our whole conception of meaning to a higher and more efficient level; ... Thus Significs involves essentially and typically the philosophy of Interpretation, of Translation and thereby a mode of synthesis accepted and worked with by science and philosophy alike. (Welby 1983: 161).

In her entry of 1902, commissioned by James M. Baldwin for his *Dictionary of Philosophy and Psychology in Three Volumes*, she formulates the following definition:

Translation: [Lat., trans + latum, part. of ferre, to bear, carry]: Ger. Übersetzung; Fr. traduction (transposition); It. traduzione. 1) In the literal sense, the rendering of one language into another.

2) The statement of one subject in terms of another; the transference of a given line of argument from one sphere to another; the use of one set of facts to describe another set, e.g. an essay in physics or physiology may be experimentally "translated" into aesthetics or ethics, a statement of biological into a statement of economic fact.

Welby's theory of translation is grounded in her theory of sign, meaning and value. With Welby, as with Peirce, translation is implicit in the concept itself of sign. There cannot be a sign without an interpretant, that is, without another sign that translates its meaning into yet another sign. Meaning develops in the translational processes of deferral among signs. In other words, translational processes are structural to sign processes as these develop and defer to each other across systemic and typological boundaries (Petrilli 2010a: 49-88). Since meaning is generated in the relation among signs, translation theory and sign theory are inevitably interconnected (Welby 1983: 120). Signs, meaning and values are in translation and cannot subsist if not in translational processes of deferral from one sign to the next. Welby theorizes translation in the broad sense of translational processes across sign systems throughout the entire semiosphere and not just across languages, verbal and nonverbal, whether internally to a single historico-natural language or externally among different historico-natural languages. Her theory of translation takes account of the vastness and variety of the sign universe and, consequently, of the unbounded nature of translativeinterpretive processes. Moreover, beyond translation across different languages in a plurilingual and intercultural world, Welby thematized translation as a method for interpretation and the acquistion of knowledge, a method for the verification of the validity of our beliefs, of truth and for progress in knowledge. She focused on the conditions that make translation possible which she identified in the larger context where translational processes converge with life processes and, perhaps, beyond, in the thrust toward an unbounded cosmic dimension. With reference to the human world, translational semiosis is a condition for the development of experience from the lowest instinctive and sensuous levels to the highest degrees possible in understanding and interpretation. Moreover, significs evidences the relation between significance, translation and the pragmatic-ethical dimension of signifying processes. The concept of translation is further explicated by Welby with a whole series of other expressions all of which begin with the prefix "trans": "transference," "transformation," "transmutation," "transfiguration," "making translucent and transparent" and "transvaluation" (Ch. 5, "Translation and meaning from a significal perspective," in Petrilli 2009a: 560–572, presents a collection of papers from the Welby archives specifically on "Significs – Translation [i.e. Definition]", written between 1905 and 1911).

A close relation is identified between translation theory and figurative language. Welby underlines the role of the iconic relation among signs in the translational processes of thought and communication. Translation is translation among "differences" or "distinctions," the construction of relations among alterities, which are relations mostly dominated by iconicity in the case of human languages, translational relations across the verbal and nonverbal order. With reference to the question of subjectivity, translation involves the construction of relations among singularities, which are relations regulated by the logic of affinity and attraction among differences characterized by absolute otherness.

Translation implies the recognition of "distinction," of "difference" without division or separation. Translation begins from the work of equation, but is most illuminating, most charged with significance when it establishes relations among differences, in particular when these differences emerge in their uniqueness and otherness (cf. 10.1):

The idea of Translation in all its applications naturally implies the recognition of Distinction and starts from the conception (or principle) of Equation, which is in the quantitative what Translation (the discovery and application of the common element in the diverse or different) is in the qualitative sphere. ... But Translation may be helpful, that is, revelative and illuminative, when there is much less literal correspondence... It applies wherever there is a presumable unity implied in differences which can be distinguished. What we want is neither an artificial mode of uniting the apparently diverse, discrepant, separate, nor an equally artificial postulate of primary identity which either ignores, minimises, or excludes distinction. (Welby 1983: 148-149)

As emerges reading Welby, to translate clearly requires recognition of difference where in the first instance "difference" is understood as homologation and equivalence; in the second as difference indifferent to other differences; and, in the third as difference unindifferent to difference, which is difference oriented by the logic of non-relative, or absolute otherness.

This type of development outlined by Welby can be traced, for example, in the processes of acquisition of a foreign language. The initial phases of language learning take place through interpretive processes largely dominated by the logic of recognition and identification where recourse to the mother-tongue is inevitable. This is where difference understood in terms of the logic of equivalence dominates. The language learner must learn to recognize and identify the foreign language on the basis of correspondences to the native language. In other words, the language learner inevitably deciphers the signs of the foreign language on the basis of recourse to his or her mother tongue. But the need for identification through mediation by native language becomes less and less necessary as the speaker perfects his or her knowledge of the new language. Once a certain level of mastery is achieved, expression, understanding and communication take place directly in the foreign language without the need of resorting to the language of origin, which means to say without the need of identification relations of equivalence and homologation. At this point, translational processes across languages are characterized by ever higher degrees of difference in the sign of otherness and creativity and, consequently, by their capacity for responsive understanding and not merely recognition and identification. Signs, no doubt, contain a signality factor and its correlate, the self-identity factor, but they are not reduced to signality. Unlike signals, in the case of signs at high levels of semioticity, understanding is not merely a question of recognizing elements that are constant and repeat themselves always in the same way. (On the difference between the sign and signal, see Voloshinov 1929):

In the speaker's native language, i.e., for the linguistic consciousness of a member of a particular language community, signal-recognition is certainly dialectically effaced. In the process of mastering a foreign language, signality and recognition still make themselves felt, so to speak, and still remain to be surmounted, the language not yet fully having become language. The ideal of mastering a language is absorption of signality by pure semioticity and of recognition by pure understanding. (Voloshinov 1973 [1929]: 69)

The sign is characterized by high levels of semantic and ideological ductility and this renders it adaptable to ever new and different contexts. Signality and identity are transcended by the specific characteristics of the sign: variability, plurivocal ambivalence, polylogism, dialogism, plurilingualism and the capacity for understanding at high degrees of responsivity and creative participation.

The main focus in Welby's studies is verbal language, but her perspective is by no means glottocentric or phonocentric. On the contrary, we have seen that according to Welby, an adequate understanding of verbal language requires con-

textualization in the general semiosphere of which verbal language is a part, in translation processes across semiosystems ranging in scope and import from the planetary to the cosmic.

7.5 Geosemiosis, heliosemiosis, cosmosemiosis

Welby's evolutionary perspective on meaning, expression and knowledge largely ensues from her interest not only in the planetary and biological dimensions of existence, but also in the heliological and cosmological dimensions and in the sciences that study them. Her concept of "sense" is fundamentally organismic. But she also implemented the word "sense" for expression value at the highest levels of significance in ethical-pragmatical terms. "Sense in all 'senses' of the word" was considered by Welby an appropriate term for the signifying value of sign activity in the experience of life over the planet, and possibly beyond.

She associated her definition of the link between sign and sense to an organism's immediate, spontaneous reaction to environmental stimuli. In the course of evolution, this process leads to the engendering of signs endowed with significance, with a capacity for implication and reference beyond system boundaries, eliciting responses, direct and indirect. Organic analogies highlight the value of plasticity, adaptability and transformation for the development of expressive potential. Like the relation between organisms and their environments, words and their contexts adapt to each other and can enhance each other reciprocally. With special reference to verbal signs, Welby aimed to recover such qualities which she believed had been mostly lost in terms of linguistic usage and corresponding logic and which tended to be neglected by traditional approaches to language theory.

Welby took a critical stand against short-sighted anthropocentrism and the even more short-sighted error of glottocentrism. Looking beyond the planetary, organismic and biological dimensions of existence, her gaze extended to the cosmological view of signifying processes throughout the whole universe as the general context of expression value. The human signifying capacity could only be understood in the light of the overall context of cosmological forces to which this capacity belongs and which it, in turn, enhances. Reference to evolutionary processes in the universe helps convey an idea of the expansion of human experience and understanding. In terms borrowed from the language of cosmology and astronomy, Welby describes "three levels of consciousness" (1983 [1903]: 30, 96, 163): "planetary consciousness," "solar consciousness" and "cosmic consciousness" which in terms of expression value correspond respectively to "sense," "meaning" and "significance" (Welby 1983 [1903]: 1-9; Petrilli 2009a: 264–271 and 948–949). The signifying universe develops and is enhanced through the generation/interpretation of signs and senses, in a continuously expanding cosmosemiosphere that includes both the geosemiosphere and the heliosemiosphere. In this context, evolutionary development is fostered not only by interpreting so-called objective facts, actual occurrences in the real world, but by hypothesizing future developments, envisaging possible or imaginative worlds and by accepting the challenge of the play of musement as the various planes of existence, sign activity, and discourse interweave (*cf.* Ch. 4).

7.6 "A new geneology of semiotics"

The closing section of an essay by Barbara Godard, "Toward a critical semiotics. Feminist interventions in semiotic theories," in the volume, *Approaches to Communication* (Petrilli 2008), offers a discussion of Welby's concept of "mothersense" and of her contribution overall to semiotic theory and feminist discourse. She associates Welby's work on "mother-sense" with a tradition in critical semiotics that informs the work of such thinkers as Julia Kristeva, Luce Irigaray, Hélène Cixous, Mieke Bal, and others. Godard underlines the topicality of this voice from the past, a voice wholly projected toward future possibility and committed to the quest for radical social change. Welby's work promotes unity between theory and practice, between sign, value and behaviour and, no doubt, can be described as unfolding along the boundaries between "critical theory" and "semiosis as action in the social, producing change." Such interconnection is described by Godard as a signpost for future developments in semiotic research. In her own words from the concluding section of her essay:

Although in constructing the terms of another frame of reference feminists have emphasized the future as becoming or invention, the dynamism of semiotic reworking to produce transformation might well be redirected to the past. From the changed horizon of a feminist position in the field, a new genealogy of semiotics might unfold, one that would make connections between contemporary feminists' concept of the "sensible transcendental" and that of "mother-sense" proposed by Victoria Welby a century ago. The contemporary focus on the zoe and bios reunited in becoming invites renewed attention to Welby's conceptualization of the creative energy radiating from sensorium through cognition in the move from "sensation" to "sense" and "sign" in a process of "differentiation and thus of development" (Welby 1907, 1-2).2 The "Sense of Sign which gives Significance," she writes of this three-fold process, is the "true 'transcendental" (Welby 1 Sept. 1904). As generative matrix, mother-sense has conceived and borne father-life. Mother-sense is all-encompassing: "Significance is a Mother-idea" as is Order and her generative vitality creates the "impulse" to interpretation (Welby 1 Sept. 1904). A living matter, this web of Sense in its manifold senses enfolds father-logic which is secondary in terms of both temporality and range of meaning-making. As she notes, the age-old "subjection of women" has limited the impact of this sensible transcendental without which men's mental qualities have suffered from the "defects" that "result from his (narrowing) special development" (Welby 3 July 1904). (Godard 2008: 184)

As emerges from this passage, the semioethical bent in semiotics does not only involve a theoretical-interpretative orientation relative to the present, or a programmatic orientation concerning the immediate future. It also involves the past, so to say, influencing our rereading of history. Nor is this just a question of the history of semiotics, with suggestions for new possible interpretations of its "genealogy" even; interpretations that can be added, for instance, to Sebeok's own surprising proposals when he recovers his so-called "cryptosemioticians" (Sebeok 1979a). More exactly, this is also a question of a connection that is not simply historiographical and that does not even concern semiotics exclusively, as one among the many disciplines interested in reconstructing their origins and evolutionary development. In the passage above Godard establishes a connection between a research itinerary essentially accomplished in isolation, between the end of the nineteenth century and beginning of the twentieth, one unfolding in terms of a female independent scholar coming to awareness – through reflection on signs and language and relatedly to values, social values, public and private -, on one hand, and a series of contemporary women writers who have worked in a similar sense, on the other. These women operate with methods and approaches that are different – think of Julia Kristeva's semanalysis – but essentially analogous, or, better, homologous, given the genetic and structural similarities that somehow unite them. Their work can also be characterized, putting goals and orientations in a nutshell, in terms of what I like to call the "semioethic turn" in the study of signs.

The relation interpreted and developed by Godard can be summed up in the word "interconnection," as suggested earlier. Such interconnection is established between Welby's Significs, with her insistance on "mother-sense," and the contemporary feminists' concept of the "sensible transcendental" with its focus on "the zoe and bios reunited in becoming," to use Godard's words from the citation above. More precisely, we may describe Godard's appreciation of Welby's works in light of the present, contemporaneity, in terms of translation (exactly as understood by Welby), translation in a present which is not understood in isolation, which is not closed in on itself, but which, quite on the contrary, is considered the "anterior future" of the immediate future, a future we have taken to heart, that we care for, that depends on our present and for which we are responsible.

Here then, once again, we are faced with a translation task: like all translations that do not simply involve transferral from one code to another, we read the past from the eye view of the present, from the perspective of the translator's spatio-temporal localization, "interconnecting" different efforts in understanding and for the sake of change, expressed in different and diversified texts and contexts. This is a question of translation that opens to new perspectives in the reconstruction of geneaologies and, at once, to the identification of new possibilities for evolutionary development. Such interconnection-translation involves semiotics, in the sense of Significs, in the sense of the *search for sense* and for the conditions that favour the enhancement of life. Nor is reference here only to human life. Consequently, semiotics is involved precisely as "global semiotics"; and given that a major issue is the *quality of life*, semiotics is also inevitably implied as semioethics.

Chapter 8

The objective character of misunderstanding. When the mystifications of language are the cause

Silly me, this shows the inadequacies of the written word. I understood from your email where you say, "Anthony, I've just read your letter to Franco," as meaning you had read a letter I had sent to Franco, whereas you meant you just read my letter that I sent to you, to Franco... you can see how it is easy to misunderstand.

(Anthony Petrilli to his sister Susan, email dated 29 March 2011)

8.1 Significs and the "maladies of language"

The problem of sign and meaning provides a unifying perspective on the kaleidoscopic plurality of experience and communication. This means to study the processes through which signs and meaning are produced. To study such processes involves analysing the conditions of possibility that enable their articulations and transformations. Such processes unfold on a synchronic and diachronic axis, and relate to verbal and nonverbal sign activity, to linguistic and non-linguistic semiosis in general. This is the perspective adopted by Victoria Welby and her "significs," the name she elected for her special approach to the theory of meaning (cf. Ch. 7). She researched the signifying processes of ordinary life and ordinary language, of the sciences, of the human potential for interpretation and expression, and of the multiform expressions of human sign activity at large. Perception, experience and cognition are mediated by signs, such that the relation between speaking subjects and their world is indirect and approximate insofar as it is a sign-mediated relation in ongoing interpretive processes. Further, given that our relation to so-called "objective" reality is a sign-mediated relation involving the signifying processes of expression, interpretation, communication, all of us – everyday human beings and not only intellectuals – are potential "significians." Together we produce signifying processes and, in turn, we evolve in signifying processes that go to form the anthroposemiotic sign network. Welby concentrates on verbal expression, the language of the "man of the street" as well as of the intellectual, and does so with reference to the broader context, what we may also call the great "biosemiosphere," in which language is engendered, without falling into the trap of anthropocentric reductionism.

Images from the organic world are introduced to denounce the "maladies of language" and "linguistic pathology," largely caused by the use of verbal expression that is inadequate or antiquated, featuring metaphors and analogies that are

outdated and simply incorrect.¹ On the level of logical procedure, the bad use of language and expression is inseparable from the engendering of false problems, misunderstanding, and confused reasoning. The human understanding of differences and commonalities among signs, senses and meanings also requires improvement. In Welby's view, this state of affairs calls for the development of a "critical linguistic consciousness" and appropriate "linguistic therapy." But a correct diagnosis of "linguistic pathology" requires an adequate theory of signs and meaning (Petrilli 2009a: Ch. 4). Significs takes on the dual task of theoretical analysis and therapeutic remedy, as it attempts to offer practical suggestions for the solutions to problems of signification.

8.2 Ambiguity and the "panacea of definition"

Welby distinguishes between two types of ambiguity: (1) ambiguity in the sense of polysemy constitutive of the word, a positive attribute connected to a multiform and dialogic view of reality and necessary condition for expressivity and understanding; (2) ambiguity as obscurity, expressive inadequacy which is the cause of confusion and equivocation and provokes "paralysis of thought." She denounces such negative effects with innumerable examples throughout her writings (Welby 1985a [1911]: XIII, 37–38). Her characteristic recourse to organic analogies to talk about language serves to evidence such characteristics as "plasticity," "expressive ambiguity" and "adaptability" as distinctive features of verbal expression. For example, Welby establishes an analogy between context and environment and consequently between the mutually adaptive mechanism that regulates the relationship between word and context, on the one hand, and between organism and environment, on the other: "If we enthrone one queen-word instead of another in the midst of a hive of working context-words, these will behave very differently. They will expel or kill or naturalize it" (Welby 1983: 40, & note). The word, like the organism, adapts to its surroundings which it modifies and, conversely, the context influences and somehow modifies these.

In "Meaning and Metaphor" (1893), Welby criticizes the concept of "plain meaning" from a pedagogic and theoretical perspective, underlining the need to recognize the symbolic character of language, the widespread (though often unconscious) use of analogies and metaphors and the relationship between symbolic systems and what they symbolize, the pervasiveness of imagery in so-called "literal" or "actual" language which she uses as an argument against the fallacious tendency to establish a net distinction between literal language and metaphorical language:

... we might begin by learning better what part symbolism plays in the rituals of expression, and ask ourselves what else is language itself but symbolism, and what it symbolizes. We should then examine anew the relations of the "symbolic" to the "real"; of image, figure, metaphor, to what we call literal or actual. For this concerns us all. Imagery runs in and out, so to speak, from the symbolic to the real world and back again. (Welby 1893, in Petrilli 2009a: 422)

The infinite possibilities of expression and signification are actualized by signs as their meanings are gradually specified in live communicative contexts. And though not necessarily in the same terms, Welby recognizes symbolicity, indexicality and iconicity as interacting dimensions constitutive of signifying processes to varying degrees.

Welby elaborates a dynamical, structural and generative theory of signs and meaning, where polyvalency, changeability and vagueness are thematized as distinctive features. She criticizes the myth of "plain meaning," common-sense, clear and obvious meaning, of language described in terms of invariability, uniformity, univocality, of words and locutions defined as though they were numbers, tags, or symbols enjoying unanimous consent (Welby 1893, 1896, now in Petrilli 2009a: 4.9., 4.10.). The text must be freed from the prejudice of interpretation reduced to decodification. It is important to specify meaning and thereby evidence the overall significance, import, and ultimate value of a given utterance, as when we ask the question, "What do we really mean?"; but, to specify and clarify does not imply to accept the concept of "plain meaning," which Welby considers a mere fallacy when it involves reductionism and oversimplification. As an example, she indicates the widespread belief that a text can evolve into a single reading, into an absolute and definitive interpretant valid for all times (Welby 1893, in Petrilli 2009a: 22–23, 423; Welby 1983: 143). Broadly, the point addressed by Welby with her concept of "plain meaning" can be compared to the critique elaborated by Antonio Gramsci in relation to the concept of "common sense" (cf. 8.4).

Welby appreciates the "plurivocal" and "polylogic" capacity of language and at once signals reductive interpretations of the concept of ambiguity.² Plasticity and ambiguity are qualities that render the sign adaptive to new contexts, to changing habits of behaviour. Such qualities are a condition for progress in knowledge, for the development of verbal and nonverbal expression, for signifying processes at large and their potential for allusive reference (Welby 1985a: ccxli and ccliv). Ambiguity is an essential aspect of interpersonal relationships where successful communication emerges from interaction between the codified aspects of language and creative, responsive understanding which cannot be reduced to the processes of decodification (cf. Ch. 1). Welby shared her appreciation of ambiguity and polysemy with her contemporary, Giovanni Vailati. Subsequently, other authors who were to work along similar lines include Ferruccio Rossi-Landi, Adam Schaff, Mikhail Bakhtin.

"Clear" and "convincing" discourse often implies mystifying oversimplification which, paradoxically, engenders obscure and "perverse" discourse. The concepts of "plain meaning," "common sense" and "common place," when misused, are good examples. When applied under the mask of "simplification" and "clearness," the above terms reduce potential polylogism to the condition of monologism, as in the case of the metaphorical stratification of sense exchanged for univocal, literal meaning. Mystifications of this sort often ensue from lack of awareness of the semiotic materiality of the sign, of its vocation for otherness, of its socio-historical consistency. The importance of the role of the enthymeme, of the unsaid, the implicit in discourse is often neglected; the fact that words and signs in general are impregnated with senses engendered in a signifying history of their own. Understanding and communication rest on the unsaid, the unspoken, implicit meaning, on that which is understood (*cf.* Ch. 6).

On a diachronic axis, the meanings and values of words and utterances, whether implicit or explicit, may accumulate, overlap, change, disappear even, or develop. On a synchronic axis, the unique experience of the single speaker influences the modality of perception and interpretation. Different factors are at work to condition meaning value in a structure that is never identical to itself. These factors include the specific historico-socio-cultural context, communicative context, linguistic usage, inferential procedure, psychological and emotional factors, memory, attention, intention, the capacity for making associations, allusions and assumptions, enthymemes, the tendency to symbolize or picture, the a-priori conditions of language, etc. Welby thematized dialectic complementarity and interdependency between the forces of indeterminacy and determinacy, vagueness and exactitude, plurivocality and monologicality, between the centrifugal forces and the centripetal forces operative in language, ultimately, in our own terminology, between the logic of alterity and the logic of identity. The genetically and structurally dynamical character of language, its inherent potential for creativity and innovation, and the action of such variables as those just listed all these aspects invalidate recourse to definition as an absolute and definitive remedy for the mystifications of language.

Welby focuses on a series of specifically linguistic issues such as the role of definition in the determination of meaning, the relationship between literal meaning and metaphorical meaning, the role of metaphor, analogy, and homology in the enhancement of expressive potential. Expressive precision can be attained by exploiting different linguistic resources; for example, by distinguishing between the different meanings of words that seem to be similar but in fact are not, and by identifying similarity among words that seem to have different mean-

ings but in fact do not. However, Welby claims that to be a significian does not mean to be a "precisionist" in the sense of working for "mechanical exactitude in language" (see the Welby files entitled "Significs (1903-1910)" and "Mother-Sense (1904–1910)," now in Petrilli 2009a, in particular pages 249, 270, 336, 576, 705, 808). On the contrary, meaning is inherently ambiguous and to neglect this particular quality can lead to monological signifying practices that lay the conditions for the tyranny of dogma and orthodoxy. At a metadiscursive level, though ready to propose new terms for the study of language and meaning, Welby kept her distances from the temptations of technicalism. And while she was critical of the fallacy of eliminating ambiguity and polysemy from the utterance, she was committed at once to making her expressions as precise as possible. The following passage on the meaning of the words "fact" and "idea" is an interesting example:

Taking both words in the generally accepted English sense what in the last resort is the difference between Fact and Idea? What is that essential meaning of both which, if changed, will necessitate a new word to express what we are losing? Surely there can be no doubt of the answer. If we can say of any supposed fact that it is false: unreal from one point of view, untrue from another (these again never to be confounded), it ceases to be fact. No fact can be either unreal or untrue, only our idea of it. Otherwise we may as well say at once that the real may be the delusive, or the true may be the deceptive. Of course the "real" tends to become illusory to us, and the true deceptive, owing to the inadequacy of our inferences, which is again due to our little-developed interpretive power. But this must become more adequate when we have learnt to make sense, meaning, and significance our central concern, and have developed our sensifying and signifying faculties. (Welby 1983: 40-41)

"Linguistic consciousness" implies development of the critical and interpretive capacity and rejection of such tendencies as dogmatism, pedantry and anarchy in linguistic usage, logical inference, and sign behaviour in general.

Liberation of language from the so-called "linguistic traps" that obstacle its development and articulation, as Wittgenstein too observed, is a condition for mastery over one's surroundings. In this framework, Welby recognized the usefulness of definition, but not in an absolute sense. Definition serves limited, but specific purposes. What is most worth expressing and interpreting often escapes definition (Welby 1983: 10) whose effective usefulness is restricted to special interests. Definition does not account for the ambiguity of language understood as a condition for successful communication. And when resorting to definition to solve problems of meaning and expression, the greatest good arises in the process of working toward that definition rather than in its actual formulation, as the English philosopher Henry Sidgwick observes in his epistolary exchanges with Welby (their correspondence is stored in the Welby Collection, York University Achives, Box 14, see Petrilli 2009a: Appendix 3).

Welby distinguished between "rigid definition" and "plastic primary definition" (1985a, b. 2010). The former is always secondary because of its tendency to freeze meaning and render it static in the orientation toward a single, univocal meaning. By contrast, "plastic primary definition" keeps account of the live character of language and, therefore, of its capacity for adaptation to new signifying contexts. Welby discusses the problem of definition in her correspondence with Giovanni Vailati, who took a similar view. Rather than limit definition to single words, he underlined its usefulness in determining the meaning of propositions. The meaning of single words is often only determined in relation to other words, in the linguistic context, in the context of the proposition itself. To exemplify his view, Vailati indicated such terms as "to be," "to act," "to produce," "to represent," "to manifest," etc. The meaning of the linguistic context itself is also determined in its relation to the single words forming that context (Vailati/Welby, 12 July 1898, in Vailati 1971: 140-142; Welby/Vailati, 27 February 1907, in Petrilli 2009a: 415). Only in a correct theoretical framework can definition be implemented, though never as a remedy to the problems of linguistic equivocation. Without denying its value for technical language, definition tends to eliminate the expressive plasticity of words, responding inappropriately to their inherent liveliness with lifelessness and inertia (Welby 1983: 2; Petrilli 1998b: VI.1; 2009a: 4.5).

To solve problems of language, rather than resort to definition we need an adequate theory of sign and meaning. As illustrated above (Ch. 7), Welby thematizes a tripartite division of meaning into "sense," "meaning" and "significance"; and other important distinctions include that between "plain," "actual" or "literal," "direct" meaning, on one side, and "figurative," "indirect" or "reflective" meaning, on the other. Signifying processes do not respond to the binary view which distinguishes between the two poles of "metaphorical, indirect or reflective meaning," on one hand, and "literal, direct or actual meaning," on the other. Indeed, the term "literal" is considered by Welby to be more figurative and more ambiguous than the term "metaphorical" itself (1893, in Petrilli 2009a: 422). Instead, she hypothesizes a third region of meaning constitutive of signifying practices, a "third value" of meaning – neither entirely literal nor entirely figurative – in which the "metaphorical" and the "literal" combine to varying degrees (Welby 1983: 139, 292; a similar approach is elaborated by Rossi-Landi, though independently of Welby, see Rossi-Landi 1985: 115-120). The "third value" or "third region" of meaning hypothesizes a contact zone where boundaries are not defined and interpretive processes are generated in the interaction among signs. Metaphorical meaning cannot be reduced to ornamentality, nor is it exclusive to the language of literature or to the artistic vision in general. On the contrary, metaphorical procedure is structural to the development of knowledge and to signifying processes at large. This indeterminate, third value, or third region of meaning runs through

the whole of language, including ordinary language, where the actual and the symbolic, the real and the ideal, the direct and the reflective intermingle, as in a painting. The same utterance can translate across different regions of meaning actual and direct, symbolical, figurative, or some combination thereof, thereby revealing its ambiguous nature and capacity for adaptation and transformation as requested by the live processes of communication.

The influence of metaphorical meaning is active even when we are not aware of it. The processes of metaphorization and symbolization have neither systemic nor typological boundaries. On the contrary, they permeate the sign network in its complexity where there exist metaphorical signifying paths which are already traced and which are so deeply rooted in the language and consciousness of utterers and interpreters that their meaning seems simple, fixed, definite, like "plain meaning." But there are also metaphorical signifying paths that are immediately recognizable as such owing to their inventiveness, creativity, and capacity for innovation. These are engendered by relating interpretants in the sign network that may even be distant from each other, thereby producing signifying processes which are completely new, unexpected, unpredictable, even surprising. Though we may choose programmatically between the "literal" and the "metaphorical," in reality this is no more than a pseudo-choice, one which harbours the danger of ensuing artificial exaggeration in one sense or in the other (Petrilli 2006a, 2012a: Ch. 7).

8.3 "Critique of imagery": Toward a "significal education"

Analogy and metaphor operate implicitly and unconsciously in everyday language as well as in scientifical-philosophical language. For this reason, Welby believes that the study of such meaning production devices must be systematically introduced into educational programmes, with continuous testing on a practical level, according to the criteria of effectiveness on interlocutors in communication. A "significal education," the acquisition of a "significal method," is required from the very first years of schooling, she writes to Charles K. Ogden in a letter dated 24 March 1911 (the main part of their correspondence is now available in Petrilli 2009a; see also Petrilli 1995b):

The work wanted must begin in the nursery and elementary school; the instinct of clarity in speech now burdened beneath a load of mere helpless convention perpetually defeating expression must be fostered and stimulated. When the generation now represented by my grandchildren marry their children must have their racial sense brought out and worked upon – with significal discrimination! While the elements of reading and writing are taught as now but not as obeying the same rigid (not logical) laws. Then the first school will appeal to this: their desire to express as to know and infer will always be stimulated and ordered: then gradually their anarchic or dogmatic tendencies will be raised into interpretive ones. I think it ought not to be difficult to awaken us. We are even now always being startled by what turns out to be the too-too of a tin-trumpet. But to be able to say what we ought to mean and to act upon our true conception of a subject – that is the aim. (Welby/Ogden, in Petrilli 2009a: 774)

To this end, both Welby and Vailati (who fully subscribed to the orientation of her studies) insisted on the need for a *critique of imagery* and for the creation of habits of analysis, classification, and verification of expressive devices in general, particularly when a question of verbal signs (the sign *par excellence*). Such habits, she argues, should be instilled from infancy. As a defence against linguistic anarchy, Vailati, too, underlined the need for critical reflection on language to begin in childhood. He advocated developing the habit of reflecting on "questioni di parole" or, as Welby says, "verbal questions," in their radical interconnection with the processes of argumentation and knowledge acquisition. Vailati says as much in a letter to Welby dated 12 July 1898:

I believe that the exposition and classification of verbal fallacies and, above all, their *caricatures* (in *jeux de mots*), to be one of most effectual pedagogic contrivances for creating the habit of perceiving the ambiguities of language. It is a remedy somewhat analogous to that resorted to by Lacedaemons, who, in order to keep alive in their sons the horror to intoxication, compelled them to assist to the *dégoûtant* deeds and sayings of the ebrious Ilots. (Vailati 1971: 142)

Vailati, like Welby, advocates the need for a "critique of language," for awareness of the complex nature of the meaning of words, the unconscious use of which may give rise to misunderstanding and linguistic traps. At the same time, he turns his attention, again like Welby, to the expressive potential and practical functioning of ordinary language. For Vailati, rather than focus on the construction of an artificial language in the effort to solve problems of ambiguity and misunderstanding, the task of language analysis and philosophical speculation is to enhance and renew common language, revitalising its connection with life in all its aspects and at all levels, from everyday ordinary language to the higher spheres of artistic, scientific and professional language.

Welby analyzes verbal expression not only in order to describe it, but to explain it, with the ultimate aim of transforming, regenerating and subjecting it to conscious and critical implementation in signifying practice. Given its natural inclination for investigation and enquiry, its curiosity and capacity for questioning, the child is the supreme critic and a model. Welby contrasts the provocation of questions to the monologizing constriction of the order of discourse, emphasiz-

ing the importance of confrontation and comparison among different points of view, the condition of dialogic interrelatedness.

Language and logic, linguistic signs and inferential processes are interconnected by relations of mutual interdependency, such that the bad use of language involves the bad use of logic. On promoting the need for "language study," Welby underlines the inevitable connection between language, thought, action and values. Faulty conceptualization, false problems – e.g. the fallacious contrast between "free will" and "determinism," "freedom" and "necessity" - are largely the result of language problems and bad linguistic usage.

Vailati (who was one of Welby's most devoted readers) shares the aims of her research, as he illustrates in a letter to her dated 19 March 1903. He lists three points on which he agrees strongly:

- 1. Your insisting on the need for a critique of imagery, for a testing of analogies and metaphors (especially when "unconsciously" or semiunconsciously" used, as it is always the case in the *current* and *vulgar* ones).
- 2. Your warning against the tendency of pedantry and school-learning to discourage the development of linguistic resources, by the inhibitions of those spontaneous variations that are the necessary condition of organic growth.
- Your valuation of the practical and speculative importance of raising language from the irrational and instinctive to the rational and volitional plane; in which it is considered as a means or contrivance for the performance of determined functions (representative, inferential, communicational, etc.) and for the attainment of given ends. (Vailati 1971: 144)

As Welby recognizes in a letter dated 27 February 1907 (in Vailati 1971), Vailati shared a common interest in the relation between language and thought, in problems specifically related to the human capacity for linguistic expressivity, meaning and argumentation. His article of 1905, "I tropi della logica," centres on the problem of the use of metaphors taken from the physical world, and is directly inspired by Welby's 1903 monograph, What Is Meaning? In "Alcune osservazioni" on the role of analogy and confrontation in the development of knowledge, first published in 1899 (now in Vailati 1987), Vailati deals with questions similar to those proposed by Welby in her 1896 essay, "Sense, Meaning and Interpretation." He theorizes the method of comparison and confrontation among different sign systems, the sciences that study them and their respective languages. Such a method is fundamental to highlight convergences and divergences among different disciplines, areas of knowledge and culture. In another essay of 1905 (now in Vailati 1987), "La ricerca dell'impossibile," Vailati compares the formulas of moral discourse with those of geometry and in an essay of 1908 (in Vailati 1987), "La grammatica dell'algebra," he compares verbal language and the language of algebra. The method developed by Vailati (1967) is comparable to Welby's interpretivetranslative method and fits in well with the project for significs. They both thematize the need to bring the unconscious use of logical-linguistic mechanisms to consciousness in the effort to overcome the inadequacies of our inferences and interpretive capacity. The "sensifying and signifying faculties" must be improved by bettering our understanding of the problems of meaning, as Welby often repeated.

8.4 "Universal language," "common speech" and "common sense"

Welby criticizes attempts at overcoming obstacles to mutual understanding by neutralizing linguistic diversity through recourse to a universal language. Whether this involves imposing the primacy of one natural language over another, or constructing an artificial language, this solution to the problems of language and communication is nothing less than delusory. She recognizes that the great variety of languages, dialects, jargons, slangs, etc. favours the development of our linguistic-cognitive resources. Examples are provided by popular culture and the popular instinct of the "man in the street," described as unconsciously philosophical and a model to apply in the study of language related issues. Welby underlines the "significal" import of popular idiom, especially as it finds expression in everyday language and in folklore: "... both slang and popular talk, if intelligently regarded and appraised, are reservoirs from which valuable new currents might be drawn into the main stream of language - rather armouries from which its existing powers could be continuously re-equipped and reinforced" (Welby 1985a [1911]: 38–39). Distinction and diversity among languages enhances signifying, interpretive, and communicative practice. In contrast, the imposition of an artificial universal language leads to levelling the multiplicity of our cultural, linguistic and psychological patrimony, of possible worldviews and logics. According to Welby, difference (linguistic and non-linguistic) is not the cause of division and silence, but, on the contrary, favours the possibility of interconnection and signifying continuity. Differences engender other differences as part of a detotalizing totality in continuous evolution (1983 [1903]: 212).

In Welby's terminology, "common meaning" is an expression that contains the idea of the universal validity and at once of the specificity of signifying processes. Similarly to Ferruccio Rossi-Landi (1961) and his concept of "common speech" (parlare comune), for Welby too, such expressions as "common language," "common speech" and "common meaning" are not connected to "ordinary language" or "everyday language" in the terms theorized by the English analytical philosophers. "Everyday language" is just one aspect of linguistic

expression. Considering the different languages that make a historico-natural language and the multiplicity of historico-natural languages over the globe, difference in linguistic expression overall is subtended by a universal patrimony specific to humanity. This is indicated with such expressions as "common language," "common speech" and "common sense." In Welby's theory of language and meaning, such expressions indicate common signifying material operative in the great multiplicity of languages and jargons forming a single natural language, as much as across the great variety of different languages and cultures populating the sign universe. Such material constitutes the "foundation of all sectorial differences of speech," of "mere technical or secondary meanings," as Welby says in a letter to Thomas H. Huxley dating back approximately to the years 1882–1885 (in Cust 1929: 102).

The expressions "common meaning," "common sense" and "common speech" denote a sort of a priori in a Kantian sense, a level of reference common to all languages and to all human beings; "common meaning" and "common speech" indicate a set of operations that constitute repeatable and constant material forming the conditions for human expressivity. To such common material may be traced analogical and homological similarities in human biological and social structures that interconnect different human communities beyond historico-cultural differences. This common patrimony of communicative techniques allows for translation from one universe of discourse to another, indeed is a condition for translational processes across different languages, whether internal or external. As Rossi-Landi argues, we must focus on underlying processes and identify the universal empirical procedures operated by speakers in all languages (when translating interlinguistically for example, but also when teaching, learning, or simply conversing in the same language) (Rossi-Landi 1961: 204ff.).

The expressions "common speech," "common language," "common meaning" and "common sense" do not neglect the great multiplicity of different languages forming the cultural patrimony of humanity; they do not eliminate plurilingualism and polylogism by tracing them back monologically to a mythical original language, an Ursprache, to the universal linguistic structures of some Logos, or to biological laws that govern and unify all human languages. To recognize commonality or an underlying unity does not imply reconducting difference to identity. On the contrary, Welby, as Rossi-Landi after her, recognized the plurilinguistic and pluridiscursive value of language and distanced herself from monologizing temptations. These are inherent, for example, in Noam Chomsky's linguistic theory, which fails to explain the communicative function of language or its social and intersubjective dimensions. The notion of common speech, as clarified by Rossi-Landi, does not contradict plurilingualism and plurivocality, i.e. the simultaneous presence of multiple languages and multiple voices (Rossi-Landi 1992a: 134–136). On the contrary, it alludes to the similarity in functions carried out by different languages which, in their diversity, satisfy similar needs of expression and communication. Therefore, common speech serves to explain difference, variability and multiplicity among languages in terms of the needs of different traditions of experience and expressivity, which develop different means, solutions, and resources to satisfy expressive and communicative demands common to all human societies.

Antonio Gramsci is another noteworthy figure who gave special attention to the question of what he too denominated "common sense." Most significantly, the syntagm "common sense" is present in the opening pages of his Quaderno 1 (Gramsci 1975a), included in the list of "main topics," dated 8 February 1929. Like Welby, Gramsci too has a dual attitude toward "common sense": he both criticizes the concept, but also recovers it and renews it (Sobrero 1976). He criticizes common sense when it implies imprecise and incoherent beliefs and outdated worldviews that have sedimented in languages and cultural systems. But there also exists a "broad region" of "common sense" (senso comune), of "good sense" (buon senso) which subtends our conception of life and morals and involves all social classes; "common sense" thus understood refers to the ideas, senses and values commonly accepted by all social strata, unwaringly and uncritically (Gramsci 1975a, Quaderno 1: 65, 75-76). This is a recurrent theme in Gramsci's 1949 monograph, Gli intellettuali e l'organizzazione della cultura (Gramsci 1971a). Such "philosophy without philosophers," what Gramsci also calls "low philosophy," an "inconsequent, incoherent, disruptive philosophy" (1975a, Quaderno 8: 173) is the form in which "high philosophy" – which responds to the interests of the ruling class - variously circulates among the masses (an important contribution on this point is Gramsci's monograph, Il materialismo storico e la filosofia di Benedetto Croce, first published in 1948, see Gramsci 1975b):

Every social stratum has its own "common sense" which is at the bottom of the most widespread conception of life and morals. Every philosophical trend leaves a sedimentation of "common sense": this is the document of its historical effectiveness. Common sense is not something rigid and static; rather, it changes continuously, enriched by new scientific notions and philosophical opinions which have entered into common usage.

"Common sense" is the folklore of "philosophy" and stands midway between "folklore" proper (that is, as it is understood) and the philosophy, the science, the economy of the scientists. "Common sense" creates the folklore of the future, that is, a more or less stiffened phase of a given time and place. (Gramsci 1975a, Q 1, 65: 76)

In order to create a new political and cultural hegemony, a task Gramsci assigns to the party ("The Modern Prince," *Note sul Machiavelli*, 1971), common sense among the masses must necessarily be replaced with an organic conception of

the world (cf. Boothman 2008). To this end, it is not only a question of demystifying backward beliefs upheld by common sense, but also of eventually identifying any spontaneous, progressive tendencies in it. Gramsci holds that in order to affect common sense it will be necessary to place oneself "in the sphere itself of common sense," "detaching oneself sufficiently to allow for a mocking smile, but not contempt or haughty superiority." Taken in toto common sense is not an "enemy to defeat"; instead, a "dialectical" relation – in my terminology, a "dialogical" relation – should be established with it (cf. Gramsci 1975a, Q 1: 65, 75–76).

Although Gramsci did not distinguish often between "common sense" and "good sense" (he recurrently says "common sense," that is, "good sense"), all the same he sometimes speaks of "good sense" in terms of protection against the excesses of inane intellectualism and also as the reasonable part of common sense. Gramsci observes that Manzoni, in his *Promessi Sposi* (Ch. XXXII), distinguishes between "common sense" and "good sense" à propos the plague (1630) and the plague-spreaders. As Gramsci observes:

Speaking about the fact that there were indeed people who did not believe in plaguespreaders, but that could not support their opinion against widespread popular opinion, Manzoni adds: "There must have been a secret outlet of the truth, a domestic confidence: good sense was there; but it remained hidden, for fear of common sense." (1975a, Q 10 II: 48)

To critique and surmount deep-rooted "common sense," exploiting its "good sense" as well, is the necessary condition for the propagation of a new, more unitary and coherent conception of the world, for new common sense among the masses (Gramsci 1988: 188). This involves organizing the system of superstitious and folkloristic philosophical conceptions typical of the masses into a new national popular philosophy, to the end of spreading a new culture, one that is organic and in keeping with the ideology of a new "social block," shared therefore by all strata of society. Common sense in Gramsci is closely connected with the problem of ideology.

Rossi-Landi refers to Gramsci in several passages throughout his writings. Particularly relevant to our present discourse is a passage from his 1978 monograph *Ideologia* (now 2005), in a chapter titled "Ideology and social practice." After dedicating the first three paragraphs to the introduction of ideology into the problematic of "social reproduction," to social reproduction as the arché or beginning of all things, and to the articulations of social reproduction, Rossi-Landi dedicates the fourth to the question of sign systems, ideologies and production of consensus, and he refers to Gramsci. He observes that Gramsci, even if in "presemiotic" terms, had already identified the role carried out by sign systems in the social reproduction system and, precisely, in the relation between co-called "structure" and "superstructure" (Rossi-Landi 2005 [1978]: 111). This paragraph concludes with the statement that in Gramsci's view, the most important goal for the "New Prince" (reference here is to the Machiavellian-Gramscian conception of the "Prince": the "New Prince" is the party) is *to reorganize verbal and nonverbal sign systems* for the sake of revolutionizing social teleology. Let me add that this means to reorganize "common sense," with its "common places" and its "good sense," *as a function of new social planning*. According to Rossi-Landi, Gramsci knew that to develop and impose a new ideology – and, consequently, to permeate the dominant mode of production with new ideological values, to permeate culture with new ideological values – was only possible through sign systems. These are described as the *mediating* level between the other two, that is, modes of production and ideological institutions.

8.5 Critical common sensism and pragmaticism

According to both Welby and Peirce, technical terminology, to be considered scientifically adequate, should begin with a critical reading of common experience, common sense, and common speech - understood here in the reductive sense of everyday language and meaning – given their pervasive and often unconscious presence in technical language itself; for example, in the expressions of temporospatial relations (see Peirce's letter to Welby dated 16 December 1904, in Hardwick 1977: 48). Any kind of research, including the philosophical, must elaborate a "technical nomenclature" whose every term has a single definite meaning that is universally accepted among the experts of the subject. According to Peirce's "ethics of terminology (CP 2.219–2.226), a scientifically valid nomenclature, which breaks with individual habits and preferences and satisfies the requisite of unanimity among specialists, must be supported by moral principles and inspire a sense of decency, of respect. The introduction of a new conception in philosophy calls for the invention of appropriate terms to express it. These should always be used by the scientific community according to their original meanings, whereas new technical terms that denote the same things and are considered in the same relations should not. Peirce expresses himself clearly on this point, as in his 1905 article "What Pragmatism Is" (CP 5.411-5.437; the first of three on pragmatism published in *The Monist*) and particularly in the paragraph "Philosophical nomenclature" (CP 5.413).

By comparison with the other sciences, philosophy is a rather peculiar case insofar as it presents the need for *popular words* in *popular senses*, not as part of its own terminological apparatus, but as its object of study. Philosophical language itself requires special terminology – think of that supplied by Aristotle, the scholastics, or Kant – which distances itself from the "common speech" of

everyday language and is distinct from it. "It is good economy for philosophy," as Peirce says.

to provide itself with a vocabulary so outlandish that loose thinkers shall not be tempted to borrow its words. [...] The first rule of good taste in writing is to use words whose meanings will not be misunderstood; and if a reader does not know the meaning of the words, it is infinitely better that he should know that he does not know it. This is particularly true in logic, which wholly consists, one might almost say, in exactitude of thought. (CP 2.223)

In Peirce's view, Kant, a "confused pragmaticist," made the mistake of not using the adjectives "objective" and "subjective" in a sufficiently specialized sense, thus causing them to lose their usefulness in philosophy altogether. On the basis of such premises, Peirce, in his paper on "The Ethics of Terminology," lists seven rules for the formation of desirable philosophical terminology and system of logical symbols (CP 2.223-226).

According to Peirce's critical common-sensism, 2 no person is endowed with an infallible introspective power, not even when it comes to the secrets of one's own heart, no flawless means of knowing just what one believes or doubts. But he also maintains that there exist indubitable beliefs that are more or less constant. Such beliefs partake of the nature of instincts understood in a broad sense. They concern matters that come within the reach of primitive mankind and are very vague (e.g. fire burns). A philosopher should regard an important proposition as indubitable only after having systematically endeavoured to attain doubts about it, remembering that genuine doubt does not ensue from a mere effort of will, but must be the expression of experience. An indubitable proposition can be false, but insofar as we do not doubt a proposition, we must regard it as perfectly true, perfectly certain. While recognizing that there exist propositions that are each individually perfectly certain, we must also admit the possibility that one or more of them may be false (CP 5.498). In any case, doubt as theorized by the critical common-sensist is not doubt as envisaged by the Oxonian intellectual, i.e. doubt for its own sake, for the sheer pleasure of argumentation. The clever pragmaticist does not love the illusory power of brute force, but rather the creative power of reasonableness, which subdues all other forms of power and rules over them in the name of knowledge and love. As a supporter of reasonableness, the pragmaticist invests doubt, understood as the power of critical interrogation, though not amiable, with high moral value.

Aspects of critical common sensism are relevant to the pragmaticist insofar as they evidence the conditional character of belief, "that the substance of what he thinks lies in a conditional resolve," and the need for the quest for truth as the only way to satisfy the wishes of the heart (CP 5.499). The pragmaticist is open-minded and free of prejudice and, as such, is the most open to conviction and the most careful to distinguish beween truth and falsity, probability and improbability. The pragmaticist enquires into the relationship between inferences and the facts from which they derive and establishes a relation of affinity between thought and action in general. Beginning with the assumption that action in general is guided mostly by instinct, pragmaticism establishes that belief, too, is a question of instinct and desire (*CP* 5.499). And while it is true that, with the evolution of the species, instincts are constrained by the various degrees of self-control, they are not dominated completely. Therefore, given the familiarity and quasi-invariability of irresistable and instinctual desire, the inevitable interconnection between pragmaticism and critical common sensism should not be doubted.

8.6 Vagueness and generality

The only important alternative to pragmaticism, at least the version criticized by Peirce, is traditional logic. The latter contends that "thought has no meaning except itself" and that "substance is a category," "an irregular pluralism of functions" (CP 5.500). Logicians have elaborated a great many different categories, but they all agree that those concepts which are categories "are all simple," and that "they are the only simple concepts." The fact that something may be true of one category that is not true of another does not imply that these differences constitute the identifiable specificity of that concept: "Each is other than each of the rest but this difference is unspecifiable and thus indefinite. At the same time there is nothing indefinite in the concepts themselves" (*CP* 5.501). Peirce proceeds to establish a relation of affinity between differences connected to concepts and different qualities of feeling. The differences are perceived, just as we perceive different fragrances of different flowers. But the different qualities which may be predicated of each fragrance do not at all constitute the fragrance; they are not part of the fragrances themselves. As to their relations, nothing can be predicated except that each one is other than every other. Therefore, those relations are indefinite; but there is no indefiniteness about the feelings involved. On Peirce's account, concepts as analyzed by the logicians are no more than another kind of quality of feeling. Though the logician would never admit this on the grounds that concepts are general while feelings are not, s/he cannot demonstrate this position. Instead, Peirce maintains the following:

[Concepts and feelings] are different no doubt; but the difference is altogether indefinite. It is precisely like the difference between smells and colours. It must be so, because at the very outset they defined concepts as qualities of feeling, not in these very words of course, but in the very meaning of these words when they said that concepts possess, as immediate objects, all the characters that they possess at all, each in itself, regardless of anything else. (*CP* 5.501)

Proponents of individualism would agree that reality and existence are coextensive: in other words, that reality and existence are either alike true or alike false with regard to every subject; they have the same meaning, or *Inhalt*. Many logicians would refuse such a position as a reductio ad absurdum of individualism, the two meanings to their mind clearly not being the same: "reality means a certain kind of non-dependence upon thought, and so is a cognitionary character, while existence means reaction with the environment, and so is a dynamic character" (CP 5.503). A misunderstanding characteristic of individualists is their belief that all other human beings are individualists as well, including the scholastic realists whom they thought believed that "universals exist." In reality, many great thinkers of the past did not believe that "generals" exist, but regarded them as "modes of determination of individuals" and such modes were recognized as being of the nature of thought. According to Peirce, the metaphysical side of pragmaticism attempts to solve the problem by accepting the existence of "real generals" and by seeking to answer the question: "In what way can a general be unaffected by any thought about it?" (CP 5. 503).

Another misapprehension clarified by Peirce is this: for the pragmaticist the import, or adequate, ultimate interpretant of a concept is contained in a "habit of conduct" or "general moral determination of whatever procedure there may come to be" (CP 5.504). The import of any word (except perhaps a pronoun) is not limited to what is in the utterer's mind actualiter, but, on the contrary, is what is in the mind perhaps not even habitualiter, but simply virtualiter. Every animal has habits and thus has innate ones. Insofar as an animal has cognitive powers, it must also have "in posse innate cognitive habits," this being Peirce's interpretation of innate ideas. Pragmaticists share these positions with a critical philosophy of common sense and they should not be considered as individualists, neither of the metaphysical nor of the epistemological type.

In line with critical common sense, Peirce maintains that all beliefs are *vague*. He even goes so far as to claim that the more they are indubitable, the vaguer they are. He goes on to discuss the misunderstood importance of *vagueness*, even in mathematical thought. Vagueness is no less than constitutive of belief, inherent to it and to the propositions that express it. It is the "antithetical analogue of generality":

A sign is objectively general, in so far as, leaving its effective interpretation indeterminate, it surrenders to the interpreter the right of completing the determination for himself. "Man is mortal." "What man?" "Any man you like." A sign is objectively vague, in so far as, leaving its interpretation more or less indeterminate, it reserves for some other possible sign or experience the function of completing the determination. "This month," says the almanacoracle, "a great event is to happen." "What event?" "Oh, we shall see. The almanac doesn't tell that." The general might be defined as that to which the principle of excluded middle does not apply. A triangle in general is not isosceles nor equilateral; nor is a triangle in general scalene. The *vague might be defined as that to which the principle of contradiction does not apply.* For it is false neither that an animal (in a vague sense) is male, nor that an animal is female. (*CP* 5.505)

Generality and vagueness do not coincide. Indeed, they oppose each other, though on a formal level they are seen to be on a par. A sign cannot be at once vague and general in the same respect, as Peirce says, "since insofar as the right of determination is not distinctly extended to the interpreter it remains the right of the utterer" (*CP* 5.506). Furthermore, only if a sign is not indeterminate can it avoid being vague or general; but "no sign can ever be absolutely and completely indeterminate" (*CP* 5.506).

In the light of his logic of relations, no proposition has a single subject, but rather has different levels of reference. On this aspect, Peirce refers to an article by himself published in *The Open Court* in 1892, "The Reader is Introduced to Relatives" (*CP* 3.415–3.424). Even if only implicitly, all propositions necessarily refer to the truth, "the universe of all universes." Therefore, they refer to the same determinately singular subject, understood both by the utterer and the interpreter, and assumed by all to be real. At a more restricted immediate level, all propositions refer to a non general subject.

In his paper "Consequences of critical common-sensism" (*CP* 5.502–537), Peirce reflects further on the role of vagueness. Communication among interlocutors is never completely definite, never completely non vague, for where the possibility of variation exists absolute precision is impossible. Beyond expressing his hope that qualities of feeling among different persons may one day be compared by physiologists and thereby no longer represent a source of *misunderstanding*, Peirce identifies a cause of misunderstanding in the intellectual purport of communication and in the diversity of experience among different persons. Communication is necessarily vague "because no man's interpretation of words is based on exactly the same experience as any other man's" (*CP* 5.506). Therefore, just as when we look closely at the detail of a painting we lose sight of its overall sense, the more we attempt to be precise, the more unattainable precision seems, even when we are dealing with intellectual conceptions.

Vagueness is the common matter that subtends communication and constitutes a condition of possibility of communication itself; it is an *a priori* condition for the formulation of the propositions to be communicated. Such vagueness is strictly dependent upon reference to the different experiences of each one of us, from organic-instinctual life to intellectual life. Thus understood, more than postulating vagueness as the cause of *misunderstanding*, Peirce, like Welby, recognizes it as the condition of possibility of communication, thanks to which it is

possible to formulate or actualize the propositions that form our communicative exchanges. Moreover, communication is achieved in terms of dialogue, whether interior dialogue or dialogue with other interlocutors external to oneself. Variability in the experience of the individual implies variability at the level of explicit interpretation and also at the level of implicit understanding. Therefore, dialogue and understanding, as negotiated in communication, are strictly dependent upon vagueness, variability, the implicit and the unsaid. Understanding is possible thanks to the understood, and is always vague. The risk is that the more we attempt to be precise, the less we understand each other. To explicate the indeterminate and render it comprehensible means to undertake new interpretive/translative courses, new signifying paths, and thus to introduce new implications, new variables, and hence a new dose of vagueness. Ultimately, communication is dialogic investigation and approximation by interlocutors with respect to the referent of discourse – both the general referent, truth, and the immediate, special referent. Speaking, saying, explication, determination, understanding all these stand firmly rooted in the understood, the unspoken, that is to say, in implied meaning (Petrilli 1998a: 95–105, 2013: 186–188).

Expression and communication are achieved thanks to the relation among signs, or, better, among interpretants. And given the close association of interpretation to translation, to the point that under certain aspects these terms overlap and may even be considered synonymous, the relation among interpretants is a translational relation. Meaning is achieved through processes of transferral and transvaluation in the interaction, to varying degrees of dialogic responsiveness, among signs.

In this chapter we have aimed to evidence the importance of indeterminacy, ambiguity and vagueness as a necessary condition for continuity in interpretive/ translative processes in human semiosis.

Chapter 9 The live word, value and otherness

As opposed to the official feast, one might say that carnival celebrated temporary liberation from the prevailing truth and from the established order; it marked the suspension of all hierarchical rank, privileges, norms and prohibitions. Carnival was the true feast of time, the feast of becoming, change and renewal. It was hostile to all that was immortalized and completed.

(M. M. Bakhtin, "Introduction," in Rabelais and His World, 1984 [1965])

9.1 A case of chronotopic otherness

Two figures who did not know of each other, who had never been in contact with each other, direct or indirect, who had completely different private and public life experiences and came from different socio-political and cultural backgrounds, in other words, who lived in two completely different chronotopic scenarios can nonetheless be associated to each other, thereby providing a fruitful example of intercultural translation. Ideas are developed and verified by translating them into the language of other ideas, in relations of substantial dialogism and reciprocal enhancement. And such processes, as in this case, can occur independently from immediate real-life relations among authors. Victoria Lady Welby (who lived from 1837 to 1911) belonged to the highest levels of English nobility. The life she led after her marriage was relatively uneventful by her own choice and quietly dedicated to her work which she largely conducted in the peace of her domestic surroundings and through her network of epistolary relations. Welby corresponded with many great personalities of the time including Charles S. Peirce, Bertrand Russell, Charles K. Ogden and Giovanni Vailati, elaborating her ideas in dialogic exchange with them and many others as her relations expanded aross national, linguistic and cultural frontiers. Mikhail M. Bakhtin (who lived from 1895 to 1975) was a descendant of the Russian untitled nobility, though it was as a member of the Russian intelligentsia that he survived the Stalin purges, arrest and political exile. Like Welby, Bakhtin was not affiliated on a permanent basis to a public institution or university, though he too carried out his research in the spirit of dialogic exchange of ideas with members of the now renowned "Bakhtin Circle" and beyond – unlike Welby he was rather adverse to letter writing. The so-called Bakhtin Circle included such figures as Pavel N. Medvedev and Valentin N. Voloshinov, both of whom disappeared at the time of the Stalin purges – in 1936 Voloshinov died from tuberculosis in Leningrad and two years later, in 1938, again in Leningrad, Medevedev was arrested and shot by a firing squad.

Unlike Welby, Bakhtin was rarely able to publish his works freely and sometimes presented them under the name of friends (Medvedev and Voloshinov included) and many years after they had been conceived - such discrepancies slowed down his influence and fortune during his own lifetime. Of course, Bakhtin's nationality by no means circumscribed his intellectual concerns: he looked with great interest toward Western thought, philosophy and literature, translating ideas and terminology into the Russian language. The result is interesting, as Bakhtin produced a whole novel conceptual apparatus articulated with special expressions such as "extralocality," "unfinalizability," "dialogism," "polyphony," "heteroglossia," "responsiveness," "great time," and so forth. He published a monograph on Dostoevsky in 1929 (revised ed. 1963) and another on Rabelais, considered its Western counterpart, in 1965, to name just two works specifically dedicated to literary discourse. This represents but one of the multiple faces of his research and interdisciplinary vocation (Bakhtin 1975, 1979, 1990).

In spite of basic differences the parallels between Welby and Bakhtin are such that we can read them together and develop the ideas of one in the light of the other. From this point of view, it is not incidental that two monographs, one on Bakhtin (Clark and Holquist 1984; Holquist 1990) and the other on Welby (Schmitz 1985), should each contain a section concerning their religious formation (Petrilli 2009a: 1.8, 2.4). But more than reconstruct the thought system of two authors who, read together, shed light on each other, as an exercise in the history of ideas, this chapter proposes to look beyond and show how fundamental categories in sign, language and communication studies today can be renewed and developed by associating Bakhtin's "philosophy of language" or "metalinguistics" and Welby's "significs." Ultimately, the aim is to evidence how such renewal can be implemented for the sake of humanizing theory and practice with special reference to signifying and interpretive processes. Both authors have contributed in important ways to a better understanding of problems relating to communication, expression, interpretation, translation and to a use of language that is at once critical and creative.

9.2 Philosophy of language as philosophy of the live word

Bakhtin's philosophy is a philosophy of the word. But reference here is not to the word viewed in the framework of the system of language, the word understood as the dead cell of language, associated to the sentence. Instead, Bakhtin thematizes the word in relation to the utterance and the text. As such the word is turned to the other and calls for listening. This is the word of live discourse. Thus understood the word is always accentuated, intonated, the place of signification

inseparable from significance, where meaning and value are recognized in their interconnectivity. In the second 1963 edition of his monograph on *Problems of* Dostoevsky's Poetics (1st ed. 1929), Bakhtin placed the prefix "meta" in front of "linguistics" to describe his special approach to sign and language; in truth, this prefix can be appropriately extended to all other fields and disciplines that enter his research: metalinguistics is understood as surpassing linguistics, not beyond it, but before it. As thematized by Bakhtin, metalinguistics investigates the live word. The expression "philosophy of language" was implemented by Voloshinov in his 1929 monograph, Marxism and the Philosophy of Language, as well as by Bakhtin in a later essay of 1959–1961, "The Problem of the Text in Linguistics, Philology and the Human Sciences: An Experiment in Philosophical Analysis." Bakhtin critiques the language sciences when they reduce the concepts of sign, utterance, text, discourse genre, linguistic creativity to the logic of identity. Instead, he commits to redefining these concepts in terms of the logic of otherness aided by the vision of artistic discourse. He describes his approach as properly philosophical to the extent that it critically investigates the conditions of possibility of language and expression (Petrilli and Ponzio 2000a, 2003b, 2005b).

So studies on the metalinguistic and intersubjective dimensions of language have an important reference point in "philosophy of language" as theorized by Bakhtin and his collaborators. Here, the expression "philosophy of language" does not mean to reduce philosophical problems to problems of (verbal) language. Bakhtin transcends the limits of traditional approaches centred on centripetal forces operative in the (verbal and nonverbal) sign network to extend his gaze well beyond the monological and fixed units of language. That his "philosophy of language" or "metalinguistics" should centre on the live word is based on his appreciation of the human capacity for otherness, dialogism and extralocality. In this framework Bakhtin elaborates a theory of knowledge, praxis and ideology that is critical and dialogical. Through what may be described as his metalinguistic and detotalized method, Bakhtin investigates signs and values (and that values are necessarily expressed through signs leads to his interest in the general science of signs or semiotics) with a special focus on the dialectical-dialogical processes of their production and circulation, by contrast to the tendency to reify them (Petrilli 2012c: 29–42). His critique of language and communication is neither exclusively concerned with verbal expression, nor limited to confrontation with linguistics and its different approaches. With Voloshinov and Medvedey, Bakhtin formulated a critique of "abstract objectivism" and "individualistic subjectivism" in his early writings. This was an important starting point for the whole course of his subsequent research. Representative publications produced by the Bakhtin Circle include, Freudianism. A Critical Sketch, published in 1927, signed by Voloshinov, The Formal Method in Literary Scholarship, of 1928, signed by Medvedev, and Marxism

and the Philosophy of Language, 1929, again by Voloshinov (on the question of the authorship of these works, cf. Ch. 1, n. 2). As part of the same intellectual humus Bakhtin produced his own monograph on Dostoevsky that same year. The citation below is from the second 1963 edition and evidences his "metalinguistic," or if we prefer, "metasemiotical" vocation from the initial phases of his studies:

... linguistics studies "language" itself and the logic specific to it in its capacity as a common ground, as that which makes possible dialogical interaction; consequently, linguistics distances itself from the actual dialogical relationships themselves. These relationships lie in the realm of discourse, for discourse is by its very nature dialogical; they must therefore be studied by metalinguistics, which exceeds the limits of linguistics and has its own independent subject matter and tasks.

Dialogical relationships are reducible neither to logical relationships nor to relationships oriented semantically toward their referential object, relationships in and of themselves devoid of any dialogical element. They must clothe themselves in discourse, become utterances, become the positions of various subjects expressed in discourse, in order that dialogical relationships might arise among them. (Bakhtin 1984a: 183)

That Bakhtin gave primary importance to the dynamical and creative forces of real linguistic life, led him to conduct his linguistic analysis of the utterance in the broad context of its relations with the human sciences, on the interface of these interdisciplinary relations. As he explains in his 1959–1961 essay "The Problem of the Text...," he qualified his analysis as "philosophical" and chose this denomination mainly because of what it is not: "it is not a linguistic, philological, literary, or any other special kind of analysis (study). The advantages are these: our study will move in the liminal spheres, that is, on the borders of all the disciplines just nominated; at their junctures and points of intersection" (Bakhtin 1986 [1959–1961]: 103). The problem of value is a constant concern throughout the whole course of Bakhtin's writings, from the early 1920s to the 1970s. His perspective is interdisciplinary and has a special focus on the problem of sense or value for the human person. This led him to deal with value beyond the limits of a specific field or human science (linguistics, theory of art and literature, etc.). By contrast to linguistics of Saussurean derivation, Russian Formalism and Jurij Lotman's cultural semiotics (1990), Bakhtin maintained that value could not be explained exclusively in terms of relations with a closed system such as a linguistic code, langue, so-called "poetic language," or a general cultural system. At the same time, he also recognized the importance of the problem of specificity or the problem of value specifically in relation to verbal signs, literature and cultural texts. Rather than limit his research on values to the boundaries of a single human science, his gaze translated across borders and barriers as he searched for the unitary sense that precedes and subtends division among the sciences. His perspective is radically dialogical, therefore interlingual, intertextual and intercultural.

9.3 The problem of interpretation, the linguistic conscience and significance

Welby develops her theory of sign and meaning denominated "significs" (cf. Chs. 7 and 8; Nuessel 2011) from an initial concern with religious, theological and exegetical issues. Her early studies concentrate on the textual interpretation of the Bible as the specific object of research and find their most complete published expression in her book of 1881, Links and Clues. In this early volume, issues are identified that were to become the central concern and specific object of her more mature writings. For example, in a section on "The Holy Scriptures," she delineated four principles of textual interpretation, anticipating what was to become a life-long research topic. Concerned with the problem of developing an adequate "linguistic conscience," Welby already in her early writings began to formulate her critique of the concept of "plain, common-sense meaning" or "plain and obvious meaning" and of the related belief that a text can only lend itself to a single, absolute and final reading, valid for all times. Like Bakhtin she thematized the pliable nature of meaning and the multiplicity of different interpretive itineraries that can arise from a single text. Welby too, like Bakhtin, worked on the live word. Consequently, she too recognized such qualities as ambiguity and polysemy as essential characterisitics of the word while at once advocating the need to test different interpretive possibilities, "alternative meaning, choice of readings, progress in discernment," and to guard against imposing one's own interpretation on a text at the cost of mystifying, monologizing and misinterpreting it. In a section entitled "The living word," in which she refers to the interpretation of parables, Welby claims that "we ever tend to interpret them by what our natural hearts... would mean if we had written them" (now in Petrilli 2009a: 90-91). These words are echoed in her 1893 essay "Meaning and Metaphor" (now in Petrilli 2009a: 421-430), where she develops her critique of language and warns against the tendency to homologate meaning, to make the author mean exactly what the reader means, thereby monologizing the text, as Bakhtin would say. Critical awareness means to escape linguistic traps and fossilization as represented by dogma and absolute truth. Ultimately, such traps are set by the logic of identity, that is, closed identity. Given that the categories of human experience are rooted in verbal expression, a rereading of the categories of religious discourse, as much as of other disciplines with a common concern in the sense and value of life, can only benefit from a general theory of sign and language. Both Welby and Bakhtin orient their research in this direction.

Keeping account of semantic plurivocality, changeability and ambiguity as positive aspects of our signifying and expressive potential, Welby addressed the need to develop a more acute linguistic conscience in the formulation of truths.

The validity of a truth is given in the capacity for confrontation with other truths, in the capacity for translation in the full range of this term, and eventual transformation. Given their relation to words and contrary to dogmatic temptations, truths require to be constantly reviewed, updated and innovated to maintain their status as truth. In a section in Links and Clues entitled "Words," Welby suggests that we cling to "each fruitful word," but never at the expense of the "precious truth they once conveyed" (Petrilli 2009a: 94). Welby's guest for truth, like Bakhtin's, unfolds in the context of a plurivocal and harmonious totality as it emerges from the relation between different voices and points of view. She suggests that we "survey the same expanse of truth from as many 'points' as possible" (Petrilli 2009a: 95), attributing a good part of the problems relating to exegesis, dogma and orthodoxy to the lack of awareness of the ambiguous and polysemic nature of words and their consequent misuse. So what in her more mature writings she thematizes as the "plasticity" of language – meaning its semantic pliability, changeability and adaptability to ever new contexts and communicative situations – is already outlined in her book of 1881.

Moreover, Welby stressed the importance of giving the sign its true place and value in the scale of realities, being a quest which unites her interest in religious discourse to all other aspects of socio-cultural activity. As she maintains in her 1890 essay "Truthfulness in Science and Religion" (now in Petrilli 2009a: 197–208), truth in the religious sphere can only be reached by keeping account of progress in all other spheres of knowledge and experience. Different spheres of expression are described as converging in the need to interrogate a common special interest from their own peculiar perspective – the question of ultimate value or significance. In Welby scholar H. Walter Schmitz's account: "She advocates that central religious ideas be given a new meaning, which is in keeping with science, in order to work out in this way a 'religion of ethics' (1890: 2194)" (Schmitz 1985: xxxiv). Bakhtin cultivated a similar view. Religious concerns were of central importance for him as well. He was brought up in the Russian Orthodox tradition and on Holquist's account (1984: 120-145), remained a believer all his life, though not in a conventional sense. Like Welby, he believed that religion should not be considered separately from other spheres of experience and socio-cultural investigation, but, on the contrary, should draw on these and update itself in light of scientific progress.

But irrespective of their common interest in religious discourse and its centrality in the architecture of their respective thought systems, interesting to underline from the present viewpoint is that both Welby and Bakhtin connect religious discourse to their studies on sign, language and meaning. Both translate and reconsider strictly religious concerns in the framework of an ethics of critical awareness that revolves around such values as those so far described – semantic flexibility, ambiguity and pluridiscursivity. As Welby says in a letter to her daughter and editor, Nina Cust, significs "must react upon all religion and theology, on practical as well as moral life, setting them free from the distorting pressure which deforms and sterilizes" (Welby to N. Cust, 1903–1905, now in Petrilli 2009a: 383).

Welby and Bakhtin researched and published on a vast range of topics, including scientific issues, particularly in the field of biology. Religion was considered in relation to philosophy and the sciences and thematized as a system of ideas interacting dialogically with other systems of ideas in a continuously changing world. Inevitably, such an approach was intolerant of ideological monism and led both Bakhtin and Welby to eschew an attitude of unquestioning acceptance with respect to dogma and received truths. Both encouraged critique of the already given and official world, the need to develop a greater critical attitude toward set ideas and the language used to express them. They both elaborated a view of the world more sensitive to interconnectivity among differences, continuity in translation/transformation processes and the dialogic and polyphonic potential of signs, abundantly allowing for coexistence among different points of view. For Bakhtin, as Holquist maintains, "all that is living is alive precisely because of a noncorrespondence with others. Cacophonic difference is what he valued most, not the endless silence of a homogenizing harmony" (1984: 136).

Significs turns its attention to all spheres of life and knowledge and has a special focus on the meaning value of "significance." The problem of meaning becomes that of grasping the "true value" that the sign has for each one of us within and beyond the limited sphere of human intention. Hence significs recapitulates the view of the man in the street (cf. 1.4); it aims to educate the individual speaker to ask such questions as "What is the sense of...?," "What do we mean by...?," "What is the significance of...?," each of which correspond respectively to the three levels of signification described by Welby: sense, meaning and significance: "As the word implies, 'Significs' sums up what for the 'man in the street' signifies; whatever does not signify, he will tell you, is nothing to him" (Welby 1983 [1903]: 89; Petrilli 2009a: Ch. 3). From this point of view, significs not only includes such disciplines as semiotics and semantics, but surpasses them when they tend to be reductively descriptive in the direction of the relation of signs to values. In her writings on pedagogical issues, Welby exhorts teachers to educate the single individual from childhood to reflect critically on the ultimate value of experience through reflection on the ultimate value of the verbal sign. As emerges from the question she encourages the speaker to ask at all times: "What does it signify?," she evidences the ethical dimension of the sign more than its actual "physiognomy." The ultimate value of the verbal sign is neither given in its exchange value, nor even in use value, in intentional communication, but rather in what Welby denominates as "significance" which more or less corresponds to what Bakhtin and Voloshinov, as we will see below, call "theme" (Voloshinov 1973 [1929]: 99–106). All this involves recognizing the true value and significance of ambiguity. Critical awareness is associated with development of the linguistic conscience and awareness of the essential ambiguity, plasticity, plurivocality, pluridiscursivity and alterity of the word.

Such signifying values find maximum expression in aesthetic discourse. Bakhtin in particular gives special attention to the language of literature. Thanks to its capacity for distancing and indirect discourse, literary language provides the condition for development of the metalinguistic capacity and for critique with respect to the order of discourse. Like Bakhtin, Welby contrasted the order of discourse and its monologic constrictions to the provocation of questions, criticism, the dialogic plurality of different voices and viewpoints, the capacity for creativity, invention and innovation, and did so with abundant examples from literary writing. She too appreciated the signifying potential of literary language and even formulated her own ideas through literary genres, making use of irony, parody and parables, in addition to the scientific genres. Apart from a substantial corpus of published materials in the form of aphorisms, short stories and dialogues collected, for example, in a book of 1897, Grains of Sense (a selection of passages is available in Petrilli 2009a: 98–111), a significant corpus of literary writings by Welby is available in the York University Archives (Toronto, Canada), yet to be published, which include philosophical and scientific reflections in verse (see "Poems of Victoria Welby: Thoughts in Rhythm," Welby Special Collection, Box 37, file 10).

9.4 The sign in sociality, the human psyche and language

The life of language evolves in the tension between the centripetal forces and centrifugal forces acting within it. But contrary to what studies in linguistics and philosophy of language had so far postulated at the time Bakhtin was writing, language is not caught up and artificially stabilized between two poles, namely the system of unitary language, on the one hand, and individual speaking, on the other. The speaker's relation to language is not an unmediated relation between an individual and a monologic and unitary expression. The centripetal forces of the life of language are embodied in such concepts as "unitary language," the "system of linguistic norms," and "definition," or in verbal-ideological terms "absolute truth," "official literary language," and so forth. But centripetal forces also operate in the context of live communication. Though characteristically dialogized and heteroglot, plurilinguistic and polylogic, centrifugal and decentralized, communication also calls for interpretation in terms of identification – whether a question of phonematic, graphemic, semantic, or syntactic value, etc. – as the condition itself for interpretation that is responsive, creative and critical.

At any given instance, language is stratified not only in terms of linguistic dialects in the strict sense, but also of different socio-ideological and cultural languages within the same historico-natural language. A theory of language must account for linguistic multiplicity and diversity. The condition of internal plurilingualism or heteroglossia is a distinctive feature of language. Consequently, verbalideological life evolves in the dynamics between the centripetal and centrifugal forces in language and finds expression in the concrete utterance of the speaking subject. In Bakhtin's words:

Every concrete utterance of a speaking subject serves as a point where centrifugal as well as centripetal forces are brought to bear. The process of centralization and decentralization, of unification and of disunification, intersect in the utterance; the utterance not only answers the requirements of its own language as an individualized embodiment of a speech act, but it answers the requirements of heteroglossia as well; it is in fact an active participant in such speech diversity. (Bakhtin 1981 [1975]: 272)

In Marxism and the Philosophy of Language, Voloshinov (cf. Ch. 1, n. 2) observes that works of philosophy of language which address language in organic fashion and with any sort of precision were still lacking - he refers to his own contribution as no more than a possible beginning of what he envisaged as a fully-fledged science of language. Bakhtin too, like Welby before him, believed that concrete problems relative to language and sign in general were still calling for adequate treatment. Their critique of linguistic-philosophical orientations that expect to solve problems of language in terms of monologism, univocality and the one-toone correspondence between sign and meaning is connected to thematization of the specificity of language in terms of its capacity for semantic ambiguity, plasticity, heteroglossia. A major issue is that the verbal sign should not be reduced to signality, to a one-to-one correspondence, established on the basis of a fixed code, between *signifiant* and *signifié*. In Welby's terminology, signifying processes should not be reduced to what she calls "plain meaning"; in our terminology they should not be reduced to the relation of identification between interpreted sign and interpretant sign, to the "identification interpretant" (Petrilli 2012a: 70-71). In the case of Bakhtin and Voloshinov, this meant to take a critical stand toward official linguistics and behaviourism; more precisely, toward dominant interpretations of Saussurean linguistics as formulated in Cours de linguistique générale (1916), which oriented general linguistic theory at the time, and toward the behaviourist conception of communication exemplified by J. B. Watson, Franz Boas and Leonard Bloomfield. Marxism and the Philosophy of Language is emblematic of this standpoint (see also Bakhtin 1959-1961, in 1986: 105, 107, 117, 119); in

Welby's case it meant surpassing semantics as it had been conceived by Michel Bréal, as she states explicitly in her 1896 essay, "Sense, Meaning and Interpretation" (pp. 200–201, now in Petrilli 2009a; 285). Both Bakhtin and Welby express their dissatisfaction with a purely linguistic approach to semantics, one that elaborates abstract analyses with exclusive reference to the system of verbal expression. This critical orientation led Bakhtin to his conception of "metalinguistics" and Welby to her "significs."

For both Bakhtin and Welby, the specific nature of all aspects of human culture is linguistic-ideological or in Welby's terminology, linguistic-psychological. Language is the material of the mental-ideological, which they highlight under different aspects. Welby investigates the mental processes of the human psyche in terms of sign interpretation: mental-psychological life evolves with the conferral of meaning to the sign. The feeling of interest for something prompts the interpreter into attempting interpretations of that something in the search for the particular significance it may bear for that interpreter. The acquisition of experience had been studied in psychology under such headings as attention, perception, memory and judgment, but had not been specifically analyzed from the viewpoint of meaning and the translative energy of the interpretive conscious (Petrilli 2009a [1896]: 439–441). Instead, this was the approach advocated by Welby with her theory of meaning and interpretation. For Welby a theory of the conscious was to be grounded in a theory of meaning:

Sense in the meaning sense has never yet been taken as a centre to work out from: attention, perception, memory, judgment, &c. &c. have never been cross-examined from the direction of their common relation to a "meaning" which has to be made out, a "sense" which has to be mastered, a "significance" which has to be felt, understood and acted upon. Before we ask, what is real? we not only need to ask the "meaning" of the "sense of reality" but the meaning of the sense of "sense"; the sense, intent, import, purport, of the perceptions which make up or bring us experience. (Welby 1896, now in Petrilli 2009a: 441)

Thought processes and language are not two separate entities, but rather partake in common interpretive-translative processes. In Welby's words, "thought is not merely 'clothed' in language," but rather it develops in language (in Petrilli 2009a [1896]: 443). Hence problems connected with human psychic life are best dealt with through a sign-interpretation approach.

The material of the human psyche is linguistic-cultural-ideological material, sign material. Consequently, as Bakhtin and Voloshinov aver, psychology must be founded in verbal-ideological theory (Voloshinov 1987 [1927]). The problem of the relation between the individual psyche and cultural-ideological expression at large is also the problem of distinguishing between the notions of "individual" and "social," "inner" and "outer" as part of the same semiosic continuum. Beyond qualification as a biological entity, the single individual is a social product. The content of the human individual psyche is social just as language and all other human cultural expressions are social. Voloshinov identifies the specificity of the individual psyche in the unity of the biological organism and the complex of socioeconomic conditions in which the individual subsists and develops as a unique individual (Voloshinov 1987 [1927]: 23-26). According to this description, an internal dimension of the sign and the self can be distinguished from the external, but only by way of abstraction. As much as the inner sign is predominantly biologicalbiographical, it must also refer to outer linguistic-ideological reality, social reality, for its specific determination in relation to the single individual. The inner sign and the outer sign are related dialectically, or, better, dialogically: they subsist together, continuously interacting in the objective processes of socio-historical relations. Thought processes are constituted of linguistic-socio-ideological signs modelled in specific historico-economic and cultural systems. The individual consciousness is fundamentally social consciousness developed and organized in the context of specific social relations which, in turn, it contains.

The relation between language, thought processes and external reality is a sign-mediated relation both when a matter of the individual and of the collectivity. We may claim that there is no difference in principle between the "unconscious," "conscious" and "social ideology" as they are all made of the same material: linguistico-ideological material, historico-social material. The contents of the individual psyche, the unconscious and the conscious, and the contents of culture, social ideology, official, institutionalized ideology all belong to the same generative process and proceed from a common source, what we can identify as linguistic-interpretive work. In other words, the structures of the production of the individual conscious and the structures of complex socio-ideological forms are fundamentally the same. The different levels of consciousness and ideology correspond to different levels in linguistic elaboration and sign interpretation generally.

Though her interest in the human psyche initially arose from her specific focus on the misuse of metaphors and analogies, of figurative language, Welby's position can be associated with that of Bakhtin and his collaborators, while allowing at once for inevitable differences in terminology. Both Welby and Bakhtin maintain that studies in psychology should be grounded in language and sign theory. In a pamphlet entitled *The Use of the "Inner" and "Outer" in Psychology: Does the Metaphor Help or Hinder?* (1892), Welby gives evidence of the detrimental effect on ideas as much as on human practice of the misuse of metaphors and analogies. In particular, she studies the pairs of opposites "inner" and "outer," "inside" and "outside," "interior" and "exterior," "within" and "without," "Self" and "Not-self," "mind" and "matter," "thought" and "thing": "Mind' and 'matter,' 'thought' and 'thing,' embrace all that is, all reality, all that has meaning,

importance or consequence" (1892: 4; now in Petrilli 2009a: 601). But binary logic leads to establishing a net distinction between mental and material, a distinction which Welby criticizes on the grounds that mind and matter as much as Self and Not-self are different terms of the same continuum: the process of sign activity, production of meaning and interpretation. If anything, both Self and Not-self are "without" or "external" in the sense that insofar as they are sign material endowed with meaning, they refer to something else which is other than the previous sign, other than self. "Inner" and "outer" indicate specifications that take shape and interact dialectically in the processes of sign interpretation:

After all what do we rightly want to do in describing the mental or psychical world as Inner and the material or physical world as Outer? Do we not want to emphasize distinction while preserving continuity or even identity; to give intension in the one case and extension in the other? Cannot these be equally secured by more abstract terms, like subjective and objective? (Welby 1892: 6; now in Petrilli 2009a: 602)

According to Welby, the subjective human psyche cannot be reduced to processes occurring within the boundaries of the natural, biological organism. The content of the psyche (Self) does not develop inside the individual organism, but outside (Not-self) in relations of participative interaction with the other. Human psychic experience develops in sign relations which interconnect the individual organism to the outside environment. From this point of view as well, Welby's work prefigures the Bakhtinian perspective. We know that in Marxism and the Philosophy of Language, Voloshinov explicitly formulates an objective psychology, where "objective" may be read as "sociological": "the subjective psyche is an object for ideological understanding and socioideological interpretation via understanding" (Voloshinov 1973 [1929]: 5). According to this approach, a fundamental task for the sign theorist interested in the human psyche is to define inner experience in terms of objective, outer experience. Voloshinov specifies that the reality of the inner human psyche is the reality of the sign, so that the biological-biographical organism and the outside environment meet in the sign. Consequently, "the inner psyche is not analyzable as a thing but can only be understood and interpreted as a sign" (Voloshinov 1973 [1929]: 26).

Both Welby and Bakhtin thematize the public and dynamic aspect of language, the expression of social experience belonging to the collectivity. Like all living organisms, the collectivity is subject to continuous transformation and is never still or finalized. Sign and meaning evolve in the relation with the other, socially, as part of the collectivity and are continuously renewed with the acquisition of new experience. The single individual, the speaker and human experience are not independent from social context, but rather are an integral part of it, in relations of dialogical interactivity. The word of the single individual as much as of the collectivity is a social expression of common semiosic processes and interpersonal relationships, such that the individual as much as the collectivity can only subsist in social and dialogic interaction. The semiotic materiality of the word as used by the individual speaker is given in the historico-social community of language users. In such a framework, it is clear that meaning is not something private and abstract, relegated to the signifying intention of subjective consciousness, but rather emerges from the accumulation of experiences pooled together and present in the concrete sign at any given instance.

The word as received and re-elaborated by the speaking community presents a stratification of meanings which from a diachronic point of view accumulate during the processes of historical development, are co-present at the moment of use by the individual speaker and are subject to transformation. Therefore, the word or utterance in live communication is not an anonymous, preconstituted entity devoid of sense, but rather is impregnated with socio-historical experience, verbal and nonverbal, interpersonal relationships, and values. At the moment of use, to the resources of sociality are added those of the individual speaker in his or her singularity. As a living organism, the word continuously renews itself, emerging as the open result of social signifying processes; each time this word is used it is further enriched by the fresh imprint of the individual consciousness in signifying processes that enhance its internal dialogism, multi-voicedness and otherness.

Overall, for Welby and Bakhtin, signs and language in the live context of discourse are always becoming other from what they were becoming. Both take their distances from the objective empiricism of positivistic thought. Bakhtin is critical of a mechanistic and pre-dialectic type of materialism, of a positivistic conception of empirical data. In the light of his theory of sign, he refuses the cult of non-dialectic fact understood as something static, precise and finalized. On her part, Welby too criticizes the conception of "hard dry facts," as she says in her 1893 essay "Meaning and Metaphor" (now in Petrilli 2009a: 424; see also pages 357–362). Instead, so-called "facts" are part of dynamic sign-mediated reality. As the object of interpretation, facts present themselves to the observer as signs that are endowed with meaning in becoming and at once contain the interpretive experience of other observers. What, then, to positivist eyes appears as the precisely delimited, undisputable and unequivocally observable fact, in Bakhtin's view is ideological-material reality and in Welby's something that conveys the heritage of humanity's pre-intelligent and primitive faculties.

In contrast to nonverbal signs – which as nonsign bodies with an extrasign function can take on a sign function – verbal signs converge totally with their sign function (Petrilli 2010a: 137–158). The word is completely absorbed by its sign function and as such is the highest and most semiotically resonant expression of

social relations: it is immediately communicative and ideological, since it arises directly from the needs of social communication. As expressions thereof ideology and culture are best taken into consideration through analysis of the word which is the "ideological sign par excellence" (Voloshinov 1973 [1929]: 9). The verbal sign reaches the highest degrees of semantico-ideological pliability and in addition to its vocation for otherness and dialogic relations on the outside with other signs, is characterized by its capacity for high degrees of internal dialogism. The word is dialogical both because it is multi-accentuated internally and also because it is related externally to the word of others. Otherness is constitutive of the sign, a vocation of the sign. Contrary to the ideal of language which evidences such concepts as "signality," "plain meaning" and the "identification interpretant," interpretation semiotics perspects a sign model that is oriented by the logic of otherness, is open to the other and ultimately calls for the interpretant of "responsive understanding" (or "answering comprenhension") (cf. 1.4, 9.5).

9.5 The human sciences, the artistic dimension of sign systems and the critique of language

Bakhtin worked on the language of literature which he chose not only as the object of research, but also as the very point of view of his philosophy of language, the periscope through which he analyzes language (Petrilli 1994, 2010b). Through his studies on literary language, Bakhtin evidenced the expressive potential of indirect discourse, the condition of extralocalization, excess and distancing with respect to individuality based on the logic of identity and aggregation, with respect to the monological voice. Consciousness and self-consciousness arise from the logic of otherness and estrangement, from the condition of "being-other" (nadbytie) in Bakhtin's terminology, of "otherwise than being" (autrement qu'être) to recall Emmanuel Levinas (1974). This means to say that the extralocalized word, which is a dialogized word, is a condition for the development of consciousness and self-consciousness. The otherness of the literary word emerges in the light of that which escapes the order of discourse, the places of official culture, the word of everyday life. To cite Bakhtin from his 1959–1961 essay, "The Problem of the Text":

Does not the author always stand *outside* the language as material for the work of art? Is not any writer (even the pure lyricist) always a "dramaturge" in the sense that he directs all words to others' voices, including to the image of the author (and to other authorial masks)? Perhaps any literal, single-voiced can only be second voice in the discourse. Only the second voice - pure relationship - can be completely objectless and not cast a figural, substantive shadow. The writer is a person who is able to work on language while standing outside language, who has the gift of indirect speaking. [...]

The author of a literary work (a novel) creates a unified and whole speech work (an utterance). But he creates it from heterogenous, as it were, alien, utterances. And even direct authorial speech is filled with recognized words of others. Indirect speaking, an attitude toward one's own language as one of the possible languages (and not the only possible and unconditional language). (Bakhtin 1959–1961, in 1986: 110–115)

Words cannot be "pure" in literary language, single-voiced or monological. In literature the word is indirect, distanced, extralocalized and dialogized. In it we hear the word of others. Dialogism is external to the word but also internal. Internal dialogism is evidenced in the forms of reported discourse and is present in both spoken language and written language, in literary language and in extraliterary language. But while in nonliterary language (ordinary discourse, massmedial discourse, scientific discourse) the speaker identifies with the genre of discourse, with the places of representation, instead in literary writing s/he evidences the internal dialogism of the word which is depicted rather than represented. In other words, the artistic vision evidences the dialogic structure of language. It provides an essential place for the critique of a passive and subservient attitude toward the official communication order, toward dominant ideology and the oppositional logic that subtends it. All this implies critique of subordination of the *signifiant* to the *signifié*, of a monological perspective on the Subject, Truth and Dogma.

Welby privileged the verbal sign as her specific object of research. At the same time, she did not fail to contextualize with reference to nonverbal sign systems. These are inextricably interrelated with verbal signs and play a major role in the formulation of her sign-communication theory. While not entering a relation of subordination with respect to linguistics and its categories, both Welby and Bakhtin recognized the importance of linguistic material in all forms of human culture. Consequently, an adequate analysis of language is necessary not only for a better understanding of language related problems, but also of different socio-cultural issues generally which are rooted in language. As Bakhtin says:

Where there is no word and no language, there can be no dialogic relations; they cannot exist among objects or logical quantities (concepts, judgments, and so forth). Dialogic relations presuppose a language, but they do not reside within the system of language. They are impossible among elements of a language. The specific nature of dialogic relations requires special study. [...]

Language and the word are almost everything in human life. But one must not think that this all-embracing and multifaceted reality can be the subject of only one science, linguistics, or that it can be understood through linguistic methods alone. The subject of linguistics is only the material, only the means of speech communication, and not speech communication itself, not utterances in their essence and not the relationship among them (dialogic), not the forms of speech communication, and not speech genres.

Linguistics studies only the relationships among elements within the language system, not the relationships among utterances and not the relations of utterances to reality and to the speaker (author). (Bakhtin 1959–1961, in 1986: 117–118)

In the context of her work on the problem of sign and meaning, Welby wrote her major monograph of 1903, What Is Meaning?, in dialogue with a vast range of different disciplines and research areas. Beyond linguistics and philosophy, these included such areas as anthropology, psychology, physiology, law, mathematics, biology, astronomy, education, economy, cultural politics, etc. In the Appendix to her 1911 monograph, Significs and Language, she further added quotations from a vast range of disciplines to endorse her discourse as it had been maturing in preceding years. All the sciences enter her sphere of interests, from the human sciences, social sciences, exact sciences, hard sciences, to the life sciences, etc. From this point of view, Welby proceeds in similar fashion to Bakhtin. The characteristic interdisciplinary scope of Bakhtin's own approach to sign theory is the result of reflecting on language in relation to the language of other human sciences beyond the strictly linguistic – anthropology, psychology, psychoanalysis, theory of ideology, the study of popular traditions, folklore, of different socio-cultural systems and practices, theory of literature, etc. (Vygotsky 1925). All the same, Bakhtin drew particularly on literature for his understanding of language on the basis of his conviction that literary language is the place which most enhances and manifests the characteristics of the live word, of communication in real life situations. An important instance is plurivocality or "dialogized plurilingualism" which is structural not only to the relationship among different discourses, but also to the discourse of a single voice.

Welby and Bakhtin roam extensively over different spheres of knowledge and experience, but not because they wish to develop a complete, definitive, and compact thought system with claims to omniscience. What seems to be interdisciplinary inclusiveness is in reality the result of concentrating on a specific problem, that of sign, meaning and language. In this case reflection on a given issue is so profound that many other venues of human knowledge and consciousness inevitably come into play. Here, interdisciplinary inclusiveness is produced not by claims to totalization, but by the exact opposite. In other words, it is achieved by resorting to what can be termed the "detotalizing method," which is a "dialogicaldialetical method," even with respect to a single problem (Petrilli and Ponzio 2005a: 154-166). This method consists of relating fields and objects of study that may even seem distant from each other, shifting perspectives and opening to others, rather than englobing and enclosing. And, most importantly, with Bakhtin the dialectics among signs explicitly recovers its connection with dialogism (Petrilli 2012c: 29-43).

Bakhtin dealt with the problem of the specificity of the literary word on the basis of his research on the word in general, which he conducted along the margins of different disciplines, along their junctures and at their points of intersection, where both verbal and nonverbal signs come into play. His basic unit of analysis is the utterance, in the context of the internal and external dialogical relations forming speech acts, texts and discourse genres. It follows that the problem of understanding the utterance clearly supersedes the traditional limits of linguistics. In Bakhtin's own words from his essay, "The Problem of Text in Linguistics, Philology and the Human Sciences" (1959–1961):

The problem of understanding the utterance. In order to understand, it is first of all necessary to establish the principal and clear-cut boundaries of the utterance. The alternation of speech subjects. The ability to determine the response. The essential responsiveness of any understanding ("*Kannitverstan*"). (Bakhtin 1986: 112)

Contrary to linguistic analyses that search for meaning in unitary, fixed and well-defined entities, forgetting the live nature of signifying and communication processes, Bakhtin defines the "boundaries" of the utterance with reference to the *relation* among subjects and to the responsive nature of understanding: in other words, the "boundaries" of the utterance are given in the dialogical interrelation-ship with other utterances. According to this description, the utterance is an open, dialogical, intertextual unit whose signifying value is determined in the interrelation with the other. The boundaries of the utterance understood as a dialogical unit are open and in continuous becoming in the relation to the other, whether this be the other *of self* or the other *from self*, in the relation to the outside with respect to identity.

It is not surprising that in this conceptual framework both Welby and Bakhtin should theorize the signifying value of silence, the unsaid word, the unspoken: "silence is often a most significant declaration and a most misleading one," says Welby (1985a [1911]: 41). Bakhtin distinguishes silence from quietude. He associates silence to responsive understanding, to active and responsive participation, to the utterance considered in its unrepeatability and signifying otherness at high degrees of semioticity (*cf.* Ch. 6). Instead, quietude is related to identification, to interpretation in terms of recognition, when simply a question of identifying the elements foreseen by the system of language, the repeatable elements, which involves interpretive work at low degrees of otherness, or at high degrees of signality.

Bakhtin's multiple interests in the human sciences ultimately refer to the problem of value. He was immediately interested in the problem of aesthetic value, but given that this is determined in the logic of otherness and extralocality, he necessarily dealt with other types of value as well, in the first place, ethical

value. He had already highlighted this connection in an early paper of 1919 entitled, "Art and answerability" (now in Bakhtin 1990: 1-3). In another early text of 1920–1923 (1986: 4–256), he maintains that the source of artistic value is the other and not the I, the self. Consequently, artistic value necessarily involves issues of an ethical order, which revolve around the problem of the other. From this point of view, literature represents a sort of experiment pushed to the extreme beyond the limits of social convention, and concerns the functioning of values in interpersonal relationships.

Linguistic value converges with dialogical value; it is measured in terms of the word's capacity for dialogism. This is not formal dialogism, which is dialogism of the surface order as in the case of the exchange of rejoinders between two speakers, but rather substantial dialogism which is traceable in the voice of a single speaker even, in a single utterance. With such concepts, Bakhtin supersedes the conventional limits of linguistics in the direction of "metalinguistics." The aim is not to propose a quantitative extension on the boundaries of linguistics, but rather a transformation in qualitative terms, a shift in focus from the logic of identity to the logic of otherness. Such a shift highlights the condition of dialogism not only in the relation on the outside among different texts, historical languages and discourse genres, but internally to these. The utterance finds its sense in these relations. Pushed to high degrees of dialogism, extralocality and displacement, linguistic value understood as dialogical value becomes ethical value and aesthetical value. In the case of scientific discourse or in everyday discourse, the degree of dialogism and otherness is not as high as in artistic discourse, in spite of the potential for innovation and intellectual development. When a question of the acquisition of knowledge oriented by a thesis and a conclusion, cognitive processes are ultimately grounded in the logic of identity and points of view essentially converge in the subject of discourse. Nevertheless, as Bakhtin clarifies on various occasions, cognitive processes call for the category of otherness. In Rabelais and His World he shows how, during the Renaissance, official language opens to unofficial language, to popular culture, to carnival and the grotesque body, thereby contributing to the rise of modern scientific knowledge. Bakhtin's philosophy of language and theory of literature draw from folklore tradition; to the language of literature and philosophy he applies the categories of carnival. This operation favours full manifestation of the dialogic dimension of language (which is not only artistic language) and human culture at large, the celebration of joyful relativity, the condition of polyphony, the logic of otherness, all of which are enhanced by the categories of carnival, by the reversal of hierarchical relations, by profanation with respect to the official order. Bakhtin continues working on such concepts in his later writings, especially his notebooks of 1970–1971. The artistic vision extends its gaze beyond the official order thereby offering an understanding of humanity (as Bakhtin argues \hat{a} *propos* Dostoevsky's "polyphonic novel") that is altogether inaccessible from a monological perspective.

Above all, Bakhtin dealt with problems of language and meaning generally from the perspective of the literary word. His excursions outside the sphere of literary language do not imply recourse to an external point of view with claims to offering a description that is totalizing and systemic. On the contrary, Bakhtin never left the realm of literature. Literary language provided him with a permanent observation post on all other forms of language and expression. Literature was the perspective from which he conducted his *anti-systemic and detotalizing* critique of language. He was intent upon revealing the internal threads that connect the literary to the extraliterary, thereby evidencing the condition of structural intertextuality characteristic of the live word, the utterance, the text. Bakhtin maintains that the literary text subsists and develops in its *specificity as a literary text* thanks to its implication with the external universe, keeping account of the ethical dimension of the artistic vision, including of the literary word.

The literary word is a pivotal point of reference in Bakhtin's vision, but viewed in its relation to life and not in isolation, never as an end in itself, as established, instead, by the principle of art for art's sake. We know that Bakhtin already wrote about the relation between literature and life, indeed, more extensively, between art and life in his early paper of 1919, "Art and Answerability" (now in Bakhtin 1990: 1-3), being a theme which was to remain central throughout the whole course of his production. The question of the relation between "literature" and "life" is also thematized by Medvedev in his 1928 monograph on The Formal Method in Literary Scholarship. Literary language is grounded in the heterogeneous material of life. It establishes relations between alterities, between the *other* of literature, or art in general, and the *other* of life. Through processes of extralocalization, literary language depicts the other. Bakhtin theorizes dialogical understanding among alterities that meet in the dialectical unity of responsibility/answerability. Such encounter presupposes listening to the other, responsiveness to the other. From this point of view, art and life are closely interconnected and enhance each other reciprocally: the irreducible otherness of life, its polyphony, resounds in the language of art, so that life is enhanced by artistic discourse and vice versa art is anchored to the materiality of life which enriches artistic discourse with its vitality:

But what guarantees the inner connection of the constituent elements of a person? Only the unity of answerability. I have to answer with my own life for what I have experienced and understood in art, so that everything I have experienced and understood would not remain ineffectual in my life... The poet must remember that it is his poetry which bears the guilt for the vulgar prose of life, whereas the man of everyday life ought to know that the fruitlessness of art is due to his willingness to be unexacting and to the unseriousness of the concerns in his life. (Bakhtin 1990: 1–2)

In discourse that proposes a new approach to language and communication, the relation between art and life is fundamental (nor should it be neglected by philosophy). Bakhtin shows how Dostoevsky's artistic vision revolves around dialogue considered as an end in itself and not simply as a means. In accordance with Dostoevsky, Bakhtin identifies in dialogue the material itself of human becoming:

Dialogue here is not the threshold to action, it is the action itself. It is not a means for revealing, for bringing to the surface the already ready-made character of a person; no, in dialogue a person not only shows himself outwardly, but he becomes for the first time that which he is – and, we repeat, not only for others but for himself as well. To be means to communicate dialogically. (Bakhtin 1984a: 252)

Language, the self, consciousness, values, orientations, ideologies are all dialogical constructs which arise in the encounter with the other on the borders and junctures uniting internal and external alterities in live communicative interaction:

I am conscious of myself and become myself only while revealing myself for another, through another and with the help of another And everything internal gravitates not toward itself but is turned to the outside and dialogized, every internal experience ends up on the boundary, encounters another and in this tension-filled encounter lies its entire essence ... The very being of man (both external and internal) is the deepest communion. To be means to communicate. (Bakhtin 1984a: 287)

Bakhtin develops his theory of literary language through dialogical confrontation with a host of different languages. Consequently, the practices, theories, values and orientations of other sciences connected to language – either because they address language problems directly or simply because language is the material they are made of - all enter Bakhtin's theory of literature. All are viewed in the light of the live word of literary writing and the centrifugal and contradictory forces operative in it; literary writing is the place where the sign manifests its expressive potential and capacity for dialogical answerability to a maximum degree. Consequently, in Bakhtin's view, literary writing provides us with appropriate models, materials and instruments for a critique of language theories that fail to account for the dialogical, polyphonic and plurivocal constitution of language, and ultimately for the live word.

Bakhtin's work on literary writing helps evidence the semiotical materiality of the word, its signifying otherness, its capacity for dialogical interaction with respect to its interpretations, for "responsive understanding," "dialogic participation" and "listening," and for resistance to homologation according to identity logic. With reference to literature, especially genres like the novel, the word's dialogic potential is investigated beyond its more limited reach in ordinary language.

Linguistic value in Bakhtin is not only given by the relation among the elements of language (between phonemes, between signifiant and signifié, between words on the syntagmatic and paradigmatic axis), but rather extends beyond to concern the dialogical materiality and live processes of discourse (Ivanov 1973; Ponzio 2003b). Bakhtin connects linguistic value to aesthetic value with a view to the properly human, which means to account for the capacity for otherness logic to the highest degrees. While dedicating a large part of his attention to literary theory and criticism, he at once superseded the limits of traditional disciplines dedicated to literary writing and verbal art. A literary text can only be adequately understood by looking beyond literature and art in general, from different fields and perspectives, according to the processes of extralocalization. Bakhtin studies verbal and nonverbal signs both on the theoretical level of general semiotics and on the level of specification of these studies relative to different cultural systems, folklore traditions, festivities, rites, myths and cults, as is particularly manifest in his 1965 monograph on Rabelais. In addition to the study of verbal and nonverbal signs, other perspectives that come into play in the study of the literary text include those provided by studies in ideology, the psychological and psychoanalytical dynamics of the relation between official and unofficial consciousness, between the psyche and the unconscious, the relation between inner and outer, internal and external, private and public, the problem of social stratification and of the relation among social classes, the relation between history and structure and that between the genetic and the morphological approach to signs and language, etc.

Bakhtin's approach to literary writing inevitably involved all the human sciences, though he never abandoned his special interest in the problem of the specificity of the *literary word*. This is the object of analysis in Medvedev's monograph, *The Formal Method in Literary Scholarship*. Medvedev works on *the specificity of the literary word* and how it is addressed as a criterion for criticizing the Russian Formalists who thought they had solved this particular problem. Like Medvedev, Bakhtin too critiqued recourse to superficial sociological formulae and pseudo-marxist slogans.

9.6 Extralocalization, responsive understanding and translation

Polemicizing with general linguistics (including Saussure's) which identifies two partners in speech communication, what he calls "scientific fictions," the speaker described as the active part and the listener as the passive, Bakhtin in his essay, "The Problem of Speech Genres," maintains that

The fact is that when the listener perceives and understands the meaning (the language meaning) of speech, he simultaneously takes an active responsive attitude toward it. He either agrees or disagrees with it (completely or partially), augments it, applies it, prepares for its execution, and so on. And the listener adopts this responsive attitude for the entire duration of the process of listening and understanding, from the very beginning - sometimes literally from the speaker's first word. (Bakhtin 1986: 68)

The interpretant of active responsive understanding is specific to the sign; whereas the interpretant of identification is specific to the signal. The utterance, the dialogic word, the text call for responsive understanding; whereas the sentence, object of study of traditional linguistics, abstract and isolated from the real processes of dialogic interactive communication, simply calls for identification. Interpretation in the sense of responsive understanding converges with translational processes at high degrees of otherness and creativity, whether a question of interpreting texts across different historico-natural languages or within the same language. Different types of interpretive-translative processes at varying degrees of otherness and responsiveness are present together in any given instance. For example, similarly to translation, whether intralingual or interlingual, the responsive interpretation of an utterance will depend on the capacity to identify syntactical structure. The utterance "I read your letter to Franco," cited in the epigraph to Chapter 8 above, can be disambiguated either in the sense that the letter was addressed to Franco and I read it, or in the sense that the letter was addressed to somebody else and I read it to Franco. The capacity to disambiguate, which Noam Chomsky attributes to deep structures (cf. Ch. 2), consists in the generative capacity of interpretants that are not necessarily foreseen by the system of language, but rather are connected with the utterance, with its verbal and situational context and with translational relations of the endosemiotic and intersemiotic order (Petrilli 2003a: 19).

A dynamic approach to sign and language inevitably involves reflection on the role of translation. Welby is a pioneer on this front too and actually develops her theory of meaning in close association with translation theory (cf. Chs. 7 and 10). Here, "translation" is understood not only in the obvious sense of transferral from one language to another, interlingual translation, but also in terms of verbal signs into nonverbal signs and vice versa, intersemiotic translation, and of verbal signs into other verbal signs of the same language, intralingual translation. Welby thematizes translation as a method of interpretation and understanding. Our mental activities are nothing short of automatic translational processes. As foreseen by Peirce's own conception of the sign, the meaning of a sign is given in the relation to another sign that interprets it. In this sense the sign is in translation. Semiosic fluxes and signifying processes converge with translation/interpretation processes; semiosis is a translation/interpretation process. Welby's theory of translation is an important aspect of her significs which we know she describes as a "philosophy of significance," "philosophy of interpretation" and "philosophy of translation" (Welby 1983 [1903]: 89, 161). Moreover, her theory of translation is closely connected to her reflections on figurative language and on the role of metaphor, analogy and homology in communication and understanding. The acquisition of knowledge implies the capacity to establish links and connections in translational, interpretive processes.

In fact, knowledge and consciousness are enhanced through translative/ interpretive processes in which meaning, interpretation and translation are inextricably interconnected. Meanings are clarified and developed in the passage from one language to another, whether these are internal to one and the same historico-natural language, a question of "internal plurilingualism," or external to it, what has been described has "external plurilingualism" (or "heteroglossia"). In the relation among different languages, internal or external to the same historico-natural language, the chain of deferrals from one verbal interpretant to another surpasses the semantico-ideological and cognitive-pragmatic boundaries of any one single language and enters the field of other languages in ongoing and potentially open-ended signifying processes. From this point of view, the greater our linguistic competence – whether in terms of the number of external languages we speak or of internal languages forming any one historico-natural language –, the greater the development of linguistic consciousness and with it our consciousness of the world we live in, which is determined in the former. Moreover, the higher the degree of dialogized pluridiscursivity, that is, of dialogic encounter among languages, whether internal or external to one and the same historico-natural language, and with it the degree in development of linguistic consciousness and knowledge, the greater the capacity for critical awareness, and for the properly human.

The translation of an idea or hypothesis into the language of different spheres of experience increases the possibility of perceiving links and connections previously unsuspected, of revealing different aspects of the same object or occurrence, different points of views, of discovering new truths. The meaning of sign is given in communicative interaction through interpretation-translation processes (see "Translation and Meaning from a Significal Perspective," Ch. 5 in Petrilli 2009a). In significal or semioethical terms, the more a sign translates into ever more numerous spheres of human knowledge and experience, the more its significance and ultimate value is enhanced. Different aspects of the processes of translation are expressed by the words transference, transformation, transmutation, transfiguration and transvaluation. Significs aims to develop critical awareness, the linguistic conscience, to empower and somehow master translational processes as the very condition for understanding. The sense, meaning and significance of

an utterance are understood and enhanced through ongoing translational processes.

Though not thematized directly, translation is also essential to Bakhtin's conception of interpretation, understanding and dialogism (De Michiel 1999; Ponzio 1992, 2003b, 2008f). His theory of language and meaning is rich in suggestions for a theory of linguistic and cultural translation (Torop 2002). The self emerges from intersubjective interpretive-translative practices involving the other; cultures are polylogic, the open, unfinalized expression of ongoing translative processes among different voices and worldviews; as sign activity of the "meta" order, the sciences involve translative processes across different sign systems and orders of discourse (Kumar & Malshe 2005). Considering all these aspects, translation emerges as no less than central in the work of Bakhtin and his circle of collaborators (Zbinden 2006). From this point of view, the following observations from Marxism and the Philosophy of Language, by Voloshinov, on the problem of understanding are emblematic:

[...] each of the distinguishable significative elements of an utterance and the entire utterance as a whole entity are translated in our minds into another, active and responsive context. Any true understanding is dialogic in nature. Understanding is to utterance as one line of a dialogue is to the next. Understanding strives to match the speaker's word with a counter word. Only in understanding a word in a foreign tongue is the attempt made to match it with the "same" word in one's own language. (Voloshinov 1973 [1929]: 102)

Bakhtin analyzes the sign as it emerges from the relation among different verbal and nonverbal expressions. In Rabelais and His World he investigates the signs of carnival and their translation into verbal signs, the processes of renewal and regeneration achieved by literary writing as an effect of the carnivalization of the word through intersemiosic translational processes across different languages, cultures and value systems (Petrilli 2003a, 2005c, 2006b, 2007b). But we could maintain that even the word of direct discourse genres is an indirect word insofar as it results from reporting the word of the other, insofar as it emerges from contact with the word of the other, from translation processes according to the full range of this concept, even more so in the case of the formation of modern languages. In the words of Bakhtin from the text entitled "From Notes Made in 1970-71":

A particular nuance of sobriety, simplicity, democratism, and individual freedom inheres in all modern languages. One can say, with certain reservations, that all of them (especially French) have arisen from the popular and profane genres. All of them have been determined to a certain degree by a lengthy and complex process of expunging the other's sacred word, and expunging the sacred and authoritarian word in general, with its indisputability, unconditionality, and unequivocality. [...] This word had spread everywhere, limiting, directing, and retarding both thought and live experience of life. It was during the process of struggling with this word and expelling it (with the help of parodic antibodies) that new languages were also formed. The boundary lines of the other's word. Vestiges in the syntactical structure. (Bakhtin 1986: 132–133)

We have already signalled a series of convergences between Welby's meaning triad, "sense," "meaning" and "significance," on the one hand, and "theme" (or "actual sense") and "meaning" as thematized by Bakhtin and Voloshinov, on the other (cf. 9.4). Moreover, convergences can be identified between the latter and Peirce's tripartite analysis of the interpretant into "immediate interpretant," "dynamical interpretant" and "final interpretant" (Ponzio 1990: 251–273). And given that Peirce himself had already established correspondences between his own categories and Welby's (see Peirce's letter to Welby, dated 14 March 1909, in Hardwick 1977: 109-111), the relation between Bakhtin and Welby on this aspect is worth reiterating as well. We know that according to Bakhtin, the processes of communication ensue from the dynamics between the logic of identity and the logic of alterity in the context of social interaction. The sign is a dialectic unit of self-identity and alterity. Its significance is given in the continuous shift toward something more, the unrepeatable which goes together with the fixed and repeatable elements of the utterance that make it recognizable as part of a specific speech act. Bakhtin's "meaning" as distinguished from "theme" indicates all those aspects of the utterance that are reproducible and self-identical each time that utterance is repeated. Meaning may be broken down into sets of meanings (phonemes, monemes) that belong to the linguistic elements constituting the utterance. "Meaning" thus understood corresponds to signality, to "plain meaning" and calls for an "identification interpretant." Instead, "theme" is essentially indivisible, it refers to all that is singular, unique and unreproducible (cf. Ch. 10). "Theme" concerns the import and general significance of an utterance produced in a given historical moment. It denotes that aspect of communication which requires responsive understanding, a dialogical response, a point of view and valuational orientation (Voloshinov 1973 [1929]: 100). However, the boundary between "theme" and "meaning" is not absolute. The two interact dialectically and cannot subsist independently of each other: the "meaning" of the utterance is conveyed by making it an element of the "theme" and vice versa the "theme" is based on some kind of fixity of meaning, otherwise it would lose its significance altogether. To cite again from Bakhtin's notes of 1970–71:

Understanding-recognition of repeated elements of speech (i.e., language) and intelligent understanding of the unrepeatable utterance. Each element of speech is perceived on two planes: on the plane of the repeatability of the language and on the plane of the unrepeatability of the utterance. Through the utterance, language joins the historical unrepeatability and unfinalized totality of the logosphere. (Bakhtin 1986: 134)

Bakhtin's "meaning" and Peirce's "immediate interpretant" are fixed by use and tradition, they are given in the correct deciphering of the sign. In Peirce's words, the immediate interpretant "is ordinarily called the meaning of the sign" (CP 4.536); whereas the dynamical interpretant "is the actual effect which the Sign, as a sign, really determines" (CP 4.536, italics my own). Considered in relation to both the dynamical interpretant and dynamical object, that is to say, in relation to "the Reality which by some means contrives to determine the Sign in its Representation" (CP 4.536), for Peirce too the sign can never be repeated always the same. Each time this sign is used, it makes its appearance in a new semiotical act. This implies that the sign develops and is continuously renewed in ongoing translational processes which, in turn, implies that the interpretant is never established once and for all. This is the principle of infinite semiosis, the unending sequence of interpretants, which, from the point of view of logical procedure and inferential processes, affords a better understanding of the hypothetical and approximative nature of knowledge, as theorized by Peirce in the context of his cognitive semiotics.

In his letter to Welby, Peirce identifies convergences between his "immediate interpretant," "dynamical interpretant" and "final interpretant" and "Welby's "sense," "meaning" and "significance." Welby's "sense" concerns the word in live communication, it keeps account of the circumstances of use, the universe of discourse and not of the word in isolation (it somehow corresponds to the dialectics described by Bakhtin between "meaning" and "theme"); "meaning" denotes speaker intention; whereas "significance" covers import and implication, the ultimate value of the utterance:

There is, strictly speaking, no such thing as the Sense of a word, but only the sense in which it is used – the circumstances, state of mind, reference, "universe of discourse" belonging to it. The Meaning of a word is the intent which it is desired to convey - the intention of the user. The Significance is always manifold and intensifies its sense as well as its meaning, by expressing its importance, its appeal to us, its moment for us, its emotional force, its ideal value, its moral aspect, its universal or at least social range. (Welby 1983: 5–6)

On the basis of our considerations so far, we believe that what Bakhtin calls "meaning" somehow corresponds to Peirce's "immediate interpretant" and to Welby's "sense"; and what Bakhtin calls "theme," Peirce divides into "dynamical interpretant" and "final interpretant" and Welby divides into "meaning" and "significance." In any case, while these similarities are interesting to evidence, they do not converge perfectly, one of the reasons being that the concepts in question break down a unitary totality which, in reality, is indivisible. In effect, theoretical distinctions are always made by way of abstraction in order to evidence different aspects of an issue. However, the different aspects of the sign do not act independently of each other, but rather they complement each other in the ongoing translational processes of dialectic interaction that characterize semiosis.

9.7 Dialogization, translation and the properly human

To develop language and communication theory from a Bakhtinian perspective, means to grasp the otherness dimension of language largely through the experience of literature. The inter-subjective and dialogical dimension of language (the very condition for signifying and communication processes) – which is grounded in the logic of otherness and extralocality and entails the "ethical" dimension of life and language, it too grounded in otherness logic – tells of the disposition immanent in language to transcend its own limits as artificially imposed by the logic of identity and equal exchange. Literary language theories and philosophical language theories meet in the Bakhtinian perspective: both presuppose plurivocal and dialogical otherness structural to human discourse and consequently are open to the ethical dimension of semiosis. Unlike special scientific languages and in line with literary language (especially Dostoevsky's polyphonic novel), philosophical language has its specificity in plurilingualism, pluristylism and pluridiscursivity.

Language and communication theory in a Bakhtinian perspective must not ignore the correlation between theory of literary language and philosophy of language for a *philosophical grounding of language* (beginning from the problem of the language of philosophy). The quest is to ground problems of language philosophically, rather than simply reduce philosophical problems to problems of language. To place philosophy alongside literature, precisely the polyphonic novel, as Bakhtin does, may seem arbitrary. This procedure involves relating two different phenomena: on one side, a dimension or attitude or an orientation that translates across all discourses and beyond genre; on the other side, a specific discourse genre. But this discrepancy disappears when we stop hypostatizing literary genres to consider them, instead, as an interpretive model of reality (Bakhtin 1938; Medvedev 1978: 130–131), that is, as a modelling procedure or specific signifying procedure.

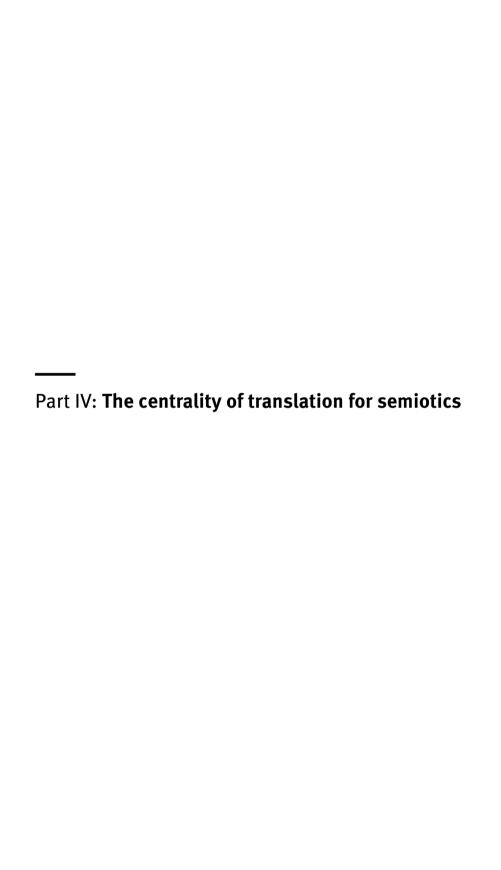
The juncture between the word in the novel and the philosophical word can clearly be traced on a genetical level (Ponzio 2011). Bakhtin traces the origins of the "polyphonic novel" in "Socratic dialogue." In turn, Socratic dialogue can be traced back to the carnivalesque orientation of popular culture which opposes the joyous relativity of a topsy-turvy world to the monologism, univocality and dogmatism of hegemonic culture (Bakhtin 1984a: 106–114). A theory of sign, language and communication with any claim to adequacy should be based on the ethics of

otherness and dialogism. Bakhtin evidences the vocation of philosophy for dialogized pluridiscursivity. This philosophical vocation corresponds to the vocation of language. A philosophical perspective on language evidences the dialogic capacity of the word where reference is not only to the philosophical word, but to the word generally in the context of live expression, interpretation and communication.

Far from tending toward totalization or semiotico-philosophical imperialism, to reflect in a philosophical key on verbal and nonverbal expression, and on the translation processes that interconnect them, means to contribute to developing a detotalizing approach to the different areas of knowledge, praxis and human values, considered from the perspective of their constitution in terms of sign material. Thanks above all to results obtained by experimenting with the word's dialogical potential in the laboratory of literary writing, the "detotalizing" method of inquiry evidences the ethical or, better, "semioethical" dimension of language. Literary writing highlights the human capacity for the indirect word, for extralocalization, the places of dialogization. Special mention can be made here of the parodic and "carnivalized" genres of both the oral and written word. All such expressive devices are oriented by the logic of otherness and give full play to the word's internal dialogization, which renders it capable of self-awareness, selfcritique and self-derision even, as Bakhtin demonstrates in his 1965 monograph on Rabelais. That the philosophy of language, or metalinguistics, evidences those places of discourse which resound as pluristylistic, pluridiscursive and plurivocal means to say that it evidences those places where the word is experimented in the encounter with another word, with a word that is other, where the meaning of a word is its translation into that other word and beyond. Translation is at once a modelling device and communicative procedure that the condition of extralocalization presupposes and that in turn presupposes the condition of dialogic listening, responsive understanding and intercorporeity.

Though Welby has only been appreciated in relatively recent times and certainly some years after her writings first appeared and Bakhtin only received the full attention he deserved after his death, today, thanks to wide-open reception, both scholars are now leaving significant traces on the horizon of studies on signs and language. In particular, thematization of the relation of signs to values opens up to new perspectives on signifying processes and on the development of sense and understanding in terms of the properly human. For both Welby and Bakhtin, meaning cannot be enclosed within the boundaries of a given system of signs or type of sign, it cannot be circumscribed to a given language, field or discourse genre. For both our scholars, a fundamental principle is that the more signifying processes translate across different fields and spheres of discourse, different types and systems of signs, different languages and discourse genres, the more meaning develops, is enriched and enhanced and the more the capacity for signification develops in terms, at once, of plurivocality and rigour as it gets free of expressions that are confused and deviating. An example is offered by the metalinguistic capacity and its enhancement through translation: the fact of transferring over into another language presupposes reflection on the target language in the case of interlingual translation; but the dynamics is the same even when we translate a word, utterance or text into the same language, as in the case of the different types of intralingual translation, to the end of understanding and enhancing our capacity for meaning; as much as in the case of intersemiotic translational processes across different types of sign systems. Other aspects of this example include recourse to metaphors and different types of images to express something that would otherwise be difficult, or even impossible, to express or even only conceive; and the role carried out by the extra-verbal context and nonverbal signs in the use and understanding of verbal language in ordinary communicative situations.

An important aim for research on signs and meaning is to reach full awareness of human signifying resources and how we can implement them to enhance our humanity. A major point from this point of view is that meaning develops through semantic shifts among signs, through processes of translation. This is in full contradiction with the prejudice that meaning is preestablished and given outside the live processes of expression and communication. Instead, it is in full support of the human potential for creation, invention, innovation and for critique as foreseen by the human primary modelling device and capacity for metasemiosis. And all this foresees the human potential for the regeneration of human relations and proposal of new visions of the world.



Chapter 10 Translational semiotics, life processes and ideology

 \dots a "meaning" \dots is, in its primary acceptation, the translation of a sign into another system of signs.

(Charles S. Peirce, Collected Papers 4.127)

10.1 Looking back to new frontiers in translation theory

Victoria Welby describes the human signifying capacity in terms of "translative thinking," an automatic process "in which everything suggests or reminds us of something else" (1983 [1903]: 34). Translative thinking converges with semiosic processes where something stands for something else, where different sign systems are related and defer to each other in meaning-making processes, where one sign is more fully developed, enriched, criticized, put at a distance, placed between inverted commas, parodied or simply imitated and, in any case, interpreted in terms of another sign. Moreoever, in Welby's view, translation is a method of investigation and discovery, of verification, a method for the acquisition of knowledge and development of critical consciousness. Continuing on from the passage cited above (9.4):

As language involves both unity and distinction (the one actually and the other implicitly), language must itself be recognized as a means of discovering contrasts together with the links which constitute these elements of unity, or at least completely exclude the idea of final disparateness ... For a thing is significant, both in the lower and in the higher sense, in proportion as it is expressible through bare sign or pictorial symbol or representative action. In the higher sense (that of vital or moral or rational import) it is significant in proportion as it is capable of expressing itself in, or being translated into, more and more phases of thought or branches of science. The more varied and rich our employment of signs ..., the greater our power of inter-relating, inter-translating, various phases of thought and thus of coming closer and closer to the nature of things in the sense of starting-points for the acquisition of fresh knowledge, new truth. (1983 [1903]: 150)

Such intuitions can be developed in the light of recent studies in language theory and the general science of signs. Semiosis, the situation in which something functions as a sign, cannot subsist without translation, since semiosis is a translation-interpretation process. The role of translation is fundamental in the very constitution of the sign, verbal and nonverbal, in the very development of its meaning. As Charles S. Peirce also teaches us, there cannot be a sign without an

interpretant, without another sign that explicates and develops its meaning. This means to say that meaning subsists in the mutual relation of translation among signs. The close connection between signs and translation emerges with the category of *replaceability* set as a *necessary condition* for signhood, that is, when the sign is considered not only as something that replaces something else, but that can be replaced in turn by something else. According to this approach, meaning is defined as a class of verbal and nonverbal sign materials which can replace each other in semiosical processes where the interpretant is the actualization of a possible alternative to a less developed interpreted sign: the interpretant sign acts as a possible response to a previous interpreted sign which it somehow develops. In other words, as Peirce teaches us, a sign subsists thanks to another sign that acts as its interpretant, so that meaning is engendered in translational processes of deferral from one sign into the next. Meaning flourishes in relations of mutual translation and substitution among signs, in signifying processes where the original sign is never given autonomously and antecedently to the interpretant.

In the citation above, Welby states that "while language itself is a symbolic system its method is mainly pictorial" (1983: 38). On the basis of Peirce's most renowned tripartition of the sign into symbolicity (or conventionality), indexicality (or contiguity/causality) and iconicity (attraction, affinity), we may "reword" or "translate" this statement as follows: "if verbal expression is a symbolic, that is, a conventional system, its method is iconic" (see Ch. 4 above; also *CP* 2.247–2.249; and Peirce's letter to Welby dated 12 October 1904, in Hardwick 1977: 22–25). The role of iconicity in the development of language and signifying processes is acknowledged here, which implies the associative capacity in relations of hypothetical similarity (*cf.* 5.1, 11.2).

Reference to the *Tractatus Logico-Philosophicus* (1922) by Ludwig Wittgenstein is helpful here. Wittgenstein distinguishes between names and propositions. The relation between names or "simple signs" used in the proposition – Welby's "bare sign," on the one hand, and their objects or meanings, on the other – is of the conventional type. Insofar as it is arbitrary, the rule or code that relates the sign to its object cannot be discovered simply by guessing: sign arbitrariness is a category proposed by Ferdinand de Saussure (1916) to characterize certain types of signs – verbal signs, or words taken singly and nonverbal signals. Instead, the relation between whole propositions or "propositional signs," Welby's "pictorial symbol" and "representative action," on the one hand, and what they signify – the interpretant sign – on the other, is a relation of similarity, which means to say a relation where iconicity prevails. Wittgenstein's "proposition" like Welby's "pictorial symbol" and "representative action" are complete signifying units at high degrees of semioticity, which means to say they are invested with significance and call for responsive understanding.

In Philosophical Investigations (1953), Wittgenstein thematizes situational context as a part of the proposition's representative and signifying function. His conception of the "proposition" is analogous to the "utterance" (in Russian, vyskazyvanie), as understood by Mikhail Bakhtin (1986). When iconicity dominates in the utterance, the relation between the interpreted sign and the interpretant sign is a dialogic relation of "responsive understanding" ranging from lesser to higher degrees of alterity, Accordingly, Bakhtin's "utterance," Wittgenstein's "proposition" or "propositional signs," Welby's "pictorial symbol" or "representative action" are all endowed with a capacity for critique, innovation and creativity.

Even though Wittgenstein's proposition indubitably involves conventionalsymbolic relations, fundamentally it is based on the relation of representation, where by "representation" is understood the iconic relation. Similarly to Peirce's "diagrams," this relation is of the proportional or structural order. In *Tractatus* Logico-Philosophicus (1921) Wittgenstein states that "The logical picture of the facts is the thought" (Proposition 3); and that "A thought is a proposition with a sense" (Proposition 4.001). Therefore, the proposition is a "logical picture." To know a proposition means to know the situation it represents. Moreover, comprehension of a proposition does not require that its sense be explained, for "the proposition shows its sense" (4.022). Consequently, while "the meanings of the simple signs (the words) must be explained," instead "by means of propositions we explain ourselves" (4.026). The importance of Wittgenstein's picture theory for a better understanding of language production and signifying processes is obvious and is applicable to Welby's own approach to the study of meaning. As a logical picture, representation evidences the role of iconicity in the development of propositions and explains how through propositional signs language escapes the pure and simple conventionality of names - which would otherwise render expression thoroughly repetitive. The issue regards the signifying processes involved in the production and development of thought, given that, as stated in Propositions 3 and 4 above, a logical picture of the facts is the thought and a thought is a proposition endowed with sense.

For both Welby and Wittgenstein of the *Tractatus*, language analysis must not limit itself to a surface description of signifying phenomena, but rather account for the processes of production of such phenomena. From this point of view, a connection can be established with Ferruccio Rossi-Landi's notions of "common speech," "linguistic work" and "social reproduction" (1961, 1968, 1985, 1992a; cf. Ch. 14). Moreover, for a semiotical, philosophical and linguistic perspective on the problem of translation and of meaning in translation with a special focus on Wittgenstein's research, an important contribution is offered by Dinda L. Gorlée with her recent monograph Wittgenstein in Translation (2012a). With reference to all these aspects, most interesting is the close connection that emerges from Wittgenstein's reflections in his *Tractatus* between similarity and translation and the importance of this conjunction for the relation between language, logic and the world: "The gramophone record, the musical thought, the score, the waves of sound, all stand to one another in that pictorial internal relation, which holds between language and the world. To all of them the logical structure is common" (4.014). The role of translation in logical representation is further explained by Wittgenstein in his *Tractatus* in the following proposition, where translation is not reduced to the "interlingual" dimension (to use Roman Jakobson's terminology), but is understood "intersemiotically":

There is a general rule by which the musician can obstain the symphony from the score, and which makes it possible to derive the symphony from the groove on a gramophone record, and, using the first rule, to derive the score again. That is what constitutes the inner similarity between these things which seem to be constructed in such entirely different ways. And that rule is the law of projection which projects the symphony into the language of musical notation. It is the rule for translating this language into the language of gramophone records. (4.0141)

The authors cited so far – Welby, Wittgenstein, Bakhtin, Peirce – all contribute to a better understanding of the more complex levels of signification, expression and communication, without reducing these concepts to the mere function of information and message exchange. Each of these scholars evidences, under different aspects, the importance of iconic representation in language, the otherness dimension of signifying/interpretive processes and the role of translational processes among signs. Each recognizes the importance of establishing relations among signs beyond systemic restrictions, of transcending systemic boundaries. This orientation evidences the dialectic and dialogic nature of sign relations, the condition of interrelatedness, interactivity and interdependency in ongoing interpretive-translative processes, the interconnection between "unity and disparateness," as Welby says in the citation above. In Bakhtin's terminology (1981: 269–275), signifying/interpretive processes occur in the dynamics between the centripetal forces and centrifugal forces operative in language, between unitary language and individual speaking, the forces of centralization and of decentralization, monolingualism and plurilingualism (that is, dialogized heteroglossia), monologism and polylogism, ultimately between the logic of identity and the logic of alterity. In this theoretical framework, "unfinalizability," incompleteness, indeterminacy and vagueness emerge as characteristic traits of semiosis (Merrell 2003; cf. 8.6). Knowledge and truth are never given once and for all, but, on the contrary, are open to continuous investigation and transformation in transla-

tional processes of constant renewal and adaptation to ever new communicative contexts (cf. Ch. 9).

Following Welby and Peirce, translation is considered to be implicit in the concept itself of sign. There cannot be a sign without an interpretant, that is, without another sign that says its meaning. In other words, meaning subsists in the mutual relation of translation among signs. Interlingual translation, that is, translation among languages, is not something exceptional. Rather, it is part of a common practice which not only involves the verbal sign, but rather the sign in general. The question of translatability from one language to another already finds a positive response in the fact that we are continuously accomplishing translational processes of the "intralingual" and "intersemiotic" order, certainly in the same language, but also in nonverbal communication. Continuous translative processes are the condition for understanding and for making ourselves understood. Jakobson's analysis of translation is based on Peirce's tripartition of signs into symbols, indexes and icons (cf. Ch. 6). Any given sign (thus identified only by abstracting from real semiosic processes, for the sake of analysis) is the product of dialectic interaction among conventionality, indexicality and iconicity in sign situations where one of these aspects prevails over the other at any specific instance. This Peircean tripartition can be used to specify the relation between translation and signs more closely, for a more precise yet broader characterization of the interpretive-translative processes constituting our semiosphere and proliferating in it. In his paper "On Linguistic Aspects of Translation," Jakobson (1959 [1971]: 260–266) describes three main types of translative processes:

- intralingual translation or rewording which refers to the interpretation of verbal signs by means of other signs of the same language;
- interlingual translation or *translation proper* which refers to the interpretation of verbal signs by means of some other language;
- intersemiotic translation or transmutation which refers to the interpretation of verbal signs by means of signs of nonverbal sign systems.

These translative modalities are translative-interpretive modalities which are always co-present to varying degrees in human signifying processes dominated either by conventionality, indexicality or iconicity in any given instance.

Conventionality is regulated by a code. It is the type of relation described by Welby when she says that "language [...] is a symbolic system." Relations of contiguity and causality also regulate the dynamics between signs and their interpretants. These relations specify indexical signs, as understood by Peirce, and are exemplified by words and their definitions in a monolingual dictionary. Both indexicality and conventionality play an important part in interlingual translational processes. However, iconicity is the determining factor – for without it the sense of discourse, Bakhtin's "theme" or "actual sense" cannot be rendered (*cf.* 9.6). Iconicity in the interaction between interpretant signs and interpreted signs in translational processes always involves dialogism, alterity and creativity to a major or minor degree. When iconicity prevails, the relation among signs is neither conventional, nor necessary and contiguous, but rather hypothetical, what we have identified as a relation of hypothetical similarity. This is something that the interpreter/translator must inevitably take into account given that the task is to render the original interpretant with a similar interpretant from another language.

In theory there are no limits on the interpretants of the sign, neither of the typological order nor of the systemic. Each time something has meaning, potentially all types of signs and sign systems can provide interpretants. Consequently, meaning and translation are semiotic phenomena whether interpretation/translation takes place within the verbal, among the special or sectorial languages (Fr. *langage*; It. *linguaggio*) of the same historico-natural language (Fr. *langue*; It. *lingua*) (intralingual translation), or among different historico-natural languages (interlingual translation).

Transposition, translation, transfer, intersemiosis, intertextual, interverbal, interlinguistic, interlingual, dialectic, dialogue: these expressions tell us that the sign can only subsist in the relation *among* signs and that the modality of this relation is translation. Sign theory and translation theory come together in what we propose to designate as the "semiotic turn in translation" and which with a view to the relation to values can also be specified in terms of the "semioethic turn in translation" (*cf.* 10.7).

10.2 Translation, communication and life

Trans, *inter*, *dia* are prepositions and prefixes that specify the modality of being a sign or sign activity or semiosis. Semiosis is an intersign and a transign process. This is even more evident in the case of "*semiotic* processes" by contrast with "*semiosic* processes." We know that "semiotics" versus "semiosis" is a prerogative of the human being definable as a "semiotic animal" (*cf.* Introduction). Here, we are specifically interested in the relation, that no doubt can be described as vital (in the twofold sense of belonging to life and of being indispensable to the sign as such), that is the relation between sign and translation. We will now consider this vital relation at the two levels of *semiosis* and *semiotics*: in the general lifeworld and in the specifically human world (*cf.* 2.3, Ch. 12; Petrilli and Ponzio 2005a: 3–6).

Something that is not capable of relating to something else that signifies, utters, interprets, translates or somehow responds to it is not a sign. As Peirce says, something is a sign only on the condition that it has an interpretant.

"Transign," "intersign": this is the condition for signs to flourish, for the life of signs. Translation is a term now commonly used in the field of biology. providing yet another instance of translational processes on a theoretical level (by way of exemplification, see the chapters by Jesper Hoffmeyer, Kalevi Kull, Peeter Torop, Stanley Salthe and F. Eugene Yates in Petrilli 2003a). The *Umwelt* in which semiosis occurs is necessarily a transign or intersign network (Hoffmeyer 1996, 2003, 2008; Kull and Torop 2003). Biology speaks of translational processes with reference to the genome. Neurology speaks of translation with reference to the transition from chemical processes to electrical processes and vice versa and from electrical processes to endocrine processes and vice versa. As soon as it adopts semiotic paradigms, biology developed in the direction of biosemiotics is concerned with processual translational dynamics, with "trans" processes, "inter" processes: "signhood" is "intersignhood" and "transignhood" - or, if we prefer, "semioticity" is "intersemioticity" and "transemioticity."

It follows that there are necessarily two overlapping types of semiosis: semiosis for modelling, in other words, semiosis that constructs the sign network forming the *Umwelt*, that models the world in which the sign flourishes; and semiosis for communication as foreseen by a given Umwelt, according to the modalities established by that *Umwelt*. "Modelling" and "communication" indicate two fundamental types of semiosis and both occur in the relation among signs. For this reason, we may speak of translation. Signs are signs in translation, from modelling to communication and back. Signs are in translation. Signs translate each other: this is their condition of being signs. But this is also the condition of life which converges with semiosis and is made of signs (Athanor. Vita 5, 2002; Petrilli and Ponzio 2002a, b; Petrilli 2008a).

That signs and life – the latter being made of signs (life = semiosis) – are only possible in the condition of interrelation, interpretation, transposition or translation means that the being - the identity - of something that signifies and is significant is irrevocably grounded in otherness and, as such, is always becoming other than what it was becoming. The same sign is always the same other, for in order to become this sign here, in order to be itself and continue being so, it must become other in intersign interpretation processes, or in translation (Petrilli 2001, 2003a; cf. 11.4).

A greater focus on the prefixes *inter, trans, dia* is appropriate here. A sign is an intersign, a transign, a diasign, otherwise it is not a sign. The sign flourishes among signs, through signs, on signs and in the relation between signs. A sign needs signs to subsist as a sign. The sign lives and flourishes because it shifts outside itself and relates to other signs, in a movement through which it develops and fulfils its conatus essendi. The sign not only lives and flourishes on signs, but also among signs. The second situation, that of flourishing among signs, is the condition for the sign to subsist as a sign (a condition for life), for the sign to flourish on signs. But "between" and "among" do not only signify relation; they also signify separation. Relations among signs are not continuous, on the contrary, they are discontinuous, discrete. The absence of interruption is the presence of signs. But between one sign and another there is also a gap, or a leap. Every sign is other. The sign's identity develops and flourishes on signs; its identity consists in being other among signs, among others. As much as it may try, identity cannot mask, reduce, or eliminate the other, given that otherness is the material from which it evolves as identity.

The condition of becoming among signs can neither be reduced to *living on* signs, to *being*, nor to *being with* signs: there is no possibility of forming a community, no possibility of fusion, of convergence, of communion among signs: the sign is discrete, irreducibly other. The sign's continuous deferral among signs does not only imply difference in terms of identity and its confirmation in terms of identity, or of translations that render identity. The interpreted sign does not converge with any one interpretant, just as the translated sign is not exhausted in any one translatant sign (Petrilli 2010a: 234–242). Signs do not converge or identify perfectly with one another, but rather always leave a margin for evasion; the otherness of signs cannot be contained given that, to be this sign here, the sign must be other, the *same other*.

Biology distinguishes between "pro-" or "proto-" and "eu-": procaryotes and eukaryotes. Consequently, we can also distinguish between "prototranslation" and "eutranslation." These two types of translational processes are interconnected and interdependent. It is difficult to neatly distinguish between "prototranslational" and "eutranslational" processes, just as it is difficult to distinguish, for example, between unconscious and conscious or between work and activity. All the same, these two types of translation roughly correspond to the distinction between modelling and communication, between semiosis of the phylogenetic order and semiosis of the ontogenetic order.

The distinction between "proto" and "eu", in our case between "prototranslation" and "eutranslation" can also be used to distinguish between semiosis proper to all life-forms and semiosis proper to human beings. To the extent that human beings, unlike other living beings, are endowed with *language*, i.e. a primary modelling device capable of constructing infinite worlds, given that this modelling device is endowed with syntactics, they are also capable of high-level eutranslational processes by comparison with other living beings. In other words, human beings are capable of "logotranslation," or, if we prefer, of "semiotics" understood as "metasemiosis." The human being is a high-level "eutranslator," namely a "logotranslator": under this aspect, as anticipated above, the human being qualifies as a "semiotic animal".

Let us return to the distinction between modelling and communication (cf. 2.3). Modelling belongs to the phylogenetic order insofar as it concerns the species, it is a device that formed during the course of the species' evolution and did so not only through adaptation, but also through exaptation (Gould and Vrba 1982). Now, an important exaptative phenomenon of particular interest to us here is one that occurs in the sphere of anthroposemiosis – we are alluding to the verbal sign, speech. Speech originally arose with a communicative function in the homo sapiens era, which means to say for relations with the outside, with other humans. Subsequently, instead, speech was interiorized and used to support the original primary modelling device (language). This enabled the human being, for example, to communicate to himself, to weigh up, evaluate, eventually modify and perfect what he intended to communicate to others. This increase in the capacity for reflection was an enormous advantage for modelling procedure, both qualitative and quantitative: that primary modelling was empowered meant that the specifically human capacity for metasemiosis was empowered. This is the empowerment that characterizes and explains the transition to that phase which in evolutionary terminology is indicated as the *homo sapiens sapiens* era, to man as he is today.

In both types of semiosis – modelling and communication – relations are developed among signs, between signs, signs in translation. But in the field of translation, exaptation allows for expansion and empowerment, both qualitative and quantitative, involving primary modelling (that pertaining to language), secondary modelling (that pertaining to natural languages) and tertiary modelling (that pertaining to culture). The metasemiosic capacity is based on "primary modelling," on "language" understood as primary modelling. Here the term "language" serves to highlight the syntactical capacity of this modelling device, which is exclusive to human beings, whereas "secondary modelling," to repeat, concerns language understood in terms of verbal sign systems and "tertiary modelling" concerns complex cultural (human) sign systems at large.

On the level of intercultural relations, the condition of translational intersemioticity, of transemioticity tells of the processes of compromise, hybridization and negotiation that necessarily form difference and identity in all aspects and dimensions of culture. Translational processes are the condition for the formation of differences and identities; but they are also the condition for the delusory relation of mutual independence and indifference, opposition and conflict. Moreover, as studies in intercultural translation have clearly revealed, interlingual translation also involves - in addition to verbal signs - nonverbal signs, customs, habits, beliefs, knowledge, artistic and non-artistic cultural expressions, and values.

As anticipated, the expression "eutranslation" is appropriate for high-level translational processes as they take place thanks to "metasemiosis" or "semiotics" – that specifically human capacity and condition of possibility for the type of reflection on semiosis that is proper to the human species.

Here, in continuity, but in fact in the discontinuity of continuity, we are, as Emmanuel Levinas says, in a world that is "altogether other," an "altogether other world." A world that beyond the being of things as they are in correspondence to the *Umwelt* of each species, reveals the possibility of an *otherwise than being*, as states the title of his monograph *Autrement qu'être ou au-delà de l'essence* (Levinas 1974). This is a prerogative of the human *Umwelt* insofar as it is capable of producing an indeterminate number of different possible worlds (Sebeok 1986a: 13–14; 1991b: 53–58).

At this point, the prefixes "trans" and "inter" understood as across signs, among signs, between signs call for further consideration. The prefixes "trans" in "transign" and "inter" in "intersign" indicate the condition of becoming among signs, of becoming in the relation between signs. They indicate that *the sign is not exhausted in being, in identity, but rather flourishes in the relation*, a relation among signs that is *open* and *unfinalizable*. *The sign flourishes in the condition of otherwise than being* (see Levinas 1974; also Colapietro 2003b). The prefixes "trans" and "inter" announce the otherness of signs with respect to being – from procaryotes to the colonies or eukaryotes forming organisms in the superkingdoms (Sebeok 1986a: 10–12), from single fleeting utterances to persistent texts and their interpretations and translations.

Otherness thus described is not absence of being, but *time*, objective time, time that cannot be retained in presence. This is what Levinas in the third section of his important 1948 essay "La realité et son ombre," calls "*entretemps*," the "meanwhile," the unending interval and the time of dying which marks an abyss among beings that cannot be bridged and at once favours their effective multiplicity. The sign lives in its own time: in a chronotope that renders it other with respect to other signs – untranslatable as much as it flourishes through translatability, and uninterpretable inasmuch as it flourishes through interpretants, untransposable inasmuch as it flourishes through transposition, undeferrable as much as it flourishes through deferral. The question of the translatability of texts must keep account of the fact that translation extends over a void – the time of dying; or that it attempts to transgress an objective discretion that is not decided on the basis of respect, or any initiative by the subject; or that it brings to presence that which is characterized by absence: absence as it is determined in non-relative otherness and in the objective diachrony of time.

Eutranslation occurs at high levels of consciousness in logotranslation, which also involves translation among discontinuous, discrete signs; signs that not even

consciousness can make coexist in the synchrony of its presence. Logotranslation is dia-logotranslation where dialogism is otherness and responsive understanding and, at once, irreducible extralocalization. In this sense, translation is metempsychosis of the paradox of Achilles and the tortoise (Levinas 1972; Petrilli 2009b) and even before this, the paradox of life: endless deferral among signs without return.

But with respect to verbal sign systems, what linguistic usage is *not* translation as we are describing it? With respect to the distinction between literal and metaphorical and the fictitious boundaries it establishes, is not the sign transversal? Is not interlingual translation itself hardly at all translation the more it is literal? Is not the interpretant less an interpretant the less it is capable of establishing a relation to the sign it interprets in terms of responsive understanding?

10.3 Communication, responsive understanding and freedom

With reference to semiosis in the human world – and specifically with reference to verbality - once we recognize that meanings subsist and flourish in translation processes, the importance of the relation between identity and alterity and of plurilingualism in general, both internal and external to a single language, emerges more clearly. In the framework of interpretation semiotics – and as Bakhtin's work in particular has revealed – it is now obvious that communication is a primary function of human language. However, it is important to clarify that in this statement "communication" is not understood in the limited sense of message transmission, the intentional exchange of information. Far more than this, communication, as we have seen, also involves ambiguity, inscrutability, reticence, the unsaid, allusion, simulation, vagueness. Such characteristics are connected with the capacity of language for polysemy, polylogism and plurilingualism, which are all manifestations of the logic of alterity. Ultimately this is the type of logic that orients communication and provides the condition for interaction and understanding. And, obviously, this approach is in complete contrast with a monolinguistic and monological view of human communication.

Concrete live speech is possible thanks to continuous translational operations on the side of both production and interpretation in the transition from the following: from one code (linked to class, linguistic register, idiolect, genre, etc.) to another, from one language to another, from one communicative context to another. Successful communication-translation requires "active comprehension" or "participative understanding." This involves the speaker's ability to reformulate and adapt his/her own language to the interlocutor's. It involves the speaker's ability to reflect metalinguistically upon his/her own language and specify meaning through recourse to interpretants from the language of another. This also entails the ability to reflect metalinguistically on the language of others in order to specify meaning in terms of interpretants from the speaker's own language. "Active" or "answering comprehension" concerns the theme or actual sense of an utterance. It is achieved through dialogic relations among different languages and codes. These permit operations of rewording, transposition and transmutation in the ongoing deferral among interpretants as the latter replace each other, without ever perfectly converging.

Far from being a compact, unitary and monolithic phenomenon, human language may be described in terms of dynamic processes. It involves constant renewal, new idioms, different discourses, different logics and points of view. Plurilingualism and polylogism, both internal and external to a single language, derive from the possibility in human language of constructing different worldviews: human language develops in its plurality and multiplicity as a function of this very possibility (Deleuze and Guattari 1976).

Recalling George Steiner (1975), language thus described is the main instrument that we human beings have at our disposal for critical awareness, even if only to refuse the world-as-it-is, the world understood as a static and monologic block. Though each language presents its own special interpretation of reality to a greater or lesser degree, it is thanks to its inherent alterity and to the possibility of translating across different languages and cultures, that we human beings discover the almost disconcerting pleasure of freedom. From this perspective, as observed by Thomas Sebeok (1981), language not only concerns the real world, but also infinite possible worlds as foreseen by the human capacity for the play of musement.

Language understood in terms of so-called "natural language" as much as the plurality of different languages that go to form the latter are never given once and for all. On the contrary, insofar as they are made of sign material, their vocation is translation and transformation. Language and languages are in becoming in the semiosic processes of linguistic production. And considering that linguistic production is part of social reproduction overall, language production processes are inevitably oriented according to the values and ideologies characteristic of a given socio-linguistic community.

10.4 Translatability versus untranslatability

In *Ideologies of Linguistic Relativity* (1973), a title which refers to the work of Whorf and Sapir, Rossi-Landi (1973: 63) writes:

Language (le language) is the dialectical sum of a language (une langue) and common speech... The generative and self-extensive power of a language is therefore not a property inherent in it, but comes from the fact that we use it when we speak and in this use of it, we bend it to our purposes. Language-in-general is everything that is used for linguistic production. In this production, as in any other, we can distinguish (1) a constant capital, which is the language [langue], (made up of linguistic materials, instruments and "money"), (2) the linguistic working processes constituting common speech and (3) a variable capital constituted by the linguistic workers, that is, the speakers. The generative and self-extensive power usually attributed to the language as such [langue] is thus a characteristic of language-in-general, more or less as the growth of constant capital is in reality a characteristic of production viewed as a whole. But in linguistic production, as in material production, it can happen and indeed it usually does, that the constant capital takes on a sort of apparently autonomous, monstrous life of its own, subordinating to itself those expenders of linguistic labour power, without whom it could never have formed nor could it continue to exist.

As implicitly indicated by his recognition of "the generative and self-extensive power" of a language and his critique of extreme forms of linguistic relativity which view languages as closed, separate and self-sufficient universes unable to communicate among themselves, Rossi-Landi supports the thesis of interlingual translatability. As distant as languages may be from a cultural point of view – as in the case of languages deriving from different families such as the Amerindian and European – translation is always possible (cf. 10.2–10.5): "After all we do succeed in translating," says Rossi-Landi (1973: 53). And even where codes, expressions and propositions cannot remain identical or at least similar in the transferral from one language to another, it will always be possible to reconstruct one language in terms of another, either by describing the first metalinguistically or by expanding the second. "An ability to speak a given language implies an ability to talk about this language," in the words of Jakobson who calls our attention to the complementarity of the object level and the metalinguistic level of language (1959 [1971]: 262). As Rossi-Landi says, had linguistic universes been mentally incommensurable, it would never have been possible for Whorf or anyone else to even describe linguistic universes distant from our own, in English, while at once thematizing the impossibility of such operations (1973: 54).

This position finds support in Jakobson's work who, echoing Peirce, states that "any sign is translatable into a sign in which it appears to us more fully developed and precise," and continuing: "All cognitive experience and its classification is conveyable in any existing language. Whenever there is a deficiency, terminology can be qualified and amplified by loanwords or loan-translations, by neologisms or semantic shifts and, finally, by circumlocutions" (Jakobson 1959 [1971]: 263). Translatability is not a question of identifying or establishing convergences and correspondences between one language and another. The relation

is not one of conversion or of transformation of the same into the same. When a question of interlingual translation, the relation between languages involves re-reading, re-writing, re-interpreting and re-creating. Translation is the relation between the similar and the dissimilar, the known and the unknowable, the same and the other (Petrilli 2001). To support the thesis of translatability does not imply that languages equal each other, that their underlying structures are identical or that their vocables overlap perfectly. Languages do not communicate with each other directly. The thesis of translatability, of communicability among languages does not imply linguistic universalism, the belief that the great plurality of different languages can be traced back to a single language, to an *Ursprache*, to universal linguistic structures, or to innate mental structures, ultimately, to a monologic view of reality. Languages always maintain a margin of alterity and distancing with respect to each other, not only in the more obvious case of different natural languages, but also in situations of internal plurilingualism. As claimed above, the capacity for otherness, for difference and distance and for variation in point of view and linguistic register is a necessary condition for communication. Languages are always endowed with their own specificity, that is, with their own alterity however strong their cultural proximity. And it is precisely thanks to the condition of alterity that a text can transit across different languages and that translation is always possible from one language to another. À propos the possibility of different languages and different texts co-existing and enhancing each other through ongoing interpretive/translative processes, Per Durst-Andersen, in a book entitled Linguistic Supertypes. A Cognitive-Semiotic Theory of Human Communication (2011), introduces an interesting concept, one that accounts for the interplay of different voices, points of view, and representations in language, perception, cognition and communication, the concept of semiotic polyphony. This concept describes a combined triple orientation in all speech acts involving objective reality, speaker and listener (cf. 11.6).

Thanks to alterity, it is also possible to operate at a metalinguistic level not only in one and the same language, but also across different languages, across different verbal and nonverbal sign systems. The target language offers the possibility of greater metalinguistic distancing with respect to the source language; therefore, it makes further materials available for development in the chain of interpretants. The metalinguistic function compensates for the condition of non identification among the linguistic universes of different languages. However, in spite of their reciprocal alterity, languages are not incommensurable.

From the dynamics between identity and alterity derives the possibility of obtaining different forms of reported discourse – direct, indirect and free indirect – and their variants (Herczeg 1963; Voloshinov 1929). The different forms of reported discourse correspond to as many different ways of associating reporting discourse

to reported discourse, of perceiving, reformulating and representing the discourse of others; to the different ways of translating the discourse of others into one's own discourse. Furthermore, as demonstrated in particular by Bakhtin (1984a; 1984b), the dynamic between identity and alterity, as well as between the different forms of reported discourse, is a determining factor in the production and development of different literary genres. In relation to poetic language, Jakobson states that "poetry by definition is untranslatable":

only creative transposition is possible: either intralingual transposition – from one poetic shape into another, or interlingual transposition - from one language into another, or finally intersemiotic transposition - from one system of signs into another, e.g., from verbal art into music, dance, cinema, or painting. (1959 [1971]: 266)

In spite of what seems to be a limitation, following Bakhtin it can be claimed that thanks to the action of alterity and dialogism in language, poetic language included, this transposition is always in some way possible.

But to return to the passage from Rossi-Landi quoted above: far from deriving from some arcane quality inherent in a superindividual reality called langue, a language's potential for expressing and communicating anything from another language is the result of dialectic interaction between langue and "common speech" - the interpersonal and collective set of techniques that subtend expression and communication and are common to all individual speakers: in other words, "the generative and self-extensive power of a language" (Rossi-Landi 1973: 63) does not coincide with the *langue* but is connected with "language-in-general" as this expression is understood by Rossi-Landi (cf. 2.9).

Rossi-Landi develops his reflections on language and signifying processes in a Marxian framework. In this context he elaborates such notions as "linguistic production," "reproductive capacities inherent in all languages," "linguistic work," "linguistic use," "linguistic instruments," "linguistic materials" and "linguistic workers" (Rossi-Landi 1968, 1992a), underlining the dialectic-dialogic relation that interconnects them in the happy realization of communication (cf. Ch. 15). The implication is that human language is first of all social reality, which means that it is live, mobile and dynamic reality always in becoming through ongoing linguistic production and reproduction processes – the result of interaction between langue and "common speech," what Rossi-Landi also thematizes in later writings in terms of "common semiosis" (Rossi-Landi 1985). Rather than view language as simply given, clearly defined and definitive, Rossi-Landi investigates the actual processes of linguistic production, the processual dynamics that make expression and communication through language possible.

According to Rossi-Landi (1973), supporters of extreme forms of linguistic relativity, who support the thesis of interlingual untranslatability, confuse *langue* with *langage* reductively putting the former in the place of the latter while separating it from speech. This means to replace the global process of linguistic production with one of its parts only – constant linguistic capital. However, difficulties in interlingual translation concern *langue* and not speech, nor *langage* or linguistic production generally. To replace *langage* with *langue* means that any "new work" carried out by "speech" in that very same *langue* (constant capital), that any transformations in constant capital are ignored.

Another significant misunderstanding underlying the thesis of interlingual untranslatability consists in confusing products – already existing linguistic capital, with production, thereby attributing to the system of products properties that in reality belong uniquely to linguistic work. In other words, individual speakers use linguistic products that they partially reproduce. Such products are the result of historico-social production processes and never of individual labour viewed in isolation. Mental processes do not exist separately from linguistic work, but rather converge with it. Consequently, linguistic usage does not condition thought in a one-way process; instead, these terms intermingle with each other in the process of linguistic reproduction which, in turn, is part of a global and dialectically interactive network of economic, social and cultural relations. This description captures the reality of language in its complexity and dialectic-dialogic dynamism. Language is endowed with a potential capacity for looking at one linguistic universe with the eyes of another, for reproducing and developing a linguistic universe within the ever flexible boundaries of another - "plasticity" is a characteristic of language thematized by Rossi-Landi, similarly to Welby, as a condition for the very continuity of language's existence and development. For both authors, the capacity of language for signifying ambiguity, its plasticity, is an essential quality that renders it adequate for expression, communication and the acquisition of knowledge, endowing it with the capacity to adapt to ever new linguistic usages and purposes, to ever new communicative contexts, consequently for successful interpersonal communication which relies on such a capacity.

Even in the case of closely related languages, translation is at times difficult, inadequate or practically impossible (on a scale of increasing difficulties, for example, we can place a scientific treatise at one extreme and poetry at the other). Obstacles to communication among different universes of discourse, among different languages, may be systematically present at various levels. The following are some brief examples of relative untranslatability, described by Rossi-Landi, as results from comparing different aspects in the superficial signifying structure of two natural languages, English and Italian:

- vocabulary, where difficulties arise because of the greater or lesser availability of corresponding terminology. Italian words generally carry more meanings than the English simply because they are less numerous. This phenomenon is designated with the term *polysemantism*; it has historical causes and is open to various interpretations. An example is the Italian word "vitello" which is rendered in English either with "calf" or "veal" depending on whether we are speaking of a live animal or a serving of meat (Rossi-Landi 1961: 232–234);
- *syntax*, where problems of untranslatability would seem to be more serious and concern not only syntactic correspondences at a formal codified level, but also the signifying capacity that words assume in different contexts. The proposition expressed in Italian with either "Giovanni disse chiaramente" and "chiaramente disse Giovanni" loses a shade of meaning in English if both are translated by the rules as "John said clearly" (Rossi-Landi 1961: 234-235).
- concept families, where non-correspondence between two languages can give rise to such serious cases of untranslatability that not even context or paraphrase can offer an adequate solution. The distinction in English between "sense" and "non-sense" and "meaningful" and "meaningless" do not find their exact Italian equivalents in "senso" and "non-senso," or in "significante" and "non significante." In relation to this particular semantic field, Gottlob Frege's distinction between Sinn and Bedeutung (Frege 1892, 1892–1895) was rendered in English with meaning and denotation (Russell 1905) and in Italian with senso and significato (sense and meaning) translating from German and with significato and denotazione (sense and denotation) translating from English (Rossi-Landi 1961: 235–237).

Though areas of "untranslatability" exist and stylistic elegance must sometimes be sacrificed, it is generally agreed that the discourse universe of different languages more or less correspond, even when they seem distant from each other. In Rossi-Landi's view, the extent of such reciprocal coverage, which does not exclude areas of untranslatability in one language, or introduction of new signifying material in another, can be verified in terms of communication effectively achieved across languages and of the status of eventual "residues." For some concepts it is more a question of *expressibility* in two or more languages than of *communication* among languages (Rossi-Landi 1961: 227–232; also 1973: 53–55, 56–61).

The concept of "communication among languages" is another complex issue given that it is not direct and immediate, not even when a matter of languages belonging to the same family, deriving from the same originating source, as in the case of so-called romance languages, etc. Communication among languages is always mediated by signs, verbal and nonverbal, by cultural systems and values, by interpretive processes at various levels – semiosic, linguistic, verbal and non-verbal and again metasemiosic, metalinguistic and metaverbal (*cf.* 11.7).

The concept of "sign residue" throws light on the connection between signs and interpretants and in relation to translation processes contributes to a better understanding of the non-exhaustive and never definitive character of the work of translation. From this point of view, translation is similar to the work of interpretation which, too, is never exhaustive or definitive. The "sign residue" is the uninterpreted residue of the interpreted sign in relation to a given interpretant sign. It constitutes that part of semiotic materiality which enables a sign to be translated into any number of interpretive courses – without ever necessarily losing its initial sense because of this. The "uninterpreted sign residue" constitutes the very condition for the sign's ambiguity, polysemy and otherness. Even if a sign is produced by an original signifying intention, once it is freed from its source, it is open to infinite interpretive-translative possibilities (Petrilli 2010a: 137–158; Rossi-Landi 1992a: 271–298).

Reciprocal coverage among different languages is never complete and can be measured in terms of the material forming languages historically. In other words, we can compare the level of development in phonological and morphological complexes, verbal material, to the level of development of civilization in its different aspects, socio-cultural material, including the non-linguistic and the ideological, to which languages belong and which they express. With respect to the complexity of this approach, to classify translation difficulties simply in terms of surface signifying structure is obviously insufficient.

10.5 Common speech and plurilingualism

On the basis of what kind of signifying material can a philosopher make claims to both the individuality of his or her work in its historical and cultural determinations and, at once, to its universal relevance for mankind? A more profound understanding of such matters goes hand in hand with a more profound understanding of the processes that subtend intralingual, interlingual and intersemiotic communication. Rossi-Landi identified a level of reference common to all languages – what he called "common speech" – and described as a sort of *a priori* of language – in the Kantian sense – or a pre-linguistic level understood as all the operations that constitute speaking and communication and make them possible (*cf.* 2.9). "Common speech" designates a common territory among languages; it allows for transition from one universe of discourse to another and consequently for communication *among* different languages, whether natural or technical. This common territory includes the processes that subtend the level of language pro-

duction and the empirical procedures involved – whether a matter of translating, teaching or learning language. And as Rossi-Landi says, to investigate the prelinguistic level of language also means to investigate language in its connection to thought (Rossi-Landi 1961: 240ff).

The common speech hypothesis addresses all the common operations which are necessary to speech for successful communication (cf. Ch. 14). It refers to basic similarities in biological and social structure that unite all human communities beyond historical and geographical difference. The notion of common speech does not oppose that of plurilingualism. On the contrary, precisely because common speech is nothing more than a similarity of functions fulfilled by the various languages in satisfying needs of expression and communication, it can explain and justify the difference, variety and multiplicity of different languages in terms of the variety in expedients, solutions and resources that each language makes available in order to satisfy the basically similar social needs of expression and communication. As the set of social techniques necessarily used by all speakers, common speech subtends all natural, special or technical languages and in the face of greater or smaller areas of untranslatability ultimately makes translation possible, all the same.

Common speech does not refer the multiplicity of languages to a mythical original language, to an *Ursprache* or to the universal linguistic structures of a Logos or to some biological law governing all human languages. This is further explained by Rossi-Landi in his important 1968 monograph, Language as Work and Trade, as well as in subsequent writings where he reformulates the notion of common speech in terms of work, that is to say, linguistic work (and later of social production and common semiosis), in the framework of historical materialism:

The similarity of the functions fulfilled by the various languages is derived from the fact that in the process of language development the general forms of social formation, that is, the basic work and production relationships that separate any human society from any prehuman (only) animal society, are necessarily represented. (Rossi-Landi 1983: 41)

The theory of common speech seeks to *explain* the use of language and not simply describe it as did the Oxonian analytical philosophers. In Language as Work and Trade Rossi-Landi criticizes Wittgenstein and his notion of use as developed in Philosophical Investigations, maintaining that he analyzes the linguistic unit as already given, without inquiring into the social processes that produce it, thereby ignoring its social character. Rather than describe linguistic use as it occurs in a given natural language, with his common speech hypothesis Rossi-Landi aimed to identify the general conditions that make linguistic use possible beyond the limits of any one given natural language. The common speech hypothesis is a theoretical construct, a model and method with interpretive functions, a hypothesis

applicable to different languages and not an immediate description of real processes (Rossi-Landi 1961: 26). It refers to a set of techniques forming the necessary conditions for the happy realization of expression and communication. By virtue of their repeatability and constancy these techniques are common to all human languages. Common speech concerns fundamental categories and structures of various description because the human situation is what it is, biologically and socially, all over the earth in spite of relevant local variations. The expression "parlare comune" (common speech) was introduced by Rossi-Landi (1961: 164–166) to conceptualize a general methodology of human language and speech involving a set of common human techniques that are relatively constant in all languages. This system of human techniques is broadly international or rather, transnational, which means to say it is not limited to national-cultural boundaries, but rather is a global phenomenon shared by speech communities worldwide (1961: 165). It is not the theoretical expression of the historical processes of linguistic and ideological unification and centralization, of the "centripetal forces" in language according to Bakhtin, it is not connected with the notion of langue. As Rossi-Landi maintains (1961: 169) in his critique of the dichotomy between linguistic system and individual speaking, langue and parole, between that which is permanent in language and the potential for innovation, between "inventum" and "inventio," the notion of common speech understood as the set of constant and reproducible characteristics of language, as "language-in-general-as-humanwork," to echo Rossi-Landi's terminology in Language as Work and Trade, cannot be reductively attributed to just one of the two poles forming these dichotomies. Instead, it involves them both.

10.6 Translation, alterity and responsibility

The verbal sign is the ideological sign *par excellence*, as Voloshinov claims (1973: 9). As an ideological phenomenon it refracts historico-social reality. The verbal sign has an ideological function, it is invested with ideological materiality. It refracts ideologically the social reality in which it is produced and used. Insofar as it is ideological, the verbal sign is characterized as a historico-social event. Though nonverbal signs contribute toward shaping reality, the modelling influence of verbal signs is far greater. Reality, as we experience it, is organized verbally – a conviction which is at the basis of extreme forms of linguistic relativity. Exponents of this theory, like Benjamin L. Whorf (1956), maintain that our very perception of the physical world is programmed by the language we speak, in other words, the structure of language determines the speaker's thoughts, worldview and nonverbal behaviour (*cf.* 10.7). Echoing Wittgenstein (1953), we could say that our

world is the language we speak. On his part, Rossi-Landi described this approach as "a case of exasperated glottocentrism in which it is not difficult to recognize an idealistic deviation" (1975a: 25). By contrast with the idealism of linguistic relativity and opposing neopositivist stances which thematize language, thought and reality as separate though variously interacting entities, Rossi-Landi, instead, evidences the inseparable relationship interconnecting them. That is, he evidences the relation between language, thought and the context in its global complexity whether economic, social, cultural, etc. and the role that such interconnectivity plays in the formation of ideologies and worldviews:

Language is immediately present, but certainly not in the form of a constant linguistic capital, capable of being isolated from everything else and made to determine nothing less than thought. If we want to study the way in which thought is determined in all its developments up to the point of including spontaneous and sophisticated worldviews, we shall have to turn our attention to the sum total of economic, social and cultural conditions. We shall find that what we describe as linguistic is, if anything, a part of their phenomenology. (Rossi-Landi 1973: 70)

The theory of linguistic relativity recognizes the plurality of languages and worldviews, the condition of plurilingualism and polylogism, but at once formulates the thesis of incommunicability, incommensurability and untranslatability. According to this approach linguistic universes cannot relate to each other dialogically. At the opposite extreme, such trends as mental innatism, biologism and linguistic universalism reduce multiplicity to unity. Instead, critiquing both extremes, Rossi-Landi highlights the dialectic-dialogic nature of the relation between language, thought and objective reality. In other words, language shapes our worldview and is at once the product of relations among human beings and between human beings and the "natural" environment. Language not only determines social praxis but is also determined by it (Ponzio 1988, 2008c; Bianchi 1995). However, semantic correspondences between verbal signs and object reality, our view of the world, are never direct or immediate. There are no such things as "hard dry facts," as Welby claims (Petrilli 2009a [1893]: 424). She too evidences the sign-mediated nature of consciousness, language and reality and of the relation interconnecting them. The objective world takes shape and is perceived in its various parts thanks to the mediation of language which, in turn, is the product of social practice. Awareness of reality is awareness mediated by previous experience, both individual and collective, by specific values, ideologies and orientations of a given community which find their most resonant expression in the verbal sign.

"Semantic-ideological pliancy" means to be able to transfer into different ideological spheres, a characteristic of the verbal sign which, thus endowed, easily acquires new meanings and functions. The plurivocality, ambivalence, ambiguity and semantic-ideological pliancy of the verbal sign is given in its translatability into other verbal interpretant signs belonging to different semantic classes with different shades of meaning. In contrast with signals, which in comparison with verbal signs are endowed with a low level of signhood (Voloshinov 1927), verbal signs may be translated/interpreted by interpretants not only from different sign systems, as in the case of signals, but also from different classes of meaning (Voloshinov 1929). Ideological multiaccentuality, projectual pluridirectionality, valuational heterogeneity and polylogism are all implied by the condition of plurilingualism, polyphony and plurivocality. Semantic alterity involves ideological alterity, which concerns the valuational accentuation, practical orientation and operative intentionality assumed by the word in concrete communicative contexts. Consequently, answering comprehension involves interpretive choices and participation not only at the semantic level, but also at the ideological. It involves a point of view that is other with respect to identity, an ideological stance and is associated with the development of a critical linguistico-ideological consciousness.

All this is connected with what Bakhtin and Voloshinov call "theme" or "actual sense" as it develops in semantico-ideological translation processes and with what Welby describes as "significance" (1983 [1903]: 50-52; Petrilli 2009a: 272–284) in the framework of her own special approach to signs and meaning, or "significs." For Welby the term "significance" indicates the maximum expression value of a sign, enhanced through ongoing translative-interpretive processes: the sign viewed in its axiological dimension, in its relation to values. The more a sign is subject to transference, transformation, transmutation, transfiguration and above all to transvaluation, the more its significance and ultimate value is augmented. Even the simple rewording - "intralingual translation" to paraphrase Jakobson (1959) – of an expression in different linguistic registers is possible thanks to the development of a metalinguistic semantic-ideological consciousness. Ongoing translative-interpretive processes sharpen our perception of links and connections, enhance progress in knowledge and reveal aspects of truth previously unknown: the more the sign translates consciously and dialectically into different fields of thought and practical experience, the more its significance, import and value is enhanced. In the framework of significs, "transvaluation" (Welby 1983 [1903]: 26) is the term that best captures this aspect of the connection between translation and meaning: "transvaluation" is an expression that underlines the link between translative processes in the "significal" sense and Welby's triadic analysis of signifying processes into "sense," "meaning" and "significance." These terms indicate a progressive advance from lower to higher degrees of semantic-ideological expression value in concrete communica-

tive interaction (1983 [1903]: 5-6; Petrilli 2009a: Ch. 5). Steiner (1975) speaks of freedom as achieved in the possibility of transiting across languages and worldviews

Working along similar lines and keeping account of studies on the relation among signs, meaning and value – in addition to Welby and Bakhtin, we are also alluding to studies by Peirce, Morris and Levinas – the fundamental relation between translation and the concept of responsibility, unlimited, absolute responsibility, is also important to signal (Petrilli 2004b, 2010a: 3-48). "Responsibility is what first enables one to catch sight of and conceive of value," says Levinas (1989 [1968]: 113). Translative-interpretive processes regulated by the logic of alterity supersede the limits of identity and limited responsibility, as defined by professional roles, social status, political orientation, ideological convictions, etc. Unlike difference based on identity and the corresponding condition of indifference among identities, the logic of alterity allows for transcendence with respect to limitations and boundaries, which means to say for crossing over barriers and perceiving the other in relations of dialogic participation and unlimited responsibility.

10.7 Translation and ideology, toward a semioethic turn in translation studies

In the light of the connection not only between "meaning" and "ideology," but especially between "sense" and "ideology," a semiotic approach to translation theory must clearly deal with the question of ideology. The task of translation is properly accomplished only if the translating text interprets and expresses the "sense" of the translated text: to remain at the mere level of "meaning" is not sufficient. And given that it expresses valuational orientation, point of view and social planning to varying degrees, sense is connected with ideology. It follows that the problem of sense and ideology are closely related to the problem of translation.

In this framework, the limitations of linguistic relativity are clearly connected with the limitations of a specific ideological orientation, whether this is conscious or not as in the case of Edward Sapir (1949, 1952) and Benjamin Whorf (1956) and their conception of language. The latter thematize the influence exerted by language on thought, experience and perception, underlining the difference among languages and respective worldviews. They contend that differences can be so great, that languages can be so distant that interlingual translation is not only difficult, but even impossible. The problem of translatability and untranslatability is clearly connected here with ideological issues. Sapir and Whorf's theory of linguistic relativity implies a specific ideological orientation in relation to studies on Amerindian languages. The theory of linguistic relativity hides an ideology of the ethnic-cultural order, one that tends to justify forms of separation and segregation with respect to peoples that speak languages different from one's own (Rossi-Landi 1974; Solimini 1974: 98–102; 1991: 30–33; 2005).

Translation theory cannot avoid the problem of ideology. The question of translation is also closely related to semiotics, given that it necessarily involves the problem of the relation among signs, and to semioethics, given the relation to social practice and values. In addition to the connection between signs, values and social practice, a general translation theory, as anticipated above (10.2), is also open to developments in biosemiotics and inevitably to the connection between culture and nature. Considering the opening onto the different orders and systems of signs, a general theory of translation is a *global theory of translation*, one that addresses the semiotic founding of translation and the translational founding of semiotics understood as global semiotics. On the level of practice, this means to address two faces of the same semiosical processes which are sense producing processes.

Ground-breaking work on the relation between semiotics and the problem of translation, with special reference to the semiotics of Charles Peirce, has been pioneered by Dinda L. Gorlée in a series of important publications (Gorlée 1994, 2004, 2007). Gorlée coins the auspicious expression "semio-translation" to evidence the relation between signs and translation in the generative dynamics of signifying processes which are, precisely, semiotranslational processes. And today, in the light of Thomas Sebeok's global semiotics, such processes are ever more easily recognizable as global semiotranslational processes.

À propos the ideological implications present in translation, significant insights are afforded by a rereading of the debate from the early 1970s on Karl Marx's VIth thesis in *Theses on Feuerbach* (written in 1845 and published for the first time in 1888, in Engels 1976) and its correct translation. I am referring here specifically to the debate which took place between Adam Schaff and Lucien Sève in 1971 and 1972, published in the French journal *L'Homme et la société* (the various interventions are collected in a single volume in Italian translation under the title *Marxismo e umanesimo*, 1975b). But given its role in the overall interpretation of Marxian theory and of the relation between Marxism and humanism, the question of the VIth thesis and its translations attracted the attention of many other intellectuals. These included Louis Althusser, Auguste Cornu and Roger Garaudy to name only those who expressed themselves in the French language (given that it was the French translation that was directly under fire). The VIth thesis reads as follows:

Feuerbach löst das religiose Wesen in das *menschliche Wesen* auf. Aber das *menschliche* Wesen ist kein dem einzelnen Individuum innewohnendes Abstraktum. In seiner Wirklichkeit ist es das Ensemble der gesellschaftlichen Verhältnisse.

The discussion was sparked off by Adam Schaff and his 1965 monograph, *Marksizm a jednostka ludzka*. Schaff maintains that what results from social relations is man understood as an individual, the human individual. This was in net contrast with the sense of the official Polish translation which translated *menschliche wesen* as "man's essence." According to this interpretation/translation of Marx's conception, what results from social relations is the essence of man and not the individual man. In Polish, *menschliche wesen* corresponds to "*istota ludzka*" and not "*istota czlowieka*." In French "*istota ludzka*" corresponds to the expression "*l'ètre humain*" and in English to "human being"; whereas "*istota czlowieka*" in French is "*l'essence humaine*" and in English "human essence." The Italian and Russian translations are just as mistaken.

For Schaff, menschliche Wesen means the "concrete human being" in contrast to "man in general" or "abstract man." Therefore, menschliche Wesen means "human individual." According to Sève, Schaff's translation of Marx's VIth thesis was wrong, a misinterpretation of Marxism, the result of reading Marx in a humanisticspeculative key with repercussions at the political level. Ultimately, the whole debate revolved around the question of the relation between Marxism and humanism: in truth interpretations of the VIth thesis can be read as reflecting the overall interpretation of the relation between Marxism and humanism, ideology and science, scientific socialism and Marxist humanism, Marx's youthful writings and his mature works, all of which concern the meaning and value of Marxism in general (cf. Ponzio 1975a: 6). Though centred upon the translation/interpretation of only a few expressions in the *Theses*, the debate, as Schaff maintains, extends beyond "words" and can only be fully understood by looking "behind the screen," by inquiring into the history of left-wing political movements and by relating the consequences of this debate to the "controversy on the humanistic contents of socialism, the controversy on the means of overcoming the effects and consequences of Stalinism in the Communist movement, etc." (Schaff in Ponzio 1975a: 114).

Schaff contends that even though *menschliche Wesen* is recurrently translated with the equivalents of "man's essence," at the time consolidated by tradition, this translation is mistaken. The German word *Wesen* is ambiguous: it has up to eleven distinct groups of meanings, each with numerous semantic nuances. Two of these meanings are relevant to the debate in question. They correspond, respectively, to the Latin "ens" and "essentia," English "being" and "essence," French "être" and "essence," Italian "essere" and "essenza" understood as "living being," on the one hand, and "essence of things," "that which is essential" as opposed to

incidental, on the other. These languages do not have an equally ambiguous term corresponding to the German "Wesen." However, "Wesen" does have an equivalent in terms of polysemantism and plurivocality in the Russian "suschtschestwo" and in the Polish "istota." Consequently, contrary to languages like Russian and Polish which contain an equivalent to the German "Wesen" for ambiguity, languages like French, English and Italian are forced to make a decision each time they translate: the meaning of "Wesen" must be decided each time it occurs in a given context, its sense determined for appropriate translation into the target language.

Translation matters get even more complicated when we consider that two different and contrasting official versions of the *Theses* are available in French: the expression *das menschliche Wesen* is either translated as "*l'essence humaine*" (*Œuvres complètes de Karl Marx*, 1927–1928) or as "*l'être humain*" (*Œuvres choisies de Marx-Engels*, 1970). To translate in one sense rather than in another is of no small consequence. The expressions "*l'essence humaine*" and "*l'être humain*" bear profound philosophical implications and, accordingly, Marx is interpreted as discussing either the "essence of man" or the concrete "human being," the latter being the real human individual defined in his/her relations not only to nature, but also to society. The real human being is a product of society and as such is a social being.

Most official translations of *Theses on Feuerbach* derive from the original Russian translation. But strangely enough, in 1892 the Russian translator Plekhanov chose to translate the ambiguous German word "*Wesen*" with the unambiguous Russian word "*suschtschnost*" ("essence," "*Wesenheit*"). But he could have chosen the ambiguous term "*suschtschestwo*" which, like the Polish "*istota*," has multiple meanings and consequently is closer to the German original. With this particular lexical choice, the Russian translator – a renowned authority, as Schaff observes in his monograph cited above – heavily conditioned future philosophical and political interpretations of this particular text by Marx.

Unlike "Wesen," "istota," "suschtschestwo," the same word cannot be used indifferently in languages like French, Italian and English. Under the influence of the original Russian translation, "Wesen" is mostly translated with the equivalents of the Latin "essentia." But Schaff refused this solution, preferring the equivalents of "ens." He reached this decision by combining the results of grammatical analysis with philosophical context. According to Schaff, the sense of such an ambiguous word as "Wesen" can be established on the basis of the rules of German syntax.

If the expression "das Wesen" is followed by a noun in the genitive, it means "essence." Therefore "das Wesen des Christentums," which also corresponds to the title of a work by Feuerbach, means "the essence of Christianity"; correspond-

ingly "das Wesen des Religion" means "the essence of religion"; "das Wesen des Menschen" means "the essence of man." "Wesen" followed by "of something" or "of somebody" functions in the sense of "essence." But if "Wesen" is preceded by a qualifying adjective, it means "being." Therefore, "das christliche Wesen" means "the Christian being"; "das religiöse Wesen" means "the religious being"; "das menschliche Wesen," "the human being." German syntax tells us that in all these cases we are dealing with a "being" that is respectively Christian, religious or human.

An interesting point is that translation of das menschliche Wesen, following Schaff, as "human being," was also recognized by Althusser author of *Pour Marx*. However, Althusser did not accept "definition" of "human being" as the totality of social relations. Therefore, it is still possible to reach a diametrically opposite position to Schaff's and refuse Marxist humanism as "non scientific," as does Althusser, on the basis of the same translation even of Marx's VIth thesis. Though this particular issue may seem overspecialized and of limited interest to the non specialist, on the contrary it is enormously important given that it has conditioned and determined interpretation of Marxist theory generally.

This discussion is particularly important for translation theory, given that it evidences the relation between translation and ideology: to translate in one way rather than in another, as in the case of this thesis by Marx, is rich with ideological implications. The solution to this particular controversy is significant at various levels including the philological, philosophical and political. It is also important to the end of establishing the validity of Schaff's general interpretation of Marxism and of his critique of existentialism, of structuralism, as well as of Althusser's theoretical anti-humanism.

In Marksizm a egzystencjalizm (1961b) (Marxian and existentialism) significantly translated into German as Marx oder Sartre, Schaff already observes that to deny Marxism the character of humanism (as did certain Polish Marxists even before Althusser) means to reinforce the opposition between Marxism and humanism and to divide the proletariat using humanism as the discriminating factor. Schaff maintained that Marxism is the humanism of our times and placed the problem of the human individual at the centre of his own theory of language and knowledge. In truth he had dealt with issues related to the human individual and socialist humanism since his early writings, such as Wstep do teorii marksismus (Introduction to the theory of Marxism), 1947. In a conversation with Augusto Ponzio held in 1977, Schaff claimed that

... neglect of the problem of the human individual leads to impoverishing Marxism at the theoretical level and to distorting it at the practical level. In this mistake lies the deep secret of Stalinism. This is why the protagonists of "true" Marxism - where the single individual is absent – are so dangerous. I am referring not only to those who put Stalinism into practice, but also to its theorists whose various political lucubrations and theoretical mistakes have resulted in the thesis that Marxism is anti-humanism. If this were the case, we would have to fight it. But it is a pure lie: Marxism is humanism and it is the concern of Marxists to fight in the name of the humanism it professes. This has always been my firm belief as a Marxist and as a Communist which also explains my choice of the leitmotif running through my philosophical works. (now in Ponzio 2002, Eng. trans. my own)

Unlike other forms of humanism, Marxism as scientific socialism leads the way to the radical transformation of relations of inequality and exploitation. Schaff began formulating the problem of Marxist humanism in his book of 1947, *Wstęp do teorii marksismus*, according to the same methodological procedure applied twenty-seven years later in his monograph of 1974, *Strukturalismus und Marxismus*. He criticized Althusser's anti-humanism and underlined the need to specify the meaning of such expressions as "humanism" (and "anti-humanism") relatively to historical and social context. Words only signify appropriately when historical and social conditions are specified and this, no doubt, is also true of other terms relevant to the present discussion, such as "freedom," "democracy," "justice," "equality" and "property."

Specification is necessary to avoid moralistic overtones as much as to eliminate semantic ambiguity and stereotypes exploited to maintain the dominant order and to spread anticommunist propaganda. Schaff had already observed in his early studies that humanism does not exist in itself, just as man does not exist in himself and for himself, separate from context and from the other: only concrete man exists, man who lives in a given age, in a given country, who belongs to a given social class, represents a given tradition, given personal ideals, etc. (Schaff 1947).

Between the second half of the 1950s and the beginning of the 1960s, existentialism (especially in Sartre's interpretation) deeply influenced certain Polish Marxist intellectuals: this trend was related to the so-called "crisis of Stalinism" and to events connected with the "Polish" and the "Hungarian October". At the time, Schaff evidenced a profound "incompatibility" between Marxism and existentialism, as evidenced in his 1961 monograph *Marksizm a egzystencjalizm*, mentioned above (the German edition is significantly entitled, *Marx oder Sartre?*, a legacy of the concept of the individual proper to bourgeois ideology). Historical materialism explains human behaviour in terms of social conditioning. It describes each single individual as the expression of social relations (Marx's VIth thesis on Feuerbach). Instead, existentialism explains social phenomena as resulting from individual freedom considered as an absolute, natural and non-historical fact. In his critique of existentialism, Schaff underlines the importance of semantic definitions and denounces the ambiguous nature of concepts and arguments re-

currently used by Sartre in his Critique de la raison dialectique (1960). Moreover, with the same reasoning which led him to oppose Marxism to existentialism and to polemicize against certain Marxists (e.g. Leszek Kolakowski) for having accepted the existentialist conception of the human individual, Schaff rejected the work of other Marxists who like himself criticised existentialism, but in terms that he judged altogether inadequate and oversimplifying.

Schaff supported the Marxist approach rather than the existentialist, but he shared a common interest with the latter in problems relating to the human individual. Though mostly neglected by Marxism, these problems were not alien to it on a theoretical level. Problems concerning the human individual contributed to generating Marxism and to rendering Marxian analysis of the social relations of production even more significant. Marxism involves struggle against the different historical forms of social alienation, where such a condition prevents the individual from becoming a conscious protagonist of its own history. In Schaff's opinion, Marxism is radical, positive and materialist humanism, which means to say humanism committed to historico-social reality where the history of humanity is human. Marxism is concerned with the human individual, where that human individual is historically specified in terms of the relations of production peculiar to a given country. And, of course, Marxism is inevitably opposed to the interpretation of social alienation in the abstract terms of "human essence" and "human nature."

Discussion of Marx's Theses on Feuerbach emphasizes how the problem of translation is at once the problem of the correct interpretation of a text's sense, its ideological orientation as well as the interpreter-translator's ideological orientation toward that text. Such issues evidence the close relationship between signs, ideology and translation. And given that the relationship between "signification" and "significance," "semantics" and "pragmatics," "meaning" and "ideological sense" is central to an adequate understanding of the task of translation, a focus is clearly required on the relationship between theory of translation, theory of ideology and semiotics.

At this point, we can return to what we said at the beginning of this section (10.7) and above (in 10.4) and integrate with further considerations \dot{a} propos the relation between the question of translation and the "theory of linguistic relativity" as formulated by Sapir and Whorf. Difficulties and obstacles connected with translation are not absolute to the point of justifying the thesis of "untranslatability." No doubt, there is no such thing as a final and definitive translation. It is always possible to return to a translated text and propose yet another translation, one that is considered more "adequate," more "in keeping," that "responds" better to the original text. In this connection, the difference between "simple" and "complex" is only relevant to a point as the criterion for deciding on the possibility of translational "fidelity." In certain cases, there is nothing simpler than a poem and yet nothing more difficult, more complex to render in another language.

Untranslatability is an alibi for closure within the boundaries of some totality. In the case of Sapir and Whorf, the totality is language and its "distance" from another language. But it could also be a question – and examples are not lacking in this sense – of the untranslatability of a literary genre. For example, "Poetry" where the capital "P" is intended to highlight the idealizing and hypostatizing emphasis that generally compensates the lack of explanation (see the critique of Benedetto Croce's concept of "Poesia" in Leone de Castris 2012: 86-124). Another example is the totality constituted by the self, the monadic nature of its "singularity," its "uniqueness." This involves that type of "untranslatability" which found expression, for example, in the aftermath of the second World War, in terms of "incommunicability." This type of untranslatability / incommunicability emerged and was thematized precisely at a time when it was becoming ever more obvious that "encounter" is inevitable - whether linguistic, ethnic, cultural, social, economic, professional or scientific. In other words, the structural impossibility of avoiding "encounter" and of escaping through the expedient of incommunicability slowly became ever more obvious, to the point of becoming manifest in "global communication" today.

Alibis and expedients: as regards what? As regards our responsibility toward the other. Linguistic untranslatability is but one among numerous alibis, no doubt the most effective and peremptory against the other who does not belong, who is different, who is not a member of the community, who transforms the uniqueness—alterity relationship into a relation of opposition, contrast and mutual exclusion. Uniqueness, singularity — like identity, whether individual or collective — is constituted in the relation of alterity; and calling the self back to its responsibilities without limitations and justifications, the other renders it unique. In other words, it is only in the relation with the other that the self emerges in its singularity.

The theory of linguistic relativity assigns language its own "ideology" and "vision of the world." No doubt this is true if we consider language in the terms discussed by Sebeok and his concept of "secondary modelling." The concept of "secondary modelling" refers to modelling processes operated by each language relative to species-specific modelling, that is, "primary modelling" which Sebeok also indicates with the term "language" as distinct from "speech" (cf. 3.1, 10.2, 15.4) The concept of "modelling" is present in the term "patterning" used by Sapir: cultural patterning and linguistic patterning. According to Sapir, unconscious patterning operates at all levels of natural language – the phonological, syntactic, semantic and pragmatic. Natural language resists intervention by the individual and rationalization. If language thus understood is subject to transformation, this

is due to an internal "drift" process. Interpreting natural language as something perfectly autarchic, Sapir does not keep account of "language" as understood by Sebeok, as primary modelling, fundamental and species-specific. Language as modelling – and this is true exclusively of the human species – allows for the invention of numerous possible worlds. This even explains what Chomsky with his theory of universal grammar leaves unexplained; why Babel?, how come many languages?

What we may call "common human modelling," which can somehow be associated to the concept of "common speech" as thematized by Rossi-Landi in his 1961 book, or to what from the second half of the 1960s onward he preferred to call "linguistic work," explains translation as a possibility in spite of substantial differences among languages, which means to say, among the different secondary modelling systems. To the prejudice of the autarchic and hermetic closure of "secondary modelling" characteristic of natural language (with respect to other historico-natural languages, but also with respect to "primary modelling" which is what makes the existence of manifold and different historico-natural languages possible) is added the prejudice of language understood as inexorably the same for all individuals who speak that language, which also means to exclude that particular difference which, instead, Saussure recognized and evidenced with the distinction between *langue* and *parole*. Ideology is not a monological vision and prerogative of language, just as worldview is not the monolithic expression of a culture. The so-called "linguistic community" is socially stratified and differentiated. Thus differentiated ideological visions, differentiated expressions of interest, needs and aspirations, that give rise to different social programmes, projects and plans with different possibilities of converging with the dominant worldview, linguistically and culturally, or of being dominated by it, with different possibilities of converging with the order of discourse and with the dominant social order, all such differences subsist together in the same "linguistic community."

A theory of translation with any claim to adequacy must take all such factors into account. Any difficulties, incongruities and even the paradoxes of translation should be reconducted to such differences as just outlined (even if only synthetically), and not exclusively to difference among languages, historico-natural languages, which is reductive. What's more, these languages are conceived as the expression of closed and monadic worldviews. But precisely because differences and relations of alterity among languages, cultures, ideologies, among individual paroles do not subsist - indeed are not even possible - outside encounter, involvement, mutual exposition and dialogism (resulting from inevitable provocation by the other, and not from concession by the same); and precisely because such relations are the expression of a *common*, species-specific human capacity for innovation, recombination, invention, creativity and transformation, translation is always possible. Here "always possible" also means that finalizability is excluded, that what is translated is always retranslatable, that translation like interpretation (two faces of the same process, inseparable like the two faces of the same sheet of paper) has no limits. This is because translational and interpretive processes are constitutive of semiosis and semiosis is infinite.

10.8 Intermezzo. Humanism and antihumanism, responsibility without alibis and voluntarism

The relation between semioethics and humanism has been discussed in Chapters 1 and 7 (in particular 1.5, 7.1) à propos the relation between semioethics and Victoria Welby's significs. We will now return to the theme of humanism in the light of our considerations above on Marx's *Theses on Feuerbach*, precisely the VIth and its translations. The problem of translation is closely related to theoretical problems that transcend translation proper to invest issues that are no less than fundamental – such as the question of humanism. Our observations concerning the VIth thesis are intended to explain the sense of the relationship between semioethics and humanism. In this light we also intend to explore the related concept of *human individual* understood in its constitutive and historically specified biological and social structure. On the basis of this discussion, we will now take the opportunity to respond to the timely call for clarification made by Paul Cobley in an essay of 2007 titled "Semioethics, Humanism and Voluntarism."

Referring to Louis Althusser and the *vessata questio* of the relation between Marxism and humanism, Cobley revisits the problem of the relation between humanism and antihumanism and does so keeping account of semioethics. The problem of whether Marxism is a form of *humanism* or *antihumanism* leads back to the debate which took place during the mid-1960s. Initially, only French communist intellectuals were involved. Subsequently, however, this debate spread beyond France and its national boundaries, in circles with a similar political orientation and essentially at a time when Stalinism was commonly recognized to be collapsing.

Cobley's main focus is Althusser's monograph, *Pour Marx*, published in 1965. *Lire le Capital*, a co-authored volume including chapters both by Althusser and Étienne Balibar among others, appeared that same year. This period is characterized by so-called "structuralist Marxism." In addition to Althusser, other authors representative of this trend include Lucien Sebag and Maurice Godelier. Unlike Althusser, Godelier did not use the expression "humanism" in vague or abstract terms, nor did he discuss Marxism in terms of "antihumanism," which he con-

sidered just as general and abstract. Godelier described Marxist antihumanism as the result of associating socialist orientations and programmes to speculative a priori conceptions about man's nature, an approach he considered scientifically unfounded.

Among French intellectuals of the time were representatives who interpreted humanism generically. They defended the humanist character of Marxism while polemicizing directly with Althusser. Lucien Sève supported translation of the expression "menschliche Wesen" in Marx's VIth thesis with the equivalents of "human essence." His position corresponded to the dominant interpretation of this particular thesis – and not only in France. Consequently, Sève intervened in the debate to state that Schaff's interpretation was wrong because he referred to the concrete human being (as stated in the title itself of Schaff's 1965 monograph and its German and English translations), that is, the socially and historically determined human individual.

Schaff had already underlined the humanist character of Marxism in the 1940s. In line with this approach, he also evidenced the importance of addressing the ethical dimension of the human individual in its material specification, biological and historico-social. Neglect of such issues is one of the main causes behind alienation as a social phenomenon, traceable even in "real socialist" countries, as Schaff affirmed courageously in his 1977 monograph, Entfremdung als soziales Phänomen (Eng. trans. Alienation as a Social Phenomenon, 1980). Such a stance made his life difficult, causing him to be ostracized in Marxist circles as well – and not only in Poland. He met with serious obstacles concerning the possibility of direct participation in political life. He also had difficulty publishing and getting his works translated.

In 1960 Schaff published his renowned monograph Wstęp do semantyki (Eng. trans. Introduction to Semantics, 1961). In that same year he published the essay "Konflikt humanizmów" [The conflict of humanism] and, immediately after, in 1961, "Marksizm a filosofia człowieka" [Marxism and the philosophy of man], in Polish. These essays deal with different aspects of the problem of the relation between Marxism and humanism. Both flow into Schaff's 1961 volume, Marksizm a egzystencjalizm [Marxism and existentialism.] In 1975, Schaff collected his (closely interrelated) essays on Marxist humanism, philosophy of language and theory of knowledge in one volume in German, Humanismus, Sprachphilosophie, Erkenntnisttheorie des Marxismus. This was soon followed by its translation into Italian in the form of a trilogy under the common denomination Saggi filosofici [Philosophical essays], edited by Augusto Ponzio, which appeared between 1977 and 1978: Teoria della conoscenza, logica e semantica [Theory of knowledge, logic and semantics], 1977, Che cosa significa essere marxista [What it means to be a Marxist], 1978, and La questione dell'umanesimo marxista [The question of Marxist humanism], 1978. In 1975, Ponzio had already collected essays by Schaff and Sève discussing Marx's VIth thesis and its translations, presented together for the first time in a volume significantly entitled, *Marxismo e umanesimo* [Marxism and humanism], a title that effectively responds to the sense of the debate.

Just as he had differentiated between Marxist humanism and "voluntarist" and individualist humanism characterizing existentialism – with special reference to Sartre, author of *La critique de la raison dialectique* (1960) – Schaff now took another interesting stand in the monograph *Structuralismus und Marxismus*. This appeared simultaneously in German and French (*Structuralisme et Marxisme*) in 1974, and in English translation (*Structuralism and Marxism*) in 1978. Schaff opposed generic antihumanism, as professed by Althusser (where all historicosocial references were lacking), as much as the idea of "man's nature" (which subtended Chomsky's linguistic theory, where Cartesian innatism is associated to forms of pseudoscientific biologism).

Althusser's so-called structuralist and antihumanist Marxism responded to the need for "scientific" guarantees against Stalinist ideology. At the time, French Marxist intellectuals felt this need widely – and not only them. Althusser took a generic stance toward "humanism" and "ideology" without further specification, contrasting them to science described as immune from ideological temptations. Dogmatic communists shocked and frustrated by the "personality cult" insisted on identifying a *coupure*, a break in Marx's writings – not between different types of humanism, Feuerbach's and the Marxian, but between humanism (without further specification) and science (understood in neo-positivistic terms).

The need to distinguish clearly and without further specification between humanism and antihumanism, humanism and Marxism, science and ideology, individual will and determination by social structures can be explained. Marxist intellectuals were disappointed by the processes of "de-Stalinization" and reacted to their trauma by deluding themselves into believing they could get rid of voluntarism, individualism, ideology and humanism all in one blow.

Though analogies can be traced between Althusserian antihumanism and neopositivism (reduction of philosophy to methodology of science, analogy between the opposition of science to metaphysics and of science to ideology), unlike the neopositivists, who are careful to use terms clearly and precisely, Althusser's antihumanist structuralism, as Schaff indicates, is remarkable for its lack of precision and lack of attention concerning semantic issues. We are not signalling the absence of definition, which is not the point. Both Welby and Vailati have taught us to be wary of definition. And when Charles Morris himself in *Signs*, *Language*, *and Behavior* searches for terms to talk about signs (and searches in the language of biology and not of physics like the neopositivists), he did not formulate definitions. Instead, he described possible applications in given contexts.

As regards the association between "humanism" and "semioethics," we will not let ourselves be tempted by Cobley (2007) to formulate a definition. Humanism calls for characterization in context and certainly not in terms of "individualistic voluntarism," "Cartesian subjectivism" or revolutionary wishful thinking. The concept of responsibility has been discussed in terms of the capacity to respond for the other - this other that in today's globalized world is ever more "my neighbour" -, and not simply for the self. The allusion here is to "unlimited responsibility," to responsibility without alibis. Contrary to a limited and anthropocentric perspective, unlimited and unconditional responsibility conditions us to the point of evidencing how the life of each single individual is implicated not only in the life – meaning also the quality of life – of other human beings, but also of all other life-forms on earth. This means to say that we are all implicated in semiosis globally.

Rather than as a courteous, generous or altruistic concession made to the other, dialogue has been discussed in terms of inevitable exposition to the other, as involvement with the other, as reflecting the condition of intercorporeity, as the impossibility of closing to the other, of withdrawing from implication in the destiny of the other, in spite of all efforts to the contrary, that is, efforts to barricade oneself in an attitude of indifference to the other. In our discussion as we have conducted it so far and as we intend to continue it, the human individual is clearly conditioned not only in organic and biological terms, but also socially and historically. As such the single individual is called to respond not only for itself, but also for others – and ever more so the greater our capacity to use signs to talk about signs. In other words, the greater our consciousness of our own self and of the condition of inevitable involvement with the other – without parapets, protections or alibis –, the greater our responsibility for the other (the other of self and the other beyond self), where responsibility is understood as "unlimited" or "absolute" responsibility.

Context confers semantic specification. Therefore, what we can report with Schaff à propos Althusser's antihumanism and his ostracism of ideology is not a lack of definition tout court, but rather an indeterminate use of terms in the contexts in which he uses them. The expressions "ideology," "science," "humanism," "human individual" and "historicism" are all implemented without keeping account of their semantic ambiguity. But not only this. These terms are also invested with different meanings in different contexts. Schaff evidences how Althusser uses the term "ideology" with meanings that are not only different, but that are even contradictory. On Schaff's account, "ideology" and "antihumanisn" are invested with a magical meaning and perform a sort of exorcism when implemented. And just as the term "ideology" is ambiguous, so is the term "science" whose meaning is mainly determined in opposition to "ideology." The same thing holds for "humanism" and "antihumanism." Here, we may also observe that Althusser rejects "empiricism" in terms that are just as ambiguous and generic. What Althusser calls "empiricism" has hardly any connection at all with its historical meaning. Traditionally "empiricism" means anti-innatism and antispeculative apriorism. It incorporates stances – like Locke's – contemplated by Sebeok and his global semiotics. In any case, our immediate concern here is not to establish what Althusser understood by "empiricism." Instead, what we wish to point out is that his "distorted" use of this concept signals the general tendency to underestimate the importance of "empiricism" understood as "anti-innatism" and "anti-apriorism."

But let us consider the term "antihumanism" as used by Althusser: Schaff observes that according to Althusser, "antihumanism" is not symmetrical to "humanism." Antihumanism in Althusser's interpretation does not reject speculative conceptions of social reality founded on the "essence of man." On the contrary, misinterpreting Marx and in full contradiction with the latter's critique of the "fetishism of merchandise," antihumanism in Althusser's interpretation consists of asserting that social relations, insofar as they are structural relations, are not relations among single individuals. However, to claim that social relations are relations among single individuals, does not mean not to take account of the structural character of such relations. If anything, it means to take a stand against the tendency to hypostatize the concept of structure and thereby interpret it in ontological and metaphysical terms. No doubt, social relations among single individuals are connected to existing objective conditions, to existing "structures." Moreover, to make this claim does not mean to deny individual responsibility. Nor does it mean to contribute to a necessitarian, naturalistic or even fatalistic vision of things, to deny the possibility of transforming them. As Schaff insists, to avoid the error of "individualistic voluntarism" (a disease that plagues "existential humanism" which he opposes to "Marxist humanism" rather than "Marxist antihumanism"), it is not necessary to throw out the baby with the bath water. In other words, it is not necessary at all to deny the single individual's responsibility – despite attempts at reducing responsibility, even shirking responsibility entirely, by hiding behind social roles, situational contexts, identities and affiliations in search of alibis and justifications.

At this point, after our considerations so far (demanding, but necessary), let us now report two jokes that circulated in France more or less at the time Althusser's *Pour Marx* was published (mid 1960s):

Joke 1

One asks: "What's capitalism?"

Other replies: "Exploitation of man by man."

One asks: "And communism?"
Other replies: "The opposite."

Joke 2

One says: "Say something leftist." Other replies: "Anti-humanism!"

And after what might seem a piece of stale humour, let me now tell a story. This is about someone who was keen to denounce the "fashionable nonsense" plaguing semiotics before its "biological turn." So keen that in his efforts to prove the point, he at last found someone who made nothing less than the "flatly selfcontradictory claim" that "the body" is "incorporeal." He then rightly adds with admirable acumen that, of course: "a body can be a lot of things, but it cannot be noncorporeal." However, he makes the slip (a case of short-sightedness?, or a Freudian slip?, who knows!) of reading "incorporeal" instead of "intercorporeal" (the incriminated text: "The body is an organism that lives in relation to other bodies, it is intercorporeal and interdependent." Nor am I misinterpreting in turn, since the text in question is my own – Petrilli 2003c: 66. And irrespective of anything else, was not "the biological turn" in semiotics already history in 2003?). The author in question (Champagne 2011: 21, note 22) inconveniences no less a figure than Sebeok (quoted from Shintani 2000: 53) to endorse his belief that this particular piece of "fashionable nonsense" is, echoing Sebeok precisely, one of those "such ridiculous things that the serious thinkers, like the good philosophers, the scientists, physicists, biologists, just laughed and threw up their hands." I do not know about the reader, but knowing Sebeok, I am sure he would now just throw up his own hands and have another good laugh!

Chapter 11

Translation, iconicity and dialogism

Je cherche, sans y arriver, à dire qu'il y a une parole où les choses ne se cachent pas, ne si montrant pas. Ni violées ni dévoilées: c'est là leur non-vérité. [...] Une parole telle que parler ne serait plus dévoiler par la lumière. Ce qui n'implique pas qu'on voudrait rechercher le bonheur, l'horreur de l'absence de jour: tout au contraire, atteindre un mode de "manifestation," mais qui ne serait pas celui du dévoilement-voilement. Ici, ce qui se révèle ne se livre pas à la vue, tout en ne se réfugiant pas dans la simple invisibilité.

(Maurice Blanchot, L'Entretien infini, 1969: 41)

L'écriture n'est pas forcément le mode d'existence de ce qui est écrit [...] L'écriture n'est pas la parole [...], mais elle n'est pas non plus l'écrit, la transcription; écrire n'est pas transcrire.

(Roland Barthes, *Le Grain de la voix*, 1981)

11.1 Dialogical otherness and translation

From a semiotic perspective the text is made of sign material. This means to say that the text, any text whatsoever, is already a translation in itself, an interpretation, given that, as we know, all signs are such only if they have a corresponding interpretant which says their meaning. Translation across languages is a specific case of translation across sign systems, or what we may also call "semiosystems," internally and externally to the same historico-natural language. But translation across languages is possible on the basis of *language* understood as a *modelling device*. Language as modelling is an *a priori* condition for language as communication, or, put another way, for *verbal expression* which, instead, originally arises for the sake of *communication* and thanks to the predominance of iconicity in the relation among signs.

If we posit that far from being a mere imitation or repetition, a literary translation should be faithful to the original in terms of *creativity* and *interpretation*, the translatant text – the target of translation – establishes a relation of *otherness* (or *alterity*) with the source text. The greater the distancing in terms of *dialogic otherness* between two texts, the greater is the possibility of artistic re-interpretation through another interpretant sign in the potentially infinite semiosic chain of deferrals from one sign to the next, of which the so-called "original" is a part. From the perspective of Charles Peirce's general theory of signs with particular reference to his tripartition between icon, index and symbol, the relation between source and target text must be oriented by iconicity to achieve a successful translation in terms of creativity and interpretation. A translation must be at once similar and dissimilar, the "same other." This is the paradox of translation. The

implication is that a text is at once translatable and untranslatable. This is the paradox of language (Petrilli 2001; cf. 10.2–10.5, 11.4).

11.2 Similarity and intertextuality in interpretation/translation

The paradox of translation is the paradox of the text and of the sign. Translation involves the question of similarity among signs. And if the question of similarity is central to translation it is not less so in relation to the text. The text too is an interpretant sign before becoming an interpreted sign for other interpretants in open-ended reading and translational processes. The relation between the text and that to which it refers presents itself in terms of similarity (an international conference specifically dedicated to the question of the relation between similarity and difference in translation was organized in New York in 2001, see Arduini and Hodgson 2004). The relation of similarity is particularly manifest in the literary text where it emerges in terms of "depiction" and not of "imitation," as a mere copy. As Paul Klee (1948, 1958, 1964) pointed out repeatedly, the artistic text – whether literary, pictorial, plastic, etc. – does not reproduce the visible (as in theatre performances), but rather renders visible that which is not visible; in other words, the artistic vision renders visible that which is invisible. The question of similarity is central to translation and to literary writing. The relation between the original text and the translating text is a relation of similarity; the literary text itself and not only its translation, is oriented by the relation of similarity. In other words, the literary text relates to "reality," to its referents in terms of similarity, as the condition of its credibility.

But what is understood by "similarity," "resemblance," or "likeness"? Similarity is inherent in semiosis, structural to it. It subtends perceptual and logicalcognitive processes involved in categorization, which makes the question "What is similarity?" a crucial one (Tabakowska 2003: 362). Similarity can either be regulated by the logic of identity, or by the logic of alterity. In other words, similarity is either oriented by assemblative logic (the logic of aggregation among entities that tend to identify with each other), on the one hand, or by associative logic (the logic of affinity among entities that are different from each other and relate to each other on the basis of attraction), on the other (cf. Ch. 5).

Peirce clearly demonstrated that meaning is not in the sign, but in the relation among signs, whether these are the signs of a defined system, like those forming a code, a *langue*, or the signs of dynamical interpretive processes, passing from one type of sign to another, or from one semiosystem to another. Interpretation is not mere repetition, literal translation or substitution by synonyms,

but rather re-elaboration and creative reformulation. Conceived in such terms, interpretation-translation is risky in the sense that it does not appeal to a pre-established code and is not guaranteed by a convention of some sort. This means to say that the higher the degree in iconicity, firstness and originality regulating interpretive-translative processes, the more these processes are capable of fully rendering the meaning of a sign, of developing it to high levels of expressivity. Moreover, sign identity calls for continuous displacement: each time the sign is interpreted-translated it becomes "other," in fact is another sign which acts as an interpretant of the preceding sign.

Translation – with reference to semiosis in verbal expression – whether among different languages within the same language family, or among different language families (interlingual translation), or among different idioms within the same language (intralingual translation), involves the iconic dimension in the relation among signs, which it in turn enhances. This also means enhancing the relation of absolute otherness and creativity in the relation between the interpreted sign and the interpretant sign, between the source text and the target text as new interpretants develop the meaning of the preceding sign, of the preceding text relatively to new signifying contexts. A sign's meaning is not defined in terms of a given sign or sign system, e.g. a given historico-natural language. Meaning converges with the interpretive trajectory delineated by the processes of deferral from one sign to the next in the great sign network, which knows no boundaries of a typological or systemic order. This is particularly obvious when translation processes involve interpretants from another language or linguistic-cultural modelling system.

Literary texts escape the bounds of deductive logic which is replaced by associative logic. This is the logic that regulates translation understood as readingwriting, which involves active participation and answering comprehension. Where associative logic predominates, the relation between the interpreted sign and the interpretant sign proceeds by hypothesis (Petrilli 1998a: 12-14; Petrilli and Ponzio 2005a: 8-10, 25-32). It calls for initiative and inventiveness in the reader and develops according to inferences of the abductive type, which means logical procedure at high degrees of creativity. Translation processes across languages further enhance the capacity for innovation and linguistic creativity and involve high degrees of iconicity. As Roland Barthes observes, to read literary writing means to rewrite it (1982, 1993-2002, Vols. I-III) and this process is enhanced in the transition from one historico-natural language to another. Literary writing is characterized by dialogism and intertextuality and by the capacity to shift the significant in semiotic directions which enhance signification. In other words, literary writing is characterized by high degrees of otherness, autonomy, resistance and objectivity, what we have indicated as semiotic materiality (Petrilli 2010a: 149–151). All this escapes literary criticism when it directs reader attention to what the author says and to the autobiographical, psychological, ideological or historico-social reasons for saying it. And to consider translation issues from the complex perspective of literary translation, of secondary genres (Bakhtin 1986), also throws light on the problem of translating nonliterary texts, primary genres.

Translation across languages further enhances the associative and dialogic character of the reading/writing (rewriting) process and contributes to freeing the text from a single type or system of signs. This is the task of translation. Translational processes among languages evidence dialogic intertextuality in the relation among texts as much as internally within a single text. Consequently, textual practice in a single language is already in itself an exercise in translation.

11.3 Metaphor, modelling and translation

By virtue of the potential for absolute otherness and for irreducible uniqueness or singularity connected to it, iconicity and firstness involve the capacity to evade the logic of totalization, which corresponds to the logic of the identical. This is what makes the metaphor an inexhaustible source for the generation and renewal of sense, an interpretive-translative device for the enhancement of sense across signs and sign systems. The capacity for signifying innovation, "linguistic creativity," is the capacity to form new metaphorical associations and to invent new sense combinations, the capacity to figure, picture, portray and to present by contrast with the capacity for mere representation. This capacity for "presentation," rather than "representation," for "figuration" and "depiction" is programmed by our primary modelling device, specifically what Thomas A. Sebeok (1986a, b, c) calls "language" understood as "modelling," or more precisely, "primary modelling," the preliminary basis for human symbolic behaviour, i.e. for secondary and tertiary human modelling systems. Concepts in the human brain are the product of the activity of three different modelling systems largely corresponding to Peirce's firstness, secondness and thirdness (Sebeok 1991b, 1994a; Sebeok and Danesi 2000). The primary system is rooted in sensory experience, the secondary in referential and indexical forms and the third in highly abstract, symbolic forms of modelling (cf. Ch. 3): "This 'flow' from iconicity to connotativity and symbolicity, that is, from concrete, sensory modes of representation (and knowing) to complex, abstract models, characterizes most of human modelling" (Sebeok and Danesi 2000: 171). This modelling capacity is an interpretive-translative device; it is regulated by iconicity and constitutes the very condition for all types of translative processes. The propensity for creativity, inventiveness and innovation is not a prerogative of poets, scientists and writers, but rather is common to human beings generally. As humans, we are all capable of metaphorical associations, of establishing relations among terms that are seemingly unrelated and of extending our gaze beyond the sphere of human culture to contemplate the great semio(bio)sphere at large.

The importance of metaphor has mostly been underestimated by traditional linguistics. But in line with more recent developments in cognitive linguistics, Sebeok and Danesi invest the metaphor with a major role in human modelling, which also means to recognize the major role carried out by translational processes. Translation is an aspect of the "connective form" theorized by Sebeok and Danesi, a special type of modelling strategy traditionally described as metaphorical. Metaphor is a central device in human reasoning which does not simply consist in representing objects, but in picturing them. According to Peirce, the metaphor is an icon; more precisely, a hypoicon with diagrams and images (*CP* 2.276–277) – what Sebeok and Danesi describe as an "iconic metasign." The use of metaphor and imagery in language, where "language" is understood as symbolic modelling, presupposes the human primary modelling device and its syntactic articulation. And as emerges clearly from the semiotic tradition delineated by Peirce, Jakobson and Sebeok, language as a modelling device relates iconically to the universe it models.

11.4 The paradox of translation, the same other

Let us now return to the paradox of translation. Just as we tend to believe that what comes first in a sequence causes that which comes later, that the two terms are connected by a relation of necessity, we also tend to believe that the order in which a text appears to us is necessary and unchangeable, especially when we are familiar with it. This line of thought can lead us to conclude that any change in a text is a sacrilege. The text can only be that particular text there. Consequently, its translation – any form of translation – will always be true to the original.

Let us take the case of someone reading Dante Alighieri's *Divina Commedia* in Italian. *Inferno* can only begin with the line "Nel mezzo del cammin di nostra vita" ("Halfway on the path of our life") and variants are not appreciated – not only in the sense of transposition and transferral into another language, but even in the form of paraphrase in the same language. By contrast, for a reader unfamiliar with ancient Greek, the *Odyssey* is available in many different variants, but none are considered as the criterion for evaluating fidelity to the original – yet we are discussing translations. Nor does it make any difference whether these variants are in prose or in verse. In Italy, the translation of Homer's *Iliad* by Vincenzo Monti (2004 [1825]) performs the role of the original, especially for those who encountered this

work for the first time through Monti's translation during their early school days and have continued reading it, to the point of not acknowledging any other version but this one. And yet, as Monti's contemporary Ugo Foscolo, a famous Italian writer and critic, claimed, Monti was not considered as a prominent scholar of ancient Greek! His translation was derived from other translations, rather than from the Greek original, which caused Foscolo to nickname Monti "traduttore dei traduttori di Omero ("translator of Homer's translators") (Foscolo 1888).

The question of how to produce a "relevant" translation can be compared to Zeno of Elea's paradox about Achilles and the tortoise (Achilles can never overtake the tortoise because the tortoise, having been granted an advantage at the beginning, always advances beyond the point where it first was when Achilles reaches that same point). The "relevant translation," like Achilles, must match the original. The original, however, like the tortoise, will always have the advantage of having started first. Precisely because of this advantage and similarly to the case of Achilles and the tortoise, the translation will never reach the original. In any case, the logoi or argumentations used by Zeno to deny movement and change (like the paradox about Achilles and the tortoise or the one about the arrow) were ultimately intended to support Parmenides' thesis of unchangeable unity versus the existence of plurality. Parmenides confuted the idea of plurality and favoured the idea of unity (Colli 1998). In a certain respect, the thesis that asserts that only one is possible can be connected to the question of translation. Conflation of plurality and multiplicity can be applied to common views about the relation between that which is considered as the unique original text and its many translations. From my own point of view, it is important to underline that Zeno's confutation of plurality, as reported by Plato in *Parmenides*, is based on the notion of similarity, which is the same notion generally invoked to explain the relation between the text and its translations.

Even if a translation is simply the same text "rewritten" in the same language, it is never identical to the original – not even Pierre Menard's Quijote in comparison to Miguel de Cervantes's Quixote (Borges 1939b). For a translation to be completely similar to its original, it would have to be identical, simply another copy of the same text. But a translation must be similar and dissimilar at one and the same time, the "same other" (cf. 10.2). This is the paradox of translation, which is also the paradox of multiplicity. Expressed in terms of the paradox concerning Achilles and the tortoise, the "paradox of translation" lies in the fact that in order to reach the source text, the translatant text must somehow recover the former's advantage of being first from the very start. The argument concerning Achilles and the tortoise, as explained by Aristotle as well in *Physics* (1935: 239b, 14–20), is that, in a race, the fastest runner can never overtake the slowest, since the pursuer must first reach the point from where the pursued started, so that the slower runner will always take the lead. This argument is in principle the same as the paradox about the flying arrow: the arrow will never reach its goal because it must move across the infinite halves of the segment in a trajectory, where the segments are divisible *ad infinitum*. But in Achilles' case, the distance which remains to be covered each time he attempts to reach the tortoise is not successively divided into halves.

Borges (1932b, 1939a) formulates this argument in slightly different terms: Achilles is ten times faster than the tortoise, therefore in the race he gives the tortoise a ten metre advantage. But if Achilles runs ten times faster than the tortoise, it follows that while Achilles runs a metre, the tortoise runs a decimetre; while Achilles runs a decimetre, the tortoise runs a centimetre; while Achilles runs a centimetre, the tortoise runs a millimetre and so forth ad infinitum. It follows that swift-footed Achilles will never reach the slow tortoise. Borges reports and examines various attempts to confute Zeno of Elea's paradox, for example by Thomas Hobbes, John Stuart Mill (System of Logic), Henri Bergson ("Essay upon the immediate data of consciousness"), William James (Some Problems of Philosophy) – who maintained that Zeno's paradox is an attack not only on the reality of space, but also on the more invulnerable and subtle reality of time – and lastly Bertrand Russell (Introduction to Mathematical Philosophy, Our Knowledge of the External World). Russell's attempt is the only one Borges considered worthy of the "original" in terms of argumentative force. The "original" is in inverted commas because all these successive argumentations are variants or translations of the primary text, insofar as they compete with Zeno's paradox and attempt to equal it in argumentative ability.

Pierre Menard, author of *Quijote*, also turns his attention to the paradox about Achilles and the tortoise. Borges dedicated a short story to Menard which is just as paradoxical. In this story, Menard's Quijote is listed among his works as Les problèmes d'un problème, dated Paris 1917. Menard discusses different solutions to the "Achilles" paradox in chronological order and in the second edition cites the following advice from Leibniz in the epigraph: "Ne craignez point, monsieur, la tortue" (Do not fear the tortoise, Sir) (Borges 1939b, 1974). Why should we fear the slow tortoise? Should we fear it because of its advantage, because of the distancing, the time-lapse separating it, like a gulf, from swift-footed Achilles? To fear the tortoise is to fear translation because of the original, which has the advantage of coming first. The text which translates the original inevitably comes second. In order not to fear the original and faithfully respect it, Menard decided not only to write another Quijote, but the Quijote - the unique, the original Quijote. Of course, this was not just a question of imitating or copying the original, but of taking advantage of the original, making Quijote, as composed by Menard, a second text. Though Menard had an immense respect for the original, he did not hesitate to produce pages that coincided word by word with the words of Cervantes. How did he go about this? Having set aside the idea of competing with Cervantes by identifying with his life, times and biographical context and eventually reaching *Quijote*, as it were, by becoming Cervantes (who was decidedly at an advantage simply because he had undertaken to write the same artwork much earlier), Menard decided that the greater challenge was to reach Quijote while remaining Menard, through his own experience as Menard.

Menard's *Quijote* is only "verbally identical" to Cervantes's *Quijote*. To prove the difference, Borges cites a passage from *Quijote* by Cervantes (Part I, Ch. IX) and the corresponding passage from Quijote by Menard. Even though these two passages correspond to the letter, the version by Menard, a contemporary of William James, clearly resounds with pragmatic overtones, because to Menard, unlike Cervantes, historical truth, which is discussed in exactly the same terms in both passages, is not what happened but what we judge to have happened. Achilles can make up for the tortoise's advantage and overtake it simply because it was he who gave the tortoise an advantage: even if the tortoise started first, it was Achilles who let the tortoise come first. All things considered, the tortoise depends on Achilles; but thanks to his generosity for giving the tortoise an advantage, Achilles beats the tortoise. Time also plays its part: the style of Menard's Quijote is inevitably archaic and affected, while Cervantes's Quijote is updated and conforms to the Spanish language as it was spoken in his own day.

11.5 Metamorphoses of the text in translation

The question itself of translation is a paradox: the text withdraws from the text that reads it and from the text that translates it because it is beyond their reach. But precisely because of this, the text is subject to endless transmigration processes. One transmigration of the paradox of the tortoise is the question itself of translation. Borges introduced the expression "avatars of the tortoise" for all those arguments which reproduce Zeno's paradox (1939a, 1974; 202). This paradox and all its reincarnations are connected with that concept which "corrupts and maddens" people, the concept of the infinite. This idea of the infinite is present in the expression itself, "the eternal race between Achilles and the tortoise," which corresponds to the title of one of the two texts by Borges (1932b) dedicated to the paradox of Achilles and the tortoise.

Like all texts, the literary text too is originally an interpretant. The literary text creates a new picture before being pictured in turn, that is, before being rendered visible through translation processes into another language, into another verbal or nonverbal sign system. Like the translatant text, the literary source text renders the invisible visible; it too relates to the other and not to the identical.

As anticipated above, the artistic work as such renders the invisible, the otherness of identity, its shadow. As Emmanuel Levinas teaches us, all identities, first and foremost the identity of self, cast a shadow - their otherness - which can never be eliminated however much one tries. At a certain point in his essay, "La realité et son ombre," Levinas (1987a [1948]: 142) refers to Zeno's first paradox, the one about the arrow, but he does not reveal that he is quoting from "Le cimetière marin" by Paul Valéry. In this poem, Valéry also refers to Zeno's second paradox in which Achilles does not succeed in catching up with the slow tortoise, which means to say that Achilles does not succeed in keeping up with his own otherness, in escaping his own shadow. In the thirteenth stanza of Valéry's poem "Le cimetière marin," the situation is reversed. Before referring to Zeno (the twentyfirst stanza), the only change with respect to the sun hanging motionless in the sky at midday is represented by the self ("Midi là-haut, Midi sans mouvement / [...] Je suis en toi le secret changement", Valéry 1995 [1920], Stanza 13). In spite of the self's struggles, there is nothing new under the sun, but only the tortoise's own shadow, an imaginary construct which, though constantly in motion seems motionless, like Achilles:

Zénon! Cruel Zénon! Zénon d'Élée! / M'as-tu percé de cette flèche ailée / Qui vibre, vole, et qui ne vole pas! / Le son m'enfante et la flèche me tue! / Ah! Le soleil... Quelle ombre de tortue / Pour l'âme, Achille immobile à grands pas! (Valéry 1995 [1920]: Stanza 21)

Zeno, Zeno, cruel philosopher Zeno / Have you then pierced me with your feathered arrow / That hums and flies, yet does not fly! The sounding / Shaft gives me life, the arrow kills. Oh, sun! – / Oh, what a tortoise-shadow to outrun / My soul, Achilles' giant stride left standing! (Valéry 1995 [1920]: Stanza 21, Eng. trans. by C. Day Lewis)

Zenon! Crudele! Zenone Eleata! / M'hai tu trafiitto con la freccia alata, / Che vibra, vola, eppure in vol non è! / Mi dà il suon vita che la freccia fuga, / Ah! Questo sole... Ombra di tartaruga / Per l'io, l'immoto Achille lesto pié! (Valéry 2000 [1920]: Stanza 21, It. trans. A. Ponzio)

To return to the paradox of the text and its translation, insofar as it is identical and different, similar and dissimilar, the "same other," the artwork is a living image of the tortoise's reincarnations – but not only the artwork. The artwork renders visible how any identity is a living image of the tortoise's reincarnation; how reality itself is a living image of the tortoise's metempsychosis. As Levinas maintains, in the artwork similarity appears

not as the result of a comparison between the image and the original, but as the movement itself that creates the image. Reality is not only what it is, what it reveals in truth, but also its double, its shadow, its image [non pas comme le résultat d'une comparaison entre l'image et l'original, mais comme le mouvement même qui engendre l'image. La réalité ne serait

pas seulement ce qu'elle est, ce qu'elle se dévoile dans la vérité, mais aussi son double, son ombre, son image.] (Levinas 1987a [1948]: 133)

This can be associated to what Peirce (CP 2.276) describes as the icon where the relationship between the sign and its object is based on similarity, as distinct from the symbol which is characterized by a relationship of conventionality and the index which is characterized by a relationship of contiguity and causality.

The literary text object of translation is endowed with iconicity, in other words it installs a relation of similarity with the invisible other of the identical. As a sign where similarity prevails, the literary text renders the invisible, its irreducible alterity, visible. In terms of iconicity, a translation can supersede the original, as in the case of the Spanish translation of Valéry's poem by Néstor Ibarra published (in 1932) with a preface by Borges. To illustrate the point, Borges (1932c) compares the following line by Ibarra, "La pérdida del rumor de la ribera" with the corresponding line by Valéry, "Le changement des rives en rumeur." As he claims in his preface, according to Borges, the French original seems an "imitation," because by comparison with the Spanish translation it does not succeed in wholly "restoring" the "Latin savour" (Borges 1977 [1932]: 129–130). To blindly defend the line by Valéry only because it is the "original" text, means to underestimate the recreative capacity of the translation and to privilege the original author only because he came first from a temporal point of view with respect to the translator, in this case Ibarra. In this case, the author as creator comes second in terms of iconic depiction – at least in the line cited which seems to be a bad copy of Ibarra's Castilian original. This claim can be made on the basis of the fact that in a comparison between two texts which are both highly iconic – one by the author, the other by the translator – the translator's version can surpass the author's in terms of iconicity and depict what it depicts even better than the original.

To come first in terms of temporality does not stop the second text from surpassing the first, from transcending it. Both the second and the first text are interpretant signs as well as iconic signs. From this point of view, there is no such thing as the first text. Instead, what we have is a succession of interpretants where each time one interpretant surpasses another, the second sign is surpassed by yet another, a third sign and so forth ad infinitum: the text is another instance of the tortoise's metempsychoses, as it transmigrates from one text to another. This is not only true of texts transiting from one language to another, of texts in interlingual translation, but also of texts transiting in the same language and in the same body of literature. To assume that a new combination of elements is necessarily inferior to the original text means to assume that a subsequent draft is necessarily inferior to an antecedent draft, as Borges maintains on the first page of his paper on Valéry's "Le Cimetière marin" (1932c: 128) which reads almost the same as the first page of his paper on the Homeric translations (1932b: 139). We only speak of drafts because in the last analysis there exist nothing else but drafts. In other words, the claim is that there is nothing else but a succession of interpretant texts and in the specific case of literary writing they are all oriented by iconicity.

11.6 Translation, signs and meaning

We will now relate the considerations above to Jakobson's analysis of translation considered in the light of Peirce's tripartition of signs into symbols, indexes and icons. Following Peirce (CP 2.274-291), we know that any given sign is the product of dialectic-dialogic interaction among conventionality, indexicality and iconicity in sign situations where one of these dimensions prevails over the others. On his part, we know that Jakobson proposes a triad that distinguishes between three different types of translative-interpretive processes: 1) intralingual translation, or rewording; 2) interlingual translation, or translation proper; 3) intersemiotic translation, or transmutation. Relating Jakobson's triad to Peirce's leads to a more adequate specification of the relation between translation and signs and a broader – yet more precise – characterization of the interpretive-translative processes that constitute the semiosphere and proliferate in it. Each of Jakobson's three translative-interpretive modalities is dominated either by symbolicity, or indexicality or iconicity. In other words, the relation between the interpreted sign and the interpretant sign, or the translated sign and the translatant sign, is dominated either by the symbolic, or the indexical or the iconic relation among signs. Moreover, Jakobson's three types of translation are always interrelated containing traces of each other to varying degrees. For example, in the case of interlingual translation, an adequate understanding of the source text and its rendition in the "target" language necessarily presupposes intralingual translational processes in each of the two languages involved.

When conventionality predominates, the relation between a sign and its object (or referent) is established on the basis of a code. Reference to a code is inevitable to translate the linguistic elements forming a text, especially in the initial phases of translative-interpretive processes. When reference to the code predominates, distancing between interpreted signs and interpretant signs is minimal. In this case, the mere activity of recognition and identification plays a primary role in translative-interpretive processes.

Moreover, signs and interpretants are also united by indexical relations of contiguity/causality. To mechanical necessity a bilingual dictionary adds the relation of contiguity between the sign and its interpretant when it associates the words in the source language to its equivalent(s) in the target language. Therefore,

interlingual translational processes present indexicality (contiguity/causality) in addition to symbolicity (convention). Read from this perspective. Wittgenstein's observation on translation in his Tractatus becomes particularly interesting: "When translating one language into another, we do not proceed by translating each proposition of the one into a proposition of the other, but merely by translating the constituents of propositions" (Wittgenstein 1961: 4.025 [1922]). Indexicality refers to the compulsory nature of the relation between a sign and its object. This relation is regulated by the dynamics of cause and effect, by relations of spatio-temporal necessary contiguity and is pre-existent with respect to interpretation. When indexicality predominates, translation-interpretation processes simply evidence correspondences where they already exist. The degree of creative work involved is minimal.

Voloshinov conceptualizes communication and social intercourse in terms of dialectic and dialogic interaction between identity and alterity. Furthermore, he introduces two important categories in his analysis of verbal expression which can be extended to other sign systems as well: "theme" (smysl) and "meaning" (znacenie), or, if we prefer, "actual sense" and "abstract sense" (Voloshinov 1973: 99–103). The second term in these pairs covers all that is identical, reproducible and immediately recognizable each time the utterance is repeated – it concerns the meaning of linguistic elements, e.g. the phonemes and morphemes constituting the utterance. "Meaning" or "abstract sense" thus understood corresponds to signality at low degrees of otherness, rather than to signhood at high degrees of alterity, to the "interpretant of identification," rather than to the "interpretant of responsive understanding," to "plain meaning" rather than to plurivocal meaning, to translative processes (and phases) where the degree of dialogism and distance regulating the connection between the interpretant sign and interpreted sign is minimal. Conversely, "theme" refers to all that is original and unreproducible in an utterance – overall sense or signifying import and valuative orientation as these aspects emerge in a given instance of communicative interaction. "Theme" accounts for communication and signifying processes in terms of responsive understanding or answering comprehension, dialectic-dialogic response and multiaccentuativity. It concerns translation-interpretation processes dominated by the iconic relation among signs and capable of qualitative leaps in knowledge and perception, of amplifying the semantic polyvalency of discourse and opening it to new ideological horizons (cf. 9.6). As such, theme has an iconic bearing.

The iconic relation between a sign and its interpretant plays a fundamental role in the rendition of the "theme" or actual sense of discourse. And this is just as much the case when a question of interlingual translation is on the agenda. If translation processes stop at the level of conventionality and indexicality, translators will fail in their task. Instead, when in her discussion of translativeinterpretive processes, Victoria Welby states that the method of language is pictorial (1983 [1903]), she is evidencing a component of verbal signs that is irreducible to indexicality or to symbolicity (conventionality). The competent translator shifts beyond the conventions and obligations of the dictionary to enter the iconic dimension of live dialogue as occurs among national languages, among languages internal to a given national language, among verbal signs and nonverbal signs. The interplay among interpreteds and interpretants, among "translateds" and "translatants" at high levels of semioticity necessarily involves iconicity, dialogism and alterity to various degrees.

Iconicity implies that the relation between a sign and its object is not wholly established by rules and codes (as in the case of symbols), does not pre-exist with respect to a code (as in the case of indexes), but rather is invented freely and creatively by the interpretant. In the case of icons, the relation between a sign and its object is neither conventional nor necessary and contiguous, but rather hypothetical. It corresponds to Bakhtin's "theme" or "actual sense" (Voloshinov 1929: 73); the interpreter/translator must keep account of all this when rendering the original interpretant with the interpretant of another language.

When the relation between a sign and its object and among different types of signs is regulated by the iconic relation of similarity, affinity and attraction (Peirce 1923), ongoing interpretive-translative processes forming the signifying universe at large develop at high degrees of dialogism, alterity, polylogism, plurilingualism and polyphony. These are all essential properties of language and the condition of possibility for the development of critical awareness, experimentation, progress in knowledge and enhancement of sense.

As regards the term "polyphony", in *Linguistic Supertypes* (2011), Per Durst-Andersen, following Bakhtin, author of *Problemy tvorchestva Dostoevskogo* (1929), proposes that we use the expression "semiotic polyphony" to indicate the communicative situation where three different orientations intermingle and are always present, these include: orientation toward the speaker, the listener and reality (Durst-Andersen 2011: 112; see above, 10.4). However, the author claims that only a small number of utterances bear traces of all three speech acts simultaneously. More than exceptional, it would seem – again following Bakhtin – that semiotic polyphony is a condition that occurs normally, perhaps even with a few exceptions. This is because, as Bakhtin (1929) says in his typology of the word – and Bakhtin is an author Durst-Andersen considers as one of his most important references along with Peirce, Bühler and also Jakobson (Durst-Andersen 2011: ix, 129) –, orientation toward the object is always at once, in one way or the other and to varying degrees, orientation toward the other as well, the other that is the real or even just the possible listener (as occurs in interior discourse).

Closely connected to the notion of polyphony of course is that of voice. Durst-Andersen recovers this notion too from Bakhtin, attaching considerable importance to it. He views reference to the voice as an indispensable element in enhancing the architectonics of Peirce's overall theoretical system. Without the notion of voice, the sign would be "a completely mute sign" - "I here use the Bakhtinian notion of voice," as Durst-Andersen clarifies (2011: 154). He adds that the importance of this notion is also given by the fact that beyond its association with polyphony, it is connected to dialogue. And dialogue is the condition for an approach to linguistic semiotics that is characteristically dynamic, by contrast to an approach to linguistics that is mainly focused on the language system and the isolated sign (Durst-Andersen 2011: 129).

Under this aspect, the model provided by Bühler (1934) would seem inadequate, given that it centres almost exclusively on the listener, often ignoring the voice of the speaker. In any case, Durst-Andersen observes that the instance of dialogue is present not only in Bakhtin and Voloshinov, but also in Peirce:

Only by including the speaker is it possible to reach the true level of the dialogue described by Bakhtin (1994 [1929]). Voloshinov is quite explicit in stating that "all utterances have an inherently dialogic character" (1986 [1929]: 25). Peirce was even more radical in arguing that all thinking is dialogic in form (CP 6.336). (Durst-Andersen 2011: 148)

So far, we have referred to interlingual translation where all communication processes are involved. In other words, to recall Durst-Andersen and his analyses of language and speech, three speech act models are involved: that concerning the speaker, the listener and the object of speech. What we claim \hat{a} propos interlingual translation is also valid for intralingual and intersemiotic translation. We know that interlingual translation also implies these other two main types of translational processes. Translation always involves interaction among the three types of "sign-object-interpretant," or "interpreted-interpretant," or "translatedtranslatant" relation (icon, index, symbol) identified following Peirce, on one hand, and the three modalities of translation identified by Jakobson, on the other (Petrilli 2012: 231–243).

In the theoretical framework outlined by the authors referred to as signposts in this volume (Peirce, Welby, Morris, Rossi-Landi, Bakhtin, Levinas, Jakobson, Sebeok, Ponzio, etc.), communication is confirmed as a primary function of human language, but with an important specification: it cannot be reduced to the terms of message exchange. By comparison, communication is a far broader semiosic phenomenon. As such, communication converges with life processes in the biosphere and presupposes the dynamics of dialogism and intercorporeity. But what we wish to demonstrate in the present context is how communication, as anticipated above, also converges with the capacity for the unsaid, ambiguity,

implication, imitation, semantic pliancy, polylogism and plurilingualism. All this presupposes the predominance of otherness logic and iconicity in semiosis, and determines the possibility itself of successful communicative interaction, which necessarily involves successful translational practice.

A fundamental requisite for the success of communication-translation processes is the capacity for "answering comprehension." This implies a speaker's ability to reformulate and adapt language to the language of one's interlocutors, to reflect metalinguistically on language in the effort to develop and specify meaning through recourse to interpretants from the language of others, and to reflect metalinguistically on the language of others to specify meaning in terms of interpretants from one's own language. "Active or answering comprehension" concerns the "theme" or "actual sense" of an utterance. It is achieved thanks to dialogic relations among different languages and codes that allow for such operations as rewording, transposing and transmutating in the deferral among interpretants which replace each other without ever converging perfectly. Far from being compact, unitary and monolithic, human language is a live signifying process, always in becoming, which constantly renews itself through the generation of different idioms, discourses, logics and viewpoints. This processual dynamics also finds expression in terms of the predominant tendency toward decentralization as foreseen by the structure of signs and sign relations. Plurilingualism and polylogism, both internal and external to a single language, are associated with the potential in human language for distancing, which also means to say for the expression of viewpoints that are "other"; human language develops as a function of this very potential. This, once more, exemplifies Steiner's (1975) suggestion that language is the main instrument through which the single individual can refuse the world-as-it-is. Each single language presents its own interpretation/s of reality, but does this thanks to the semiotic capacity for translation across different orders and systems of signs. Human beings are invested with the capacity to travel across different languages and cultures and transcend the boundaries of any single language system and of any single worldview. As we have suggested above and will discuss at more length below (cf. Chs. 3, 15), language understood as primary modelling is associated with the human propensity for the play of musement and the possibility of generating an infinite number of possible worldviews.

11.7 Communication and expressibility across languages

To ask whether or not historico-natural languages communicate with each other is irrelevant to the question of translatability. In any case, our answer would have to

be that, as close as two languages may seem to be in terms of historical formation, they do not communicate with each other directly. That two languages should have many aspects in common, either because they are familiar with each other or because they share a common past on the level of formation and transformation processes, does not eliminate differences among them. Nor will their distinct universes of discourse and worldviews necessarily overlap. Every language is endowed with its own specificity at all levels: phonological, intonational, syntactic, semantic, lexical, pragmatic and semiotic-cultural. In a letter to Carl G. Jung dated 17 February 1908, Sigmund Freud went so far as to state that his *Interpretation of* Dreams (1913) was untranslatable and would have to be reinvented, reconstructed in each language intending to host it (Freud 1974: 130).

The correct question concerning the relation among languages does not concern communication, but expressibility. The question to ask à propos translatability is the following: can what is said in one historico-natural language be expressed in another? The answer cannot be reached through inductive inference which requires verification each time it is stated, case by case and in all languages. And given that we are addressing the historico-cultural sphere, the human sciences and not a formal discipline, the answer cannot be deductive either - in other words, the answer does not ensue from a theoretical premise or axiom. Instead, the question à propos expressibility calls for an answer of the abductive or hypothetical-deductive order: it calls for hypothetical inference subject to verification at each occurrence.

From this perspective, to translate (this impossible communication among historico-natural languages) is always possible. This belief is based on the metalinguistic character of verbal signs. Interlingual translation occurs in the territory that is common to all historico-natural languages. It presupposes endoverbal translation as much as intralingual translation. Consequently, interlingual translatability occurs on common ground and involves common practices for all speakers. A speaker who is exercised in the practice of a single language is already familiar with the practices involved in interlingual translation. To be competent in a single language means to be competent in the practice of transverbal express*ibility*, the practice of translation among verbal signs – whether belonging to the same language or to different languages. By contrast with nonverbal sign systems, verbal sign systems can speak about themselves, make themselves the object of discourse, the interpreted discourse. Multiple special languages in a single historico-natural language enhance speaker capacity at a metalinguistic level. All the same, when a matter of "internal plurilingualism," the degree of distancing achieved between metalanguage and object language in a given historico-natural language is necessarily inferior to the degree of distancing achieved when translating across different historico-natural languages. So if we consider the problem of translatability in terms of expressibility, it is soon clear that the relation with another historico-natural language augments expressibility and that translation is not only possible, but even enhances the speaker's metalinguistic capacity.

To the extent that interlingual translation is also endoverbal translation, it is achieved on the basis of what Rossi-Landi (1961) calls "*parlare comune*," common speech (*cf.* 8.4, 10.5, 14.4). The original text and the translatant text are connected by a relation of resemblance, similarity or likeness, but the "common speech" hypothesis indicates that the type of similarity implied here is neither a question of isomorphism nor of superficial analogy, but rather of homology. The relation connecting different human languages is a relation of homological similarity. In other words, beyond surface differences, the relation of resemblance bonding different historico-natural languages is structural and original. Texts in two different historico-natural languages have a common denominator in "common speech." Therefore "common speech" is an *a priori* for all human languages and a conditioning factor with important repercussions concerning the possibility of interlingual translation.

Thanks to the meta-linguistic capacity of the verbal mode, it is always possible to reformulate that which is already said, whether in the same historico-natural language, or – even better – in a special language or in a different historical-natural language. Translatability is inherent in the verbal mode and is also possible thanks to "common speech." This position contrasts with those conceptions that describe historico-natural languages as closed and self-sufficient systems, on the one hand, and with extremes in the description of differences among historico-natural languages in terms of "linguistic relativity," on the other. In terms of metalinguistic usage, translatability is a characteristic common to all historico-natural languages, and as such is part of the "common speech" legacy.

As reported discourse, translation resorts to a practice that all historico-natural language speakers are trained in, the practice of reporting the discourse of others. This of course involves both *langue* and *parole*. The individual *parole* is always more or less reported discourse in the form of imitation, stylization, parodization or direct or hidden controversy (Bakhtin 1981). As much emerges in relation to all the modalities analyzed by Bakhtin in his two different editions of his monograph on Dostoevsky (1929 and 1963). The trace of the word of the other in one's own word, the fact that one's own word must make its way through the intentions and the senses of the word of another favours the dialogic disposition of the translatant word. Indeed, it enhances the constitutive dialogism of the word itself, both as translated and translatant. This means to say that the inclination to respond to and report the discourse of others is inherent in historico-natural language, in the utterance. From the point of view of the question of translatability, the upshot is that the capacity to respond to and report the word of others

across historical-natural languages in terms of interlingual translation is already inscribed in speech, or rather, in the linguistic functions and habits that render speech possible. At most, one of the major difficulties that the translator may encounter is that the utterance or text in translation is formulated in a special sectorial language he or she is not familiar with, or not sufficiently so. But this is not a different problem from difficulties of the same order that also arise in endolingual or intralingual translation. In any case, such difficulties do not justify supporting the principle of interlingual untranslatability, bearing in mind, however, the considerations we signal below.

As regards the translation of a literary text – in particular a poetic text (often referred to in support of the claim that translation is impossible) – the indirect character of the translatant word can be used to validate the thesis of translatability. From this point of view, the argument runs as follows: the literary word and the translatant word relate to each other homologically, on the basis of iconicity; in other words, they are related in terms of similarity not just at a surface level, but at the level of formation and structure. Such characteristics are shared by the literary word and the translatant word which renders them less distant from each other than would be commonly expected. From this point of view and contrary to common prejudice about the possibility of translating literary texts – especially a poetic text – it is the iconic relation of similarity regulating translation as translation – together with the capacity for exotopy, distancing, or extralocalization – that somehow makes translation a privileged place for the orientation of discourse toward literariness.

Both the literary word and the word in translation are indirect words that can be distinguished from the word of primary or direct discourse genres (Bakhtin 1979), from the word that converges with the voice of the subject that produces it. The literary word belongs to secondary or indirect discourse genres. And insofar as it belongs to secondary genres, the literary word is not a direct word, it does not identify with the subject of discourse, the author, as normally occurs in ordinary speech - or at least this is the claim (Bakhtin 1981). Instead, secondary genres evidence the indirect character of the word, the word and its shadow (Levinas 1948). The author does not identify with the literary word. The literary word is other with respect to the word of the author, such that the pronoun "I" can be pronounced without identifying with it. This occurs, for example, in the novel narrated in the first person; but also in drama where the playwright has his characters speak directly; in lyrical poetry; and even in autobiography where, too, a certain amount of distancing always intervenes between the writer and the "I" of discourse: "extralocalization," "outsideness," as understood by Bakhtin, are the condition of literariness and of artistic discourse in general. Translation is indirect discourse masked as direct discourse; nevertheless there is a distance in the relation be-

tween what would seem to be direct discourse and its author-translator. Even in the case of oral and simultaneous translation, the translator says "I," but nobody would dream of identifying him with the I of discourse. The Ambassador says: "Thank you for receiving me, I'm honoured to be here"; and the interpreter translates: "Grazie per l'accoglienza, sono onorato di essere qui"; but nobody thinks it is the interpreter who is grateful or honoured. Numerous misunderstandings can and effectively do occur in an interpreter's translation. A particularly funny episode concerns President Carter's trip to Poland when his interpreter told the audience not that I/Carter was interested in their desires for the future, but that he wanted to know them carnally (see: http://www.lackuna.com/2012/04/13/5historically-legendary-translation-blunders/). In any case, one thing is unequivocal and this is that even if the interpreter translates in the first person (direct discourse), and not in the third (indirect discourse), nobody would dream of thinking it's the translator who wants the carnal experience! In the same way, no reader of an essay, novel or poem would ever attribute the author's words to the translator as much as the latter normally reports the other's discourse in the form of direct discourse.

"Translatability" does not only signify the possibility of translation. It also denotes an open relation between a text in the original and its translation. As the general "interpretability" of a text – with respect to which "translatability" is a special case – translatability also indicates that the translation of a text remains open and is never resolved definitively. This is to say that a translated text can continue to be re-translated – indeed can be translated over and over again, even into the same language and even by the same translator – producing a potentially infinite number of translatant texts. The sign materiality of that which is translated – its otherness and capacity for resistance in relation to any one interpretive trajectory – as well as its complexity, is evidenced by the fact that the original is never exhausted but is continuously rendered and reinterpreted in the texts that translate it. This meaning of the expression "translatability" must also be taken into consideration when reflecting on the limits of translation, as in general of interpretation.

11.8 Translating the untranslatable. On language as absence, equivocation and silence

The problem of translatability should be addressed with the problem of untranslatability, as two faces of the same process. By virtue of semiotic materiality the concept of translatability relates to the untranslatable. Language is the place of equivocation and misunderstanding; it invents itself anew at every occurrence; it

is the place where something is always wanting or left unsaid. As an assertion or statement the speech act necessarily implies leaving something out, an absence. This something corresponds to the absolute otherness of the utterance, which generates new fluxes of interpretants; these, in turn, resist control and evade the will. Language is not a nomenclature. If it were, translation across languages would be immediate in the sense that each word would have a corresponding concept in its own language and its immediate correlate in another language.

Under this aspect an interesting example is provided by Durst-Andersen (2011: 156–157). He confronts the same lexeme in three different languages: the Russian knig-a (book-nominative case), the Bulgarian kniga-ta (book-article), and the English "the book" (definite article-book). Though these words all seem to have exactly the same linguistic content, such correspondence is simply apparent and only works in the abstract:

Rus. kniga points to a specific book situated at a certain place in a certain situation; Bulg. knigata points to a specific book in the speaker's mind; and Eng. the book points to a specific book in the hearer's mind. (Durst-Andersen 2011: 157)

Therefore in the Russian correlate of the utterance "The book is not here" the nominative case cannot be used because it indicates a specific book in a certain place in a certain situation. The Russian language resorts to the genetive case (knigi) followed by negation (net).

But further complications occur precisely because of the lack of exact correspondence in the case of these three languages between reference to the mind of the speaker, reference to the mind of the listener and reference to reality. This is expressed by Durst-Andersen in terms of Peirce's triadic distinction between icon, index and symbol and corresponding triad of categories which distinguishes between firstness, secondess and thirdness:

Just as an experience of a certain book understood as a physical thing, not as its contents, requires its local existence, the memory of it requires an experience of it. This means that we can establish the following natural order outside a communication situation, i.e. a purely logical order: physical existence (firstness) > somebody's experience of it (secondness) > somebody's memory of the experience of it (thirdness). Having done this, we can establish the same elements within a communication situation with three obligatory participants: a situation where a certain object is present (firstness) > the speaker's experience of this object (secondness) > the speaker's memory of this object correlated with the hearer's memory which yields information (thirdness). (Durst-Andersen 2011: 159)

In language, the relation is not between words and preconceived ideas; the relation is not direct and unambiguous. To assert through words and speech acts means at one and the same time to silence. If silence implies the unsaid, absolute

otherness, the shadow understood as the other face of the word, this has consequences for the act of translation, as interlingual translation in particular makes obvious. On the one hand, we have common speech, invariability, semiotic fluxes, energy, progress, succession, return, transitive writing, transcription, synechism, continuity, what Barthes calls mathesis universalis; on the other, uniqueness, otherness, fragmentation, death, loss, intransitive writing, variability, unrepeatability, discontinuity, what Barthes calls mathesis singularis. All these factors interact and overlap, evoking each other in relations that are uncertain, ambiguous, relations of chiaroscuro, refraction or diffraction. An act of forgetfulness, as demonstrated frequently by Freud, indicates how language is discord and not harmony, dissidence and not a system of oppositive pairs, absence and not presence, and how language proceeds in the dialogic dialectics relating all such elements. The self is not master of his/her "own" home, the speaker is not at home in his/her "own" mother-tongue. Instead, the self is spoken by another utterance, by another language that defers to yet another utterance, to yet another language, and so forth. The speaker, the self is nomadic. We are always "strangers to ourselves" (Kristeva 1988): what we share and have in common is the very condition of strangeness, absolute otherness.

The code of translatability can attempt to render translation automatic by cancelling the other, by homologating the other to the self, by asserting the principle of authority. But in truth translation is regulated by the logic, or, better, the dia-logic of otherness in the terms discussed; translational processes emerge from difference-otherness and are at once oriented toward difference-otherness. Translation is infinite interpretation, deferral among signs, intransitive writing, re-creation: neither translation word by word, nor letter by letter (verbo verbum reddere, criticized by Cicero), but translation on the basis of sense (St. Jerome's non verbum de verbo, sed sensum exprimere de sensu). The experience of translation, like writing, intransitive writing, unfolds in the materiality of signs; it is a material process involving letters and the deferral of signifiants. Whether we translate "by the letter" or "on the basis of sense," we cannot leave out the letter, since it marks the specificity of the signifiant, its materiality. This makes a difference in terms of that which cannot be levelled, or equalized according to the logic of identity. We cannot translate the letter, for the materiality of the *signifiant* is not translatable. Decisions play on ambiguities – not to dissipate them, given that nothing can be decided, but to evidence their signifying potential. A translation is active, connected with the work of re-reading and re-writing, of re-creating. Canonical translation, however, is based on the code, convention, authority and respect of authorial intention. Contrary to such an orientation, the task of the translatant is arguably not to give the impression that it is not a translation, but rather to convey the sense of its uniqueness, its specificity, its unrepeatability and together the sense of its untranslatability (Petrilli 2010a: Ch. 8). The translative procedure is regulated by iconicity whose signifying value is an "effect" of language provoked by the "original," by virtue of what Peirce would call its quality.

As we have already stated, translation is inherent to semiosis even if it presents itself in different forms and on different levels, quantitatively and qualitatively, in the transition from inferior to superior life-forms through to the human. In his essay "Semiosis and Semiotics: What Lies in Their Future?," Sebeok precognizes the possibility of semiotics understood as metasemiosis beyond human life. He does so hypothesizing the continuation of semiosis and also of metasemiosis in artificial life-forms, that is to say, in machines. In light of our discussion so far, this ought to mean that machines capable of metasemiosis should also be capable of translation. Here translation is not understood in a mechanical sense as literal translation, translation term by term, but rather as innovation of the text, semantic reorganization and even reinvention of the object of interpretationtranslation. We will address such issues in the next chapter.

Chapter 12 The semiotic machine, linguistic work and translation

Machines will thus become not merely the agents of evolutionary change – in some measure they already have – but also the *loci* for what Peirce has called "the essential nature and fundamental varieties of possible semiosis," which as he also foresaw, "need not be of a mental mode of being."

(Thomas A. Sebeok, A Sign is Just a Sign, 1991: 99)

12.1 Semiosis in the interaction between humans and machines

Let us now make some preliminary remarks à propos the main concepts and themes that the reader will encounter in this chapter. Originally, some of the issues presented were investigated in a long review article (co-authored by Augusto Ponzio and myself) of the epochal handbook *Semiotik/Semiotics*, edited by Roland Posner, Thomas Sebeok and Klaus Robering (1997–2004). This review article was commissioned by Sebeok himself as Editor-in-Chief of the international journal *Semiotica* and benefited from discussions with him as we were writing – given the length he liked to refer to it as the "monster review." It was titled "Sign Vehicles for Semiotic Travels: Two New Handbooks" and only appeared in 2002 (141–1/4, 2002: 203–350), that is, the year after his death. For what concerns the immediate topic of the present chapter, *Semiotik/Semiotics* includes the article "Machine Semiosis" (Andersen, Hasle, Brandt 1997: 548–571). Our review article was published antecedently to another text specifically dedicated to "The Sign Machine": a chapter in a co-authored monograph by Ponzio and myself, *Semiotics Unbounded* (2005), being but one of the several topics covered in that volume.

Winfried Nöth too returns to this topic in diverse essays, one of which is an article review of *Semiotics Unbounded* published in *Semiotica* (2008). Nöth privileges so-called "intelligent machines" as the (only) thematic object of his review. In an earlier essay, "Semiotic Machines" (2002) (section 2.1., "The Paradox of Semiotic Machines"), he raises the following issue:

If we define semiotic with Peirce as "the doctrine of the essential nature and fundamental varieties of possible semiosis" (*CP* 5.488), semiosis as the "intelligent, or triadic action of a sign" (*CP* 5.472–73) which involves "a cooperation of three subjects, such as a sign, its object, and its interpretant" (*CP* 5.484), and if we accept Peirce's "provisional assumption that the interpretant is [...] a sufficiently close analogue of a modification of consciousness"

(*CP* 5.485), the idea of a *semiotic machine* must appear a contradiction in terms. *Semiotic*, according to such premises, seems to presuppose living organisms as sign producers and as sign interpreters. Whether the "action of the sign" can also develop in machines or whether semiosis does in fact presuppose life is the problem to be examined in the following on the basis of Peirce's semiotics.

In *A Sign is Just a Sign*, Sebeok too, citing Peirce (*CP* 5.473) as well as Charles Morris – who defined semiosis as "a process, in which something is a sign to come organism" (1946: 253) – observes (in Chapter 8, "The Evolution of Semiosis," section 1, "What is 'Semiosis"), that "effectively and ineluctably, [...] at least one link in the loop must be a living entity" (1991b: 83).¹ But he also adds in parenthesis: "although, as we shall see, this may be only a portion of an organism, or an artifactual extension fabricated by a hominid." This "as we shall see" refers to a brief reflection toward the end of the same essay (in section 6, "Biocommunication, and Some Implications," p. 95) where he claims that the domain of semiosis "can also encompass, in any communicative loop, a human artefact, such as a computer, a robot, or automata generally" (p. 96). In Chapter 9, "Semiosis and Semiotics: What Lies in Their Future?," Sebeok describes the difference between semiosis and semiotics: "Semiotics is an exclusively human style of inquiry, consisting of the contemplation – whether informally or in formalized fashion – of semiosis" (Sebeok 1991b: 97).

Such "inquiry" which will, in Sebeok's words (1991b: 97), "it is safe to predict, continue at least as long as our genus survives," presupposes what he calls "language" which (as appears virtually certain now) arose with *homo habilis*. By "language" is understood here a species-specific primary modelling device distinct from "speech" – a distinction which Sebeok (1991b: 94) has correspond to that drawn by Horst Müller (1987) between *Kognition* and *Sprache*. Continuing his reflections on "semiotics" and "semiosis," Sebeok makes a further claim:

Just as semiotics is a heavily glosso-tinged activity that characterizes all normal hominid life, so semiosis, the ceaseless romp of any and all signs (with which the universe, as Peirce assured us, is perfused), hitherto defines any and all life (being, as far as anyone yet knows, tantamount to terrestrial life). (Sebeok 1991b: 97)

In response to the question forming the title of Chapter 9, "Semiosis and Semiotics: What Lies in Their Future?," Sebeok continues like this:

At the nether end of time, semiosis began when life began, but it would be erroneous to assume that, as life, including human life, changes in the future and eventually terminates, semiosis will also come to stop. Sign processes, fabricating unlimited interpretants, are likely to continue, independently of us, in machines. (1991b: 98)

Sebeok's previsions about the future of semiosis and semiotics avail themselves of arguments put forward by Lynn Margulis and Dorion Sagan in "Strange Fruit on the Tree of Life" (1986) in terms of "cybersymbiosis" – or, as Sebeok also proposes, "cybersemiosis" – which they define as the commingling of human life and non-living, manufactured parts in new "life-forms" (Sebeok 1991b: 96; see also Sebeok 1991a: 87).

The hypothesis about a possible future for semiosis and semiotics is not my immediate concern here and is not the reason for my referring to Sebeok's monograph, *A Sign is Just a Sign*. Instead, what I do wish to take into account is the possibility of considering "semiosis," "semiotics" and "language" in a discussion \grave{a} *propos* machines. The point is that in the context of such a discussion, these terms do not appear in isolation, but rather as part of a world pervaded by language and semiotics and not only semiosis. This is the human world which in the present day and age is in the globalization phase of development, more properly described as the "communication-production" phase (Petrilli and Ponzio 2005a: 491–502, 520–526).

What follows is a development on a paper I delivered at the 9th International Congress of the German Association for Semiotics, October 3–6, 1999, dedicated to "Machines and History," held at Technische Universität Dresden. My paper was titled, "The sign-machine: linguistic work and world communication" (Petrilli 2003b). In the meantime, between 2006 and 2010, Nöth published a series of important essays, exactly five (all listed in the References section below), on the same topic, in which he rigorously addresses the problem of the relation between "semiosis," "semiotics," "language" and the "machine," indicated at the beginning of this chapter. So, I will now clarify our own position with respect to these terms, specifying their sense and use as precisely as possible, beginning from Sebeok who in turn refers to Peirce and Morris.

In this section, my focus is on the relation between man and machine in globalization, the current phase of development in capitalist production, also named the "communication-production" phase given that communication is no longer limited to the intermediate exchange phase in the reproduction cycle, but now also invests the initial and final phases, that is, the production and consumption phases. Consequently, I am particularly interested in semiosis at the interface between humans and machines. Nöth addresses this problem in section 2.4 of his essay "Semiotic machines" with reference to computers. But the type of communication he is mostly concerned with here regards the relation between human sender and receiver. According to this description, the machine serves as a mediator in human semiosis, as a semiotic extension of human semiosis, in a machine-mediated communication of messages. But, in communication-production we are not only dealing with a "semiotic extension of humans in a cultural development

that began with the invention of painting, writing, printing, phonographs, typewriters," as Nöth has it.

Instead, once the intelligent machine enters the scene, what we are faced with is a new relationship between work and machine, which implies a new relationship between man (the worker) and machine (cf. 12.3). Communication now occurs with the machine and does so through a "machine-language." However, this always occurs via a "glosso-tinged activity," which means to say completely within the domain of human language.

In the communication-production phase of social reproduction and with the development of artificial intelligence, the relation between worker and machine cannot be reduced to the relation between emitter and receiver mediated by the machine. Nor is it a question of the relation between two different worlds, the human world and the machine world, comparable to that between an individual of the human species and an individual of another species, the former in a world characterized by language, the latter outside but still in communication with the former. This is not a question of interspecies communication. The so-called "intelligent machine" belongs to the same world as mankind's, constructed "in its own image" on the basis of the human capacity for invention. Creativity and inventiveness are determined by language understood as a modelling device, to the point of rendering the machine capable of both semiosis and semiotics.

Of course, all this is subject to communication with human beings, not just with any human being, but with the person trained specifically to communicate with this type of machine, most often as part of some permanent education programme to keep up with continuous technological innovation. It goes without saying that the machine in itself, taken in isolation, is not capable of inventiveness or creativity, that is, of abductive reasoning of the innovative type. Outside the human world, machines obviously do not have language, but there is no doubt that they greatly enhance the human potential under this aspect. We are mostly interested in how this type of machine transforms work compared to traditional automatic or semiautomatic machines, what may be indicated simply as "work instruments."

Nöth is perfectly right when, concluding his essay, "Semiotic Machines," he claims that not only are all semiotic processes completely absent from the world of machines, but that all forms of semiosis are absent as well. But let us specify: they are absent not only from a world of machines considered in isolation and abstractly, but also from a world of machines where life itself is absent, including the human. This leads us back to the question formulated by Sebeok concerning whether or not, once all life-forms have ceased to flourish, "sign processes, fabricating unlimited interpretants, are likely to continue, independently in machines" (Sebeok 1991: 88).

Signs cannot be reduced to the status of instrument (Peirce speaks of "thought-sign, of the self as a sign and interpretant"), as Nöth himself observes in "Are Signs Instruments?" (2009a: 683). Using signs is not the same as using instruments for work. But to this we must add that using automatic machines is not the same as using instruments either. With the capacity to function automatically, the machine inverts the relationship between worker and instrument and transforms the worker – and therefore the sign, the thought-sign, man-sign – into an instrument for the function he is programmed to carry out. In semiautomatic machines, the instrumental character of the human being consists in intervening to complete the machine's functions with action that is minimal and repetetive as in the assembly line. In traditional automatic machines, human instrumentality simply consists of supervising the machine. But, in the case of interaction with the intelligent automatic machine, the human worker foregoes his purely instrumental character and recovers the creative function, the capacity for planning and innovation which the machine enhances.

In his article review for *Semiotica* (169–1/4, 2008: 319–341), Nöth summarizes "the major characteristics" of sign machines according to *Semiotics Unbounded* in ten statements. This list does not keep account of the history of the relation between the worker and the machine. Nonetheless, however we qualify the so-called "intelligent" machine we believe that this aspect is no less than crucial. In the ten theses listed, Nöth fails to keep account of the socio-economic aspect of the relation between man and machine, that is, the relation between fixed capital, the instruments of production, and variable capital, human labour functional to profit. With the gradual process of automation, both physical work and human mental work are eliminated by the machine and in the inversion of the relation between man and machine, man is first transformed into an instrument of the machine and then into a redundant worker.

What we intended to underline in *Semiotics Unbounded*, and is still at the centre of our interest, is the new type of relation that comes to be installed between the worker and the intelligent machine. This relation now requires special interactive community training together with an array of different interrelated competencies and languages. All this is connected with the rise of new forms of sociality and reproduction relations consonant with the current level of development in production forces (technology-science-work competence). Such aspects present the positive face of the man-machine relationship and its connection with the ethical dimension of semiosis. New forms of sociality and reproduction relations involve new forms of responsibility toward oneself and others, that is, responsibility that is distant from purely technical responsibility.

Instead of taking this aspect into consideration, which he lists as the tenth thesis, Nöth delivers a tirade lasting approximately three pages to refute the idea

that machines have a capacity for responsibility, given that they are not endowed with intentionality, inconveniencing no less a figure than Peirce in support of his argument. But the point we were making was not at all to determine whether or not a machine can be held "ethically responsible," nor was it our intention to make such an attribution. Apart from one's standpoint with respect to the question of the machine's capacity for intentional behaviour, Nöth understandably directs reader attention to the problem of the production of "immorality," "pornography" and "criminality" through the World Wide Web and the Internet (Nöth 2008: 322–325). All the same, whatever one's viewpoint on this matter, however crucial, it is totally irrelevant to our main argument. In the light of our statement that machines are not capable of semiosis outside the human world, let alone of semiotics, the possibility of responsible behaviour, "not only of the cognitive order, but also of the semioethical order," would hardly seem feasible (Nöth 2008: 321).

We will investigate the question of whether the intelligent machine is capable of semiotics or only of semiosis, or whether it is simply a mediator in the exchange of messages among human beings in a moment. Here, we must clarify immediately that unlike Nöth in "Machines of Culture – Culture of Machines?" (2010), we believe that the difference between the intelligent machine and the traditional machine is not at all "the difference between machines that produce artefacts and those which produce mentefacts" (p. 44). Intelligent machines, the most simple, like coffee machines that produce different types of coffee on request and even return the change, or again machines that produce train tickets or airflight tickets, all these machines produce things ("artefacts") and not "mentefacts."

A completely different issue concerns the type of work that is replaced by the so-called intelligent machine. But, according to Nöth, this problem too depends on the difference just mentioned between artefacts and mentefacts. The traditional machine replaces physical force, what in the current jargon of economy is called "material work," for example, the power of an automobile is still measured in "horses" (horse-power engine). Instead, the so-called intelligent machine clearly replaces "mental" work, what in the jargon of economy is improperly called "immaterial work" (the bartender's, the ticket clerk's, etc.). That human mental work and human physical work, intellectual work and manual work are distinct and separate is not a view we maintain, as Nöth would seem to claim, again misinterpreting a passage from *Semiotics Unbounded* (2005: 503). Nor can such a position be attributed to Ponzio (1999: 83) for having stated, and here I quote from Nöth, that

"The second industrial revolution consists in the substitution of intellectual force by means of automatic machines, whereas the first industrial revolution made the substitution of physical

force possible." [...] Ponzio overrates the semiotic difference between mental and physical work. Manual work is semiotic work, too, and most certainly inseparable from mental work. Only Cartesian dualists ignore this fundamental premise of anthroposemiotics. (Nöth 2010: 44–45; and 2008: 327)

(This sentence continues with a reference to "the philosopher of mind John Searle") (Nöth 2010: 45). The distinction between human "material" work and "immaterial" work, "mental" work and "physical" work, "manual" work and "intelligent" work is the product of social history. It persists in accord with dominant ideology as it regulates the social reproduction system today. But, as maintained in this chapter, the "intelligent machine" or "semiotics," or however else we wish to call it (the question of the name, though not necessarily idle is at least secondary), is causing this distinction to disappear in the reality itself of the social system that produced it.

Focusing on the relation between human semiosis, the semiotic machine and translational work, to the question of whether or not machine-semiosis in semiotic machines (i.e., computer-based signs) is opposed to human semiosis, well may we respond that human semiosis and machine semiosis do not oppose each other, but, on the contrary, integrate each other reciprocally (Petrilli and Ponzio 2001, 2002a, 2002b). We can distinguish tentatively between semiotic machines and human semiosis as follows:

[T]he difference between human and machine semiosis may not reside in the particular nature of any one of them. Rather, it may consist in the condition that machine semiosis presupposes human semiosis and the genesis of the former can be explained by the latter. (Andersen, Hasle, Brandt 1997–2004: 1, 569)

12.2 Biosemiosis, translation and culture

On the basis of the axiom that *semiosis* is a translation process, therefore keeping account of the relation between semiosis, semiotics, and translation, we can outline the foundations of the theory of translation. The theoretical framework in support of this approach is developed around a series of pivotal concepts which, synthesizing, can be drawn from the present volume.

If we agree with Peirce that signs do not exist without an interpretant and that the meaning of a sign can only be expressed by another sign acting as its interpretant, then translation is constitutive of the sign. It ensues that sign activity or *semiosis is* a translation process.

To translate is neither simply to "decodify" nor to "re-codify." Of course such operations are part of the translational process, but they do not exhaust it.

To translate is to interpret.

Moreover, in the light of today's semiotic or biosemiotic or, better, global semiotic perspective (Sebeok 2001), it is now obvious that translation does not only concern the human world, anthroposemiosis, but emerges far more extensively as a constitutive modality of semiosis or, more exactly, biosemiosis in general. Translational processes pervade the living world, the great biosphere in its entirety.

Different types of semiosis involve different interpretive functions, which correspond to different translative functions. On this aspect, most interesting is the triad "information semiosis" (or "signification semiosis"), "symptomatization semiosis" and "communication semiosis" as described by Thure von Uexküll (1997a), son of the biologist and "cryptosemiotician" Jakob von Uexküll. Thure characterizes these three different types of semiosis in terms of the different roles carried out by the emitter and the receiver:

- in the case of semiosis of information or signification, the inanimate environment acts as a "quasi-emitter" without a semiotic function. Instead, the receiver is a living entity, a living system that renders meaningful whatever it receives via its receptors. In this type of semiosis the receiver performs all semiotic functions:
- 2. instead, in the case of *semiosis of symptomatization*, the emitter is a living being. But the signals it sends out are not directed to a receiver and do not anticipate an answer. The signals or signs that reach the receiver are called "symptoms;"
- finally, in the case of semiosis of communication, signs are specifically directed at the receiver and translate into the meaning intended by the emitter (T. von Uexküll 1997a: 449-450).

In our own terminology and in accordance with Peirce, rather than speak of emitter and receiver, these three types of semiosis may be reformulated in terms of the relation between the interpretant sign and the interpreted sign and the different roles they carry out. Accordingly:

- an *interpreted* can become a *sign* simply because it receives an interpretation from an interpretant. This interpretant is a response (semiosis of information or signification);
- alternatively, before being interpreted by the interpretant, the interpreted sign is already an interpretant response (symptom) though this does not correspond to an originating intention (semiosis of symptomatization);
- finally, before being interpreted by the interpretant, the interpreted is already an interpretant response, but different to the preceding case it arises with the intention of being interpreted as a sign and from the very beginning calls for another interpretant response (semiosis of communication).

Reformulation of T. von Uexküll's typology of semiosis in terms of the relation between the interpreted sign and interpretant participation in the interpretation process, rather than in terms of "emitter" and "receiver" participation, serves to emphasize the role of the interpretant in semiosis. This means to evidence the connection between semiosis understood as an interpretive process and translation.

Other levels in the activity of translation in the lifeworld can be specified in the light of Sebeok's analysis of the concept of *transduction*. Sebeok explains the notions of *encoding* and *decoding* in terms of this concept (Sebeok 1991b: 27–29). Transduction consists of a series of transformations or translations in the source and in the destination, operated on the basis of the *interpretation* of a probable homology between meaning and an externalized serial string (e.g. speaking, writing, or gesturing). Transduction as encoding or conversion by the source becomes decoding or reconversion by the destination. This occurs before the message can be interpreted. In Sebeok's words:

"Transduction" refers to the neurobiological transmutation from one form of energy to another, such as a photon undergoes when impinging on the vertebrate retina: we know that it entrains impulses in the optic nerve that change rhodopsin (a pigment in the retinal rods of the eyes), through four intermediate chemical stages, from one state to another. A message is said to be "coded" when the source and the destination are "in agreement" on a set of transformation rules used throughout the exchange. (1991b: 28)

The concept of transduction describes translational processes at the interface between physical-chemical material and properly sign material as identified in relation to the lifeworld. Transduction evidences the role of translation as the link between life and nonlife, and from this point of view is a concept that may contribute to a better understanding of the terms involved in the discussion on the relation between semiosis and life and the continuity of semiosis between life and nonlife. As such translation understood as transduction is a condition for translation in the properly human world, and the latter is characterized by the capacity for translation in terms of responsive understanding.

The Danish biologist Jesper Hoffmeyer emphasizes two important distinctions in biosemiotics: the first differentiates between what he calls *endosemiotics* (i.e. sign processes inside organisms) and *exosemiotics* (i.e. sign processes between organisms); the second between "horizontal semiotics" and "vertical semiotics":

Horizontal semiotics is concerned with sign processes unfolding in the spatial or ecological dimension and comprises most of endo- and exosemiotics. Vertical semiotics studies the temporal or genealogical aspects of biosemiotics – that is, heredity: the transmission of messages between generations through the interdependent processes of reproduction and ontogenesis. From a semiotic point of view, this transmission is based on an unending chain

of translation of the hereditary messages back and forth between the digital code of DNA and the analog code of the organism. (Hoffmeyer 1998: 83)

Such distinctions direct our gaze back to the complexity of translational processes in the lifeworld if we agree that where there is semiosis there is interpretationtranslation and that interpretation-translation is inherent in the sign generally and not exclusively in the sphere of anthroposemiosis. Translational processes are the condition for life to flourish globally, human and nonhuman.

With specific reference to human beings we know that they are endowed with a species-specific modelling device called language, therefore with a capacity for metasemiosis. This is the capacity not only to use signs directly, but also to reflect on signs. The species-specific capacity for "metasemiosis" or "semiotics" characterizes the human modelling device and is what makes the human being not only a "semiosic animal," but also a "semiotic animal." In other words, insofar as they are endowed with the capacity for metasemiosis and language as we are now describing it, human beings are *semiotic animals* (cf. 2.13).

The *metatranslative* capacity is inherent in the semiotic capacity and finds its strongest expression in special modalities of the similarity relation (the iconic dimension of signs), e.g., metaphorical transposition. This had already been intuited by Giambattista Vico with his "poetic logic" (1976) (cf. 3.7, 12.2). To repeat then, re-elaborating, inherent in "metasemiosis" is the capacity for "metatranslation" and the metatranslational capacity finds its strongest expression in a special modality of establishing connections, namely in terms of resemblance or similarity (the iconic dimension of signs), as in the case of metaphorical transposition. It ensues that metaphorical transposition is an important aspect of the structural capacity for translation in the human animal. This leads to considering the relation between translation and metaphor as a modelling strategy and cognitive device. Translation is an aspect of a "connective form" theorized by Sebeok and Marcel Danesi (2000), discussed in Chapter 3 above. In light of Peirce's semiotics, the metaphor is an icon, precisely an iconic metasign (CP 2.276–277). Metaphor presupposes the human modelling device and its articulation, or *language*.

An important issue is that of the relationship between metaphor and verbal expression and more generally between icon and modelling (cf. Petrilli 2012a: 224–230). The role of metaphor has been largely underestimated by traditional linguistics. Chomsky even went so far as to consider it an aberrant dimension of expression (cf. 3.6). By contrast, in line with more recent developments in linguistics commonly known as cognitive linguistics, Sebeok and Danesi invest the metaphor (and let me add translation) with a major role in human modelling. As Lakoff and Johnson (1980) argue, metaphors are far more pervasive in everyday speech and writing than has hitherto been acknowledged (p. 412).

Before Ivor A. Richards' *Philosophy of Rhetoric* (1936), the role of metaphor in language and thought had already been evidenced by nineteenth century scholars Victoria Welby and Giovanni Vailati and before them by Vico, as mentioned above. Vico too considered the metaphor as an original and fundamental structure in human thought processes and not just as a rhetorical device used for ornamentation, a mere question of style. And from this point of view, a close connection can be established between Vico's poetic logic and cognitive linguistics today (Danesi 2000; *cf.* Fisch 1986; Sebeok 2001: 135–144).

As regards the human cultural world and in the context of semiotics understood as the "science," or "doctrine," or "theory" of signs, and to refer to a typology we are all familiar with (Jakobson 1959, 1963), translation is not only understood as *interlingual translation*, but far more extensively as *intersemiotic translation* and *intralingual translation* (*cf.* 10.1).

Cultural translation generally refers to the relationship among texts in different historico-natural languages. But to translate is not only to transit from one language to another (interlingual translation). This common form of translation itself involves complex translational operations that should not be taken for granted. Other forms of translation are involved. Translational processes may be internal to the same language (intralingual translation); they may occur across verbal sign systems and nonverbal sign systems and *vice versa* (intersemiotic translation); they also occur across different nonverbal sign systems; as well as among nonverbal languages. (Strictly speaking, "language," whether embodied in verbal expression or nonverbal expression, can only occur in the sphere of anthroposemiosis).

But the complex of translational processes can be specified further. At a general level, that of semiosis in the biosphere, a distinction can be drawn between *endosemiosic* translation and *intersemiosic* translation. The first is internal to a given sign system, while the second refers to translational processes across two or more sign systems. Both types of translation occur in the living world at large and not only in the human cultural world. In the specifically human world *intersemiosic translation* is specified as *intersemiotic translation* when there appears a language (in French *langage* and not *langue*, corresponding to the distinction in Italian between *linguaggio* and *lingua*), including verbal expression.

When translational processes take place exclusively among languages (from nonverbal signs to verbal signs and *vice versa*, or solely among nonverbal signs), translation is *interlinguistic translation*. Here the adjective "linguistic" in the expression "interlinguistic" derives from language-in-general (Fr. *langage*; It. *linguaggio*) and not from historical language (Fr. *langage*; It. *linguaggio*), we have processes take place in a single language (Fr. *langage*; It. *linguaggio*), we have *endolinguistic translation*.

When linguistic translation takes place among verbal sign systems, we have endoverbal translation. Endoverbal translation may be specified as interlingual translation when a question of transiting across different historico-natural languages (Fr. langue; It. lingua); or as endolingual translation when a question of transiting among languages in a single historico-natural language (It. linguaggio; fr. langage).

Endolingual translation can be classified in terms of the following triad: diamesic endolingual translation, from diamesia which indicates linguistic variation relative to the medium of expression, translation from oral verbal signs to written verbal signs and vice versa; diaphasic endolingual translation, from diaphasia or linguistic variation relatively to different registers (e.g. colloquial, formal, professional, etc.); diglossic endolingual translation, from diglossia, the term introduced by Fishman and Ferguson for socially connoted bilingualism and the dichotomy between high language and low language (e.g. standard or national language and dialectical forms of expression). (For a more detailed exposition of this proposed typology of translation, which has also been visualized in a schema, see Petrilli 2003a: 19. revised in Petrilli 2012a: 234).

12.3 Humans and machines at work. or sociality in translation

Another important issue for translation theory today concerns the relation to artificial intelligence and automatic machines. Computers establish a relation between hardware and software and between material non-linguistic work and immaterial linguistic work (cf. 14.2, 14.3). In the context of human semiosis high-level artificial intelligent machines, semiotic machines, are capable of metasemiosis. As such, these machines call for a redefinition of the relation between man and machine. The semiotic machine amplifies the human capacity for translative processes and does so above all in qualitative terms, as testified by the hypertext. The issue at stake transcends by far the opposition between mechanical translation and automatic translation to involve the fascinating question of linguistic work and its metamorphoses. Linguistic work is immaterial work. And as immaterial work linguistic work is now our main productive resource. At the same time, this resource is incommensurable in terms of equal exchange logic and cannot be contained by today's production system.

At this point, some considerations on translational processes from the perspective of the relation between "linguistic work" and "non-linguistic work" are in place. The relation between the "semiotic machine," "computer-based signs,"

or the "sign machine," on the one hand, and human semiosis characterized specifically by language, or, in Rossi-Landi's terminology, "linguistic work," on the other, has been variously analyzed. Work is subordinated to the machine relatively to the development of signs. Think of progress in knowledge, science, artificial intelligence, special skills and competencies. A specific form of subordination is that of linguistic work to the *sign machine*. In the present day and age, the relation between these two poles – linguistic work and the *sign machine* – is increasingly a relation of integration. Production and communication can no longer be separated and the relation to machines converges with the relation to signs, both verbal and nonverbal. Moreover, this is not simply a case of commodities become messages and messages become commodities.

Following Rossi-Landi as he shifts from the level of the market to the level of linguistic production and sign production in general, we soon realize that automation not only concerns the system of machines but also the system of languages – language-in-general and specific historico-natural languages, which of course do not operate separately from each other.

Human work in the communication-production processes of automation has developed to the level of the semiotic machine. In this context, human work is both linguistic and non-linguistic work. "Material non-linguistic work" and "immaterial linguistic work" at last come together in the semiotic machine. A homological relationship is established between work and its products, on the one hand, and linguistic work and its products, on the other (Rossi-Landi 1975a, 1985, 1992a). These two aspects of the same human capacity for work (i.e. linguistic and non-linguistic work) are united in the semiotic machine as evidenced by the interrelationship between computer software and hardware that cannot function separately from each other. Language is a modelling device integral to human beings and *linguistic* work is related to language (a specifically human semiotic capacity) thus described.

All of this takes place in the context of today's "global communication-production" world. Beyond indicating that communication now extends over the entire planet, the expression "communication-production world" indicates that the contemporary social reproduction system is characterized by a new phase in production, a phase in which software and hardware interconnect and machines and signs reciprocally integrate and empower each other (Petrilli and Ponzio 2005a: 491–511). The inexorable interconnection between hardware and software presupposes encounter between material non-linguistic work and immaterial linguistic work. And such encounter as achieved by the semiotic machine now calls for a substantial redefinition of the relation between machines and human beings.

An immediate result of encounter between "material non-linguistic work" and "immaterial linguistic work" is that the human capacity for translation is enhanced qualitatively. Translation is associated with creativity. And thanks to developments in artificial intelligence, linguistic work today can be further translated and developed in terms of immaterial work – thus, "immaterial linguistic work." The hypertexts offered by the semiotic machine are a clear demonstration of this claim. As immaterial work, linguistic work is the main productive resource in today's social reproduction system, as anticipated above (11.1). However, insofar as it is linguistic work, immaterial work is incommensurable in terms of equal exchange market logic and cannot be entirely absorbed by the latter.

In today's capitalist reproduction system, machines have reached high levels in automation. We can analyze this situation from two different but interrelated points of view: the economic and the semiotic. In both cases we are dealing with a new event. With regard to the economic aspect, communication is no longer relegated to the intermediary phase in the production cycle (i.e. exchange). Rather, as in earlier phases in the development of the capitalist system, it too has become production.

From the other point of view, the semiotic, automation tends ever more to simulation or, rather, emulation of life. Indeed, research in this sense is progressing in the direction of biologically inspired artificial intelligence. We know that traditional approaches have mostly concentrated on reproducing the human brain capacity. In relatively recent years, however, new approaches have focused on other human biological systems as well including cellular systems, neural systems and immune systems. Together with the brain, these are investigated and translated in terms of algorithms and computational models that make use of biological notions (Floreano and Mattiussi 2008). Consequently, new horizons are fast multiplying in the world of artificial intelligence with a corresponding production of high-level intelligent artefacts. On the one hand, such ferment is associated with ongoing pioneer research in a range of special areas including, for example, developmental robotics, evolutionary robotics and swarm robotics, and, on the other, it calls for collaborative dialogue with the human sciences focused on evolutionary perspectives, cognitive theory and the relation to values from the pragmatic, to the aesthetic and the ethical. Machines now behave and communicate and do so as extensions of the organic world (Andersen, Hasle, Brandt 1997–2004, 1: 569). That automatic machines have developed in terms of "artificial intelligence" marks, no doubt, the advent of something new in the sphere of semiosis (Peschl 1998: 44-48). We might even claim that the semiotic machine represents a whole new ladder with respect to preceding levels (Andersen, Hasle, Brandt 1997–2004, 1: 551).

At first glance, it would seem that high-level automation completes the work of subordinating human beings to machines. Upon closer consideration, however, we soon realize that there is ample witness to the fact that increased automation goes together with increased interactivity between humans and machines. It seems that machines are no longer mere instruments and that human beings have become passive agents of the machine. But the truth is that at high degrees of automation this process is inverted. As machines become progressively more intelligent, human beings become active subjects once again. In this interactive process with machines, human beings recover their function as an indispensable element in the work process. Neither humans nor machines are passive tools, but rather interactive participants in complex exchanges (Böhme-Dürr 1997: 357–383). "Interactivity" would seem to be an appropriate expression for this particular type of exchange relationship.

Traditional automatic machines (i.e. mechanical machines that replace physical force) have always communicated, whether internally (i.e. within a single piece of machinery) or externally (i.e. with other machines). But high-level automation today goes far beyond the mechanical type of communication and implies a sort of capacity for *metacommunication*, which involves *metainterpretation* and what may also be indicated as a capacity for *metatranslation*, as described above.

Progress in technology and artificial intelligence relative to high-powered automatic machines also calls for new quantitative and qualitative competencies among operators. The active response from humans must be continuously updated to meet the new tasks proposed by intelligent machines and progress in technology generally. With earlier forms of automation, as typically represented by the assembly line, human intelligence was crushed by the machine's capacity for efficiency (think of Charlie Chaplin's comico-ironical performance in the film Modern Times). Instead, in the present day and age, human intelligence is continuously elicited and challenged for services that are not repetitive, but rather require re-elaboration, redefinition and continuous renewal of one's intellectual and practical skills. Unlike machines unendowed with language, intelligent machines elicit interactivity. Active, variable response, innovation, updating and permanent training are all necessary and inevitable factors in the human-machine relationship, even if merely for the sake of implementation. The point is that operators and not just inventors are active. Moreover, the interactive relationship not only concerns the relation between user and machine, but also among individual users themselves. The work process now develops through mutual participation, reciprocal assistance, exchange of information and data, etc. The functional scheme is neither linear nor circular. The figure that best portrays the new human condition is the grid. Intelligent machines require interactions that develop in networks and networks that elicit interactions.

Another issue that calls for consideration concerns the problem of sociality among single individuals and between the individual and the group. On the question of the individual's active role in today's social system and in the light of contributions to semiotics from the social sciences, interesting observations are offered by Terry Threadgold in her article on "Social Media of Semiosis":

What social labour has put as under it is now weaving back together again. It is perhaps interesting just to recall here that all of this also encompasses another significant rewriting, the re-alignment of the social and the individual with quite different collocational sets and values. In de Saussure's early formulations, the social was located in the system, the individual outside it. Now, individual action, dialogism, heteroglossia, conflict, institutions and society, all those individual and specific things which de Saussure's system excluded, are actually defined as the social, as what constitutes the social and constructs the systematic. The social and the individual are seen as mutually constructive and as constructive of the systems in terms of which they are understood. (Threadgold 1997: 400)

Interaction between the individual and the social is not a matter of opening to otherness on the outside. As Threadgold clarifies there is no inside and outside, only dialectic, I would specify dialogical dialectic between the individual and the social in dynamic interactive relations forming an autopoietic system. There are no such things as net boundaries in the reality of semiosis, but only translational continuity among distinct elements in becoming, or better, in becoming other than what they were becoming:

There is no longer any inside and outside, only a constant dialectic between individual and social. The dynamic excluded other (the individual) has become the social and the system, and the static, synoptic, social system has now to be accounted for within the terms of that dynamic, as sets of products, codes, whose processes of production have been forgotten, and which maintain only a use-value within this dynamic economy. (Threadgold 1997: 400)

To return to our considerations on work, immaterial linguistic work and sociality, it is important to remember that work connected with the intelligent machine is incommensurable. But what does incommensurability imply in the present context? The new type of work required by intelligent machines from humans is assimilated to abstract work, to work in general or indifferent work. Assimilation to abstract work is the condition of possibility for the evaluation of work in today's society. In other words, work associated with intelligent machines continues to be quantified according to parameters established for the purchase and sale of work in capitalist society. This means to say that work related to intelligent machines is still measured in hours. But the type of work required by the intelligent machine involves specifically human qualities, notably the capacity for language, semiotic sign behaviour and complex inferential processes capable of innovation and inventiveness. This type of work resists the measurement standards applied in modern society (viz., measurement in terms of work-time). Linguistic and immaterial work is incommensurable and unquantifiable. Human work in relation to the semiotic machine is incommensurable. It involves a qualitative leap with respect to which quantity is subordinate. Therefore, the relation between human work and the semiotic machine cannot be accounted for in terms of quantity.

In spite of incommensurability as the source of historico-social value, human work has been assimilated to quantified abstract work and measured in hours. Consequently, human work has been reduced to the status of commodities. This is the condition for the constitution of a capitalist society. The same operation has been applied to linguistic work with the result that capitalist society has also produced the phenomenon of "linguistic alienation," as observed by Rossi-Landi (1968, 1992a; see also Petrilli 1992a which includes an essay by Rossi-Landi titled "Linguistic alienation problems," pp. 158-181). However, never before has capitalist profit depended so heavily on the reduction of immaterial linguistic work to the status of commodities as in today's social reproduction system in its "communication-production" phase of development (Petrilli and Ponzio 2000b). It is paradigmatic that machines are now defined by software (sign complexes), while hardware (the physical machine) is attributed a subordinate role (Andersen, Hasle, Brandt 1997: 551). This new state of affairs represents a fundamental transformation in the production process of artefacts. Symptomatic of the subordination of production to linguistic work are such expressions as "immaterial investment," "appreciation of human resources" and "human capital." These expressions refer to linguistic work, therefore to intelligence, the mind and the human brain as necessary resources in the development of companies and their competitiveness.

We know that a specific characteristic of the human individual is the capacity for metasemiosis, for language, which represents the source of value. However, work continues to be invested with the status of commodities; work is attributed value in terms of commodities. The result is that never before has such a sharp contrast emerged in human work between the inherent capacity to increase its own value and its status as a commodity. Whilst it is evident that *human* work as such is incommensurable, these days more than ever before work is treated as just another piece of merchandise. The contradiction between linguistic work and the labour market is exasperated, just like the contradiction between the inherent incommensurability of human work and the systematic demand to commodify work (i.e. to quantify work). This contradiction in today's social reproduction system evidences the quality of linguistic work to a maximum degree, creating a phenomenon that is new and specific to the communication-production era. This new contradiction between linguistic work and the labour market in the contemporary

world is a result of the relationship established in the present day and age between labour and the semiotic machine.

High levels of automatism in machines are considered to be indicative of high levels of performance. On the contrary, automatism in human beings has negative connotations: it is commonly associated with mechanical behaviour, with lack of awareness or lack of control by the mind or will. And, yet, machines perform mechanical operations, mostly considered as the exclusive domain of human beings, at far higher degrees of precision and speediness. The question of automatism is connected with the possibility of creating automata capable of reaching high degrees in responsivity. This means to say that the relation between translation and automatism contributes to exploring the possibility of creating automata structured as totalities that are open and capable of re-structuring and reorganizing themselves in response to elicitations from the other beyond the totality.

From this point of view, the problem of the relation between translation and automatism, that is, the question of automatic translation is crucial. With respect to the original, the translation is at once same and other, "the same other" (Petrilli 2001; cf. 10.4). To the extent that a text reaches this condition, it involves processes of re-adaptation of the identical and at once hospitality toward the other. In other words, the text involves dialectics of the dialogical and interactive order among the elements forming an open system. But all this is incompatible with automatism understood in terms of dichotomic correspondences characteristic of closed totalities, organized according to the principle of binary, oppositional logic. The question of automatic translation is essentially a question of the signs used by the automatic machine. As a closed universe, the automatic machine is not open to alterity.

But in the case of translational processes, exposition to alterity is inevitable. Translation involves different types of signs: in Peirce's terminology, these include symbols (signs that depend on a law established by convention) and indexes (signs conditioned by the law of continguity and causality). In addition to the symbol and the index, automatic translation involves yet another type of sign, Peirce's icon and this sign implies the possibility of yet another type of automatism. Reference here is to the automatism of homological relations, to the automatism of interpretive interconnnections established on the basis of free association, on likeness or similarity. Interpretive interconnections of this order are creative, inventive and capable of answering comprehension, responsive understanding (Ponzio 2004a: 331-398).

Automatic translation today means to experiment with the possibility of a new form of automatism which not only concerns the machine, but more specifically humanity itself in relation to machines. Antonio Gramsci would have called this new form of automatism "new rationality" (Quaderno 10 [1932–1935],

in Gramsci 1975a: 1932–1935). Gramsci left an important corpus of reflections on issues relating to language and translation. His reflections on language are rich in implications for translation theory. Indeed, his own writings are the object of reflection by scholars interested in translational processes not only of the interlingual, but also and above all of the intralingual order (e.g., Boothman 2004a, 2004b). On this account, not only does the centrality of translation clearly emerge for semiotics, but also the centrality of semiotics for a global theory of translation.

In this framework, it is important to underline the contribution that may come from semiotic theory for a better understanding of the relation of signs to ideology and their translation across languages, whether in a situation of external plurilingualism or of internal plurilingualism. Translation across languages is not strictly intralingual or interlingual translation, but rather it is also a question of cultural translation across value systems (see above, 10.7). Moreover, the relation of signs, ideologies and values in translation also involves the associated semioethical issue of the responsibility of the translator. And the amplification of human translational processes through their extensions and developments in automatic machines renders the question of translator responsibility in today's world ever more pressing, ever more relevant.



Chapter 13

Extending semiotic horizons

Si l'on cesse d'entendre l'écriture en son sens étroit de notation linéaire et phonétique, on doit pouvoir dire que toute société capable de produire, c'est-à-dire d'oblitérer ses noms propres et de jouer de la différance classificatoire, pratique l'écriture en général. À l'expression de "société sans écriture" ne répondrait donc aucune réalité ni aucun concept. Cette expression relève de l'onirisme ethnocentrique, abusant du concept vulgaire, c'est-à-dire ethnocentrique, de l'écriture.

(Jacques Derrida, *L'Écriture et la différence*, 1967: 161)

13.1 Prolegomena for a theory of signs

The first author named by Charles Morris in Signs, Language, and Behavior (1946) is Charles S. Peirce à propos the meaning of the term "sign." In Peirce's words, as reported by Morris: "we have [...] simply to determine what habits it produces. [...] Signs are therefore described and differentiated," as Morris observes, "in terms of the dispositions to behavior which they cause in their interpreters" (1971 [1946]: 75). As evidenced by his early monograph of 1937, Logical Positivism, Pragmatism and Scientific Empiricism, Morris was influenced by Peirce's "pragmatism" or "pragmaticism" (see also Morris 1938b, 1938c). His ground-breaking contribution to the science of signs, Foundations of the Theory of Signs, appeared in 1938. In his essay "Peirce, Mead and Pragmatism," Morris underlines the affinity between Peirce and George H. Mead, more precisely, between Peirce's original pragmatism and Mead's more recent version (1934). And such issues continued to be at the centre of Morris's attention in his late volume of 1970, The Pragmatic Movement in American Philosophy.

In the glossary appended at the end of his book of 1946, *Signs, Language, and Behavior*, Morris formulated the following description of the expression "disposition to respond": "the state of an organism at a given time such that under certain additional conditions a given response takes place" (1971 [1946]: 361). A definition of "organism" is not included, though coherently with his broad view of semiotics – which he spelled "semiotic" – Morris applied this term to all living beings. Instead, he defines the term "response" as: "any action of a muscle or gland. Hence, there are reactions of any organism which are not responses" (1971 [1946]: 365).

The disposition to respond is provoked by a "stimulus," understood as "any physical energy that acts upon a receptor of a living organism." And continuing, Morris explicitly distinguishes between "reaction" and "response": "a stimulus

causes a reaction in an organism, but not necessarily a response." In parenthesis he clarifies that a response is "a reaction of a muscle or gland" (1971 [1946]: 367). As he explains in his 1948 paper, "Signs about signs about signs," his aim in Signs, Language, and Behavior was not to present a science of signs, but rather a prolegomenon to this science, leaving the task of its development to "many investigators working in many fields and for many generations" (1971 [1946]: 434). And building a prolegomenon involved the major enterprise of searching for appropriate terminology, signs to talk about signs. Morris contributed to research on signs on at least two levels: at the level of semiosis, of sign behaviour in the animal world, human and nonhuman; and of metasemiosis, where the focus is on the search for appropriate language to talk about signs.

Morris proposes a general description of the sign as embracing all that which belongs to the lifeworld. He intended his approach to account for all types of signs, human and nonhuman and to this end he constructed his semiotic terminology from the language of biology (1971 [1946]: 75). This choice of a biological framework led Ferruccio Rossi-Landi to describe Morris's research in terms of "behaviouristic biopsychology" (Rossi-Landi 1975b, 1978). No doubt Morris transcended the limits of a strictly "anthroposemiotic" perspective which had mostly been exchanged for general semiotics. However, by contrast with American behaviourists (in particular Burrhus Skinner), he did not simply apply terminology developed from observing nonhuman animal behaviour to human behaviour. Rather, he focused on signs in both the human and nonhuman animal worlds according to what today is commonly recognized as a biosemiotic perspective.

The living organism as discussed by Morris is clearly a macroorganism, that is, an organism endowed with "muscles and glands." Consequently, Morris excludes microorganisms from his theoretical framework. If we compare this view with that of Sebeok, who maintained that semiosis and life converge, we can only conclude that Morris placed greater limits on the semiosis/life relationship: semiosis cannot subsist without life, in other words, where there is semiosis there is life; but life can subsist without semiosis, in other words, life does not necessarily imply semiosis. Another limitation placed by Morris on the semiosic sphere is expressed with the difference between "reaction" and "response": a "response" as understood by Morris implies a special type of reaction involving a muscle or gland. In Signs, Language, and Behavior Morris draws on the biological and physical sciences for so-called unanalyzed terms such as "organism," "reaction," "muscle," "gland," "sensory organ," "need" "energy," etc. These are combined with other unanalyzed terms adapted from everyday language - "behaviour," "condition," "cause," "influence," "situation," etc. – to analyze (whether completely or partially) specifically semiotic terms, the analyzed terms. Signs, Language, and Behavior, after Foundations of the Theory of Signs, develops and consolidates the relation be-

tween biology, behaviourism and semiotics. Though Morris resorted to biology for semiotic terminology, he did not fall into the trap of "biologism," of reducing a plurality of universes of discourse to one only (that is, the discourse of biology), whether a matter of metaphysical fantasy or of a naturalistic vision of the existent, thereby losing sight of the historico-social dimension. From this point of view, Morris was distant from both the logical empiricists and the neopositivists with their overtly physicalist orientation.

13.2 Semiotic dimensions and new philosophical trends

Morris's pragmatic conception of meaning evidences the relation of signs to values: Paths of Life appeared in 1942, The Open Self in 1948. These books present studies on preferential behaviour in human beings and describe "fundamental choices" operated in different cultures. Varieties of Human Value was published in 1956 and collects the results of Morris's experimental research on values. His book of 1964, Signification and Significance. A Study of the Relations of Signs and Values, continues his research on the relations of signs and values consolidating the connection between semiotics and axiology (see my introduction to Morris 2012). The English term "meaning" resounds in a double sense, referring to both the semantic (signification) and the valuative (significance) dimension of signs: "that which something signifies and the value or significance of what is signified" (Morris 1964: vii). Moreover, in this book Morris confirms his approach to semiotics as an "interdisciplinary enterprise" (p. 1) focused on signs in all their forms and manifestations, relative to human and nonhuman animals, normal and pathological signs, linguistic and non-linguistic signs, personal and social signs.

In his seminal monograph of 1938, Foundations of the Theory of Signs, Morris distinguishes between syntactics, semantics and pragmatics. However, the historical origins of these branches of semiotics can be traced back to the artes dicendi – grammar, dialectic and rhetoric, taught as part of the so-called trivium in Medieval European schools. Moreover, Morris's trichotomy is related to Peirce's distinction between speculative grammar, critical logic (after dialectic) and methodeutic (after rhetoric) (CP 1.191ff and 2.93). Thus Peirce reinterpreted the artes dicendi as branches of semiotics which he thematized as disciplines that treat signs as Firstness, Secondness and Thirdness, respectively. All this is described in detail by Roland Posner in various articles included in his monumental handbook, Semiotik/Semiotics, co-edited with Klaus Robering and Thomas Sebeok (1997–2004).

Morris's trichotomy also relates to three leading philosophical movements of his time, logical positivism (or logical empiricism), empiricism and pragmatism. Logical Positivism studies the formal structure of the language of the sciences (Carnap's logical syntax), Empiricism studies the objects of research and their relations to the language of the sciences and Pragmatism studies the procedures and conventions governing communication among scientists. It follows that syntactics can employ the methods and results of Logical Positivism, while semantics and pragmatics those of Empiricism and of Pragmatism, respectively. On the whole, Morris's trichotomy is fundamentally the result of two main thrusts: logico-empiricism and behaviourism, on the one hand, and the pragmatic philosophy of George H. Mead and Peirce, on the other (Morris 1970).

Morris knew that it was important not to separate pragmatics from semiotics or the pragmatical dimension from the syntactical and semantical dimensions of semiosis. However, as rightly noted by Posner, this does not justify speaking of Morris's pragmatically unified semiotics, nor stating that semiotics and pragmatics identify with each other. According to Morris's formulation of 1946 (1971: 365ff), pragmatics studies the effects of signs; semantics studies the significations of signs; syntactics studies the way in which signs are combined to form compound signs. The sign-vehicle, the object that functions as a sign relates to a designatum and eventually a denotatum (cf. 13.3, 13.4). This relation concerns the semantical dimension of semiosis. However, the sign is also the relation to an interpreter, which produces an interpretant in response to the sign. This is the pragmatical dimension of semiosis. Moreover, the sign must necessarily relate to other sign-vehicles. This concerns the syntactical dimension of semiosis. The sign always involves all three dimensions of semiosis. And only for the sake of analysis is it possible to distinguish between the relation of the sign-vehicle to the designatum (and eventually the denotatum), the relation of the sign-vehicle to other sign-vehicles and the relation of the sign-vehicle to the interpreter, which is such only if endowed with an interpretant.

With respect to the verbal sign, the so-called "identification interpretant" identifies: a) phonemic and graphic features; b) semantic content; and c) morphological and syntactic characteristics. However, given that the three dimensions of semiosis (syntactical, semantical and pragmatical) are inseparable, the interpretant is not only an identification interpretant, but also a responsive understanding interpretant with a special interest in the pragmatical dimension of signs. And, in truth, even just mere identification or recognition of the sign at the level of phonemic or graphemic configuration, morphological and syntactic structure and semantic content requires responsive understanding.

In spite of a tradition that goes back to Michel Bréal's *sémantique* (1897), "the science of significations," which generally associates meaning with the semantical dimension of semiosis, as Rossi-Landi points out in an early study on Morris (1967), meaning is present in all three dimensions of semiosis – the semantical, the syntactical and the pragmatical – and to state that it belongs

uniquely to the semantical is the result of a misunderstanding. When Morris claims that syntactics deals with relations among signs, this does not exclude that it involves meaning, which too is part of the relation among signs. In Morris's conception, "syntax" is part of "syntactics" and both are connected with semantics and pragmatics. Similarly, pragmatics deals with the relation of signs to interpreters without neglecting the relation among signs and the question of meaning.

To restrict meaning to the semantical dimension of semiosis, instead of tracing it throughout all three dimensions, is to reduce the sign totality to only one of its parts, in this case, to the relation of designation and denotation. Similarly, the relation of the sign to other signs does not only concern the syntactical dimension in a strict sense to the exclusion of the pragmatical and the semantical. Just as the relation of the interpreter to other interpreters does not uniquely concern the pragmatical dimension to the exclusion of the syntactical and the semantical. Each time there is semiosis and therefore a sign, all three dimensions are involved and are the object of semiotics.

That Morris did not neglect the semantical dimension of semiosis distinguished his approach from both Rudolph Carnap's (1934) syntacticism and Leonard Bloomfield's structuralist version of behaviourism (1933). In his effort to avoid "mentalism" and keep faith to the behaviouristic approach to language, Bloomfield maintained a rather skeptical attitude toward semantics. The unfortunate consequence was that semantic issues were long set aside by American structuralists (Thibault 1998c: 598–601; cf. 2.1).

13.3 Beyond the limits of nonreferential semantics

With specific reference to the semantic dimension, Morris made an important contribution to sign theory à propos the referent, marking a turning point in our understanding of the problem of meaning. In the recent history of semiotics, referential semantics was juxtaposed to nonreferential semantics. The starting point of the debate was Ogden and Richards's triangle (renowned, but also deviating) and the distinction it establishes between "symbol," "thought or reference" and "referent." Influenced by Saussure's binary conception of the sign, analyzed in terms of the relation between a signifiant and a signifié, meaning was described as the relation of a "symbol" to "thought or reference." The problem became whether the "referent" should be eliminated from this triangle or not. Supporters of nonreferential semantics included Stephen Ullmann (1962) and Umberto Eco (1976 [1975]). Subsequently, however, Eco (1984) recovered the concept of referent through the Jakobsonian concept of renvoi.

In Foundations of the Theory of Signs Morris had already solved the problem of the referent with his distinction between designatum and denotatum, introducing terminological variants in Signs, Language, and Behavior and again in subsequent writings. However, the position described in 1938 remains the most convincing and effectively solves the problem of the referent: "Where what is referred to actually exists as referred to the object of reference is a denotatum" (1971: 20). For example, if the sign "unicorn" refers to its object considering it as existent in the world of mythology, that sign has a denotatum since unicorns do exist in mythology. Instead, if the sign "unicorn" refers to its object considering it as existent in the world of zoology, that sign does not have a denotatum since unicorns do not exist in zoology. In this case the sign has a designatum (Morris 1938), or a significatum (Morris 1946) as he later called it, but it does not have a denotatum: "It thus becomes clear that, while every sign has a designatum, not every sign has a denotatum" (1971: 20). The referent is a denotatum if it exists in the sense of "exist" as referred to by the sign; it is a designatum if it does not exist in the sense of "exist" as referred to by the sign. The sign always has a referent, in certain cases only as a designatum and in others also as a denotatum (see my introductions to the Italian editions of Morris 1938). The referent is one of the three apexes forming Ogden and Richards' meaning triangle, whereas in other semantic theories it is eliminated altogether given that the sign can refer to something that does not always exist in the terms referred to by the sign. Such approaches obviously do not take the designatum into account. Instead, the sign always has a referent, or in Morris's terminology, a designatum and if this referent exists in the terms referred to by the sign, it also has a denotatum.

In *Man as a Sign*, Ponzio (1990: 33–36) describes the referent as an "implicit interpretant." Once explicited, this interpretant assumes an explicative function; while the sign which had a referent, that is to say, the sign with implicit meaning, becomes an interpreted. The implicit interpretant, or referent, corresponds to what Glottob Frege (1892) calls the "*Bedeutung*." "Venus" is a referent or implicit interpretant in the expressions, "the morning star," "the evening star," "the luminous point that shines in the sky at sunset"; and, instead, an explicit interpretant or, in Frege's terminology, "*Sinn*," in the sentence, "the luminous point that shines in the sky at sunset is called Venus." So with reference to Frege's famous distinction, *Sinn* corresponds to the explicit interpretant and *Bedeutung* to the implicit interpretant.

Referent (object), interpretant and interpreted (representamen, sign vehicle) correspond to three different functions of the sign. A referent is an implicit part of an interpretive route delineated in the deferral among signs, that the explicit part (interpretant) refers to. With respect to "infinite semiosis" all interpretants forming a given interpretive flux cannot be explicated, so that all signs have a

referent (implicit interpretant) and a meaning (explicit interpretant). Meanings (therefore signs) without a referent do not exist. Consequently, that the referent, or object of reference, is a component of semiosis, means that the referent is not external to sign reality, even if as a "dynamical object" it is external to a semiosis in actu. It is not possible to refer to something without this something becoming part of an interpretive route, which means to say without it acting as an implicit interpretant or interpreted. Referents are not external to the network of signs.

13.4 For nonsectorial pragmatics, sensible to values

In Foundations Morris establishes a correspondence between the three branches of semiotics and three orientations in philosophy: "formalism" or "symbolic logic" (related to syntax), "empiricism" (to semantics) and "pragmatism" (to pragmatics). According to Morris, although "pragmatics" derives from "pragmatism," as a specifically semiotic term it receives a new signification. Chapter V, entitled "Pragmatics," in *Foundations* opens with the following statement:

The term "pragmatics" has obviously been coined with reference to the term "pragmatism." It is a plausible view that the permanent significance of pragmatism lies in the fact that it has directed attention more closely to the relation of signs to their users than had previously been done and has assessed more profoundly than ever before the relevance of this relation in understanding intellectual activities. The term "pragmatics" helps to signalize the significance of the achievements of Peirce, James, Dewey and Mead within the field of semiotic. At the same time, "pragmatics" as a specifically semiotic term must receive its own formulation. By "pragmatics" is designated the science of the relation of signs to their interpreters. "Pragmatics" must then be distinguished from "pragmatism" and "pragmatical" from "pragmatic." (Morris 1971[1938]: 43)

Morris defined pragmatics as the study of the relations of sign vehicles to interpreters or more simply of "the relations of signs to their users" (1938). Unlike Carnap (1939) who restricted pragmatics to verbal signs, only to include nonlinguistic signs much later (1955), Morris accounted for both verbal and nonverbal signs. John L. Austin (1962) and John Searle (1969) also limited their interest in pragmatics to verbal signs. Furthermore, Morris also took the ethic and aesthetic dimensions into consideration. His interest in the relation of signs to values is closely connected with pragmatics and the relation between signs and interpreters. A substantial difference between speech act theory, on the one hand, and Peircean and Morrisian semiotics, on the other, is that the former does not adequately recognize two factors which, instead, are crucial to the pragmatic dimension of meaning: the interpretation process in its overall complexity and otherness logic. The outcome is that speech act theory, with John L. Austin and John R. Searle after him, does not account sufficiently for the interpretant of responsive understanding, which is largely a consequence of the fact that their concept of verbal sign lacks a semiotic foundation.

In his Appendix to Signs, Language, and Behavior, Morris includes a paragraph on Peirce's contribution to semiotics (1971: 337–340). The aspect Morris found most interesting about Peirce's work (in spite of what he described as his mentalistic limitations) was his emphasis on behaviour. Peirce maintained that to determine the meaning of a sign we must identify the habits of behaviour it produces, which is a position that resounds in Morris's own orientation. In Morris's view, Peirce had the merit of rejecting old Cartesian mentalism and replacing it with the concept of habits of behaviour, with which he directed semiotics toward a more adequate account of sign processes.

We know that Morris defined pragmatics as the study of the relation of signs (sign vehicles, representamina) to interpreters or sign users. Given that it refers to another element (interpreter) by comparison to Peirce's sign trichotomy (sign, interpretant, object), this definition may lead one to believe that the pragmatical relation is external to the sign. But the pragmatical relation is part of the trichotomic sign relation, a pivotal condition of semiosis or "action of sign" in Morris's terminology. Of course, there cannot be a sign without an interpretant or an interpreter for the "interpretant" is the effect of a sign on an interpreter. However, given that the interpreter does not subsist as such if not as a modification ensuing from the effect of a sign in an open chain of interpretants, the interpreter is also an interpretant and, therefore, a sign. In "Some Consequences of Four Incapacities," Peirce explains the correspondence between man and sign, interpreter and interpretant; but that there is a correspondence does not imply that one of the two concepts forming these pairs can be eliminated, for each term evidences different aspects of semiosis. The whole semiosis comprises both "interpreter" and interpretant along with the other factors.

In Signification and Significance Morris continues investigating appropriate terminology for his semiotic theory and introduces a few innovations as regards the components of semiosis, though the concepts of "interpreter" and "interpretant" remain constant: "sign" or "sign vehicle," the object acting as a stimulus for sign behaviour; "interpreter," any organism acted upon by the sign vehicle. The concept of interpreter is extended to include all organisms and all types of sign behaviour beyond the human. This orientation in semiotic studies is developed by Sebeok with his "zoosemiotics," "biosemiotics" and eventually "global semiotics" (Sebeok 1968, 1972, 1975, 2001); "interpretant," the disposition to respond to a certain type of object as the result of a sign stimulus; "signification," the object to which the interpreter responds through an interpretant, in other words, the signified object which as such cannot function simultaneously as a stimulus.

Pragmatics is concerned with the interpretant more than the interpreter, an interpretant that does not merely identify the interpreted, thereby acting as an "identification interpretant", but that responds, taking a stance toward it. This is the "interpretant of responsive understanding" or "answering comprehension" which (unlike the identification interpretant) is specific to the sign given that it interprets its actual sense. Sign interpretation in terms of responsive understanding opens to interpretive trajectories that are connected with sense and advance toward signhood or semioticity beyond the limits of signality. Parallel to use of the terms "meaning" – in relation to interpretants with the task of simply identifying interpreteds - and "sense" - for interpretants whose task is not limited to identification – we may distinguish between two zones of meaning, that of signality (the object of syntactics) and that of signhood (the object of pragmatics). Insofar as the interpretant of answering comprehension responds at high levels of signhood or semioticity, it is associated with the semioethical dimension of signifying processes.

To summarize looking ahead, the interpretant relative to the signal and to signality is the "identification interpretant"; instead, the interpretant specific to the sign, that which interprets its actual sense is the "responsive understanding interpretant." This interpretant, or better, this modality of acting as interpretant concerns the pragmatical dimension of the sign, the sign as such. The relation between the interpreted and the responsive understanding interpretant depends on the models, habits and values of the world in which the interpreted-interpretant relation occurs and develops. The interpretant of responsive understanding is the conclusion, however vague or unfinalized, of a line of reasoning in an open-ended inferential process with a dialogic structure. Pragmatics deals with the relation between the sign vehicle or "representamen," the interpreted and the interpretant in its full sign nature, which means to say as the interpretant of responsive understanding.

13.5 Openings on global semiotics and semioethics

Contemporary semiotics can benefit enormously from Morris's theory of the sign both on a methodological level and in terms of the possibility of extension. In addition to the more renowned Morris, author of Foundations of the Theory of Signs (1938) and Signs, Language, and Behavior (1946), we know that Morris also thematizes the problem of values with such monographs as Paths of Life. Preface to a World Religion (1942), The Open Self (1948), Varieties in Human Value (1956) and Signification and Significance (1964). Sebeok, who had been one of Morris's students, extended semiotics to the point of conceiving it in terms of "global semiotics." On recovering the connection between signs and values, semiotics can be further developed not only in quantitative terms, but also, so to say, on a qualitative level in the direction of human semiotics, where by "human" is understood the "properly human." This expression alludes to the human capacity for modelling and communication at the highest degrees of dialogism and otherness, responsive understanding and listening. On recovering the sense of its original matrix as it found expression in medical semeiotics or symptomatology (Hippocrates and Galen), global semiotics with Sebeok evidences the human propensity for listening, also understood in the medical sense of auscultation. This emerges as a fundamental condition for the pragmatic aspect of semiotics and in the framework of "semioethics" is developed in the sense of responsive understanding.

In The Open Self Morris investigates signs used in strategies to manipulate the conscious, whether of the single individual or of the collectivity. He critiques the power of mass communication when used abusively in this sense with the effect of enhancing the condition of social alienation. Instead, like Victoria Welby and her significs before him, Morris thematized the connection between linguistic usage, formation of preferences and choice in ways of life, between language, construction of the social and values. He was particularly sensitive to the problem of human dignity, freedom and responsibility (Petrilli 2010a, 2012b). Like Rossi-Landi after him, who critiqued and denounced the widespread condition of "linguistic alienation" (Rossi-Landi 1992), Morris underlined the need to dominate signs rather than be dominated by them, of "mastering" signs rather than "being mastered" by them. Keeping account of the fact that "mastery" is always relative and certainly provisional, the implications of the concept are rather complex. "Mastery," or any degree of "control" whatsoever, is only possible by understanding the signs we use, which means to refine our listening capacity, our interpretive and critical capacities.

In light of recent events in socio-cultural history (which Morris had somehow foreseen), we cannot but appreciate the topicality of a book like *The Open Self*. We are met with a statement in the beginning pages which refers to contemporary New York, but which now resounds like a tragic premonition of the catastrophe of 11 September 2001: "If I were God I would put my thumb down on this city and wipe it out!" (Morris 1948: 4). The Berlin wall was demolished in November 1989 only to reinforce another, far more resistant wall, one made of indifference, the type of indifference which has spread worldwide with the global market and the global communication network functional to it (Petrilli and Ponzio 2000b).

In this monograph, among the expressions used by Morris to qualify an "open society," the word "democracy" does not appear. As a semiotician, like Welby (the semio-significian who came before him), he paid careful attention to the meaning of words and was mindful of the mystifying effects deriving from their misuse and

abuse (cf. Ch. 8). He explains the motivation for his decision not to use the expression "democracy" as follows:

We have not used the term "democracy." The avoidance was deliberate. For all sweet words are soured by misuse. "Democracy" has become a strongly appraisive term, designatively unclear. To call oneself democratic is now as unrevealing and as inevitable, as for politicians to be photographed with babies. We have been told by one who ought to know that when fascism conquers America it will do so in the name of democracy. In fact, whatever is now done in America – or elsewhere on the earth – will be done in the name of democracy. So we need to talk concretely. None of the grandiose labels we bandy about is of much value today. The actual problems of the contemporary world are not helped by invoking such overworked words as "individualism," "socialism," "capitalism," "liberalism," "communism," "fascism," "democracy." These terms are loaded appraisals. Each culture and each group, will use them to its own advantage. If we were to use the term "democracy" designatively it would be synonymous with the phrase "open society of open selves." But since we have this more exact phrase and since no labels are sacred or indispensable, we can dispense with the word "democracy." (Ibid.: 155-156)

These days more than ever before, we are witnesses to the processes of homologation in the social and to the spread of indifference associated with the condition of social and linguistic alienation. This face of the global world finds expression in social reproduction cycles, in the market, communication, sensibility, signs, values and human behaviour in general. Indifference, as it is emerging over the globe, is largely the expression of a global consumerist society oriented by equal exchange market logic: indifference involves indifference to difference, indifference to the other. On the contrary, in his monograph of 1948 Morris thematizes the importance of opening to the other, including the self as other, the self in its multiplicity, variety, difference and unselfish interest for others.

The ghost commonly considered to be hovering over the world today has a new face, that of international terrorism. Toward terrorism has largely been redirected the sensibility of afflicted humanity. The fear generated serves as a strategy to deviate attention from the condition of social malaise connected with the dominant social reproduction system and the values driving it. Mass fear is a strategy that obstacles the full development of critical awareness and global responsibility. The ghost of terrorism finds a large response among people (mostly distracted by everyday life, its trivialities and its difficulties) who are ready to accept the reasons of war. Such an attitude favours investment in the war machine and its justifications, with its profits, strategic objectives and "collateral effects." But though the war is often justified as a humanitarian commitment to safeguard the world, it is not difficult – unless we are suffering from ideological blindness – to recognize the imperialist project that subtends it (Athanor 2005 and 2007–2008). But as Morris does not fail to point out, the cause of social illness, even to the point of nonsurvival, is to be searched for elsewhere: not in the other, but in the "closed self," the "closed community," in the self that closed in its egoisms, barricaded behind the wall of indifference, closed to dialogue, excludes the other. The centre of danger is not the other, but the closed self and the closed society to which it belongs. The primary enemy resides in each and every one of us, in the self's anxiety and fear of the other generated by prejudice toward the other and eventual preclusion of the other. Instead, the "open self," a creative self, a self unindifferent to difference, advocates the "open society" based on dialogic listening and hospitality (Petrilli 2007b; Ponzio 2007).

In The Open Self, Morris recognizes creativity as the uniting factor in his typology of difference and variety in human beings. To enhance creativity requires to know the self and the techniques to construct the self. The unique self is an open self, a self open to the other. Morris claims that the condition of many different open selves united by the common ideal of constructing an open society does not exclude the uniqueness of each single individual. Singularity is established in the relation with the other, even more, it is only possible in the relation with the other, it can only be recognized in the relation with the other, and by the other. From this point of view, what justification for not committing to constructing the self in terms of an open self and as part of the plan for the construction of open societies? As Morris says with prophetical overtones in relation to the U.S. – but his reflections apply to us all: "The alternative to a paralyzed stalemated America and to a Romanized imperialistic America is an America rededicated to its traditional ideal of an open society of open selves and resolutely at work to reduce the anxieties which if unrelieved tend to the closed society. That and that alone, is our way out" (Morris 1948: 168).

A listening attitude, dialogic listening, is decisive for global semiotics, for its capacity to engage with the entire semiosic universe, which is the universe of life. Listening is necessary for a critical discussion of separatism and of approaches in the study of signs that exchange the part for the whole (the *pars pro toto* fallacy), whether by mistake or in bad faith. Separatism is connected with egocentric individualism and with the current "crisis of overspecialization" in the sciences (Petrilli 2010: Ch. 1). Through listening, the semiotician recovers the connection of semiotics with its early vocation and expression as medical semeiotics. If semiotics is to focus on life in its different aspects over the planet given that life and semiosis converge; and if the original motivation for the study of signs is health and therefore the quality of life, it is ever more urgent that semiotics today, in the era of globalization, should recover its original vocation and care for the signs of life globally. We have tagged this particular orientation in the study of signs "semioethics." Rather than sacrifice the other repressed by dominant ideology and social programmes, rather than practice indifference toward the other, the

semioethic slant in sign studies is a response to the social symptoms of illness and unease now so clearly manifest in the contemporary capitalist, globalized world. To the end of safeguarding semiosis and life generally, semioethics emphasizes the need for common awareness of the condition of global implication, for responsible action and a sense of global responsibility toward the other.

Chapter 14

From the *methodica* of common speech to the *methodica* of common semiosis

As to "fine logical analysis" I would rather say that Significs "admits of it" than "involves it." For educational significs means first the general relevance of limpid simplicity, fitness, adequacy, in expression, one partly comparable to the most notable triumphs of delicate "machinery," where the very complication subserves simplicity in action; but still more comparable to the result of organic development.

(Letter from Welby to Peirce, 21 January 1909, in Hardwick 1977: 89)

14.1 Sidelights

Raymond Williams was among the intellectuals who most appreciated the work of the Italian philosopher and semiotician Ferruccio Rossi-Landi. A fortunate outcome was that Williams commissioned an English translation of Rossi-Landi's *Ideologia* (1978) for his Marxist Introduction series, jointly directed at the time with Steven Lukes. The English translation of *Ideologia* was entitled *Marxism and Ideology* and appeared posthumously to Rossi-Landi and Williams, in 1990. In the meantime, other important monographs by Rossi-Landi had already appeared in English, thanks also to the collaboration of his wife, the scholar Genevieve Vaughan¹. These volumes include *Language as Work and Trade*, 1983 (Italian original 1968) and before that *Ideologies of Linguistic Relativity*, 1973, followed by *Linguistics and Economics*, 1975 (neither of which have a corresponding Italian edition to date, though an Italian version of the latter has only just emerged from the Rossi-Landi archives and is now in preparation for publication).

Rossi-Landi made an important contribution to the development of twentieth century semiotics and philosophy of language, particularly in relation to the problem of ideology, social planning and values, with a special focus on the ethical, aesthetic and pragmatic dimensions of semiosis. Therefore, his research is part of that humus in which the conception of sign studies as semioethics – of which Rossi-Landi's research was both a prefiguration and actualization – was to germinate.

In the early years of his intellectual formation, Rossi-Landi absorbed ideas and methodological instruments not only from Italian culture, but also from the cultural traditions of Austria and Germany as well as from Britain and America. In an autobiographical note entitled "Sidelights" (a version was redacted in Italian, dated 1978, for the publishers of his 1980 monograph *Ideologia*, whereas a version dated 1984 is now included in Rossi-Landi's posthumous collection of

1992, Between Signs and Non-signs, edited by myself), he describes the wealth of his plurilingual and pluricultural background. At the same time, however, he observed that from a professional point of view such plurality gave him both advantages and drawbacks. Moreover, his intellectual formation was strongly influenced by his critical confrontation with Charles Morris whose epochal 1938 monograph, Foundations of the Theory of Signs, he translated into Italian and published in 1954. But other influences just as important for Rossi-Landi included American pragmatism, operationalism, English analytical philosophy (he lived in Oxford between 1951 and 1953) with special reference to studies by Gilbert Ryle (1900–1976) (in 1955 he produced a free Italian translation of Ryle's 1949 monograph, The Concept of Mind), and Ludwig Wittgenstein (to whom he returned repeatedly throughout the whole course of his studies).

At a time when idealism – represented by Benedetto Croce and Giovanni Gentile – dominated the intellectual scene in Italy, Rossi-Landi also most significantly dedicated a large part of his work to reviving the "minor" Italian tradition which boasted such figures as Giuseppe Peano, Giovanni Vailati (whom we know introduced Charles Peirce onto the intellectual scene in Italy through mediation by Victoria Welby, with whom he collaborated directly), Mario Calderoni, Federigo Enriques and Eugenio Colorni. He associated the continental philosophical tradition, in particular historical materialism, with analytical philosophy in England and the semiotic tradition in the U.S. with special reference to Peirce and Morris. As he says in "Sidelights":

If I were now to choose myself some sort of a general formula for describing the bulk of my production, I would say that in the main it is a synthesis of historical materialism, on the one hand, and analytical philosophy and semiotics, on the other: the framework is historico-materialistic, the mentality and the techniques are, at least partially, analytical and semiotical. A synthesis, I said; and quite a few critics would agree. But perhaps it is only a mixture. Paraphrasing a famous saying by Wittgenstein, this is for the public to decide. (Rossi-Landi 1992a: 4)

14.2 Language and social reproduction

Between Signs and Non-signs was published posthumously in the attempt to bring the original project for this volume, as delineated by Rossi-Landi, to an auspicious conclusion. As it now stands, the volume includes fourteen essays that span the years from 1952 to 1984 (or 1953 to 1988 with reference to original publication rather than writing dates), offering a general overview and synthesis of the problems at the centre of Rossi-Landi's lifelong research. (As editor of the volume, I was unable to locate all the essays indicated by Rossi-Landi in his notes, but added others in my effort to compensate). These essays are closely interrelated in terms of theme and perspective and are organized in four parts, preceded by Rossi-Landi's autobiographical note, "Sidelights" and an Introduction by myself, and followed by a complete bibliography of his writings to date. Part I, "Signs and Masters in Semiotic History," presents figures at the centre of a significant part of Rossi-Landi's studies – in particular Vailati, Wittgenstein and Morris,³ outlining important phases in the history of philosophy of language and semiotics with reference to recent developments not only in Italy, but on the semiotic scene generally after Morris. Rossi-Landi brought attention to the thinkers listed and others still (e.g. Eugenio Colorni,⁴ Francis Herbert Bradley, Hugo Dingler, Edmund Husserl,⁵ Gilbert Ryle, etc.) not as a professional historian of ideas, but as a theoretician interested in discussing problems, as he had already done in his early monograph on *Charles Morris* (1953). The remaining three parts are entitled: "Signs as Cognitive and Evaluative Instruments"; "Signs, Linguistic Alienation and Social Reproduction"; "Signs and Material Reality."

As the title of this volume makes a point of underlining, *Between Signs and Non-signs*, Rossi-Landi criticized what he dubbed "semiotic panlogism," the view that the universe consists exclusively of signs. On his part, he distinguished between signs and nonsigns and critiqued what he described as an idealistic vision of the world. In Italy at that time, the cultural scene was still heavily conditioned by idealism in philosophy, as propounded by such figures as Croce and Gentile (for a critique of idealism, see also Gramsci 1975b). In this framework and in response to what he had identified as the threat of semiotic panlogism, Rossi-Landi thematized the relation between sign systems and social reproduction: social reproduction is not possible without signs, but this does not imply that there is nothing more to social reproduction other than sign systems (Rossi-Landi 1992a: 174–175).

As part of his global semiotical-philosophical project, Rossi-Landi in the early 1960s had already elaborated an original general theory of social reproduction on the basis of such notions as "modes of production," "social practice," "communication," "language," "verbal and nonverbal sign systems," "linguistic work" and "material work" or "non-linguistic work," "linguistic production" and "material production" (Rossi-Landi 1968). Like Saussure (*cf.* 1.3, 14.5), Rossi-Landi translated the language of economics into the language of linguistics, but did so in completely original terms with respect to his Genevan forefather. Rossi-Landi developed what he called a "homological method" for the study of language, which consisted of applying categories from economics to general sign theory. In other words, he applied categories first elaborated in the study of material production to the study of language production. Working in the framework of global "social reproduction" and as part of his project for the identification of homological rela-

tions between "linguistics and economics," as per the title of his 1975 monograph, Rossi-Landi identified homological relations specifically between the terms forming the pairs "linguistic work" and "non-linguistic work", "linguistic production" and "material production." (On the concepts of linguistic and non-linguistic work in relation to the question of translation, see Ch. 12, above). Rossi-Landi's special focus was on the homology between the production and circulation of commodities and the production and circulation of messages, which he viewed as different aspects of common communication and social reproduction processes. As he wrote in a letter to Morris dated 20 March 1965 (on their correspondence, see Petrilli 1992):

I am working on language, for a change – this time trying to take seriously what linguists and economists say about it. Linguists, for the obvious reason that most "linguistic philosophers" take so little account of linguistics as it is; economists, for the non-obvious reason that I found an intriguing correspondence between certain analyses in the two fields (economics and linguistics). (Rossi-Landi to Morris, in Petrilli 1992: 99–100)

At the time, the original notion of "linguistic work" could have seemed just a metaphor with no referent in the real world. But this was certainly not the case, as clearly emerges in today's world, where the expression "linguistic work" finds a concrete referent in the concepts of "immaterial resource," "immaterial capital" and "immaterial investment." Such concepts are now no less than structural to contemporary "knowledge society" in globalization.

14.3 On language and work

"On the overlapping of the categories in the social sciences" is the title of an important essay included in Between Signs and Non-signs. It was originally published in 1978 (though written in 1972) and is rich in references to his 1961 monograph, Significato, comunicazione e parlare comune (Meaning, communication and common speech). In this essay, Rossi-Landi identifies a series of paired categories where each term in a pair can only function and be explained in relation to the other, but without being reduced to the other: "communication and behaviour," "language and thought," "production and consumption." Another important pair of categories in Rossi-Landi's research is "work and activity." This pair is also thematized in the opening chapter of his book of 1985, Metodica filosofica e scienza dei segni (Philosophical methodica and the science of signs). Language is conceptualized in terms of "work" as distinct from "activity." The main difference consists in the fact that "activity" is not programmed and is an end in itself; whereas "work" mediates between needs and the satisfaction of those needs. To this end, "work" uses instruments and materials that are connected with given models and programmes and their goals.

The distinction between "work and activity" is relevant to the distinction between "signs and non-signs." Footprints impressed in the sand as the result of the activity of walking do not arise as signs and persist in their nonsign status until they become the object of interpretive work. Another crucial observation made by Rossi-Landi is that if the criterion for distinguishing between work and activity is that work is planned, intentional and part of a programme while activity is not, this does not necessarily mean that work is conscious of its objectives and programmes. Work can be "alienated work," as demonstrated by Marxian analysis of capitalist society. According to Freud, even the production of dreams implies work, "oneiric work." The unconscious is a social product and dreams are the result of work, just as their translation into discourse that narrates and analyzes them is the result of work, of "interpretive work." That work can be achieved without conscious programmes provides "a special contact zone," says Rossi-Landi, "for the Marxian use of Freud or the Freudian use of Marx" (1985: 7). The homology established between work and language favours a critical understanding of the nature of both. Work in the capitalist world is reduced to the status of commodity and as such is quantifiable, undifferentiated, abstract work; and to recognize language as work means to recognize the role of language in social reproduction. This is of no small account if we consider that contemporary society is also described as "communication society," where the crucial role carried out by language, verbal and nonverbal, by communication generally as a productive force is undeniable.

The interconnection between language and work is so obvious in social reproduction today that separation between "material work" and "linguistic work" can no longer be proposed. Moreover, we now know that the capacity for renewal, creativity and inventiveness is structural to language and cannot be limited to a single social reproduction system. By evidencing the relation between language and work, Rossi-Landi evidenced how they are both subject to processes of coercion, exploitation and alienation when they are used reductively to reproduce the social relations of production pertaining to the same social system, over and over again (Athanor 2003–2004). Instead, language and work are endowed with an irrepressible vocation for otherness and excess which by far transcends any one given set of social production relations, contrary to attempts at restricting them to those relations by the class that controls the communication system. Language and work constitute the possibility of an *otherwise than being* of communication and of the social reproduction system. As such language and work are consecrated to surplus value and otherness. This means to say that they resist ontology and transcend the binary logic of alternatives imposed by the established order and by the paradigms and the places of discourse that tend to guarantee such logic (Petrilli 2010a: Ch. 7).

Reread in light of the contemporary global socio-economical and politicocultural situation, Rossi-Landi's research is topical today more than ever before. His writings contribute to a better understanding of signs and communication, above all in their relation to ideology and social programmes.

14.4 From common speech to common semiosis, the homological method

Rossi-Landi criticized the notion of ordinary language as proposed by the English analytical philosophers (whom he studied during his stay in Oxford between 1951 and 1953). In particular, he questioned the notion of *linguistic use* which, though formulated with reference to a specific historical language (English), was mistaken for ordinary language-in-general. According to Rossi-Landi, Chomsky made a similar error (for a critical appraisal of Chomsky's linguistic theory that keeps account of Rossi-Landi's observations, see Ponzio 1991, 1993 and 2012b). Instead, Rossi-Landi's project was to identify the general conditions that subtend language-thought and make linguistic use possible, thereby investigating conditions of possibility and their general validity beyond the limits of a single historical language. This project led to Significato, comunicazione e parlare comune (SCPC) in which Rossi-Landi proposes his "common speech theory." He aimed to construct a general model capable of explaining linguistic use, a "common speech model," as he also called it, his "common speech hypothesis," by identifying those elements that are constant in language and common to different single languages. The notion of "common speech" refers to a set of communicative techniques that subtend speech and are operative in all languages, to the general conditions that make the processes of signification and communication possible, where "possible" resounds in the Kantian sense of this term. These techniques form an essential part of social practice, are handed down from one generation to the next and can be traced in all languages. The common speech hypothesis thematizes the a priori in language, identifying those operations that are inevitably accomplished in order to speak. Rossi-Landi aimed to explain concrete linguistic use in terms of a theoretical construction, a model and not on the basis of an empirical description of real processes. His method was hypothetical-deductive, or more properly abductive (to recall Peirce's terminology). It consisted of attempting an explanation of a given event by hypothesizing about the general conditions that make that event possible.

On the basis of his common speech hypothesis, Rossi-Landi not only critiqued English analytical "ordinary language," but also Chomsky's notions of competence and generative grammar and Saussure's notion of parole. After Significato, comunicazione e parlare comune, he continued his project for the investigation of the conditions that subtend language-thought and make speech possible in Language as Work and Trade, his epochal monograph of 1968. Subsequently, Rossi-Landi developed his common speech theory into his theory of "common semiosis." Along these lines, after Language as Work and Trade, during the 1970s he also produced the important volumes Semiotica e ideologia (1972), Ideologies of Linguistic Relativity (1973), Linguistics and Economics (1975) and Ideologia (1978). Central topics in this phase of his research include the problems of linguistic alienation and ideology which he developed in terms of social planning (Petrilli 2004a).

In Language as Work and Trade, Rossi-Landi critiques Wittgenstein's notion of linguistic usage and translates his own notion of "common speech" into the notion of "linguistic work" (the original outcome of his studies on G.W.F. Hegel, Karl Marx and Classical Political Economy). Formulating his critique in Marxian terms, he identified the limit of Wittgenstein's theory of linguistic usage in the absence of the notion of labour-value as analyzed by Marx: "that is, of the value of a given object, in this case a linguistic object, as the product of a given linguistic piece of work. From the linguistic object, he [Wittgenstein] moves only forward and never backwards" (Rossi-Landi 1983: 31). Nonetheless, in spite of his criticism, Wittgenstein was another important influence in Rossi-Landi's thinking, as he signaled himself with the new 1973 Italian edition of Language as Work and Trade, by shifting the chapter on Wittgenstein, significantly entitled "Toward a Marxian Use of Wittgenstein," to the beginning of the volume. Evoking the title of his volume, Dall'analisi alla dialettica (which he had planned, but never published), this change signals the important role played by Wittgenstein in his transition "from analysis to dialectics." The 1981 essay, "Wittgenstein, Old and New," included in Between Signs and Non-signs, is a development on Rossi-Landi's earlier study in the light of his subsequent work and current debate on the problem of signs. Another important book by Rossi-Landi (which appeared three months before his premature death in May 1985) is Metodica filosofica e scienza dei segni. With the essays collected in this volume, he proposed a semiotics of social reproduction. Rossi-Landi analyzed the verbal and nonverbal sign systems that mediate between social structure and social superstructure in the production of language, culture and society at large. The notion of social reproduction is also pivotal in two successive drafts of the plan (dated May 1981 and August 1984) for another book he never published, *Introduction to the Study of Signs*. In both versions which he sent to Augusto Ponzio with the intention of involving him as co-author,7 chapter one is devoted to the concept of social reproduction. The second plan concludes with a section on sign alienation and a closing chapter on language and ideology (see my introduction to Rossi-Landi 1992a).

That Rossi-Landi should have proposed a "methodica of common speech" in 1961 and that the title of his 1985 book includes the expression "philosophical methodica" is not incidental. His whole theoretical itinerary as developed from the early 1950s to 1985 can be viewed as a transition from the methodica of common speech to the methodica of common semiosis. He theorized the so-called "homological method" in a paper of 1972, "Omologia della riproduzione sociale": beyond analogies or surface similarities, the homological method works on similarities at a profound level, integrating genetical-structural language analyses with so-called dynamic analyses. We know that Rossi-Landi had already applied this method in Significato, comunicazione e parlare comune (1961), where he identified homological relations among different languages and on this basis constructed his common speech model. Subsequently, in studies that flowed into Il linguaggio come lavoro e come mercato (1968; Eng. trans. Language as Work and Trade, 1983), he investigated homological relations between the production, exchange and consumption of material goods and the production, exchange and consumption of signs and in this framework examined both verbal and nonverbal sign systems in the human world in terms of work. This approach amounted to searching for a homology between homo faber and homo loquens, which led Rossi-Landi to his theory of the homology of production in general, between sign and nonsign production.

14.5 Philosophical methodica, the science of signs and social reproduction

Metodica filosofica e scienza dei segni (1985) is the third of what Rossi-Landi called his "Bompiani trilogy," the other two being Il linguaggio come lavoro e come mercato (1968) and Semiotica e ideologia (1972). Metodica filosofica reassembles and re-elaborates eight published essays, re-organized into twelve chapters for presentation in book form. These essays were written between 1971 and 1979 as part of a research project which began in 1965, as Rossi-Landi himself explained, with theoretical and methodological roots that reach back even further to his 1961 monograph, Significato, comunicazione e parlare comune, while the latter, in turn, is part of a line of research which began in 1953 with the publication of his monograph on Charles Morris. *Metodica filosofica* is the result of practicing a semiotical, philosophical-linguistic and anthropological approach to the analysis of signs and semiosis. As already signalled in the title, Rossi-Landi conducts a philosophical investigation into the categories, foundations and conditions that subtend language and communication, and does so in the framework of the general science of signs. In less broad terms, the central question is what makes any form of communication in the signifying universe possible, which is a question Rossi-Landi had already raised in *SCPC* with his "*methodica* of common speech." The common speech hypothesis underlines the need to research the structures, generals or universals forming the common basis of all natural languages, beyond any differences characteristic of each single language, thereby investigating the underlying conditions of linguistic use. From this point of view, the common speech hypothesis offered an original contribution to our understanding of language and communication, in terms that were completely different from what had been perspected both by the Saussurean conception of *parole* and by English analytical philosophy with the notion of *ordinary language*.

In Metodica filosofica the expression "science of signs" in the second part of the title refers to the Peircean matrix in semiotics rather than the Saussurean. This means to say that Rossi-Landi's general framework for his sign analysis was "interpretation semiotics" by contrast to the analytical apparatus traditionally used by linguistic structuralism (cf. Ch. 1). By virtue of its theoretical-pragmatic orientation and novelty of the topic, "Criteri per lo studio ideologico di un autore" (Criteria for the ideological study of an author) emerges as a central chapter in this volume. In this study on the author Rossi-Landi pools together his theories on the sign and attempts a practical application. He analyzes the author - whether of literary or nonliterary texts - as an individual completely immersed in society, but with a few extra complications by comparison with the ordinary man of the street. As an exercise in application at a more complex level of sign, language and communication, this chapter acts as a test of validity for his sign theory (Petrilli 2005a: 146–156). Rossi-Landi's observations on developing a correct approach to the ideological study of an author and his written texts, consequently for a better understanding of the author and his/her theoretical production, can also be applied to himself as an author. He underlines the importance of historico-social context, considering the author as a representative and interpreter of the process of social reproduction of which s/he is a product: to begin writing, the author must take an ideological stance with respect to context as well as perform other intellectual and ethical operations (Rossi-Landi 1985: 186). According to Rossi-Landi, reconstruction of such operations provides the best criteria for interpretation of the author's work in ideological terms, remembering that in social reproduction anything human is ideological in the sense that it is part of a social programme built on a system of values – even the way an onlooker views a tree. "Hard dry facts" do not exist for the human observer, but are always the representation of sign-mediated, ideological reality.

Rossi-Landi adapted the categories subtending his theoretical and methodological work on signs, language and communication from historical materialism and applied them to the science of signs. This meant to take a critical stance to-

ward dominant idealistic, innatistic and biological-naturalistic trends of the time. He was critical of Noam Chomsky's generative transformational grammar and of structural linguistics at a time when such trends were still dominating in Italy (cf. Ch. 2). Instead, in his own original studies he applied the dialectical approach typical of historical materialism, uniting the Marxian critique of political economy and linguistics. And in this semiotic-anthropological framework, he continued thematizing such important notions as "social reproduction," "productionexchange-consumption," "sign mediation," "sign residue," "linguistic money" and "linguistic work" etc. In Metodica filosofica Rossi-Landi claims that social reproduction is the beginning of all things: in fact, two pivotal concepts in his lifelong research are "social reproduction," as reported above, and "sign residue." "Social reproduction" refers to the processes by which every human society develops and reproduces itself on the basis of human work, which is sign-interpretive work. The human being's relations with nature are sign-mediated relations and involve continuous communicative exchanges among human beings. The three interrelated levels structural to social reproduction (production, exchange and consumption) and semiosis are described in terms of the production, exchange and consumption of verbal and nonverbal signs:

Our central hypothesis is that at a higher dialectical level exchange itself includes the tripartition into production, exchange and consumption. However, this triad is internal to exchange and does not concern material objects which have already been produced and are destined to consumption. Instead, it concerns those signs which come into play and allow for exchange between production and consumption. We have sign production, sign exchange in a strict and specific sense (exchange of messages) and sign consumption. [...] Exchange occurs between external material production and consumption as a unitary and at once twofold process: the exchange of external material objects which are not signs and the exchange of messages, that is, communication. It is as though two processes take place simultaneously. (Rossi-Landi 1985: 34)

Rossi-Landi isolated the sign by abstraction for the sake of analysis with the intention of describing it's physiognomy and evidencing its constitutive "semiotic materiality" (Petrilli 1998a: 38-49, 2010a: 137-158). He broke down the sign totality or "cell" into the signans and signatum (these Augustinian terms were introduced with the intention of avoiding the mentalistic ambiguity of the Saussurean signifié) and discovered what he calls material, corporeal and social residues. On the side of the signans there are bodies (whether natural or artefacts, but in any case they are social) which act as sign vehicles; on the side of the signatum there are sign residues. The signatum can be associated with the interpretant in Peirce's sense, with intension, sense, lekton; but also with extension, referent or designatum. This indicates that the sign is endowed with a double materiality, physical and historico-social, which determines the specificity of semiotic materiality. In A. Ponzio's interpretation as formulated in "Signs to Talk about Signs" (1990a: 15–61 [1985d]), the concept of "sign residue," the *uninterpreted residue* of the interpreted sign in relation to a specific interpretant sign, accounts for the polylogic and plurivocal nature of the sign (whether verbal or nonverbal). Thanks to the sign residue the sign can become the object of more than one interpretation and figure in a plurality of different "interpretive routes."

Metodica filosofica is related to a range of different disciplines including semiotics, philosophy of language, political economy, sociology, cultural anthropology and psychology. It elaborates on themes, theories, categories, methodologies and analytical instruments proposed in the first two volumes of his Bompiani trilogy: in particular, as we have seen in works leading up to Metodica filosofica in Italian and Between Signs and Non-signs in English, the homology between linguistic production and material production, the problem of social reproduction, the multiple articulations of linguistic and non-linguistic artefacts and the complex notion of linguistic money, etc. Some chapters in Metodica filosofica attempt new applications of his proposed categories and theories (like chapter eight dedicated to the ideological study of an author); and still others such as "Ontologia sociale della proprietà e primo articolarsi della falsa coscienza" (Social ontology of property and initial articulation of false consciousness) are the result of research which he had continued developing across his earlier monographs, including Linguistics and Economics and Ideologia. Saussure too, before Rossi-Landi, had already applied the categories of economics to his studies on language, but having referred to marginalistic economic theory as developed by the school of Lausanne (represented by Walras and Pareto), he ended up elaborating a static conception of the sign. Saussure's sign model is based on equal exchange value and specifically on the relation of equal exchange between the signifiant and signifié. This approach was superseded by Mikhail M. Bakhtin and his theory of the centrifugal forces of sign-ideological life (as opposed to the centripetal forces that freeze language between the two poles represented by langue and parole), by Rossi-Landi and his theory of language as work and integral part of social reproduction and by Peirce and his theory of sign interpretation and infinite semiosis.

14.6 Considering together models, meaning and values

Morris is another author Rossi-Landi returned to repeatedly, continuing the work begun with his monograph of 1953. Their research itineraries were different but often intersected all the same. Rossi-Landi and Morris both dealt with the problem of values: Morris was particularly interested in aesthetic and ethical values,

Rossi-Landi in linguistic and economic value. They corresponded regularly over a period of approximately twenty-five years (cf. 14.7). We know that Morris influenced Rossi-Landi's thinking. However, Rossi-Landi in turn influenced Morris – in particular, his studies on the relation between signs and values, consequently between semiotics and axiology. These studies by Morris found their highest theoretical expression in his monograph of 1964, Significance and Signification (cf. 13.4). Value theory is of consequential importance for sign models and approaches to the study of signs. Peirce, Welby, Morris, Bakhtin and Rossi-Landi himself can all be grouped together as noteworthy exponents of that dominant trend in contemporary semiotics generally recognized as "semiotics of interpretation" by contrast with so-called "decodification semiotics" or "equal exchange semiotics" (cf. Ch. 1; Petrilli 2010a: Ch. 2). Already from the time of his early writings and subsequently in SCPC, Rossi-Landi was quick to evidence how the sign model proposed by decodification semiotics (primarily a Saussurean derivation) was ideated homologically with reference to value theory in economics. He was perfectly aware of the advantages involved in relating linguistics and economics, semiotics and economics and, as we know, dedicated a whole monograph to this area of study, his *Linguistics and Economics*. This approach promised a more profound understanding of the categories implemented by the disciplines in question and of their potential contribution for an adequate critique of human communication processes.

We know that Saussure referred to marginalistic political economy from the School of Lausanne for his own concept of economic value. Consequently, he worked with the concept of equal exchange value (cf. 1.3, 14.5). In terms of semiotic theory, the result was a static sign model based on equal exchange relations between the signifiant and the signifié and more broadly between langue and parole. The novelty of Rossi-Landi's approach consisted in his attempt at breaking through the limits of linguistic theory grounded in exchange value, combining categories from historico-dialectical materialism, the Marxian critique of exchange value, with categories from Peirce, Voloshinov, author of Marxism and the Philosophy of Language, 1929, and Morris. In the words of Rossi-Landi: "After his Foundations, Morris's research developed in two different directions. One consists in elaborating the notion of sign and a general sign theory [...]; the other deals with the problem of value" (1954: xix). In Signification and Significance, published in 1964, Morris at last systematically united these two main areas of his lifelong research - on signs and values: he had worked on values almost as much as he had worked on signs and rejected the idea that the mere fact of working on signs gave one the right to judge about values (Rossi-Landi 1992a: 59–85). Morris worked on the problem of ethical and aesthetic value judgments in a semiotic framework, dedicating to it a large part of his research. After Foundations and *Signs, Language, and Behavior* and almost ten years before *Signification and Significance*, he had already elaborated a theory of value in his 1956 monograph, *Varieties of Human Value*.

In Signification and Significance, Morris analyzes the two main senses according to which the expression "to have meaning" can be understood: namely, as having a given linguistic meaning, a given signification, on the one hand, and as having value and being significant, on the one hand. The term "meaning" is doubled into "signification," the object of semiotics and "significance," the object of axiology. To consider signs and values together means to work on the connection between semiotics (signification) and axiology (significance) insofar as they concern different aspects of the same process (human behaviour). It also means to work on the related problem of recovering the "semiotic materiality" or "signifying otherness" of the signifying process to which testifies the very ambiguity of the term "meaning." In Morris's own words:

That there are close relations between the terms "signification" and "significance" is evident. In many languages there is a term like the English term "meaning" which has two poles: that which something signifies and the value or significance of what is signified. Thus if we ask what the meaning of life is, we may be asking a question about the signification of the term "life," or about the value or significance of living or both. The fact that such terms as "meaning" are so widespread in many languages (with the polarity mentioned) suggests that there is a basic relation between what we shall distinguish as *signification* and *significance*. (1964: vii)

Morris knew that to work in this direction meant to move into territory that at the time had hardly been explored. However, we find not a few references to axiological issues in Peirce's semiotics as well. In line with his pragmaticism, Peirce's semiotics is inseparable from human social behaviour and from the totality of human interests. In the architectonics of his thought system, the problem of knowledge inevitably involves orientations and issues of an evaluative order; his semiotics also deals with the ethical-pragmatic or evaluational-operative dimension of signs (*cf.* Chs. 4 & 5). Peirce is one of Morris's direct predecessors, even though before Peirce, Morris was influenced by other scholars such as George H. Mead.

14.7 The correspondence between Morris and Rossi-Landi

Rossi-Landi and Morris corresponded with each other exchanging letters that span the years from 1950 to 1976. This correspondence is now published in a special issue of the journal *Semiotica*, edited by myself with an introductory essay

entitled "Social practice, semiotics and the sciences of man" (Petrilli 1992). In addition to sixty-five letters from Rossi-Landi to Morris and almost as many from Morris to Rossi-Landi (as we deduce from the letter texts some are missing), this volume also includes two papers by Rossi-Landi: an early paper of 1951, "Review of Value: A Cooperative Inquiry" and an important essay of 1970, "Linguistic Alienation Problems." Rossi-Landi's first letter to Morris is dated 23 June 1950 and his last 23 December 1976; Morris responded to Rossi-Landi's initial contact with an undated letter, while his last note is dated 26 October 1976. The correspondence took place in English – a foreign language Rossi-Landi mastered extremely well; he actually translated a significant part of his theoretical production from Italian into English himself or wrote directly in English (on the correspondence between Morris and Rossi-Landi, see also Petrilli and Ponzio 2005a: 264–268).

Rossi-Landi continued his "dialogue" with Morris not only in his correspondence but also in his several publications dedicated to the latter. He reflected constantly on different aspects of Morrisian sign and value theory which, in effect, was a determining influence in his own understanding of human signifying and behavioural processes. His interpretation of Morris developed across various phases and is closely related to the history of twentieth century semiotics in Italy. Morris's Signs, Language, and Behavior appeared in Italian translation (by Silvio Ceccato) in 1949 and his Foundations of the Theory of Signs (translated by Rossi-Landi) appeared in 1954. Rossi-Landi's monograph on Morris appeared the year before, in 1953 (Petrilli 1992: 15-22). Rossi-Landi "dialogued" with Morris (in real life and ideally) in terms that were always challenging and dynamic, through to his very last essay specifically dedicated to Morris, "On Some Post-Morrisian Problems," 1978. In this essay he introduced an interpretive novelty with his proposal of rereading Morris's behaviourism in terms of "social practice." As Rossi-Landi proceeded in the study of signs, his approach developed ever more in terms of the study of social reproduction with respect to which the concept of social practice was fundamental. And though the notion of social reproduction was originally derived from Marx following Hegel, behaviourism in the interpretation of both Mead and Morris also played an important role in Rossi-Landi's theory, if only because the notion of social practice had a certain Morrisian flavour (Rossi-Landi 1978).

14.8 Language and critique, a common quest

Like Morris, other researchers oriented their work in the direction of the relation between signs and values and from this point of view can be read in a semioethical key – in addition to Peirce, among those figuring in this volume are Welby, Bakhtin, Ogden and Richards, Vailati and, of course, Rossi-Landi. Welby's own preference for the neologism "Significs," rather than already existing terms such as "semantics," "semiotics," or "semasiology," was determined by the fact that it highlighted her theoretical interest in the connection between having meaning and having value (Petrilli 2009a: Ch. 3; *cf.* Ch. 7).

Vailati was one of Welby's numerous correspondents, for over ten years. Through her mediation he introduced Peirce and his pragmatism to Italy. Vailati was one of the authors Rossi-Landi privileged, editing a volume of his writings (Vailati 1967). Like Vailati, Welby gave special attention to what Rossi-Landi tagged "common speech," the set of expressive modalities, techniques and practices forming mankind's common linguistic patrimony (and mostly neglected by trends with a taste for technicalism). Moreover, like Vailati, Welby did not believe in definition as a possible panacea for linguistic equivocation and misunderstanding (cf. Ch. 8). While admitting to the usefulness of definition in the case of technical languages, both scholars identified its limits in the fact that it eliminates expressive plasticity, rendering words inert and lifeless, instead of keeping them alive and dynamic. Again, like Vailati (as much as Rossi-Landi and Bakhtin after her), Welby thematized polysemy, plurivocality, and ambiguity as essential characteristics of language and expression generally.

Though proposing new terminology, she aimed to stay as close as possible to everyday, common language without falling into the trap of technicalism – all the same she was not a "precisionist." In spite of her interest in rendering expression as clear and significant as possible, her intention was not to eliminate the ambiguity of words when understood positively as the capacity for plural meanings, and not negatively as generating confusion. In Welby's interpretation, the expressions "significs" and "to signify" keep account of the question "What does it signify?" used by the man in the street to interrogate not only intended meaning, but also value and significance beyond intention, the effect of language on human behaviour generally. When she praised linguistic precision, her purpose was to exploit expressive resources to the best by recognizing and expliciting different meanings of the same word or by identifying the same meaning common to different words that at once also signify differently.

"Common speech," as understood by Rossi-Landi, and "ordinary language," as understood by the British analytical philosophers, are not the same thing. "Ordinary language" ("everyday language") only covers a limited aspect of what Rossi-Landi understood by "common speech." Welby herself was well aware of the difference such expressions imply – though of course independently of Rossi-Landi for obvious chronotopic reasons. She herself drew on everyday language for her own terminology without ignoring the concept of special language as related to specific areas of knowledge and human experience – the language of religion, biology, cosmology, ethnology, physiology, musicology and the figurative

arts, etc. She criticized technicalism and the division of knowledge into separate and unrelated areas, underlining the importance of communication among different linguistic reserves and points of view. In the framework of her "critique of language" she associated bad linguistic usage, the cause of incoherence and confusion, with the bad use of logic. This approach led her not only to describe language, but to analyze it along similar lines to Rossi-Landi and Morris, with the aim of transforming and regenerating it as the result of recovering healthy linguistic practices together with conscious awareness and the capacity for critique.

Moreoever, like Rossi-Landi after her, Welby had already distinguished between "analogy" (interpretation based on surface similarity among different terms) and "homology" (what she also called a "stronger" type of analogy) in signifying processes. In her monograph of 1903, What Is Meaning? (pp. 19–20), she described six different types of likeness: 1) casual likeness; 2) general likeness of the whole, with unlikeness of constituents; 3) likeness in all but one point or feature; 4) valid analogy ringing true in character throughout, bearing pressure to the limit of knowledge, and yet remaining analogy and never becoming equivalence, or identity in varying senses; 5) equivalence; 6) correspondence in each point and in mass or whole. As Rossi-Landi pointed out, in biology, the distinction between analogy and homology is thematized as the distinction between superficial similarity (analogy) and structural-genetic similarity (homology). And both Rossi-Landi and Welby associated these concepts with different types of inference (deduction, induction and hypothesis), which they characterized on the basis of the degree of potential for inventiveness and their role in the development of knowledge, with special reference to the scientific method.

14.9 On language according to Rossi-Landi and Sebeok, more convergences

Rossi-Landi proposed and developed his hypothesis of "language as work" from his early writings of the 1960s onwards. The idea of "language as work" is an elaboration on his earlier conception of "language as common speech," as a system of common operations that subtend the different historico-natural languages. In both cases we are faced with the attempt at progressing from the level of the description of linguistic behaviour (behaviourism), the level of linguistic usage (Wittgenstein), of ordinary language (Oxonian philosophy), of the "state of a given language" (Saussure), of taxonomic analysis (Martinet), and from the level of worldview connected to a given language (Sapir and Whorf) to the level of explication of the structures and processes that produce the different historico-natural languages. Rossi-Landi tackled the problem of transcending a typical tendency in language theory, including Chomsky's, toward descriptivism. As much as Chomsky's work is oriented in an explicative and genealogical sense, he also elects as his task to describe an innate, universal grammar. In reality, Chomsky's conviction is simply the result of the tendency to hypostatize language as much as he wished to explain it with his universal grammar model. However, Chomsky fails to distinguish between the genotypical level and the phenotypical level of language. Rossi-Landi, instead, evoking Marx's terminology, thematized the need for language studies to shift from the level of the "linguistic market" to the level of "linguistic work."

To speak of "linguistic work" is not only a question of establishing an analogy with "non-linguistic work." Rossi-Landi demonstrated that work and language are interconnected by a relation of homology. Language is work (cf. 14.3). According to this approach, the two definitions of man as laborans and as loquens converge. Natural divisions that oblige one to assign verbal work and nonverbal work, the production of messages and the production of merchandise to separate regions do not, in fact, exist. In both cases, we are dealing with semiosis, with the *linguistic work of modelling*. On the basis of this claim, a connection can be established between Rossi-Landi's concept of work, on the one hand, and the concepts of primary, secondary and tertiary modelling as elaborated by Sebeok, on the other (Sebeok 1991b: 49-58). Rossi-Landi warned against those theories that reduce the problem of language to the problem of communication without taking the social relations of production into account. As Rossi-Landi writes in Metodica filosofica e scienza dei segni: "We must evidence the nonreducibility of language to mere communication, otherwise it would not be possible to place the capacity of language in a coherent framework concerning the phylogenesis of nerve structures and relative psychic functions" (Rossi-Landi 1985: 234). In Rossi-Landi's view, the problem is the same whether we are dealing with nonverbal commodities or verbal messages: in other words, the problem is that of human work which produces messages and commodities and puts them into circulation. The concept of linguistic work is the third and founding element, which the Saussurean dichotomy between langue and parole does not account for. On Rossi-Landi's account, language understood as work is at the origin of the different historico-natural languages; these are described as the product of language as work. Linguistic work reactivates languages and endows them with new value through the parole. The latter is individual only because each single elaboration is individual. However, the model of production is social.

All this puts us into a position to relate Rossi-Landi's concept of "language as work" and Sebeok's concept of "language as primary modelling." Commodified and alienated work is a characteristic of today's social system. Work in the expression "linguistic work" evokes something that is juxtaposed to play. There-

fore, it can generate the fallacious conviction that linguistic work is in a relation of opposition with the play of musement, as described by Peirce. But Sebeok also evoked the play of musement to characterize the human being as a semiotic animal, which means specifically in relation to human primary modelling or what he calls "language." The truth is that the concepts of "linguistic work" and "play of musement" do not contradict each other. As Rossi-Landi explained, work and play are not juxtaposed, indeed play requires preliminary work as well as work for its performance – surely work that is particularly agreeable.

Another point where Rossi-Landi's position encounters Sebeok's concerns the critical stand taken by both against hypotheses that aim to explain the origin of language on the basis of the need to communicate (Sebeok 1986b, c; see also Fano 1992). For both Rossi-Landi and Sebeok language is what makes the constitution, organization and articulation of properly human work possible. Speech and historico-natural languages presuppose language understood as the capacity for syntactic construction and deconstruction proper to human modelling, which insofar as it is a syntactic modelling device, is capable of producing an indefinite number of possible worlds (cf. Ch. 3).

Rossi-Landi's critique of the alienated social world presupposes the capacity to conceive different worlds, to muse utopically or scientifically about new worlds and their construction. To the extent that they are capable of linguistic work, of the play of musement, human beings are in a position to question reality as it is and to work for change. Rossi-Landi thematizes a world that is other with respect to alienated reality, other than the world-as-it-is. Developing an approach to semiotics equipped to deal with such issues as social planning, the critique of ideology and the human capacity for constructing, deconstructing and reconstructing new and better worlds, Rossi-Landi's research is perfectly in line with the approach to sign studies tagged "semioethics."

Chapter 15 Global semiotics and the vocation for translation

A lire les ouvrages de Sebeok, on est confondu par sa familiarité avec les langues et les cultures du monde, par l'aisance avec laquelle il se meut à travers les travaux des psychologues, des spécialistes de neuro-physiologie cérébrale, de biologie cellulaire, ou ceux des éthologues portant sur des centaines d'espèces zoologiques allant des organismes unicellulaires aux mammifères supérieurs, en passant par les insectes, les poissons et les oiseaux. Ce savoir plus qu'encyclopédique se mesure aussi aux milliers de noms d'auteurs, de langues, de peuples et d'espèces composant les index des ouvrages écrits ou dirigés par lui, et à leurs énormes bibliographies.

(Lévi-Strauss, "Avant-Propos," in Bouissac, Herzfeld, Posner 1986: 3)

15.1 Global semiotics as intersemiotic translation

Given that translation across different domains is a specific theme in this book, but is also specific to the perspective itself of semiotics, we will now focus more closely on Thomas A. Sebeok's research. Sebeok's interests cover a broad range of territories ranging from the natural sciences to the human sciences. He focused on signs normally covered by specialists from different fields which he viewed at once in their specificity and interrelatedness: signs of "nature" and "culture," ranging from human signs to animal signs, from verbal signs to nonverbal signs, from natural languages to artificial languages, from signs at a high level of plurivocality and dialogism to univocal and monological signs or, rather, signals, signs at varying degrees of indexicality, symbolicity and iconicity, signs of conscious life and of the unconscious. Consequently, Sebeok deals with theoretical issues and their applications from as many angles as the disciplines called in question: linguistics, cultural anthropology, psychology, artificial intelligence, zoology, ethology, biology, medicine, genetics, robotics, mathematics, philosophy, literature and narratology. All this would seem to be the natural outcome of his "familiarité avec les langues et les cultures du monde," as Lévi-Strauss puts it in the epigraph above, familiarity which, in turn, is dialectically enhanced by the unbounded nature of his investigations as he proceeds to identify differences and specificities constituting the great totality named "Gaia" (Sebeok 1986a: 32–34).

A fundamental point in Sebeok's vision of the signifying universe is that living material converges with sign activity, human and nonhuman, that *signs* and *life* converge, so that to maintain and reproduce life and not only to interpret it at a metadiscursive level, necessarily involves signs. This position reveals an intimate connection between the biological and the semiosic and, inevitably, between the sciences that study them, biology and semiotics. Sebeok experiments

with different perspectives, embarks upon different research itineraries and associates disciplines that seem distant from each other. All this finds a focus in the fundamental conviction subtending his general method of enquiry that the universe is perfused with signs, indeed, as Peirce hazards (CP 5.448, n. 1), is perhaps composed exclusively of signs. Sebeok too, contemplated the whole universe as a complex global sign, to evoke Peirce again, "a vast representamen, a great symbol... an argument... necessarily a great work of art, a great poem... a symphony... a painting" (CP 5.119). Nor did such an approach mean to claim intellectual omnipotence, as intimated by some.

Sebeok knew that to understand any one particular type of sign – such as the verbal – it was necessary to view that sign as part of the whole of which it is a part. He envisages a sort of global dialogue and dialogic globality interconnecting signs in a huge semiosic "network" or "web" (Sebeok 1975, 1995)² where signs act as interpretants of each other beyond the strict limits of anthroposemiosis. He dubbed his ecumenical perspective with the auspicious expression "global semiotics" (2001). In addition to acting as the point of encounter and observation post for studies on the life of signs and the signs of life, global semiotics is the place where human consciousness fully realizes that the human being is a sign in a universe of signs. Global semiotics evidences the extension and consistency of the sign network, which includes the *semiosphere* as constructed by human beings, human culture, its signs, symbols and artefacts, etc. But the global semiotic perspective also evidences the fact that the human cultural semiosphere is part of the broader biosemiosphere forming a sign network that human beings have never left and to the extent that they are living beings, never will (Sebeok 2001 [1994b]: 15). Global semiotics unites what other fields of knowledge and human praxis tend to keep apart, either for justified needs of a specialized order, or because of a useless and even harmful tendency toward short-sighted sectorialization, an attitude which has ideological implications mostly hidden under the mask of motivations of a scientific order. Instead, a global view favours continuous shift in perspective, identification of new interdisciplinary relations and development of new interpretive practices. Sign relations are identified where it was thought there were none: that is to say, where no more than mere "facts" and relations among things had previously been identified independently of communication and interpretive processes. Moreover, changing perspective favours the discovery of new fields of research and new languages that interact dialogically and arise as part of new dialogic interpreted-interpretant sign relations (Petrilli and Ponzio 2005a: 6-8, 22-28).

Global semiotics fully accomplishes the overall vision of "interpretation semiotics," where interpretation means translation, translation from one sign into another sign, its interpretant. Interpretation semiotics attributes an inevitable and essential relation with the interpretant to the sign. The sign only subsists in relation to a given interpretant; it orients itself toward the subject according to a specific modality as expressed by its interpretant. Furthermore, the relationship between the interpreted sign and the interpretant sign is never one of convergence, repetition. As Peirce says, the interpretant always adds something new as it shifts the sign toward the possibility of encounter with yet another interpretant sign.

The relation between interpreted and interpretant is a relation of translation and is a relation characterized by the tendency toward boundlessness, unlimitedness. Peirce talks of unlimited sequences of interpretants, open-ended chains of deferral, infinite semiosis. And Sebeok on his part, extending on Peirce even (Watt 2011), develops this possibility of opening and infinite deferral to a maximum degree. With this great master of the sign, the *translational nature of semiosis* and, therefore, the *translational vocation of semiotics* are emphasized. In fact, semiotics today searches for interpretants that are always more distant, beyond the boundaries of the human and the conventional – which are also the boundaries of linguistics – to which it had been relegated by semiology.

Roland Barthes was perfectly right when in his *Eléments de sémiologie* (1964), à *propos* the relationship between linguistics and *sémiologie* (as conceived by Saussure), he maintained that semiology was a part of linguistics and not vice versa (*cf.* 16.5). But with Sebeok and his "global semiotics," semiotics recovers its dialogical and interpretive-translative character and emerges once again as the far broader and far more comprehensive sphere with respect to linguistics. Allusion here is not only to the linguistics of the linguists, but also to Charles Morris's description of linguistics which he extended to the study of all that which he called "language," therefore to all human languages, verbal and nonverbal. This conception of language is connected to the species-specific human primary modelling device rightly denominated "language" by Sebeok, distinct from "speech."

Sebeok's global semiotics presupposes his critique of anthropocentrism and glottocentrism, which involves all those trends that turn to linguistics for their sign model. His interest in cultural processes at the intersection between nature and culture led him to the biologist Jakob von Uexküll, one of the so-called "cryptosemioticians" he studied most. With Sebeok, *anthroposemiotics* opens to *zoosemiotics* (a term he formally introduced in 1963, in his review "Communication in animals and men"), and, even more broadly, to *biosemiotics* (Cobley 2010a; Petrilli 2012a: Ch. 4), on the one hand, and to *endosemiotics* (which studies cybernetic systems inside the body at both the ontogenetic and phylogenetic levels, e.g. the immunitary or neuronal, see T. von Uexküll 1997a, 1997b), on the other. All this means taking account of sign systems which, whilst they are not alien to the human world, do not specify it. Rather, they concern the point of encounter

between human communication and the communicative behaviour of nonhuman communities within the species and with the external environment.

Sebeok describes his 1979 monograph, The Sign & Its Masters, as "transitional," but in the light of developments in philosophico-linguistic and semiotic debate across the second half of the 20th century, in reality all his work is transitional. He contributes significantly to the shift from so-called "code semiotics" to "interpretation semiotics", freed once and for all from subordination to linguistics (Bonfantini 1981, 1984; Ponzio 1985d). To simplify, we may summarize these approaches under two names - Saussure and Peirce. The study of signs is "in transit" from "code semiotics" to "interpretation semiotics" as represented by these two emblematic figures, though it has now decidedly shifted in the direction of the latter – and Sebeok has largely contributed to the transition. Saussurean sémiologie is based on the verbal paradigm and suffers from the pars pro toto fallacy: human signs, in particular verbal signs, are exchanged for all possible signs, human and nonhuman. On the basis of this mystification, it claims to be the general science of signs. But when the general science of signs chooses the term "semiotics" for itself, it dissociates from semiology and its errors. Sebeok dubbed the semiological tradition the "minor tradition" and promotes, instead, what he calls the "major tradition," represented by Locke and Peirce and studies on signs and symptoms by Hippocrates and Galen. All things considered, semiotics is recent if considered from the viewpoint of the determination of its status and awareness of its wideranging possible applications and at once ancient if its roots are traced back at least, following Sebeok, to these ancient physicians.

Sebeok also dubbed semiotics the "doctrine of signs," an expression he preferred over the more ennobling terms "science" or "theory," which placed him in a tradition that includes George Berkeley and leads up to Peirce (Sebeok 1976: 186; Deely 2008: 115 n. 25; 2011: 123-125, 135-144; Kull 2011).3 He adapted the expression from John Locke, who maintained that a "doctrine" was no more than a body of principles and opinions that vaguely form a field of knowledge. But he also uses it in Peirce's sense, which means to say charged with the instances of Kantian critique. Global semiotics not only describes signs for what they are – as emerges from observation (which is necessarily partial and limited), but also interrogates their conditions of possibility with a view to what they should be (Sebeok 1976: ix–x). Such interrogation à la Kant highlights the humble and at once ambitious character of the "doctrine of signs" as it questions itself, attempts to account for itself and investigates its very own foundations.

Sebeok's position avoids any form of biologism occurring when human culture is reduced to communication systems that can be traced in other species. And while he evidences homologies between human and nonhuman animals, as when he describes the averbal aesthetic activities of animals (Sebeok 1979b; Johansen 2011), he also avoids the anthropomorphic reduction of nonhuman animal communication to characteristic traits and models specific to humankind. Consequently, his doctrine of signs insists on the autonomy of nonverbal sign systems with respect to the verbal, beyond the sphere of anthroposemiosis. On the other hand, nonverbal signs in anthroposemiosis are as specific as verbal signs, as emerges in the framework of interpretation semiotics and is evidenced by those human sign systems that depend on the verbal only in part, if at all.

Verbal signs only constitute a tiny sector of the signs present on our planet. And yet they have been so exalted in the course of human history – especially the Western – that we must speak of "arrogance," a form of arrogance closely connected with the anthropocentric vision, recurrent not only in the realm of common sense and in philosophy, but also in the sciences. All the same, we could certainly if not justify, at least explain, find a reason for the exaltation of the human prerogative that is the verbal sign.

The explanation is *translatability*, translatability into the verbal of all other types of signs implicated in the great semio(bio)sphere. This is what such expressions as "omniformativity (Hjelmslev), "universality of the noetic field," "boundlessness of human language" (Chomsky), "omniformative character of verbal signs" (De Mauro) all allude to.

À propos the debate on the omniformativity of verbal signs, recognition of their "semiotic omnipotence" can lead to developments in one of two different directions. This debate took place at the beginning of the 1970s in the transition – which also involved the name of the science that studies signs – from sémiologie to semiotics and from code semiotics to interpretation semiotics (Garroni 1972; Ponzio 1975b). One pathway is glottocentrism as it characterizes semiotics understood as "sémiologie," where semiotics was ancillary to linguistics. This led to the inversion proposed by Barthes à propos the relation between semiology and linguistics as established by Saussure. Instead, the second pathway involves recognizing the metasemiosic dimension of human semiosis, the human capacity for implementing signs, specifically verbal signs, to speak about other signs, to reflect on other signs, to represent, depict, describe other signs, verbal and nonverbal, human and nonhuman. The second pathway suffers neither from exaltation, nor anthropocentrism. It acknowledges that semiotics cannot be reduced to semiology, that communication is not only a prerogative of anthroposemiosis, and that it is not only ascribable to macroorganisms, but also to microorganisms, including cells and the "genetic code." This omniformative capacity, no doubt, is characteristic of human semiosis and human semiotics, being a capacity that verbal signs render possible to a maximum degree, a capacity that semiotics understood as the "doctrine of signs" develops and that "global semiotics" as intersemiotic translation enhances.

Precisely intersemiotic translation – which is characteristic of global semiotics and is possible thanks to verbal signs – is a condition for the critique of glottocentrism and anthropocentrism. Sebeok's position is distant from Saussure's when the latter limits the sign science to the narrow spaces of the signs of human culture, and still more reductively to signs produced intentionally for communication. Among all else, interpretation semiotics frees semiotics from the false dichotomies "communication semiotics vs signification semiotics," "referential semantics vs nonreferential semantics," and accounts for the autonomy and arbitrariness of nonverbal signs whether "cultural" or "natural" (see above, 1.1, 1.2). For Sebeok, no aspect of sign life must be excluded from semiotics, no limits are acceptable on semiotics, whether contingent or deriving from epistemological conviction. At the same time, however, contrary to eventual first impressions, Sebeok's work discourages any claims to the status of scientific or philosophical omniscience; indeed, there is no expectation to solve all problems indiscriminately. Likewise, from the perspective of Sebeok's global semiotics, the translatability of nonverbal signs - from the macrocosm of nonhuman living beings and from the microcosm of human and nonhuman living beings - into verbal signs is a methodological instrument that fully reveals the unfounded and unsubstantial nature of a glottocentric orientation.

Intersemiotic translation puts human signs and communication back into perspective, showing them for what they effectively are: a small island in the great ocean of signs and communication, that converge with life over the planet. In global semiotics, the verbal sign's omniformativity, its semiotic omnipotence, its capacity for intersemiotic translation all play a different role from the role acted out in semiology. In the latter, semiotics reductively identifies with semiology and is at once englobed by linguistics. As Ferruccio Rossi-Landi avers in Semiotica e ideologia (in his Linguistics and Economics, see § 1.3, "The autonomy of nonverbal sign systems," 16–24):

However, nobody is claiming that semiology is necessarily invalidated by such a character [glottocentrism.] For it to be free of it, it will suffice to keep semiology distinct from semiotics understood as the general science (or doctrine, or theory) of any type of sign. We could begin precisely from the signs that children already use as *in*-fants, that is, even before they start speaking. [...] Semiology understood as a part of linguistics, which in turn is only a part of semiotics, will occupy a relatively restricted sector, but totally legitimate, in the science of signs overall. We have a separatistic fallacy, in the case in question a form of "glottocentrism" or "semiocentrism" (mostly literary), only when we claim that sector must take the place of the totality to which it belongs. (1972: 12)

In the global semiotic framework, the "omniformativity of the verbal" as the possibility of translation into the verbal of signs belonging to other communication systems reconducts anthroposemiosis to the right dimensions within the sphere of planetary semiosis. Moreover, it also puts humanity in a position to become conscious of the latter in all its aspects and variety, but this time with a sense of "humility," so to say, and "responsibility." The point is to become aware of a "service" to render, and a responsibility; to commit to knowing the diversified functioning of semiosis in the great variety of different life-forms, but also to safeguard diversity and variation, ensuring that the whole of life over the planet is in good shape. Irrespective of any other consideration, such an approach also serves the specific interests of human life. Given that humans are endowed with metasemiosis and the related capacity for intersemiotic translation, we are inextricably and indissolubly responsible for health at a planetary level. In this sense global semiotics, as entrusted to us by Sebeok, can be developed in the direction of semioethics.

15.2 Interpretation/translation, the criterial attribute of life

Given that semiosis or sign behaviour involves the whole living universe, a full understanding of the dynamics of semiosis may ultimately lead to a definition of life. Sebeok posited that semiosis and life converge. Semiosis originates with the first stirrings of life. This leads him to formulate an axiom he believed cardinal to semiotics: "semiosis is the criterial attribute of life" (Sebeok 1986a: 73; also 1991b: 124). A second axiom states that "semiosis presupposes life" (Sebeok 1994). No wonder all life sciences find a place in Sebeok's intellectual horizon and are considered important for a full understanding of signs and their workings in the terrestrial "biosphere" (Vernadsky 1926).

To claim that the criterial attribute of life is semiosis is tantamount to stating that the *criterial attribute of life is interpretation-translation*. Interpretation-translation: a sign can only be interpreted by translating it into another sign, the interpretant, precisely. "To have" in the expression "to have meaning" can itself be understood in the sense it assumes in the expression "to have a relationship." Meaning is not traceable inside the sign, it is not "vehicled" by the sign. The meaning of something that is a Sign is its interpretation of a second something, the Object, and subsists in a third something, the Interpretant of which the Sign is the interpreted. The sign is literally this relationship: the interpreted-interpretant relation in which it signifies in turn as an interpretant of another interpreted, and so forth. But the interpretant that interprets the meaning of a sign is also in turn a sign, therefore it too is an interpreted for another interpretant, and so forth. In Ponzio 1985d, 1990, Petrilli 1998a, 2010a, Petrilli and Ponzio 2008, we propose to speak of the sign in terms of an "interpreted-interpretant" relationship. However, in spite of binary appearances, reference is always to a (minimal and

abstract) triadic relationship where the "interpreted" stands for "an interpreted that is already in turn an interpretant of a preceding interpreted (the object)." Ultimately, therefore, the expression "interpreted-interpretant" implies the triad "object-interpreted-interpretant."

The notion of "interpretation" - and we can now add "translation" - in Sebeok, in accord with Peirce's semiotics, and also with Morris, concerns semiosis in general and not just semiosis connected with the human brain. The "dance" of a bee gives rise to interpretations by other bees, directing them to the food source; therefore, this is a semiosic process (Morris 1964 begins with this example to explain semiosis, see page 2). Other examples are given by Sebeok to clarify that interpretation is not limited to operations carried out by humans, nor by organisms from one of the great kingdoms and that, as protosemiosis, it is not even limited internally to the living:

- interpretation by ants of the hind end of an aphid which is mistaken for the head of another ant (Sebeok 1979a: 13) (a case of misinterpretation functional to life);
- 2. the endosemiotic function of the AMP cycle (adenosine monophosphate). In microorganisms the AMP cycle signals a nutritional crisis, the depletion of carbon sources. Depletion carries out an endosemiotic function as an intracellular sign and is interpretable by cells as signalling the lack of sufficient nourishment;
- the processes of interpretation that enable the genetic code to function;
- interpretation of signs from the environment by cells and tissues on the basis of the immune system;
- interpretive processes that render circulation of energy-information possible at the physical-quantistic level; and
- interpretive processes that keep the gigantic ecosystem together, the biogeochemical system called Gaia (Sebeok 1979a, 1986a).

The notion of interpretation can be extended to all "terrestrial worlds": the "Lilliputian world" of molecular genetics and virology; the "world of Brobdingnag," the gigantic biogeochemical system called Gaia; and, finally, the "man-size world of Gulliver" (Sebeok 1986a: 12).

In "The Evolution of Semiosis," Sebeok (1991b: 83-96) explains the correspondence between the branches of semiotics and the different types of semiosis, from the world of microorganisms to the superkingdoms and the human world. As anticipated in Chapter three above, specific human semiosis, anthroposemiosis, is characterized as semiotics thanks to a modelling device specific to humans called by Sebeok "language" (it is virtually certain that Homo habilis was originally endowed with language, but not speech). We know that in Sebeok's research semiotics is interpreted and practiced as a life science, as biosemiotics. It follows that semiotics as he understands it may be situated in a tradition of thought that features such figures as Hippocrates, Galen, Peirce, von Uexküll and in recent times René Thom – an important Peirce scholar and topologist with competencies of a biological order. In this framework, Sebeok's semiotics examines the problem of the origin of signs which is nothing less than the problem of the genesis of the universe (which, following Peirce, is perfused with signs) from the free flow of energy-information to the ongoing production of signals and signs. The development of semiosis and its complex articulation coincides with the evolution of life on the planet Earth, from a single cell to its present-day multiplicity and diversity. Terrestrial life is traditionally subdivided into four (or five) big cellular kingdoms: the single prokaryotic kingdom (Monera, comprising bacteria); the four eukaryotic systems (comprising Protoctista, Plantae, Animalia, Fungi). These kingdoms coexist, interact with the microcosm and together form the great "biosphere" (Sebeok 1986a: 10–12).

Following Sebeok, the sign science is not reduced to the terms of "une science qui étudie la vie des signes au sein de la vie sociale," as Saussure claimed (1916: 33; "a science which studies the role of signs as part of social life," Eng. trans. 1983: 16): a science which only studies communication in human cultural systems. Far more broadly, the vocation of the general science of signs is to study communicative behaviour in the larger and inclusive framework of biosemiosis, at least. In Sebeok's conception the sign science not only includes the study of signs in social life, therefore of communication in culture, but also the study of communicative behaviour of a biosemiosic order (cf. 15.1). Biosemiosis provides the wider context for semiotic studies, given that "biological foundations lie at the very epicentre of the study of both communication and signification in the human animal" (Sebeok 1976: x), now defined as the "semiotic animal" (Deely, Petrilli, Ponzio 2005; Deely 2010b). And from this perspective, that of an interest in cultural processes at the intersection between nature and culture, a biologist like Jakob von Uexküll - a master for Konrad Lorenz and among the cryptosemioticians most studied by Sebeok – finds a place in the history of semiotics.

The object of "global semiotics" or "semiotics of life" (as Sebeok also calls it) is the semiosphere – the term is Jurij Lotman's though we are now using it more extensively (Lotman 1990; Lotman and Uspenskij 1984). Lotman introduced the term "semiosphere" to refer to human culture, to the cultural dimension of signs. However, from the perspective of global semiotics the semiosphere transcends anthroposemiosis to coincide with the biosphere, so that the semiosphere is connoted as the *biosemiosphere* or *semiobiosphere*. Only if semiotics is reduced to anthroposemiotics or semiotics of culture will biosemiosis appear irrelevant to

the semiotic purview. Consequently, by comparison to other approaches to sign theory, global semiotics calls for a maximum broadening of competencies.

The conjunction between semiosis and life inaugurates a completely different approach to semiotics by comparison to Umberto Eco's approach and his concept of the "inferior threshold," theorized in his epochal 1975 monograph, A Theory of Semiotics. In 1975, Eco described semiotics as a cultural science. Instead, Sebeok interpreted and practiced semiotics as a life science, as biosemiotics which was not by any means understood as a mere "annex" of semiotics (Kull 2011: 232-240). In the framework of Sebeok's "global semiotics" biology and the social sciences, ethology and linguistics, psychology and the health sciences, their internal specializations – from genetics to medical semeiotics (symptomatology), psychoanalysis, gerontology and immunology – all find a place of encounter and reciprocal exchange, as well as of systematization and unification. But "systematization" and "unification" are not understood neopositivistically or statically, as characterized by the concept of "encyclopedia," whether a question of juxtaposing knowledge and linguistic practices or of reducing them to a single scientific field and its relative languages (as in the case of neopositivistic physicalism).

Sebeok opens his article, "The Evolution of Semiosis" (1991b: 83), with a question "what is semiosis?" His answer begins with a citation from Peirce who describes semiosis or the "action of a sign" as an irreducibly triadic process or relation involving three components (sign, or representamen, object and interpretant) (CP 5.473). From the Peircean perspective something becomes a sign that stands for something – its object in some respect, or its idea, or its ground – because it is interpreted by another sign, the interpretant, in an open synechetic chain of interpretants deferring from one sign to the next, in which is determined the possibility of infinite semiosis. Peirce's description addresses the role of the interpretant in semiosis and how it is produced. When a matter of human cultural semiosis, the interpretant is fundamentally a responsive understanding interpretant, which involves the teleonomic and pragmatic dimension of signs (Petrilli and Ponzio 2005a: 8-10; 324-339). Considered from the perspective of the interpretant, semiosis is interpretation (*cf.* 2.4).

Sebeok continues his answer to the question "what is semiosis?" referring to Charles Morris, author of Signs, Language, and Behavior (1946), and his definition therein of semiosis as a process in which something is a sign to some organism. According to Sebeok, this definition effectively and ineluctably implies the presence of a living entity in semiosic processes. And this he interprets as meaning that semiosis appeared with the evolution of life:

For this reason, one must, for example, assume that the report, in the King James version of the Bible (Genesis I.3), quoting God as having said "Let there be light," must be a misrepresentation; what God probably said was "let there be photons," because the sensation of perception of electromagnetic radiation in the form of optical signals (Hailman 1977: 56–58), that is, luminance, requires a living interpreter and the animation of matter did not come to pass much earlier than about 3,900 million years ago. (Sebeok 1991b: 83)

We know that for Morris the living entity implied in semiosis is a macroorganism; instead, from Sebeok's perspective it may even be a cell, a portion of a cell, or a genoma. Sebeok further pondered the question of the cosmos before the advent of semiosis and after the beginning of the universe with reference to the regnant paradigm of modern cosmology, namely the Big Bang theory. Before the appearance of life on our planet – the first traces of which date back to the so-called Archaean Aeon, from 3,900 to 2,500 million years ago – only physical phenomena occurred which involved interactions of nonbiological atoms, later of inorganic molecules. Such interactions may be described as "quasisemiosic."

But the notion of "quasisemiosis" must be distinguished from "protosemiosis" as understood by the Italian oncologist Giorgio Prodi. 4 In the case of physical phenomena, the notion of "protosemiosis" is metaphorical (Prodi 1977, 1988). Sebeok maintains that semiosis implies life. He distinguishes between nonbiological interactions and "primitive communication" which refers to information transfer through endoparticles as in neuron assemblies. In modern cells, transfer is managed through protein particles. And since there is not yet a single example of life outside our terrestrial biosphere, the question of whether there is life/semiosis elsewhere in our galaxy, let alone in deep space, is wide open. Consequently, as Sebeok says, one cannot but hold "exobiology semiotics" and "extraterrestrial semiotics" to be twin sciences that so far remain without a subject matter. In the light of information today, the implication is that at least one link in the semiosic loop is necessarily a living and terrestrial entity that may even be a mere portion of an organism or an artefact extension fabricated by human beings. After all, semiosis is terrestrial biosemiosis. We know that a pivotal concept in Sebeok's research is that semiosis and life converge. Semiosis is considered as a criterial feature distinguishing the animate from the inanimate: sign processes and the animate originated together, but that sign processes can exist independently of life has not yet been proven scientifically.

Having propounded a wide-ranging vision of semiosis, one which converges at least with the evolution of life, Sebeok has completely modified our perception of both the field and the history of semiotics. After Sebeok's work, both our conception of the semiotic field and of the history of semiotics have changed significantly. Thanks to him, semiotics at the beginning of the new millennium is now proposing a radically broader view than that presented during the first half of the 1960s – being a far cry from Saussurean *sémiologie*.

15.3 The self is a verb: to translate

The title of Sebeok's 1986 monograph, I Think I Am a Verb, rings with Peircean overtones as it evokes the 18th President of the United States, Ulysses Grant, on his death bed. In Peirce's view, man is a sign and Sebeok's choice of a verb instead of a noun to characterize this sign (which not only each one of us is, but also the universe in its globality) serves to emphasize the dynamic and processual character of semiosis. This monograph also assembles a broad range of interests and acts at once as a launching pad for new research itineraries in the vast region of semiotics. A fundamental point in Sebeok's doctrine of signs is that living is sign activity. This is to say that to maintain and to reproduce life, and not only to interpret it at a scientific level, are all activities that necessarily involve the use of signs. Sebeok theorizes a direct connection between the biological and the semiosic universes and, therefore, between biology and semiotics. All his research seems to develop Peirce's belief that man is a sign, with the addition that this sign is a verb: to interpret. In Sebeok's own original conception of reality, interpretive activity coincides with life activity. If I am a sign, as he would seem to be saying with his life-long work as a researcher/interpreter, then nothing that is a sign is alien to me – signi nihil a me alienum puto (cf. 1.5); and if the sign situated in the interminable chain of signs is necessarily an interpretant, then "to interpret," in this sense "to translate," is the verb that may best help me know myself.

To interpret is to translate and to translate is the very condition for dealing with signs. Consequently, translation in this sense can even be vital. To recognize something as a sign is to translate it into another sign, the interpretant. I am a verb and this verb is to translate. All the living, whether a microorganism or a macroorganism, interpret insofar as they translate. To claim that life is semiosis is to claim that to live is to interpret, more exactly to translate. To translate renders the chemical, physiological, organic transposition of semiosis better than to interpret; to translate best renders the sign character of life, from the very lowest and most hidden levels of corporeal life. Different species translate the same "stimulus," the same object in different ways; and their different *Umwelten*, as Sebeok would say recalling Uexküll, are given by the different modalities of translating, characteristic of each. We could claim that for every living being, to live is to translate. Translation occurs according to the modelling device of the species that a given individual belongs to. Consequently, the type of translation involved is limited to the only world that a given device is able to produce.

But for the human individual, the situation is completely different. Unlike other species, in humans the primary modelling device does not give rise to a single world, but rather to many possible worlds. Here, individual differences are singularities that are not interchangeable. This is what we call "subjectivity,"

"personality," etc. to the end of describing the otherness of each and every one of us. The point is that difference understood as singularity is also given in the possibility of translating the "same thing" in remarkably different ways, that is, of producing interpretive itineraries, sequences of interpretants, that move in completely different and even contradictory directions.

Sebeok explores the question of subjectivity in five main papers: "The semiotic self" (1979) and "The semiotic self revisited" (1989), both of which are reprinted in his 1991 volume, A Sign is Just a Sign (Chs. 3 and 4); and further, "Tell me where is fancy bred?: The biosemiotic self" (1992), followed by "The cognitive self and the virtual self" (1998), reprinted in his 2001 volume, Global Semiotics (Chs. 10 and 11); a fifth paper, Sebeok's Annual Edith Weigart Lecture, is entitled "The self: a biosemiotic conspectus" (1994). This has remained unpublished in English, but is included in Italian translation (with the preceding four) in a volume of 2001, Semiotica dell'io, co-authored with Augusto Ponzio and myself. Like the "I" in I Think I am a Verb, the concept of "self" as elaborated by Sebeok alludes to the "human self," and even more specifically to the human self in its specificity, not the generic self, but the self of each and every one of us. In this case, the verb "I am" more than ever before is to interpret and "to interpret" is to translate. Insofar as we are endowed with "language" in Sebeok's sense, the characteristic of the human self is its capacity to translate beyond boundaries, unlimitedly; and individual difference, the individual "cypher," the cypher that characterizes each single individual in its uniqueness, we could claim, is a question of translation, of difference in translation.

Among Uexküll's illustrated examples is an oak tree pictured as it is perceived by different types of interpreters: the tree is translated as an inanimate object to be accurately measured, or is a horrible creature of a magic world inhabited by gnomes and hobgoblins (Sebeok 1979a: 10–12). The human capacity to invent possible worlds is diversified on an individual basis and is a capacity that Sebeok insists on evidencing as a distinctive characteristic of the modelling device peculiar to mankind. This capacity is none other than the capacity to translate not only what is not a sign into a sign, but also what is a sign into a new sign; and to translate is to ascribe the sign with a new interpretant.

15.4 The play of musement between reality and illusion

The play of musement is translation, abduction is translation, simulation is translation, just as lying is translation. In human beings the play of musement – ranging from fiction to scientific research and experimentation – allows for simulation and deception, for hypothesis and abductive inference at high degrees of

creativity and innovation, therefore at high risk levels, according to interpretivetranslative modalities that may be very different from each other.

In Italy, long before Umberto Eco in *Theory of Semiotics* (1976 [1975]) defined semiotics as the discipline that studies lying, Giovanni Vailati had already asserted that signs can be used to deviate and deceive. He significantly entitled his review of Giuseppe Prezzolini's L'arte di persuadere [The art of persuading], "Un manuale per bugiardi" [A handbook for liars] (Vailati 1987; Ponzio 1988: 195–198; Sebeok 1982). Sebeok himself thematized the nonisomorphic relation of the sign to reality and, consequently, the sign's capacity for fraud, illusion and deception, representing yet another filigree in his research. Deception, lying, and illusion are forms of behaviour that a semiotician like Sebeok who was seduced by signs wherever and in whatever form they occurred, could not resist. He was attracted by the signs of the magician and returned constantly to forms of behaviour and to situations connected with the Clever Hans effect (Sebeok 1979a: 61-83) - the horse who presumably knew how to read and write, but who, in reality, performed on the basis of signals communicated to it by its trainer, whether inadvertently or in intentional attempts at fraud (Bonfantini, Petrilli, Ponzio 2006).

Sebeok explores the capacity for lying in the nonhuman animal world essentially for two main reasons: the first concerns his commitment to contradicting the belief that animals can "talk" in a literal sense. Such a claim invests animals with a characteristic that is specific to human beings, exclusive to them. In certain cases, Sebeok's commitment involves unmasking the fraudulent acts of impostors, in others it involves undermining illusions. Sebeok maintains that human verbal language cannot be homologated to nonhuman animal communication. He contributed to public debate on such issues with considerations of the theoretical order, practical documentation and even parody (see "Averse Stance," in Sebeok 1986a: 145-148). While human and nonhuman animals indubitably communicate, Sebeok's contention was that whilst interspecific communication is possible, it does not occur on the basis of verbal signs. This concept is explicated in the title of an Italian collection of his essays, Come comunicano gli animali che non parlano (How animals that do not talk communicate) (Sebeok 1998), a title he approved. The second reason for Sebeok's interest was to verify whether nonhuman animals know how to lie. If signs do not belong exclusively to the human animal world, but also populate the nonhuman animal world, as evidenced by studies in zoosemiotics, and considering that to use signs also means to use signs deceptively, then a fascinating question is effectively "Can Animals Lie?" (Sebeok 1986a: 126-130).

Sebeok was fully aware of the vastness, variety and complexity of the territories he was committed to exploring and of the problems he was engaged in analyzing. As a consequence, he ventured cautiously into the treacherous territory of signs, but also into the deceptive sphere of the signs of signs, with interpretations that were extremely circumspect and problematic. Sebeok was interested in all forms of communication, in all types of semiosystems, only a small percentage of which being specifically human and within the human, specifically verbal. The Clever Hans *affaire* focuses on interspecific communication between human and nonhuman animals – a complex problem in itself even when just a question of "straight" communication, so to say. But here the focus is on the problem of illusion and the capacity for deception and, what's more, on communication at the interface between different species.

Furthermore, in addition to evidencing the dynamics between continuity and specificity in semiosic fluxes across different spheres of semiosis (human and nonhuman), and verifying how signs function in practice, the case of interspecific communication serves as a powerful instrument at a metadiscursive level for the critique of *glottocentrism* and *anthropocentrism* together with associated "isms" including *phonocentrism* and *ethnocentrism*. All these not only vitiate scientific discourse, but also insinuate themselves into everyday practice when we least expect it, influencing our vision of the world – the real world and all possible worlds.

The human worldview is connected with ideology and social planning, with communication – verbal and nonverbal communication, witting and unwitting communication. But glottocentric ideology (and correlate anthropocentrism and ethnocentrism) projects a vision of the world that tends to neglect nonverbal communication. This means to neglect the body and its nonverbal signs, the corporeal and interrelational aspects of communication, the inextricable interrelation between sign, body and culture. Ultimately, it means to ignore the relation to the other.

Such short-sightedness also involves vision, as pointed out by Paul Cobley in his 2011 essay, "Sebeok's panopticon." From the standpoint of the spectator and possibly even Clever Hans's immediate "interlocutor" – his trainer – and contrary to panopticon ideology and its programmatic ambition to see, survey and control, glottocentrism renders visible signs invisible and tangible signs intangible in the sense that it neglects the signs of nonverbal communication. That is, it denies the *visible*. And this is a limitation that comes to be added to yet another form of short-sightedness, that connected to ocularcentrism. Ocularcentrism risks the opposite tendency, that of neglecting the invisible and not responding to the invisible as a consequence of a short-sighted understanding of the concept itself of vision. It denies the *invisible*.

From a semioethic point of view, the focus is not so much on the nonhuman animal's eventual capacity for deception, nor for that matter on the human interlocutor's. Rather, we are more directly concerned with the implications of interpretive models and worldviews translated into social programmes and human practice where anthropocentric and ethnocentric ideologies are easily insinuated.

As Cobley effectively points out, nonverbal communication calls for a response, but just as vision is denied by glottocentrism, so is dialogue where – according to both the Sebeokean and Bakhtinian vision of the relation between signs and life – dialogue is understood as a condition convergent with intercorporeity, therefore with human and nonhuman semiosis and, within the sphere of the human, with verbal and nonverbal semiosis. Contemplating the relation between "vision and the nonverbal realm" and in a theoretical framework that I would not hesitate to describe as semioethical, Cobley explains that his interest has "to do with the human undervaluing of nonverbal communication in human and other life and the concomitant failure to fully apprehend the nonverbal realm" (Cobley 2011: 2011). Such failure, let me add, is inevitably connected with the failure to fully perceive the other as other, autrui to evoke the language of Emmanuel Levinas (1972). And such an attitude is inexorably connected with the failure to respond to the other beyond the formal limits of dialogical exchange and what we choose to elect, whether consciously or unconsciously, as the real, the manifest or the true. All things considered, it is not surprising that Sebeok should have returned repeatedly to the Clever Hans effect, even in *Global Semiotics* (2001: 97–114).

In "Semiosis and Semiotics: What Lies in Their Future?," Sebeok significantly adds another meaning to the term "semiotics" alongside the "general science of signs." This new meaning refers to the specificity of human semiosis and is vitally important for a transcendental founding of semiotics as a doctrine of signs. In his own words:

Semiotics is an exclusively human style of inquiry, consisting of the contemplation – whether informally or in formalised fashion - of semiosis. This search will, it is safe to predict, continue at least as long as our genus survives, much as it has existed, for about three million years, in the successive expressions of *Homo*, variously labelled – reflecting, among other attributes, a growth in brain capacity with concomitant cognitive abilities – *habilis*, *erectus*, sapiens, neanderthalensis, and now s. sapiens. Semiotics, in other words, simply points to the universal propensity of the human mind for reverie focused specularly inward upon its own long-term cognitive strategy and daily manoeuvrings. Locke designated this quest as a search for "humane understanding"; Peirce, as "the play of musement." (1991b: 97)

This particular meaning of the term semiotics alludes to the human propensity for contemplation of semiosis, for reverie, musement and the imagination and is connected with semiotics conceived as the general study of signs and of the typology of semiosis. This exquisitely human propensity involves the capacity for such operations as predicting the future, or "travelling" through the past, which involves the ability to construct, deconstruct and reconstruct reality, to invent new worlds and new interpretive models. Sebeok associates Locke and Peirce, translating Locke's "humane understanding" into the interpretant furnished by Peirce with his "play of musement." The human propensity for musement and understanding implies nothing less than the capacity for translation and transferral – which also implies transvaluation – across different and diversified worlds. Semiotics, understood here as the general science of signs, is concerned with all types of signs, or, better, semiosis as engendered in the dialectics between socalled "reality" and "illusion." In one of his numerous descriptions of the vastness of the semiotic reach, Sebeok states that

the central preoccupation of semiotics is an illimitable array of concordant illusions; its main mission to mediate between reality and illusion – to reveal the substratal illusion underlying reality and to search for the reality that may, after all, lurk behind that illusion. This abductive assignment becomes, henceforth, the privilege of future generations to pursue, insofar as young people can be induced to heed the advice of their elected medicine men. (Sebeok 1986a: 77–78)

In any case, the world of signs between reality and illusion is not only the world of deception. A variety of other practices are involved (as sign activity no doubt connected to the capacity for illusion). These include, for instance, play, expression through symbols, gift-giving and ritual behaviour. Though all such practices are most often considered as a prerogative of human "culture," the fact that nonhuman (and not only human) animals use signs implies that these practices can be traced, and are most probably prefigured, in the nonhuman animal world as well. Such propensities and practices are explored by Sebeok in a paper of 1979, "Prefigurements of Art." Researchers often insist too strongly or too exclusively on the goal-directed functions of sign activity. In contrast, Sebeok highlights the importance of sign systems that function as an end in themselves, creating a sort of idle, turning around, semiotic mechanism. Nor does he deal exclusively with ritual signs, which are signs that tend to evade functionality and goal-directed behaviour, whether in human or nonhuman animals. And while verbal language is mostly interpreted in terms of communicative function, it is probably better understood keeping account of the propensity for play, imagination and nonfunctionality.

To daydream and let one's imagination wander are human activities that Charles Morris examines in his 1957 essay "Mysticism and Language" (in Morris 1971: 456–463). For Morris, as for Sebeok, this type of exercise favours such operations as contemplating the future or returning to the past, deconstructing and reconstructing reality, inventing new utopic worlds and interpretive models. The inferential mechanism allowing for qualitative leaps in knowledge, essentially what Peirce calls "abduction," is imbricated with fantasy and the imagination, as much as with practices of simulation. Moreover, Sebeok also refers to the question of dreaming to evidence the unconscious dimension of sign behaviour which supersedes the intentional symbolic order oriented toward a given

goal. This is the interpretive work of dreaming, what Freud calls "dreamwork" (Freud 1913 [1900]).

Forms of unproductive consumption, dissipation, absence of function are described by Sebeok as entropic phases necessary to the development of life on earth (Sebeok 1986a: 36–42): it is as though life is in continuous need of – indeed is founded on – death in order to flourish and reproduce itself. This statement is rich in implications for different approaches in the history of philosophy. As regards sign theory, the semiotic chain is subject to loss, gaps and dissipation of sense – such that a sort of anti-material is postulated in necessary contradistinction to sign material. The play of musement activating Sebeok's own research is so free, unprejudiced and ready to interrogate all earlier assumptions that he was even ready to question his axiom that life and semiosis converge. He went so far as to posit that the end of life may not necessarily imply the end of semiosis: with some probability that sign processes fabricating unlimited interpretants might continue in machines independently of humans. This Orwellian conclusion is formulated in "Semiosis and Semiotics: What Lies in Their Future?," where Sebeok also muses over the hypothesis of the machine as the unique place for the workings of the "life of signs," however we wish to play on the word "life" and on the word "signs." No doubt, what is perspected is a sort of negative utopia which from one point of view, the human, however partial and limited, is surely a form of nonlife with, therefore, an absence of signs. Perhaps we could advance an autobiographical interpretation of this message, interpreting it as the expression of the desire of the professional "semiotician" with respect to the man, who not only wishes for semiotics to continue after Sebeok – but even more, after the end of life generally.

Another important paper in *A Sign is Just a Sign* is entitled "In What Sense Is Language a 'Primary Modelling System'?" (now also in Signs, Sebeok 1994a). In it, Sebeok focuses on his description of language as a modelling device (cf. 3.1). Every species is endowed with a model that produces its own world; "language" is the name of the model belonging to human beings. However, the human modelling device called language is completely different from the modelling devices of other life-forms. Its distinctive feature is what the linguists call *syntax*. Syntax is that which makes it possible for hominids not only to construct one "reality," one world, but also to frame an indefinite number of possible worlds. This capacity is unique to human beings. Thanks to syntax, human language is like Lego building blocks, it can reassemble a limited number of construction pieces in an infinite number of different ways. As a modelling device, language can produce an indefinite number of models; in other words, the same pieces can be taken apart and put together to construct an infinite number of different models. Thanks to language, not only do human animals produce worlds as do other species, but, as Leibniz says, human beings can also produce an infinite number of possible worlds (*cf.* 3.5). This brings us back to the "play of musement," a human propensity which Sebeok considers particularly important for scientific research and all forms of investigation and not only for fiction and all forms of artistic creation, as well as for illusion and deception.

Speech, like language, made its appearance as an adaptation, but *for the sake of communication* and much later than language, precisely with *Homo sapiens*. Consequently, language too ended up becoming a communication device; and speech developed out of language as a derivative *exaptation* (Gould and Vrba 1982: 4–15). Exapted for communication, first in the form of speech and later of script, language enabled human beings to enhance the nonverbal capacity with which they were already endowed. On the other hand, speech was *exapted* for modelling and eventually functioned as a secondary modelling system. In addition to increasing the communicative capacity, speech also increased the capacity for innovation and the play of musement. Such phenomena as the plurality of languages and "linguistic creativity" (Chomsky1966, 1975) testify to the original modelling capacity of language (understood as a primary modelling device) and subsequently of speech (understood as a secondary modelling device) to generate an infinity of different possible worlds.

Insofar as it is a response toward something which thereby results in being a sign, the interpretant also implies a dialogical relation between the interpretedinterpretant, between something which imposes itself as an object to translate and its tentative translation. All inferences present themselves as "dialogicaltranslative encounter," from the most simple where something is read as a sign at the level of perception, to the most complex forms of abduction. In inference, in the hypothetical argument and in the chain of interpreted and interpretant thought signs generally, dialogue is implied in the relation itself between the interpreted sign and the interpretant sign (Ponzio 2006a). In the three types of inference described by Peirce – deduction, induction, abduction – can be traced the three types of sign relation forming his most renowned triad – indexical, symbolical (conventional), iconic - each at varying degrees of dialogic-translative opening. In deduction, the dialogic-translative relation between the premises and the conclusion is *indexical*: here, once the premises are accepted the conclusion is set and is the only one possible. In induction, it too characterized by unilinear inferential procedure, the conclusion is determined by habit and is of the *symbolic* order: identity and repetition dominate, though the relation between the premises and the conclusion is no longer preestablished. By contrast, in abduction the relation between premises and conclusion is iconic and dialogical in a substantial sense. In other words, it is characterized by high degrees of dialogism and inventiveness and consequently by a high risk margin for error.

To claim that abductive argumentative procedure is risky is to say that such procedure is mostly tentative and hypothetical, only affected to a minimal degree by convention (symbolicity) and mechanical necessity (indexicality). Abductive inferential processes engender sign processes at the highest levels of otherness and dialogism. We make inferences from case through interpretation on the basis of a rule and a datum or result. But, in abduction, the rule is not given antecedently to interpretation, it is not given outside interpretive processes – no preestablished rules orient the relation unidirectionally between the parts forming an argument. Iconicity, in relation to abduction, consists of connecting that which is not related originally, naturally or necessarily: imaginative representation attempts an approach to that which is given as other. And, given that abductive processes pervade all aspects of human psychic life, including sensation, the inherent opening to alterity is the foundation of all totalizing operations.

The possibility of imagining and planning the future, of contemplating the possibility of situations different from the real, of inventing worlds, of inquiring into the future of life, and hence of semiosis, as Sebeok does - "Semiosis and Semiotics: What Lies in Their Future?," a question we too will consider in what follows, insofar as it is fundamental from the perspective of semioethics – is connected with abductive inference, just as in the case of new scientific discovery. Once the telescope had been invented, it was discovered that the planet's orbit was not perfectly circular. Enhanced by the telescope, the eye registered a new type of orbit that called for description and nomination. To accomplish the task, it was necessary to leave aside the familiar lexicon of astronomy and Euclidean geometry (connected to the former), and to operate through inferential and translative processes capable of accounting for a new geometrical figure, the ellipsis. And, in fact, without interlinguistic translative processes among different languages, among verbal signs from different systems and different fields, and without intersemiotic translation among verbal and nonverbal signs, innovation is not possible in any sphere of life whatsoever, whether the individual, the social, the scientific, the artistic, or the ethical.

15.5 The task of the translator in semiotics and philosophy

Global semiotics is a metascience concerned with all sign-related academic disciplines. And though it cannot be reduced to the status of philosophy of science, as a science, semiotics is dialogically engaged with philosophy. Consequently, what most unites semiotics to philosophy (and can orient the former in the direction of global semiotics) is the fact that both domains implement a series of terms and relative concepts that are recognizable as specific to each. But precisely because they are transversal with respect to different scientific domains and in spite of attempts at attributing the language of a given science to all (think of the physicalist orientation in neo-positivism), both semiotics and philosophy are committed to the work of encounter among different languages united in relations of reciprocal translatability. In this sense, both semiotics and philosophy carry out a mediating function. In semiotics, this mediating function can be wrongly interpreted, as occurred with philosophy which was reduced to the status of methodology of science (in this case as well related to neopositivism). This means to deprive semiotics and philosophy of a special orientation without which they are reduced to an ancillary status: namely, the *critical function*. But what we call the "translative function" is a mediational function and is inseparable from the "critical function." Even more, the aim of mediation and translation across languages from different disciplines is the critical function itself, which consists, precisely, in verifying what these languages propose at each occurrence.

Translation is a means of verification and as such, of critique. Victoria Welby had not only identified and described the translative method herself, but she also practiced it. She experimented with translation as a means of verification of the scientific validity of an assertion. From this point of view, the question of translation was a programmatic part of her research program. As part of her own practice, she translated statements from a specific language into another, which she considered as a way of avoiding sectorial boundaries and dogmatic temptations. As part of her "translative method," Welby created associations and translative relations among specific languages. In this sense she was devoted to encounter. Allusion here is to encounter among the lexicon, syntax and pragmatic orientation of different languages, unfamiliar or foreign to each other. The "translative method" is an instrument for verification and enhancement of sense, of significance beyond the limits of a given language and its special signifying sphere.

To evoke an expression introduced by Walter Benjamin as the title of a renowned essay of 1923, to the semiotician can be attributed "the task of the translator" (*cf.* Benjamin 1968: 69–82) in the sense of translation as described in this chapter. The philosopher performs the very same task: that of translator, and has done so from the very start with the rise of philosophy; to evoke ancient Greece, the philosopher was already a translator with the Sophists, and even more so with Socrates. The questions raised by Socrates in the dialogues of Plato (1898) are generally requests of the translational order. And translation difficulties experienced by the interlocutor generally indicated an unjustifiable tendency with dogmatic overtones to remain within the boundaries of a given specialization. Such an attitude did not only involve boundaries of the scientific order, but also of the practical, technical, juridical, political and religious orders. Such boundaries were evidenced, thematized, discussed and questioned through dialogue. For

Socrates, to induce the interlocutor to acknowledge that he did not know what he thought he knew, meant to challenge that person to express him or herself in a different language from one's own, the language one identifies with, the language of one's social role, profession, and specific competencies. Vice versa, the declaration made by Socrates, the master of dialogue, of not knowing, in reality consists of not knowing how to limit oneself to a single linguistic sphere, a single expressive sphere, whether that pertaining to the judge, politician, artist or craftsman, etc. What Socrates calls maieutics actually consists of getting free of the trap of one's language when it has become conventional jargon and a cover for one's own ignorance.

The dialogic vocation of philosophy is peculiar to semiotics if the latter, like philosophy, aims to carry out a critical function. Like philosophy, semiotics must not allow itself to be reduced to any one sectorial or specialized discipline among the many, nor to the mere status of epistemology or methodology of the sciences. The philosophical tendency of semiotics lies in the vocation for dialogue and certainly not in becoming a system, presenting itself as an omniscient discipline, a sort of pansemiotics or panphilosophy. Rather than tend toward a totalizing vision, semiotics carries out a detotalizing function – and this in common with the propensity for philosophizing. According to this approach, semiotics studies are equipped to critique what would appear to be alleged boundaries and totalities and which, instead, are no more than parts mistaken for the whole. This is the pars pro toto fallacy.

Translation clearly emerges in all its importance as the actual performance of dialogue understood as encounter, as interrogation of the parts in dialogue. Encounter occurs in translation. In other words, translation is the place where dialogic encounter can effectively occur. Encounter as we are describing it is not something that takes place between two parts, two entities, both of which claim to be the totality and both of which claim mutual respect as constituted identities. This is the case of tolerance, the relation of reciprocal, hypocritical endurance and (momentary) coexistence. Encounter is not something that takes place between two pre-constituted positions, but rather is a new position in itself; it is not encounter between two pre-defined languages, but rather is the invention of a new language. Without a new language there cannot be creativity, innovation, novelty, discovery, or qualitative development.

The orientation of semiotics in the sense of global semiotics corresponds to a vision that Sebeok in particular not only revealed as a possibility, but also contributed to developing. However, its status as semiotics that is truly global can only be fully expressed by keeping account of its a priori status as a general science of signs and of its constitutive propensity for dialogic encounter and translation.

Chapter 16 Social symptomatology and semioethics

So, what can now be said of Sebeok's intellectual contribution to semiotics? Well, I would argue that the question is ill-stated, simply because Sebeok's intellectual contribution is semiotics, particularly in its contemporary form. It is the bringing about of a semiotic consciousness, not just in terms of introducing the perspective of the sign but also of rearranging the world in respect of human understanding of *Umwelten* and, principally, the human *Umwelt*. Although an opponent of naïve humanism, Sebeok's project is concerned with offering an account of what it is to be human.

(Paul Cobley, "Sebeok's Panopticon," 2011: 90)

16.1 On the dual meaning of "global communication"

Global communication in the contemporary social reproduction system is only one aspect of communication in the great sign network formed by life over the entire planet. Today, global communication is commonly understood as communication related to progress in technology and to the planetary expansion of the capitalist market. Altogether different is global communication understood as communication that converges with life. All life-forms are indissolubly interconnected, as scientific research in the present day and age has clearly shown, but we may add that people already understood this idea in economic and cultural systems of ancient times, especially those of the agricultural order. Think of the carnivalesque vision of the world and the grotesque body associated with it, as studied in detail by Mikhail Bakhtin, particularly through Rabelais (*cf.* Ch. 9). Only a superficial gaze, one that is somehow distracted – more or less intentionally, or because of a short-sighted form of self-interest – will fail to register this condition of intercorporeal interconnectivity.

Life communication, that is, communication understood biosemiotically, given that life and semiosis converge, in this sense too, "global communication," is a fact that preexists by far with respect to "global communication" understood as globalization, considering contemporary developments in the dominant socioeconomic system. By far: which is to say, precisely from when there exists light, that is, life. As anticipated (15.2), Sebeok in "The Evolution of Semiosis" translates the expression "Let there be light" at the beginning of the Genesis in scientific terms as "Let there be photons," because light presupposes that life already exists (Sebeok 1991b: 83). Life or vital communication does not only preexist with respect to globalization, but is the condition of possibility for its existence. From a global semiotic perspective, communication is structural to the evolution of life

from its very origins. Consequently, to identify communication with globalization is an oversimplifying reduction, another example of the pars pro toto fallacy. A semiotic perspective on human life-forms evidences their biosemiosic dimension and the relation of global interdependency connecting them to each other and to every other life-form on Earth.

On positing that semiosis and life converge and emphasizing the condition of interconnectivity among signs, global semiotics shifts its gaze from the protosemiosis of energy-information to the ever more complex processes of semiosis in the evolution of life: from procariots to monocellular living beings to eucariotic aggregates forming multicellular macroorganisms. The latter coexist and interact with the microcosm and together form the great biosemiosphere. The result is a situation of indissoluble interconnection and semiosic embeddedness among different life-forms and their destinies as they occur in the great semiosic web. Following Sebeok (1986: 10-12), this vital web of signs extends from the Lilliputian world of molecular genetics and virology, to the man-size world of Gulliver and finally to the world of Brobdingnag, the gigantic biogeochemical ecosystem called Gaia (Petrilli 2012a: 92-100). At first sight this system may seem to be made of numerous living species, each separate from the other. But, taking a closer look, it is obvious that each one of its parts, ourselves included, is interdependent with every other.

Anthroposemiosis appears relatively late in evolutionary development and interrelatedly with the other spheres of "biosemiosis" (which coincide with the great life kingdoms) - "zoosemiosis" (of which anthroposemiosis is a specification), "phytosemiosis," "mycosemiosis," and "microsemiosis." As a specific life-form, the human being is born into a global sign network that is preexistent with respect to anthroposemiosis. Moreover, from a global semiotic perspective, new spheres of semiosis continue to emerge as life and technology continue evolving and are studied by as many branches in the sign sciences – an example is "cybersemiosis" and its correlate science "cybersemiotics." From this perspective, beyond the mere production and exchange of verbal messages, communication involves the production of sign processes in the interplay among different types of signs and sign systems and different types of contexts – natural, cultural, even cosmic. Verbal signs flourish in the context of nonverbal signs, human and nonhuman. The connection between nature and culture is crucial for a full understanding of the scope and significance of communication, of its pervasiveness in human relations, in life generally. Before contemplating the signs of unintentional communication (semiology of signification), semiotics limited its attention to the signs of intentional communication (semiology of communication), according to dominant trends in sign studies following Saussure. Instead, as seen above (Ch. 14), after Sebeok, semiotics is not only anthroposemiotics, but also zoosemiotics, phytosemiotics, mycosemiotics, microsemiotics, endosemiotics, machine semiotics and environmental semiotics: all under the umbrella term "biosemiotics" and, subsequently, "global semiotics," though just plain "semiotics" should suffice.

Global communication understood in the broad sense, biosemiotically, is structural to life generally, human and nonhuman. But if life – including the human – is to continue flourishing globally as inscribed in the nature of sign activity, the interrelation between communication and life must not only be forgotten, but also safeguarded. Social globalization as it presents itself today is not inevitable. Globalization functional to the worldwide extension of the market and to the universalization of merchandise, to translating anything, anything at all into merchandise is not the only possible form of social globalization.

To remember the connection between communication and life is to remember the connection between communication and the other, between communication and listening. It means to remember the need for opening to the other and questioning the sense of human behaviour for the quality of life (Petrilli 2012b: 115–122). It means to remember otherness at the roots of cultural semiosis (Nöth and Santaella 2007). And just as Charles Morris with his analyses of the relation between signs and values and Ferruccio Rossi-Landi with his critique of ideology and social planning had already prognosticated, the signs of social reproduction over the entire globe today call for critical reading and radical change.

An adequate understanding of the worldwide global communication-production system requires a perspective that is at least as global as the phenomenon itself under analysis. And while the specific sciences taken separately are unable to provide such a global perspective, semiotics understood as the general science of signs can, particularly today as it is taking shape on the international scene with "global semiotics," as conceived by Thomas A. Sebeok (2001; *cf.* Introduction, note 1) – the highest point reached so far in modern semiotics as a development on the dialogue between the human sciences and the natural sciences, semiotics and the life sciences (Perron *et al.* 2000). The project for global semiotics goes back to Peirce and Morris and finds a recent expression in Sebeok's work which, in turn, is closely related to pragmatism as developed by his predecessors.

Therefore, to sum up and clarify: all this means to say that, before becoming the worldwide and pervasive phenomenon it is today with globalization (and with a potential for devastation now reaching apocalyptic dimensions), communication has always characterized the biosphere as a necessary condition for life to flourish globally. Global semiotics evidences the biosemiosic dimension of anthroposemiosis, which means to evidence the relation of global interdependency connecting human beings to each other and to all other life-forms on

the planet. And from a global semiotic perspective which incorporates the biosemiosic dimension, we now know that global interconnectedness implies global communication as it has characterized the evolution of life from the very beginnings. It ensues that communication is no less than structural to the evolutionary development of life in its multifarious and multifaceted manifestations. Moreover, to evidence the condition of global interconnectedness does not at all mean to deny or to undermine the specificity of human semiosis as a socio-cultural phenomenon.

In the present day and age the notion of "global communication" is undeniably undergoing a substantial and short-sighted reduction. The primary meaning of global communication refers to globalization in capitalist society in its most recent phase of development. In this context, communication is global in at least two different senses: firstly, in the sense that it extends over the entire planet; secondly that it tends to realistically accommodate the world-as-it-is. In globalization, communication pervades the entire reproductive cycle – not only exchange relations (as in earlier phases of socio-economic development), but also production and consumption relations (Petrilli and Ponzio 2001). The expression "global communication-production" (cf. Introduction) was originally introduced to indicate the fact that the communication network associated to capitalistic market logic has expanded worldwide and that life in its globality, including the human in all its aspects, has been incorporated into the global social reproduction system (Petrilli and Ponzio 2005a: 491-499, 518-521).

Global communication-production involves development, well-being and consumerism as much as underdevelopment and poverty to the point of nonsurvival. It involves health and illness, normality and deviation, integration and emargination, employment and unemployment, traditional emigration/immigration functional to the work-force and uncontrolled mass migration of people in search of hospitality (that is frequently denied), legal trade and illicit trade (inclusive of drugs, human organs, "non-conventional" arms), etc. The result is that communication-production now heavily influences all life-forms over the planet and can even become a threat to life in its different aspects (human and nonhuman). In other words, the communication-production system involves life over the entire planet, human and nonhuman, which it compromises and puts at risk (Anders et al. 2000; Foster and McChesney 2012; Magdoff and Foster 2011; Monthly Review 2012; Wood and Foster 1998).1

16.2 Translating today's sense of *malaise* into symptoms of the destructive character of globalization

Social reproduction in the global communication-production system has an enormous potential for destructiveness. Its "destructive character" (Benjamin 1931) is manifest in the processes of reproduction of the *productive cycle* itself. Objects of destruction include: a) machines continuously replaced by new machines for the sake of competitivity and certainly not because of wear; b) jobs as a consequence of automation which creates unemployment; c) products on the market through new forms of consumerism for the sake of reiterating the same social reproduction cycle; d) products that would otherwise exhaust the demand and that in any case are designed to become obsolete at head spinning rates to make way for products that are similar but new as they are continuously emitted onto the market; e) merchandise and markets no longer able to resist competition in the global communication-production system. The European Commission has devoted special attention to inventiveness and innovation functional to profit, "immaterial investment" and "competitiveness" (European Union Documents, European Commission 1993, 1995a, b). That the European Commission should identify "innovation" with "destruction" in full respect of capitalist ideo-logic is extraordinary. According to such logic, it is not incidental that the innovative character of a product should consist in its capacity for destruction. To be successful, a given product must destroy and replace similar products persevering on the market. All this means to say that the capacity for innovation abreast of the times converges with the capacity for destruction given that the criteria for evaluating innovation are completely adjusted to market interests.

The *conatus essendi* of communication-production destroys natural environments and life-forms. It destroys difference in economic systems and cultural systems through processes of homologation and integration. The *conatus essendi* of communication-production destroys cultural traditions that somehow obstacle the logic of development, productivity and competition, or are simply not functional to such logic. Not only are habits of behaviour and needs homologated (though not the possibility of satisfying them), but also desire and the imagination. The *conatus essendi* of communication-production also destroys forms of intelligence, inventiveness and creativity by over-ruling them and subjecting them to "market reason," a process presented to us as inevitable. Dominant ideology holds that market reason cannot be avoided given that investment in "human resources" is necessary for the system to survive (Ponzio 1999, 2003b).

The semiotic science itself is reduced by the functionaries of market research to "semiotics of marketing." This "special semiotics" (Eco 1984) lacks in theoretical consistency and even more so in the propensity for critique. Moreoever,

it practices a language that consists in a mix of statistics, business previsions, semiology and information theory. Some of the more interesting expressions of this type of semiotics – though still within the limits of an entrepreneurial ideology – are formulated by some of the more brilliant authors like Jean-Marie Floch in Sémiotique, marketing et communication (1990) and Gianfranco Bettetini with Semiotica dell'impresa (1999; see also Ceriani 2009, 2011). All the same, as an ancillary discipline at the service of global communication, the task of "semiotics of marketing" is to accommodate the world-as-it-is. But if our concern is for the quality of life globally, we need to cultivate the critical vocation of semiotics. Similarly to theoretical semiotics, communication studies as well call for a global and critical approach to communication circuits, especially as they emerge in globalization (Petrilli 2008).

The destructive character of today's production system is also manifest in the fact that it produces growing areas of underdevelopment, exploitation and misery to the point of nonsurvival. In the framework of capitalist market logic, underdevelopment is the condition for development. This is the logic behind the expanding phenomenon of migration which so-called "developed" countries tend to reject or are no longer able to absorb (Athanor 1993; Athanor 2006–2007). To globalize, to universalize the market – which means to apply the status of commodity to things and relationships indiscriminately - is destructive. Moreover, the more commodities are illegal, the more they are prohibited, the more they acquire in price-value (the highest and best use of any commodity is where it can get the best price): examples of successful illicit trafficking include the global market for drugs, human organs, women, children, uteruses, and weapons. The principle of exploiting other people's work is destructive. Profit is inversely proportional to the cost of labour: with the help of global communication circuits, companies in developed countries are more and more frequently turning to low cost production in underdeveloped countries, producing local unemployment as one of the effects. The disgrace of the communication-production world is particularly manifest in the spreading exploitation of child labour, often involving heavy and dangerous work. Much needs to be said and done for children as today's victims of underdevelopment: children in misery, sickness, war, on the streets, in the work-force, or on the market. The destructive character of worldwide communication-production is manifest in the scandal of war. Global communication-production is the communication-production of war (Bricmont 2006). War continuously requires new markets for the communication-production of conventional and unconventional arms. War requires approval, it demands to be acknowledged as "just and necessary," a necessary instrument of defence against a growing danger - the menacing "other." This implies recognizing war as a legitimate means to achieve respect for the rights of identity and difference. But the truth is that identities and differences are neither threatened nor destroyed by the "other." Instead, the logic of identity fits the communication-production of war to perfection. The real threat is today's social reproduction system which promotes identity and difference while rendering them *fictitious* and *phantasmal*. And the fact that identity is threatened ends up becoming a reason for clinging to it so convulsively (*Monthly Review* 2007, 2008).

Globalization associated with capitalism is oriented by the logic of identity understood as closed identity, where otherness is set aside, even sacrificed for the sake of short-sighted sectorial identity interests and functionality with respect to those interests. From this point of view, globalization is tantamount to *totalization*. In contrast, we have observed that globality connected with the global semiotic perspective thematizes the condition of interrelatedness and co-dependency among differences and specificities, bonding all life-forms over the planet, where the logic of otherness has full play. Globality thus described is connected with the condition of *dialogic detotalization* (*Athanor* 2009; Ponzio 2007).

That the condition of interconnectivity cannot be evaded from a biosemiotic perspective implies that any form of oppression or abuse of the other, of indifference toward the other has inevitable repercussions on the global biosemiosic network. Oppression eventually backfires on the oppressor. From this point of view, a significant example is migration, which has now reached massive dimensions, putting it largely beyond the control of state border mechanisms. Migration today is something different from traditional migration as manifested during the twentieth century: the former involves masses moving across the globe in conditions of illegality; instead the traditional emigration/immigration model involves labour force that shifts from one place to another over the globe, regulated by production cycles, related needs and by employment prospects. In the era of globalization, migration is triggered by the attempt to satisfy primary needs in the dynamics between the "developed" and "underdeveloped" world. In terms of sheer quantity it is by far the larger phenomenon by comparison to traditional migration, with implications more difficult to regulate. Global migration exceeds local occupational possibilities and generally cannot be absorbed by the labour force (Monthly Review 2013).

Like unemployment and in full contrast with expectations raised by the concepts of globality and globalization, mass migration associated with globalization today is structural (and not contingent) to the social reproduction system (Enzensberger 1993). Difficulties involved in the effort to regulate migratory fluxes can assume catastrophic dimensions and inevitably involve a variety of different issues including, not least of all, government policy and hospitality. A major issue concerns the inclination itself in the local population for hospitality, or rather,

the lack of an inclination in this sense – which often includes ex-migrants whom once integrated into a given society are often prone to refuse hospitality toward new migrants. Hostility rather than hospitality is often directly proportional to the frustrations and difficulties experienced by ex-migrants during their own integration processes. It finds a possible explanation (though not a justification) in fear: the fear of losing their hard earned status as respectable integrated citizens, projected into the relation with the undesired other. Hostility instead of hospitality is built into the system, in dominant ideology and related social programmes, even if unconsciously, when they are constructed on the logic of identity (Athanor 2006–2007: 299–414; Petrilli 2007e; 2012a: 29–40).

Government policy should favour the effective re/construction of correct relations between the local population and the "new migrant." This approach presupposes long-term educational programmes in cultural values that promote multiethnicity and multiculturalism, dialogic transculturalism and intercultural translation. Barriers erected on closed identities and the need to defend those identities should at last be overcome and set aside. To proclaim multiculturalism is not enough if it is not practiced in terms of "dialogism" in the Bakhtinian sense of this term. Truly multicultural dialogue is dialogized multiculturalism where dialogue is synonymous to intercorporeity, opening to the other, to difference and diversity grounded in the logic of absolute otherness (Petrilli 2010a: Ch. 7).

But official government policy most often persists in not recognizing the complexity of the migratory phenomenon, the international responsibilities involved, even less so the condition of global vulnerability and mutual implication. To cite just one example, according to international records (provided by Fortress Europe and the harbour offices of countries facing the Mediterranean), a disastrous consequence of this state of affairs is that over the last twenty years or so thousands of people from Africa and East Europe have lost their lives in the Mediterranean sea in the desperate search for hospitality. Migration as it presents itself today, like unemployment, is one of the ugly faces of globalization, one of its products. Such phenomena are symptoms of the limits of so-called "global communication" in a globalized world and are steadily on the rise as the gap increases between the so-called "developed" and "underdeveloped" worlds. But as we have already observed, underdevelopment in today's dominant social reproduction system is the condition for development (Gorz 1988; Rifkin 1995; Schaff 1992, 1993).

Semiotics today has an important task to carry out if we are ready to accept the challenge. As a trained interpreter of signs, the semiotician is called to identify symptoms of social *malaise* and to operate for the health of semiosis, which means to say for life. The potential for destruction today is enormous and at work in subtle (and less subtle) ways. The semiotician is called to refine the capacity for listening and critique in the shared effort to transcend the limits of egocentric identity and work for the health of global humanity, as indicated by the *humanism of otherness* by contrast with the *humanism of identity* (Levinas 1972).

16.3 Communication and the other

As Michel Foucault has revealed, separation among the sciences serves the new canon of the individualized body with its ideological-social implications (Foucault 1977, 1988; Foucault *et al.* 1996). With the spread of "bio-power" and controlled insertion of bodies into the production system, global communication favours a private and static conception of the individual experienced as a separate and self-sufficient entity. In this framework, the body is perceived as an isolated biological entity, as belonging to the individual, which goes hand in hand with the quasi-total extinction of cultural practices and worldviews based, instead, on intercorporeity, interdependency, exposition and opening to the other.

An approach to signs that is truly global and detotalized, capable of accounting for life and communication in its plurality, is global not only in quantitative terms (with reference to the omnicomprehensive character of global semiotics), but also in qualitative terms insofar as it is connected with the logic of otherness. Moreover, we know that human semiosis presupposes "metasemiosis," a biosemiosic *a priori* for polylogism and multivoicedness, in turn associated with the capacity for listening and hospitality toward difference, the other. Otherness is not a condition we concede through generosity toward our neighbour. Quite on the contrary, otherness is inevitable, even structural to life, a condition for life to flourish. Moreover, "dialogic otherness" is connected with the "non-functional," the "properly human" (Ponzio 1997b).

A global and detotalizing perspective on life and interpersonal relations demands a high degree of otherness, readiness to listen to the other, a capacity for opening to the other and for dialogic interconnection with the other. According to this approach, the tendency toward dialogic detotalization prevails over totalization. Otherness opens the totality to infinity or to "infinite semiosis." Such an orientation necessarily leads to the ethical order and investigates the condition of unconditional implication with the other beyond any specific ideological orientation. As seen in studies by the authors referred to in this book (Welby, Peirce, Bakhtin, Levinas, Morris, Rossi-Landi, Sebeok) – all representatives of the major tradition in twentieth century research on signs beyond the limits of any single discipline or specialized field of investigation (Petrilli 2010a: Ch. 1) –, the principle of dialogic otherness is structural to human relations and sign activity or deferral among signs (*cf.* 2.3).

The problem of the other is connected to the problem of the word and the demand for listening. Beyond the logic of identification, assimilation and neutralization, beyond hierarchical relations of power and submission, signs, bodies and voices are invested with the potential to respond to each other dialogically. Listening and hospitality imply relations that transcend the limits of the host/guest paradigm grounded in the logic of identity, that is, closed identity, and develop, instead, in terms of unindifferent difference, complicity, cooperation and even friendship. The Italian word "ospitalità" contains "ospite" which resounds in a double sense to designate "host" and "guest" together, therefore hospitality, the welcome beyond barriers introduced by identities and identity-based social roles (Derrida 1999/2000).

Welby and Morris overtly fostered encounter between so-called Western and Eastern culture. Both listened to the Orient and welcomed its cultural values. Morris translated Zen philosophy into his theory of sign and wrote what he called "wisdom poetry" (Morris 1966; 1976). Welby read the *Vedantasara* which she too translated into her theory of meaning as much as into her poetry (available in the Welby Special Collection, York University Archives, Canada). Both developed their theories along the borders and margins of dialogue among different cultural systems. They were fully aware that it was not so much a question of inventing and creating cultural bridges *ex novo*, but simply of recognizing the interconnections that already exist in the dynamics between continuity and extraneity, characteristic of any culture. Interconnectivity is structural to the great network of signs, cultures and civilizations, to sign material and signifying processes at large. It demands to be recognized and strengthened in dialogic confrontation with the other.

In line with my recurrent references to the Bakhtinian conception of dialogue, "dialogic confrontation" is obviously not understood here as resulting from initiative taken by the subject, as kind recognition of the other, as generous opening and tolerance. These forms of recognition of the other are closely connected with forms of exaltation of the self and of one's own identity. The other is recognized, but in the way we recognize an object and is tolerated as something we agree to put up with. Tolerance is connected with hypocrisy. Not only this: tolerance is no more than a situation of truce, where conflict is momentarily suspended, but could emerge at any instance. As we are describing it, dialogue with the other does not ensue from an attitude of complacent respect by the I, the subject, toward the other, but rather it occurs in spite of the I. The situation is that of total exposition to the other. The I is exposed to the other in such a manner that any form of indifferent difference is only the expression of vain effort, bad habit, or illusion regarding the effective situation of unindifferent difference toward the other. Concerning tolerance, following Pier Paolo Pasolini, we may observe that in the active form, "tolerating," "tolerant," the verb "to tolerate" gives rise to an expression that sounds noble and is gratifying. But if we translate it into a past participle and apply it to ourselves, "tolerated," this same expression thus transformed has nothing exhilarating about it. On the contrary, it describes a condition that nobody would ever want to be in (Pasolini 1972, 1975, 1976; L. Ponzio, S. Petrilli, A. Ponzio 2012).

16.4 Translating "semiotics" – a prerogative of humanity – into responsibility

The human auditory and critical functions in today's globalized world call for refinement – the disposition to listen to the other, for hospitality toward the other, as auspicated by the humanism of otherness and the capacity for critique. The critical task of semiotics from a semioethical perspective demands nothing less. Paradoxically, however, communication in today's globalized world tends to forget the other (whether of self or beyond self), or more precisely, the other as other. This situation leads to reinforcing indifference to the other, instead of listening according to the logic of participation and dialogism. Semiotics today must critique communication and its implications for the globalized world and not just describe it. As claimed above, communication can be constructive and creative, but it can also be destructive in a way that not only menaces the health of semiosis worldwide, but the very production of signs tout court. We have stated that signs, communication and life are inextricably interconnected. They implicate each other in today's world more than ever before. Prefiguring the effects of global communication as an attribute of globalization, Morris warned against the homologating and alienating effects of communication. He also warned against the levelling effects of semiotics when it puts itself at the service of communication programmes subservient to dominant ideology (as in the case of semiotics of marketing), to the drive for power and control over the other for the sake of short-sighted self-interest:

[...] sharing a language with other persons provides the subtlest and most powerful of all tools for controlling the behavior of these other persons to one's advantage – for stirring up rivalries, advancing one's own goals, exploiting others. Modern propaganda is the witness to this within existing nations; a world language would make the same phenomena possible over the earth as a whole. And semiotic itself, as it develops, will be subject to the same kind of utilization by individuals and groups for the control of other individuals and groups in terms of self-interest. (Morris 1971 [1946]: 294)

Beyond everyday discourse, mass-medial communication today influences all spheres of human culture including politics, the arts and the sciences, while the

fact of establishing direct contact with the public, without mediations, creates the illusion of democratic participation in the collective imagination. But more than democracy and responsive understanding, what mass-medial communication really achieves is a situation of cultural homologation where the arrogance of ignorance, confusion, and egotistic self-interest becomes the winning formula. Morris in *The Open Self* (1948) had already denounced this state of affairs (cf. 13.5), observing how words like "democracy," for example, are emptied of content and values to the advantage of the homologating effect of communication: "to call oneself democratic is now as unrevealing and as inevitable, as for politicians to be photographed with babies" (Morris 1948: 155).

Easy access to a head-spinning quantity of information does not necessarily favour the capacity for critical thinking and understanding in a world where amateurish improvisation tends to triumph over professionality and scientific method (Athanor 2008–2009; Perniola 2004, 2009). A task for semioethics is to promote intercultural translation, cooperative behaviour, listening and critique over savage competitiveness, rivaltry, exploitation and control for the sake of self-interest. Semioethics is concerned with the quality of life of the single individual as much as of the community at large - being terms that, in truth, are inextricably interrelated – and given the condition of interrelatedness and mutual influence among the different spheres of life, this implies the quality of semiosis generally over the globe. Cooperative behaviour presupposes opening to the other, awareness of the inescapable condition of interconnectivity and the capacity for creative and critical understanding in relations of listening and hospitality. Nor do such values mean to deny the singularity of each unique single individual.

Semiotic horizons are unbounded. And whether a question of general theoretical semiotics, historical semiotics, global semiotics, special semiotics, or applied semiotics, sign studies should always be critical. Researching along the margins of different cultures and value systems, scrutinizing signs through the gaze of the other, translating signs across borders and barriers, all this contributes to developing the critical capacity, sometimes with the help of new signposts, as unsuspected "cryptosemioticians" come to our attention. With specific reference to the human world, developing our understanding of signs also means developing our understanding of the relations that inexorably interconnect signs, behaviour and values (cf. Ch. 1).

Contrary to social practices based on the logic of power relations and exploitation, which persist and are reinforced in so-called "post-capitalist" globalization with the proliferation of new forms of ignorance and dulling of critical consciousness in the sense just described, our quest is for encounter among cultures worldwide in the sign of responsibility, listening and hospitality. It follows that an important task for semiotics understood as semioethics, is to foster intercultural communication and co-participation among peoples for the construction of a global world more fully aware of the condition of mutual interdependency and its implications for life (Danesi and Rocci 2009). It is impossible for the self to flourish isolatedly from the other, whether the self of the single individual or of a group of any sort. Semiotic research fully reveals how the self, thought processes, the conscious and the unconscious are all modelled interdependently in the open-ended chain of deferrals among signs. Moreover, the signs in which the human being's conscious and unconscious are engendered originally arise in the community, which means to say in the public sphere. Nor does this exclude the uniqueness of each human being with his or her store of "private" or "inner" signs. The single individual develops in the dialogic interrelation between external signs and internal signs, public signs and private signs, official signs and unofficial signs, outer signs and inner signs, exterior signs and interior signs.

Consequently, rather than assert the status of the subject, its identity, rather than subdue the other to the subject's will and control, semiotics as semioethics thematizes the need for a thorough critique of the subject, or rather of the self's claims to the status of subject. To maintain that such critique is semiotical, or, better, semioethical is to insist on the material that constitutes self, on the materiality of signs in their relation to values: sign material, linguistic material, which means to say signs of the other and words of the other. And to recognize the *semi-other character of all signs and all words* used by the self in the processes of becoming a self, to fulfil itself as self, to reach awareness of self and its world, is already in itself to question the arrogance and exaltation of the self as Subject with a capital letter, the Subject's claim to being at the centre of a world where everything else is object (Petrilli 2013: xix–xxvii).

The critique of "anthropocentrism," "ethnocentrism," "phonocentrism" and "glottocentrism" is a central aspect of global semiotic theory developed in the direction of semioethics. It implies just this exactly – a critique of the self as Subject and of the logic of self-centred, egocentric identity upon which it is founded. To recover a sense of interconnectedness with the other, a sense of the semiosphere as a detotalized and dialogic globality is to recover the sense of extensiveness and detotalized inclusiveness of the global semiosic network. This is nothing less than the network of life, where the "semiosphere" converges with the "biosemiosphere" and human beings emerge as special life-forms that partake in global semiosis, interconnectedly and interdependently with all other life-forms on Earth. Semiosic processes flourish in dialogism, in the dialogic interrelation between globalism and localism. Obviously, following Bakhtin and his analyses of the relation between bodies, signs and values, "dialogism," as we have already observed, is tantamount to intercorporeity, interconnectivity among bodies, be-

tween my body and the body of the other, among signs and bodies generally. And though Sebeok was unfamiliar with Bakhtin's writings, their research overlaps at various points as part of a global vision interconnecting signs and life.

Global semiotics emphasizes the condition of interrelatedness among signs, between signs and nonsigns, between self and not-self, human signs and nonhuman signs: human signs are interrelated with all other signs over the planet and perhaps even beyond, if we consider together the "heliosemiosic" and "cosmosemiosic" perspective formulated by Welby, "extraterrestrial" semiosis hypothesized by Sebeok, and the principle of synechism theorized by Peirce. The Peircean concept of "synechism" evidences the condition of uninterrupted interrelatedness among signs in ongoing translational processes that pervade the universe. According to the principle of continuity or synechism, each point in the semiosic flux is connected to every other, which implies that signs can never be netly separated. Signs are part of the larger global context, embodied in the universe, as a manifestation of its laws (CP 7.565–7.578, ca 1892). The doctrine of synechism rejects binary logic, the concept of dualism and oppositive pairs and postulates instead translational continuity among categories, mind and matter, human semiosis and the world of physical existents.

This understanding is a necessary condition for critique – with any claim to adequacy - of global communication in globalization, where symptoms of illness and malaise generally abound with the global spread of such phenomena as poverty, unemployment, migration, war and destruction (including of the natural environment). As claimed above (16.2.), the destructive character of globalization is ever more manifest today in the capitalist social reproduction system. Opposed to limited responsibilities and indifference symptomatic of the reign of egocentric and egotistic identity, global semiotics developed in the direction of semioethics aims to evidence the condition of global implication with the other, irrevocable interrelatedness and interdependency, unindifferent and participative involvement with the other, unlimited responsibility and accountability toward the other. Global semiotics provides anthroposociosemiosis with phenomenological and ontological contextualization. But for a proper understanding of communication today, that is to say, global communication-production, another type of contextualization is necessary: the socio-economic. And this approach is closely interrelated with the need to thematize the ethical, or, rather, the semioethical dimension of semiosic processes. An analysis of global communication in its complexity calls for conceptual instruments that are as precise and as rigorous as possible. These can only be provided by a new approach to communication theory that has a philosophical grounding, an approach equipped to account for the different contexts implied in communication as we are describing it - the phenomenological, ontological and socio-economic.

From the perspective of a global semiotic and semioethical view on global communication, semiotics today is faced with an important task and an enormous responsibility – to evidence the shortcomings of today's communication-production society. As interpreters of signs (inclusive of symptoms), semioticians are called upon to denounce dangers produced by the global communication-production system for life over the entire planet with the same energy as that invested in producing the global communication-production system itself.

A full understanding of contemporary global communication implies a full understanding of the risks involved in global communication, including the risk that *communication itself can come to an end*. Our allusion here is not only to the subjective-individualistic illness known as "incommunicability" as amply theorized and represented in film and literature, and particularly manifest during the transition to communication in its current forms (which can no longer be separated from production). That communication can risk coming to an end means that life itself can risk coming to an end if we agree, as posited by global semiotics, that life and semiosis, life and communication converge. And considering the enormous potential for destruction today in contrast with earlier phases of development in social reproduction, the risk of threatening life over the entire planet should not be undervalued.

16.5 Reading the present as the future perfect of semiosis alias life

In "Semiosis and Semiotics: What Lies in Their Future?," Sebeok (1991b: 97–99) briefly considers the possibility that semiosis should continue beyond life understood in strictly organic terms. The different spheres of what he dubs "cybersemiosis" and its possible developments indubitably amount to an interesting perspective (Floreano and Mattiussi 2008). Another possible response, after Sebeok, is summed up in the ten core theses below, proposed by the Bari-Lecce School research programme in semiotics founded by Augusto Ponzio (Caputo, Petrilli, Ponzio 2006). Semiotics can contribute toward a better understanding of the behaviour of human beings as semiotic animals and of the sense of the common condition of global implication in each other's lives, in life generally. The "semiotic animal" is capable of *signs of signs*, of mediation among signs and of reflection with respect to semiosis over the globe.

To meet the task, global semiotics must also be open to the ethical dimension, that concerning the goals and ends orienting human semiosis. For this particular slant in sign studies, focused on the relation of signs to values and human action, Augusto Ponzio and I originally introduced the term "ethosemiotics," then "teleo-

semiotics" and subsequently "telosemiotics," though we ended up opting for the term "semioethics," as indicated by the title of our 2003 monograph, Semioetica (see also Petrilli and Ponzio 2005a: 535-559, 2010; Petrilli 2010a: 3-48). As semioethics, semiotics is committed to the "health of semiosis" and the "quality of life" globally which implies cultivating the capacity for listening and understanding, oriented by the humanism of otherness at the interface between sign theory and axiology, ethics and pragmatism.

The present is the "future perfect of the future of semiosis" because the conditions are created today for semiotics and semiosis tomorrow – where by "semiotics" is understood not only the general science of signs, but the human species-specific capacity to reflect on signs and behave as a consequence. And given that semiotics is also semeiotics or symptomatology and orients our attention in the sense of caring for the other, the problem is not only of the theoretical order, but also of the practical-ethical order.

The Bari-Lecce School advocates a critical approach to semiotics founded on a series of methodological principles. These include the "logic of otherness" understood as the foundational dimension of the sign; the "dialogical dimension" of semiosis; the ideological, practical and ethical implications of dialogical otherness for human semiosis; the concepts of "listening," "responsive understanding," and of "unindifferent difference" in the relation among signs; thematization of the self as a sign, therefore as an open and dialogic community oriented by the logic of otherness structural to identity. On the basis of the Marxian critique of political economy applied to signs and language, with special reference to writings by Ferruccio Rossi-Landi, other centrally important concepts in our research on signs in the human world include "semiotic materiality," "sign residue," "linguistic alienation" and "communication-production." Reflection on signs, language and communication must be critical, detotalizing and demystifying. This implies, among all else, a critique of "stereotypes." Stereotypes are accepted passively and dogmatically, as Adam Schaff has demonstrated. A critique of stereotypes also implies a critique of the related concept of "hard dry facts." As studies by Morris and Rossi-Landi have clearly revealed, but also studies by Welby before them, "facts" are always mediated by signs and values. Relations emerge among human beings, where it was previously thought that there only existed relations among things (commodities) and reified relations among signs (stereotypes). Furthermore, as Louis Hjelmslev illustrates, form and matter of the sign do not belong to the sphere of the a priori, but rather are developed in the processes of semiosis (Caputo 1993, 1996). All this leads to the need for critique focused on the material foundations of social reproduction and on the production of sense.

The original ten core theses proposed by the Bari-Lecce school of semiotics read as follows, here revised and reformulated:

Thesis 1: A *general theory of signs* must avoid *glottocentrism* which takes the verbal sign as its general sign model and the linguistics of verbal sign systems as its model science. General semiotics transcends the limits of semiotics understood as *semiology* according to a tradition that can be traced back to Saussure, or better to a distorted reading of Saussure. Semiology studies the signs of social life and should not be confused with general semiotics. It excludes "natural" signs and all non-conventional signs that do not enter communication understood in this restricted sense, as social communication.

At the beginning of the 1960s, Barthes in his Éléments de sémiologie clarified that, in reality, the sign systems studied by Saussurean sémiologie are translinguistic systems, that is to say, sign systems supported by verbal signs. Once semiology was identified as translinguistics, Barthes rightly proposed an inversion in the relationship between semiology and linguistics as established by Saussure: semiology does not contain linguistics, as one of its parts, but rather linguistics contains semiology. Saussure effectively asserted, and rightly so, that it was necessary to construct a general science of signs before constructing a general linguistics. Consequently, it was necessary to explain what a sign in general is in order to explain what a verbal sign is. Nonetheless, in his own interpretation of the relationship between semiology and linguistics, his conception of the general sign science clearly privileged the verbal sign and was modelled as a consequence.

However, once semiotics is understood in terms of *global semiotics* Saussure is right. The general science of signs is the wider circle in which is inscribed the smaller circle represented by linguistics. But in this case the science of signs is not *semiology*, vitiated by glottocentrism, but rather *semiotics* understood as *the study of verbal and nonverbal signs*. Instead, semiology unmasked by Roland Barthes as translinguistics forms an even smaller circle englobed within the circle of linguistics. So that Barthes too was right. Here "linguistics" is understood in Morris's sense as formulated in his epochal 1946 monograph, *Signs, Language, and Behavior*. Linguistics, according to Morris is not "linguistics" of the linguists, but is understood in far broader terms to concern human language in general, which in his own words is not only made of "verbal bricks." Sebeok (who studied with Morris) was subsequently to develop this particular meaning of the term "language" in the sense of "primary modelling" as distinct from "speech." The animal *homo* is equipped with primary modelling from his early appearance as a hominid.

Thesis 2: A general sign model cannot be constructed on the basis of the verbal sign. This approach is subtended by the fallacy that we can only deal with signs, all types of signs by *speaking* about them, through *verbal signs*, by transposing and translating signs verbally. On the contrary, for the construction of a *general*

sign paradigm, our model must refer to the sign most refractory to verbal translation, the sign most resistant, most irreducible, in this sense most other. A sign that responds to such characteristics with its relative language is the *musical sign*, the language of music. The musical sign escapes imperialism of the word, which means to say it escapes the limits of the glottocentric approach to semiotics characteristic of semiology.

Semiotics, understood as a general sign theory can be described as *musical* semiotics, semiotics which refers to the musical sign as the term of verification of its own general validity, of its effective capacity as general semiotics. This is not a matter of semiotics applied to music, but of semiotics that keeps account of semiosis in music, that keeps account of the interpretive and expressive practices of music, of the signs of music: from this point of view "of music" is understood as a subject genetive and not as an object genetive. The general theory of sign takes that which is essential in music as its own methodological condition: the capacity for listening. The methodica of semiotics is the methodica of listening (Ponzio and Lomuto 1997; Petrilli 2007d).

Thesis 3: Listening is an interpretant of responsive understanding, a disposition for the welcome and hospitality, in the house of semiotics, toward signs that are other, signs of otherness: these signs reach such a high degree of otherness that overall they can only be named in the negative with respect to the verbal, that is, as nonverbal signs. Listening is the condition for a general theory of sign insofar as it is oriented by the logic of otherness.

Thesis 4: In terms of extension, semiotics must tend toward the global. From this point of view, an exemplary text is Global Semiotics, Thomas A. Sebeok's book of 2001, the last to appear before his death that same year and the point of arrival of his lifelong research. Whatever one's specific interest in the study of signs, the specific territory, the trajectories outlining the sphere of attention, semiotics must construct a general map showing exactly where we are ("you are here").

Thesis 5: Semiotics as a science must be conscious of its very conditions of possibility and consequently deal with the problem of its foundations. Semiotics understood as the general science of signs is founded on a special capacity, that is, on semiotics understood as a species-specific modality of using signs, that is, specific to the human being, the only semiotic animal existing. This special capacity has been tagged metasemiosis (or "semiotics" in this second sense). It distinguishes the human being from other living beings that are only capable of semiosis. To investigate the foundations of semiotics means to extend the gaze beyond the boundaries of identity logic, beyond the boundaries of institutional semiotics, to contemplate the conditions that make semiotics understood as metasemiosis possible. What emerges is the syntactical capacity specific to human beings designated by Sebeok as primary modelling, nonverbal and not directed to communication, nor to language understood as a verbal or nonverbal communication system.

Thesis 6: Language-syntactics tells of the metaoperative capacity specific to human beings, namely the capacity to act in the absence of objects and goals (nonfunctionally), the capacity for invention and abstraction; it tells of the capacity for *metasemiosis* which distinguishes human beings from all other living beings that are endowed exclusively with a capacity for semiosis. Language as modelling is a condition for semiotics understood as metasemiosis, the capacity for reflection or recognition and description of semiosis.

Thesis 7: Semiotics is connected with responsibility. Metasemiosis, understood as the capacity to reflect upon signs, is exclusive to human animals and is connected with responsibility: the human being, a semiotic animal, is the only one capable of responding to signs in the sense of accounting for signs and behaviour, for the self. This means to say that the human being is subject *to* and subject *of* responsibility. To the extent that semioticians practice metasemiotics, they are doubly responsible: semioticians must account for self and for others and as global semioticians, for all life-forms over the planet.

Thesis 8: Semiotics is a *critical* science not only \hat{a} la Kant, in the sense that it investigates its own conditions of possibility and its own limits, but also \hat{a} la Marx. In other words, semiotics as a critical science questions the contemporary human world on the assumption that it is *not the only possible world*, that it is *not defined* once and for all, as, instead, conservative ideology represents it. Critical semiotics considers the world-as-it-is as one only among many possible worlds, a world susceptible to *confutation*. Thus described, the critical instance of semiotics aims to recover the sense of sign production, exchange and consumption for humanity, the sense of the world, the sense of life, the sense itself of humanity.

Thesis 9: As global semiotics, metasemiotics, critical semiotics (in the double sense suggested, twice subject to responsibility), semiotics must be concerned with life over the planet – also in the pragmatic sense of concern for keeping life healthy, of caring for life. From this point of view, as hinted above, semiotics recovers its relation to medical semeiotics, or symptomatology, which beyond historical awareness of the origins, is also a question of the ideologic-programmatic order. From this point of view, semiotics emphasizes listening in the sense of medical semeiotics, or symptomatology. No doubt an important task for semiotics today is to listen to the symptoms of our globalized world and identify the different aspects of malaise (in social relations, international and intercultural relations, in the life of single individuals, in the relation to the environment, in life generally over the planet). By contrast to a globalized world tending toward its own destruction, the goal is to formulate a diagnosis, a prognosis and to indicate possible pathways for the health of semiosis and new and better forms of globalization.

Thesis 10: This programme outlines a special approach to semiotics as practised by the Bari-Lecce School and designated as *semioethics*.

Semioethics promotes semiotic research for a better understanding of global communication and the possibility of a future. The notion of "global communication" itself is understood in a double sense. In ordinary language, in the mass-medial version of the expression, with reference to the current economic, sociological, political situation, "global communication" is associated with "globalization" as interpreted by today's social reproduction system. From this point of view, global communication is connected with progress in technology and expansion of the market – but such aspects also constitute its limits. According to this description, global communication in the context of today's social reproduction system reflects only one dimension of the great web of communication that is life over the planet Earth. Instead, as a biosemiosic phenomenon, global communication is a condition for evolutionary development and the proliferation of life. From this point of view, the vital challenge for human beings today is to reconcile globalization with global communication thus described, therefore with life or better the quality of life over the whole planet (Petrilli 2004d, 2008). "Vital" here is understood in the sense of *crucial*, *essential*, but also in the sense that it is a matter of life, that life is at stake. Such issues involve human beings as unique "semiotic animals," or, better, as unique "semioethic animals."

Given that we live in a sign network where interconnection with the other, involvement with the other is inevitable (whether we like it or not), indifferent difference, that is to say, difference that is indifferent to the other, is ultimately impossible in the relation among human beings. If the other is acknowledged as structural to signs, then the ethical dimension of life, which revolves around the otherness relationship, emerges from the very dynamics of semiosis; and the discipline that studies semiosis, "semiotics," emerges as "semioethics."

16.6 To sum up looking ahead

The "semioethic turn" in sign studies emphasizes human responsibility for the health of semiosis generally, for life. In fact, another expression introduced by Thomas Sebeok for "global semiotics" is "semiotics of life." Semioethics is not intended as a new branch of semiotics, but rather it refers to the human capacity for listening to the other, to the capacity for critique, deliberation and responsibility. Following Sebeok's "global semiotics," semioethics returns to the origin of semiotics understood as "medical sem(e)iotics" or "symptomatology" and, recalling its ancient vocation to care for life, thematizes the relation between signs and values, semiotics and axiology, semiotics, ethics and pragmatism. As observed in the opening pages of this volume, from a historical perspective, Hippocrates and Galen can be considered the founding fathers of Western semiotics and the first (crypto)semioticians ever to have studied signs systematically, in the form of symptoms (of illness).

Semioethics is a response to the social symptoms of illness and malaise now so evident in the contemporary capitalist globalized world. To the end of safeguarding semiosis and life generally, semioethics emphasizes the need for awareness of the condition of global implication, for responsible action, for a sense of *global responsibility* toward the other. In contrast to sacrificing the other repressed by dominant ideology and related social programmes, in contrast to indifference toward the other, the semioethic slant in sign studies promotes dialogic listening and participation, the capacity for responsive understanding and involvement with the other as foreseen by the biosemiotic condition of interrelatedness and intercorporeity. To reflect on the social symptoms of illness and malaise from a global semiotic perspective in today's world means to keep account of communication in the context of globalization. "Global communication," which is "global communication-production," calls for a theoretical perspective that is as global as the phenomenon under observation. This means to say that a global approach must not limit its attention to partial and sectorial aspects of the communication-production system as dictated by internal perspectives functional to that system itself. Nor must it limit its attention to psychological subjects reduced to parameters imposed by the social sciences, subjects measurable in terms of statistics. A global perspective is the condition for a better understanding of global logic - or better, "ideo-logic," given that it undersigns the world-as-itis, converges with it and adheres to it realistically -, a global logic that regulates communication-production processes; such a global perspective is the condition for critique of a social reproduction system built on this type of logic or ideo-logic (Petrilli 2005a; Petrilli and Ponzio 2005a: 478-480, 525-527; Ponzio 2004b; Rossi-Landi 1978, 1992a).

As emphasized throughout this volume, the notions of communication, translation and value are recurrent in discourse related to semioethics. They are evidenced in the subtitle of this book, dedicated to the relation between sign studies and semioethics. "Translation" has been variously discussed, including in the second section of this chapter entitled, "Translating today's sense of *malaise* into symptoms of the destructive character of globalization," and again in the fifth, "Reading the present as the future perfect of semiosis *alias* life." I now wish to return to the notion of translation, considering it more closely in relation to the semioethic perspective.

When Rossi-Landi in his monograph of 1968 spoke of "language as work," he specified that he was not doing so in the metaphorical mode: language *is*

work. This is a fact that is recognized today in globalization, albeit improperly, with the expression, "immaterial work" (Petrilli and Ponzio 2003–2004: Ponzio 2003–2004). In the same way, to speak of "translation" in the sphere of semioethics, as we have already done, beginning with the very titles of the sections indicated, is not to resort to a metaphor. Semioethics effectively calls for the work of translation according to different modalities and in the most diverse spheres. Particularly significant in the contemporary world is the work of translating the condition of subjective *malaise* into the objective symptoms of social illness. In globalization, such a condition is taking on pandemic dimensions.

In a chapter titled "The Closing of the Universe of Discourse," included in his monograph One-Dimensional Man (1964), Herbert Marcuse analyzes the results of the study of labour relations carried out by a company in the U.S. Investigating the workers' complaints about labour conditions and wages, the researchers revealed that they were formulated in statements that contained "vague, indefinite terms." In other words, meanings were considered to be broad and vague, finding expression in "general statements" which lacked any "objective reference" to "standards which are generally accepted," to specific cases and contexts, to circumstantial individual cases. The researchers set out to repropose and reformulate, to translate statements of the type "wages are too low," or "the job is dangerous" in such a manner as to reduce their vague generality to particular referents. Coherently with this approach, the vague and indefinite expression that "the piece rates on [the] job are too low," for example, was translated into a statement that referred to the particular situation that gave rise to the complaint. The researchers learn that the employee's "wife is in the hospital" and consequently "he is worried about the doctor's bill he has incurred." The meaning of the complainer's statement is explicited as follows: "In this case the latent content of the complaint consists of the fact that B's present earnings, due to his wife's illness, are insufficient to meet his current financial obligations." This is clearly a real and proper translation, also one that significantly transforms the content of the original statement from the objective into the subjective mode. Before it was translated, the statement expressed a global accusation: it established a concrete relation between the special case and the totality of which it was a case and referred to conditions that were external to that specific individual, to that specific situation, to that specific job, to that specific plant. The translation eliminates reference to the general situation. It cancels its character as the expression of a symptom of suffering that is not private. Ultimately, the translation eliminates the critical character of the original statement, its tone of accusation, invective and denunciation.

To explain recapitulating: semioethics as social symptomatology sets about to denounce translations of this type. But it also promotes translation back into the social order of what is effectively experienced or made to be experienced – for lack of a detotalized vision of the world – as difficulty and *malaise* belonging to the private order, therefore passed off as provoked by fortuitous and individual circumstance. Semioethics aims to translate this condition of *malaise*, interpreting it for what it really is in a globalized world like our own. This world is made of interrelationships that are expanding more and more, that emerge ever more in terms of exposition to the other, of inevitable involvement with the other without shelters or safeguards: *so what is passed off as fortuitous, private malaise, even worse as individual inability to insert oneself productively into the social system is, in truth, malaise arising from the social system itself.* Such phenomena indicate the limits of social systems pushed to an extreme, to the level of unsustainability, where the quality of life is not a value and living conditions hardly reach the necessary requirements for survival.

In this context, tolerance and intolerance take on an objective sense. This means to say that tolerance and intolerance here are no longer simply subjective attitudes, but rather resound in a medical sense. In other words, the body itself suffers intolerance, the environment itself, nature, semiosis, life in its globality all suffer intolerance. Given their profession, semioticians should be in a position to read the signs of objective intolerance and engage in translating them for what they effectively signify, as symptoms – this, at the very least!

Notes

Introduction. The semioethic turn in sign studies

- 1 The expression "Global semiotics" is the title of a plenary lecture delivered by Thomas A. Sebeok on 18 June 1994 in his capacity as Honorary President of the Fifth Congress of the International Association for Semiotic Studies, convened at the University of California, Berkeley. The text was first published in English, revised and expanded, in 1997 (in Rauch and Carr 1997: 105–130) and, subsequently, as the opening chapter to Sebeok's 2001 book, *Global Semiotics*, the last to appear before his death in December that same year. The Italian translation is based on a typescript handed over to me by Sebeok himself for inclusion in the Italian edition of his 1991 monograph, published as *A Sign is Just a Sign. La semiotica globale*, 1998.
- 2 Other terms experimented by myself with Augusto Ponzio for this orientation in the study of human signs, language and action are "ethosemiotics" (Ponzio 1990; Petrilli in Ponzio et al. 1994: 297–301), "telosemiotics" and "teleosemiotics" (Petrilli 1997, 1998a). While they all remain valid, we now privilege the term "semioethics," chosen as the title of our monograph, Semioetica, in 2003. As Ponzio explains in an email to John Deely (4 January 2010): "Semioethics was born in the early 1980s relatedly to the introduction in Italian translation by Susan Petrilli of works by Sebeok, Morris, Welby and my introduction and interpretation of works by Bakhtin, Rossi-Landi, Giovanni Vailati and Peirce. Our problem was to find a term which indicates the study of the relation between signs and values, ancient semeiotics and semiotics We coined terms and expressions such as 'teleosemiotica' [teleosemiotics], 'etosemiotica' [ethosemiotics], 'semiotica etica' [ethical semiotics], by contrast with 'semiotica cognitiva' [cognitive semiotics] (Charles S. Peirce's writings in Semiotica. I fondamenti della semiotica cognitiva, ed. by Bonfantini. Turin: Einaudi, 1980).... The beginning of semioethics is in the introductions by myself and Susan Petrilli to Italian editions (in translation by Petrilli) of Sebeok, Il segno e i suoi maestri [The Sign & Its Masters, 1979] (Bari: Adriatica, 1985) and Welby, Significato, metafora e interpretazione (Bari: Adriatica, 1985); in our essays collected in Essays in Significs, ed. H. Walter Schmitz (Amsterdam: John Benjamins, 1990); in Susan's writings of the 1980s such as her monograph, Significs, semiotica, significazione, Pref. by Thomas Sebeok (Bari: Adriatica, 1988) and my own of that period, such as Filosofia del linguaggio (Bari: Adriatica, 1985). In a private note in the context of the International Colloquium 'Refractions. Literary Criticism, Philosophy and the Human Sciences in Contemporary Italy of the 1970s and the 1980s', Department of Comparative Literature of Carleton University, Ottawa, 27–19 September 1990 (during the discussion of my paper, 'Rossi-Landi tra Ideologie e Scienze umane'), I used the Italian term 'semioetica', as displacement of the 'e' in the Italian word 'semeiotica' which indicates in Semiotics the ancient vocation of Semeiotics (of Hippocrates et Galenus) for improving or bettering life. But in the title of three lessons delivered as part of a lecture tour in Australia organized by Susan, we still used 'teleosemiotics': 'Teleosemiotics and global semiotics', July-September, 1999: Adelaide University, Monash University (Melbourne), Sydney University, Curtin University of Technology (Perth), Northern Territory University (Darwin). The book of 2003 by Susan and I, Semioetica, is the landing achievement of this long crossing of texts, conceptions and words, as results from our bibliographic references" (Deely 2010: 49-50; and in Petrilli 2012a: 185-186).

Chapter 1

Signposts leading to semioethics: on signs, values and the non-neutrality of semiotics

- 1 Cours de Linguistique générale (Paris, Payot, 1916), by Ferdinand de Sausure, collects lectures delivered at the University of Geneva approximately between 1906–1911 and posthumously published from notes by his students Charles Bally and Albert Sechehaye with the collaboration of Albert Riedlinger. Four subsequent Payot editions were published (1922, 1931, 1949, 1955), the second of which was slightly revised and has become the basis of the "standard pagination" incorporated, for example, into the Roy Harris translation (London: Duckworth, 1983). Two critical editions have been prepared, one by Tullio de Mauro (Paris: Payot, 1972) and one by R. Engler (publishing in full the lecture notes taken by Saussure's students on which the original Payot edition was based; Wiesbaden: Otto Harrassowitz, 1967–1974). The work has been translated into English twice under the same title, Course in General Linguistics, first by Wade Baskin (New York: McGraw-Hill, 1959), the second time by Roy Harris in his 1983 edition. The Harris translation is based on the Payot editions but provides a fuller index and corrects printers' errors repeated in the series of Payot editions (cf. Deely 2001: 671–672).
- 2 With particular reference to *Freudianism: A Marxist Critique* (Voloshinov 1927), *The Formal Method in Literary Scholarship* (Medvedev 1928) and *Marxism and the Philosophy of Language* (Voloshinov 1929), the debate concerning authorship of these works, widely attributed to Mikhail Bakhtin, is now in reality still wide open. Irrespective of the question of whether or not Bakhtin actually participated in writing them and to what degree, there is no doubt that they are substantially "Bakhtinian" in terms of content, philosophical-ideological orientation and methodology. In fact, the authors involved are all identifiable as members of the so-called "Bakhtin Circle." The concepts of "otherness" and "dialogism" are pivotal in all these writings. They are thematized as part of what appears to be a unitary project and a common methodological orientation. A discussion on authorship is available in Brandist, Shepherd and Tihanov 2004; Depretto 1997; Ponzio 1997 and 2008; Vautier and Càtedra 2003.
- 3 In addition to commentary on works by Victoria Lady Welby and significs, the 2009 volume, *Signifying and Understanding. Reading the Works of Victoria Welby and the Signific Movement* (1048pp.), by S. Petrilli, presents a vast selection of writings by Welby, published and unpublished. The unpublished material includes papers and correspondence from the Welby Collection at the York University Archives (Toronto, Canada). This volume also includes a selection of essays by "classical" significians who created the Signific Movement in the Netherlands across the first half of the twentieth century. A review of the literature on Welby and significs with texts by various authors from the beginning of the same century forms the closing chapter of the volume. This is followed by five Appendices and three Bibliographies including indexes and inventories of papers in the Welby Collection, a list of Welby's correspondents (approximately 500), covering the years 1861–1912, and updated bibliographies of writings by Welby as well as on Welby, the Signific Movement and current developments. The ground work for this volume is a preceding volume, my Italian monograph, *Su Victoria Welby. Significs e la filosofia del linguaggio*, 1998.

Chapter 3

Human modelling, puzzles and articulations

1 A man without knowledge of a language could not have the idea of a finite number. Imagine yourself counting thirty or forty stones, without having some denomination to give each of them, which is to say one, two, three [361] up to the last one, thirty or forty, which contains the sum of all the stones, because when you reached the last one, in order to know and conceive what the

quantity is, it is necessary for your mind to conceive and your memory at the same time to contain all the units that make up that quantity, something that is impossible for man. The eye is no help, either, because since it wants to know the number of various objects it sees, and doesn't know how to count them, the same act of memory, both simultaneous and individual, is required. And so if you were limited to knowing only a single numerical denomination, and in counting you could say only one, one, one; however much attention you paid, in order to gather progressively with your mind and memory the exact sum of the whole, right up to the last, you would always be left in the same situation. Likewise, if you knew only two denominations, etc. [...]. (Giacomo Leopardi, *Zibaldone*, 28 November 1820, Eng. trans. 2013: 219–20 [Z 360–61]).

Chapter 4

Evolutionary cosmology, logic and semioethics

- 1 Charles S. Peirce introduced the term "pragmatism" in the 1870s to nominate his principle of inquiry and his account of meaning according to which any statement must have a practical bearing to be meaningful. The pragmatic account of meaning provided a method for clearing up metaphysical ambiguities and assisting scientific inquiry. However, Peirce was unhappy both with his own early formulations and with the developments made by his fellow pragmatists, William James and John Dewey in the U.S.A., and Ferdinand C.S. Schiller in Great Britain. Consequently, he was led to reformulate his own original account of pragmatism in terms of "pragmaticism" in order to distinguish it from subsequent and more "nominalistic" versions. For further considerations on the terms "pragmatism" and "pragmaticism," see Petrilli 2010a: 50, n. 2; also my entries on Morris, Peirce and pragmatism in Cobley 2001 and 2010a.
- **2** "On a New List of Categories" is usually referred to as an 1867 paper, which is the year it was delivered as an oral presentation (14 May) to the American Academy of Arts and Sciences. It was published the year after, in 1868, in the relative Proceedings (n. 7, 287–98).

Chapter 5

Image, primary iconism and otherness

1 "To a sensitive and imaginative man who lives as I have done for so long continually feeling and imagining, the world and its objects are in a certain respect double. With his eyes he will see a tower, a landscape; with his ears he will hear the sound of a bell; and at the same time with his imagination he will see another tower, another landscape, he will hear another sound. The whole beauty and pleasure of things lies in this second kind of objects. Sad is that life (and yet life is generally so) which sees, hears, feels only simple objects, only those objects perceived by the eyes, the ears, and the other senses." (Giacomo Leopardi, *Zibaldone*, 30 November 1828, 1st Sunday in Advent, Eng. trans. 2013 [*Z* 4418])

Chapter 7

Reading significs as semioethics

1 Victoria Lady Welby's interest in signs and meaning developed from her initial studies on problems of a moral, religious and theological order. Her first book, *Links and Clues* (1881), deals with problems of interpretation in relation to the Sacred Scriptures. Subsequently, her interests in ethical-social and pedagogical issues merged with her philosophical-linguistic concerns, finding expression in a series of papers published toward the end of the nineteenth century and in her volume, *Grains of Sense* (1897). These include: "Meaning and Metaphor" (1893), "Sense, Meaning and Interpretation" (1896), followed by a volume of 1903, *What Is Meaning?* and another of 1911, *Significs and Language*. Her published and unpublished writings are available in the Welby Col-

lection at the York University Archives, Toronto. A vast selection of her papers is now included in my monograph, *Signifying and Understanding* (Petrilli 2009a; *cf.* Ch. 1, note 3).

Welby has been largely neglected as an intellectual in her own right and inventor of significs. Until recent times, she was mostly remembered (if at all) as one of Charles S. Peirce's correspondents (a complete edition of their letter exchanges was published in Hardwick 1977; an earlier edition presented Peirce's letters, but excluded Welby's, see Lieb 1953). Consequently, her influence over the cultural circles of the time has largely gone unacknowledged. Apart from theorizing through her publications (mostly essays and essaylets), Welby was in the habit of discussing her ideas through her correspondence and to this end entertained epistolary exchanges with numerous pre-eminent personalities of her day. Apart from Peirce, these included M. Bréal, B. Russell, H. and W. James, H. Bergson, R. Carnap, A. Lalande, F. Pollock, G. F. Stout, F. C. S. Schiller, C. K. Ogden, G. Vailati, M. Calderoni and many others.

Ogden promoted significs as a university student during the years 1910–1911 and at that time contributed to spreading Welby's ideas. Recent research has documented the influence exerted by Welby and her significs on Ogden, though he subsequently moved in other directions (Gordon 1991; Petrilli 2009a: 767–781). In his renowned book co-authored with I. A. Richards, *The Meaning of Meaning* (1923), notice of Welby is relegated to a footnote.

Apart from scattered mention of her name, Welby's ideas are at the origin of the Signific Movement in the Netherlands through initial mediation of the Dutch psychiatrist and poet F. van Eeden. For a historical and theoretical description of Welby and her significs, in addition to my monographs cited above (Petrilli 1998b, 2009a), see Schmitz 1985, 1990 and Heijerman and Schmitz 1991.

Though never completely forgotten thanks to her network of relations, after years of relative silence Welby's ideas are now circulating more extensively thanks to a series of editorial enterprises. These include, in the first place, the re-editions of her monographs, *What Is Meaning?*, 1903 and *Significs and Language*, 1911, respectively in 1983 and 1985, the first by initiative of Achim Eschbach and the second by H. Walter Schmitz. The latter includes an introduction by Schmitz, in reality a full-length monograph. Beyond this extensive study on Welby and her significs, Schmitz has authored many other related writings making an important contribution to this whole area of research as emerges from my interview with him, "Victoria Lady Welby and Significs" (Petrilli 1988b).

For further studies on Welby and the Signific Movement in the Netherlands, see the collective volume edited by H. Walter Schmitz, *Essays on Significs*, 1990 and relative bibliographies. This volume, which commemorates the 150th anniversary of her birth, also makes a substantial contribution to the revival of significs; also the volume *Significs*, *Mathematics and Semiotics*. *The Significs Movement in the Netherlands*, 1991, the proceedings of an International Conference held in November 1986 under the same title, edited by Schmitz with Erik Heijerman.

In Italian three collections of her writings are now available translated, edited and commented by myself: Significato, metafora e interpretazione, 1985, Senso, significato e significatività, 2007 and Interpretare, comprendere, comunicare, 2010.

Major studies by myself on Welby include my Italian monograph, *Su Victoria Welby. Significs e filosofia del linguaggio* (1998). Other studies are available in English: for example, in my 2005 volume co-authored with Augusto Ponzio, *Semiotics Unbounded*, in particular the chapters entitled "Why Significs? A Contribution to Theory of Meaning and More," "Departure: Exegesis and Holy Scripture," "Reading Significs as 'Biosensifics'," pp. 80–137. Subsequently, my full monograph in English on Welby, *Signifying and Understanding. Reading Victoria Welby and the Signific Movement*, appeared in 2009. As anticipated in Chapter 1, note 3 above, this volume provides

extensive commentary on her published and unpublished works as well as on writings by exponents of the Signific Movement in the Netherlands. In addition to a description of materials available in the Welby Collection, with indexes and inventories of papers and complete list of Welby's correspondents, the Appendices in this volume also include three bibliographies, "Writings by Victoria Welby," "Writings on Welby, the Signific Movement and current developments," and, to conclude, a "General bibliography."

A Special Issue of the journal *Semiotica*, occasioned by my 2009 monograph *Signifying and Understanding*, has recently been dedicated to Welby, her significs and developments in the Netherlands. This volume celebrates the revival of Welby's work a centenary from her death in 1912, exploring different paths and perspectives for ongoing research (see Nuessel, Colapietro and Petrilli 2013).

2 At this point in her text, Barbara Godard adds the following footnote: "In her insightful study of Victoria, Lady Welby, Susan Petrilli notes the association between mothering, the potential of future generations and the principle of continuity or connection in Welby's writings between 1903 and 1910. The metaphor of the mother, Petrilli suggests, is linked to questions of the relation of the subject to temporality and to the other" (Petrilli 1998b: 266–67). These ideas were developed in a series of essays (and drafts of essays) written between 1904 and 1911 under the title 'Mother-Sense and Significs' (Welby 1904–1907). A short section of this was published as 'Primal Sense and Significs' in *Significs and Language* (1911, 1985). This change in title suggests an evolutionary model for the three-fold process over the more complex temporality of 'mother-sense' (Godard 2008: 187). The papers in question are available in the Welby Collection, York University Archives, Box 28, file 24, now in Petrilli 2009a: Ch. 6. Godard had a strong interest in Welby's work and before her untimely death in 2010 we had planned to work together on Welby, her significs and signific-related issues. As part of this project, she had committed to contributing an essay to the Special Issue of the journal *Semiotica* dedicated to Welby (described in the preceding note), but most regrettably was not granted the time to write it.

Chapter 8

The objective character of misunderstanding. When the mystifications of language are the cause

1 In 1892 Welby presented her pamphlet The Use of "Inner" and "Outer" in Psychology: Does the Metaphor Help or Hinder?, published anonymously, at the International Congress of Experimental Psychology. This was distributed among participants and discussed. The pamphlet consists of a selection of passages from publications in psychology and philosophy chosen to demonstrate her thesis that bad language-use compromises clarity and precision of ideas and leads to false problems. These passages are annotated by Welby, with critical reflections on the use or, rather, misuse of figurative language, particularly metaphor and analogy. She provides evidence of the negative results on knowledge and understanding that ensue from the erroneous implementation, for example, of the pairs "inner/outer," "interior/exterior," "inside/outside," etc. as metaphors to designate the opposites "psycho/physical," "subjective/objective," "thought/thing," "conscious/unconscious." Welby met James M. Baldwin at this congress, with whom she began a correspondence that lasted until 1908, as well as Frederik van Eeden whom under her influence initiated the Signific Movement in the Netherlands (Petrilli 2009a: Ch. 7). A Selection of Passages from "Mind" (January, 1876, to July, 1892), "Nature" (1870, and 1888 to 1892), "Natural Science" (1892), is the title of another publication by Welby (1893), in which she continued her critique of language, underlining its importance for successful interpersonal communication. These collections were preceded by yet another entitled, Witnesses to *Ambiguity*, 1891, dedicated to the critique of terminology. Subsequently, Welby thematized the problem of language and meaning more extensively in theoretical terms in the essays "Meaning and Metaphor," 1893, and "Sense, Meaning and Interpretation," 1896 (both now available in Petrilli 2009a).

2 Another text in the *Collected Papers*, "Pragmaticism and critical common-sensism" (*CP* 5.497–501) – which corresponds to a manuscript of 1905 originally entitled, "The basis of pragmaticism" – is articulated in the form of a dialogue between "Jules" (the allusion is to the Italian critic of pragmatism Giuseppe Prezzolini), and the "Respondent" (Peirce himself the pragmaticist). The form of dialogue was chosen as an attempt to represent the effective articulation of thought itself, which is inherently dialogic. This text is followed by another that develops it, "Consequences of critical common-sensism" (*CP* 5.502–537) (the reproduction of a manuscript of 1905, entitled "Pragmaticism, Prag. [4]"), in four parts: "Individualism"; "Critical philosophy and the philosophy of common-sense"; "The generality of the possibile"; and "Valuation."

Chapter 12

The semiotic machine, linguistic work and translation

1 This article by Sebeok, "The Evolution of Semiosis," was published as a chapter in his monograph of 1991, *A Sign is Just a Sign*, pp. 83–96. A somewhat different version appeared in 1997, in *Semiotik / Semiotics*, pp. 436–446. It was also included by Sebeok in the last monograph he published before his death in 2001, *Global Semiotics*, pp. 17–30. All this testifies to the importance he attached to this particular essay in the general scheme of his thought system and project for a truly global and open perspective on semiosis beyond any anthropocentric temptations. Each of these three editions is cited in the present volume.

Chapter 13

Extending semiotic horizons

1 À propos the name of the general science, or theory or doctrine of signs, Thomas A. Sebeok explains as follows: "In conformity with traditional English usage, Morris called the science of signs semiotic. This Stoic term was reintroduced, in 1690, into English philosophical discourse by John Locke, as his label for the 'doctrine of signs', a science which was greatly advanced thereafter by Charles Peirce, commencing in the late 1860s. Around 1897, Peirce used the word semiotic, in Locke's sense, for 'the quasi-necessary, or formal, doctrine of signs'. Saussure's etymologically kindred term, sémiologie, by which he meant 'une science qui étudie la vie des signes...', was first recorded in a note of his dated November, 1894 and has also passed into English usage; ...Roland Barthes' Éléments de sémiologie (1964) was rendered by its translators as Elements of Semiology (1968). Although sometimes semiotic and semiology are interchangeable synonyms, certain authors – perhaps most notably Louis Hjelmslev – differentiated between them sharply and consistently; semiology, however, especially in its French and Italian equivalents, is also one name of a well-established branch of medicine, more commonly designated in English as symptomatology.

So far as I can determine, the variant *semiotics*, with the programmed definition for a field which 'in time will include the study of all patterned communication in all modalities', was publicly introduced by Margaret Mead, on May 19, 1962 and then became embodied in a book published two years later. Undoubtedly, semiotics was an analogic creation on *pragmatics*, *syntactics* and especially *semantics*. It has, over the past decade, been widely, although not universally, adopted. Some workers continue to regard it as a needless barbarism. Nevertheless, I have accepted it for the title of our series, *Approaches to Semiotics*... By contrast, the International Association

of Semiotic Studies, when debating a proper name for our international journal, came to the Latin compromise title *Semiotica*, thus avoiding embarrassment of having to choose among the alternatives mentioned...." ("Terminological note," in Morris 1971: 9–10).

In the present chapter specifically dedicated to Morris, I have maintained the term "semiotic" when a question of Morris's direct discourse, and in conformity with common currency the term "semiotics" in all other cases. (On the problem of terminology, see Deely 2005).

Chapter 14

From the methodica of common speech to the methodica of common semiosis

- 1 From 1963 to 1979 Rossi-Landi was married to Genevieve Vaughan who followed his work closely. She currently continues her research and writing between Austin (Texas, USA) and Rome (Italy), where she lives, and is now winning the attention she deserves as an intellectual, scholar and committed political activist in her own right. Particularly interesting is her thematization of the human being as *Homo donans*, an expression which corresponds to the title of her monograph of 2006 (see also Vaughan 1997). Some of her publications are listed in the references section to the present volume. For more information, see her website, www.gift-economy.com.
- 2 In "Sidelights," Rossi-Landi (1992a: 1–2) recounts: "Perhaps the main feature of my intellectual formation is that it was culturally twofold. I absorbed contemporarily or alternatively views, ideas and intellectual instruments both from the European Continental and the British-American traditions. This did not amount only to reading books in various languages (I am, or was in different periods of my life, sufficiently fluent in Italian, English, French, German and Spanish, not to speak of some knowledge of other languages and of a long though forgotten training in Latin and Greek); it also amounted to existential experiences which I had by living many years in countries other than Italy, especially in England and the United States, and by marrying (this time not contemporarily) two non-Italian women with whom I had five bilingual or plurilingual daughters. On the other hand, my mother was a bilingual (Italian and German) Austrian subject who became Italian after World War I. Thus it happened that I felt and still partially feel, that I belonged not only to the Italian tradition, but also, to an important extent, to the cultural traditions of Austria and Germany, England, the United States [...] The double formation I have been describing was a good thing for me personally, but it was also a drawback to the diffusion of my ideas. In spite of many translations into various languages, in Italy I was known only for what appeared in Italian and in the English-speaking world only for what appeared in English."

That Rossi-Landi published a significant part of his work (book and essays) directly in English was largely the consequence of the fact that he had lived in other countries than Italy, in particular England and the United States. He also taught at foreign universities including the University of Michigan, Ann Arbor (1962–1963) and the University of Texas, Austin (1963), which he revisited on various occasions. In addition to the U.S.A., he acted as visiting professor between 1964 and 1975 at various universities in Europe, as well as teaching courses in philosophy and semiotics at the University of Havana and Santiago in Cuba. After a teaching appointment in Padua (1958–1962), he only returned to the Italian academic scene in 1975 as Full Professor of Philosophy of History at the University of Lecce (now University of Salento, South Italy). In 1977, he transferred to the University of Trieste (his mother's home town) for his chair in Theoretical Philosophy.

Rossi-Landi contributed to important developments on the intellectual scene in Italy not only as an author in his own right, but also as an editor and translator. He served as editor or member of the editorial board for various journals, some of which he had in fact founded: *Methodos* (1949–52), *Occidente* (1955–1956), *Nuova corrente* (1966–68), *Ideologie* (1967–74), *Dialectical*

Anthropology (from 1975), and finally *Scienze umane* (1979–81), all of which count numerous contributions to the theory of signs.

At the time of his premature death in 1985, Rossi-Landi was working on a series of volumes which he had been planning for publication for quite some time. In the bio-bibliographical note mentioned above, he mentioned three volumes in the making: *Dall'analisi alla dialettica* (From Analysis to Dialectics), a collection of essays originally published between 1949 and 1976, with the addition of three unpublished manuscripts; *Between Signs and Non-signs*, a volume collecting essays in English published between 1952 and 1976, with the addition of various unpublished manuscripts; and *Sistemi segnici e riproduzione sociale* (Sign Systems and Social Reproduction) which included three published papers: one of 1976 in Italian, "Criteri per lo studio ideologico di un autore," another of 1977 in English, "Introduction to Semiosis," and a second in English of 1978, "Sign Systems and Social Reproduction."

- **3** On Rossi-Landi and Morris, see my essays "On the materiality of signs" (Petrilli 1986), "Il contributo di Rossi-Landi allo studio di Charles Morris" (in Petrilli 1987) and my introduction to the correspondence between Morris and Rossi-Landi in *Social Practice, Semiotics and the Sciences of Man: The Correspondence between Morris and Rossi-Landi* (Petrilli 1992); see also the chapters "The Relation with Morris in Rossi-Landi's and Sebeok's Approach to Signs," and "Bodies and Signs: For a Typology of Semiosic Materiality," both in Petrilli 2010a; chapters on Rossi-Landi, Welby and Vailati are also available in English in Ponzio's 1990 monograph, *Man as a Sign.* In addition to numerous essays, Ponzio has also authored two full monographs on Rossi-Landi in Italian (Ponzio 1988, 2008c. For further details, *cf.* note 7, below).
- 4 Rossi-Landi edited a collection of published and unpublished papers by Colorni with an introduction by Norberto Bobbio (Colorni 1975). As clarified by Rossi-Landi, though this material was published in 1975 he had actually worked on it ten years earlier, between 1964 and 1966.
- 5 The first 1961 edition of Rossi-Landi's monograph, *Significato*, *comunicazione e parlare comune*, includes a long analytical appendix on Husserl. This was eliminated from the second 1980 edition of the same book and was scheduled to appear in the volume *Dall'analisi alla dialettica*, which Rossi-Landi announced, but never actually published because of his premature death in 1985. On this aspect of Rossi-Landi's work, see Ponzio 1988, 1991.
- 6 Umberto Eco discusses this particular phase in Rossi-Landi's research in his essay "Whatever Lola Wants. Rilettura di una rilettura" (in Petrilli 1987: 13–23), with special reference to Rossi-Landi's introduction to the second 1980 edition of *Significato, comunicazione e parlare comune*. Eco's essay is part of a collection organized in honour of Rossi-Landi as a Special Issue of the journal *Il Protagora*, entitled, *Per Ferruccio Rossi-Landi*, edited by myself. Among contributors to this volume figure Felice Accame, Massimo A. Bonfantini, Silvio Ceccato, Giuseppe Mininni, Augusto Ponzio, Roland Posner, H. Walter Schmitz, Vittorio Somenzi, Thomas A. Sebeok, Giuseppe Semerari, Terry Threadgold, Tullio Tentori, Tatiana Slama-Cazacu and Rossi-Landi himself with an unpublished paper of 1956, "La 'non-filosofia'." On Rossi-Landi's research see Ponzio's monographs *Rossi-Landi e la filosofia del linguaggio*, 1988, and *Linguaggio*, *lavoro e mercato globale*, 2008; in English the chapters "On the Signs of Ferruccio Rossi-Landi's work" and "*Rileggendo Rossi-Landi*, *Methodica* of common speech in Rossi-Landi," in Ponzio 1990; and "About Rossi-Landi," in Petrilli and Ponzio 2005.
- 7 Rossi-Landi and A. Ponzio collaborated closely on a series of editorial projects, not least of all the journal *Scienze umane* which they founded together in 1979, Rossi-Landi as Editor-in-Chief and Ponzio as director of the editorial office. As mentioned above, since Rossi-Landi's death in

1985, Ponzio has written two full monographs on Ferruccio Rossi-Landi's research, *Rossi-Landi e la filosofia del linguaggio*, 1988 and *Linguaggio*, *lavoro e mercato globale. Rileggendo Rossi-Landi*, 2008. Some of Ponzio's work on specific aspects of Rossi-Landi's theoretical production is also available in English in Ponzio 1990a and 1993a.

To Rossi-Landi's work was also dedicated a monographic issue of the journal *II Protagora* (Petrilli 1987a) and the two collective volumes, *Reading su Ferruccio Rossi-Landi* (Bernard *et alii* 1994) and *II lavoro immateriale* (Petrilli 2004), both of which present the proceedings of meetings and conferences organized in his honour. Moreover, thanks to Ponzio, new editions of Rossi-Landi's Italian monographs have continued appearing after his death on a regular basis, the most recent being the 5th edition of his 1972 monograph, *Semiotica e ideologia*, published in 2011. Another two volumes appeared in 1992, both edited by myself, as part of the same project for the promotion of Rossi-Landi's writings, the collection *Between Signs and Non-signs*, and his correspondence with Charles Morris, *Social Practice, Semiotics and the Sciences of Man: The Correspondence between Morris and Rossi-Landi*, commissioned by Thomas Sebeok for a Special Issue of the journal *Semiotica*.

Continuing Rossi-Landi's work on Morris in Italy, Signification and Significance was translated into Italian with a selection of other essays by Morris collected in the volume Segni e valori. Significazione e significatività e altri scritti di semiotica, etica ed estetica, 1988. Subsequently, in 2000, Significazione e significatività was published as an independent volume. This was followed by the Italian translation of his 1948 monograph, The Open Self, in 2002. Various editions of Rossi-Landi's Italian translation of Morris's Foundations of the Theory of Signs, 1938, have also appeared since the first of 1954, the most recent in 2009.

8 As regards the status of "definition" according to Welby and Vailati, see my essays "La critica del linguaggio in Giovanni Vailati e Victoria Welby," in Quaranta 1989: 87–102; and in English "The Problem of Signifying in Welby, Peirce, Vailati, Bakhtin," in Ponzio 1990: 315–363 and "Critique of language, reasoning and definition. Back to Welby and Vailati," in Petrilli 2009: 379–384. See also Ponzio, "L'eredità di Giovanni Vailati nel pensiero di Rossi-Landi," in Quaranta 1989: 103–118, and "Theory of Meaning and Theory of Knowledge: Vailati and Lady Welby," in Schmitz 1990: 165–178.

Chapter 15

Global semiotics and the vocation for translation

- 1 Over a decade (1976–86) Thomas A. Sebeok (1920–2001) published his tetralogy *Contributions to the Doctrine of Signs* (1976), *The Sign & Its Masters* (1979), *The Play of Musement* (1981), *I Think I Am a Verb* (1986). These were followed in rapid succession by another series of important volumes: *Essays in Zoosemiotics*, 1990, *A Sign is Just a Sign*, 1991, *American Signatures*, 1991, *Semiotics in the United States*, 1991, *Signs. An Introduction to Semiotics*, 1994, *Come comunicano gli animali che non parlano*, 1998, *The Forms of Meaning. Modelling Systems Theory and Semiotic Analysis* (with Marcel Danesi), 2000, *Semiotica dell'io* (with S. Petrilli and A. Ponzio), 2001, *Global Semiotics*, 2001. Early volumes by Sebeok that played a crucial role in shaping semiotics in the twentieth century include *Perspectives in Zoosemiotics*, 1972, and under his editorship, *Animal Communication*, 1968, *Sight*, *Sound, and Sense*, 1978, and *How Animals Communicate*, 1979.
- **2** À propos the web metaphor, Sebeok observes in "The Semiotic Web: A Chronicle of Prejudices," 1975, that "... I personally care little whether a piece on, say, architectural semiotics, came out in Buenos Aires or London: what matters is how that fragment fits into the semiotic tapestry as a whole. Partial knowledge misleads us, as St. Paul (the great apostle to the Gentiles who was so

preoccupied with perennial semiotic questions of code-switching) cautioned in one of his Epistles to the Corinthians, from incorrect assumptions to inaccurate conclusions: 'For we know in part and we prophesy in part' (I.xiii, 9) – hence the dense tangle of the web as the controlling metaphor for the many logically interacting circumstances suggested in this paper" (from Section 4, "Cataloguing semiotics").

Sebeok views this metaphor in yet another interesting light in a 1995 paper, here cited from an updated version included in his 2001 monograph, *Global Semiotics* (Ch. 5, "Signs, Bridges, Origins"): "Beside the use of *Web* to designate the user interface known as World Wide Web, there is the metaphor Internet, or simply the Net, for a system designed originally for data exchange between small local networks. [....] Then there are variations on the metaphor *highway*, as in 'data highway', or 'info highway, or 'global digital highway', each roughly equivalent to "global information infrastructures" and of course *roads*. Kindred popular motifs include *landscape*, *maps* and the like. A separate study on the prevalence of figures of speech and, broadly speaking, their uses in semiotics cries out to be written (*cf*. Keller 1995)" (Sebeok 2001: 189, 5.1).

- **3** However, in a paper of 1994 "Global Semiotics" (written almost twenty years after *Contributions to the Doctrine of Signs*, 1976, and included in his 2001 monograph, *Global Semiotics*), *à propos* the expression, "doctrine of signs," Sebeok claims that he no longer considered the debate on the qualification of semiotics as a "science," a "theory," or a "doctrine" of much consequence.
- 4 Giorgio Prodi, in Thomas Sebeok's own words, "was, on the one hand, one of his country's leading medical biologists in oncology, while he was, on the other, a highly original contributor to semiotics and epistemology, the philosophy of language and formal logic, plus a noteworthy literary figure. Prodi's earliest contribution to this area [immunosemiotics, an important branch of biosemiotics], [is] *Le basi materiali della significazione* [1977]" ("Foreword," in Capozzi 1997: xiv). The milestone volume *Biosemiotics*, edited by Sebeok and Umiker-Sebeok in 1992, is dedicated to Prodi whom they present as a "bold trailblazer of contemporary biosemiotics."
- 5 This paper by Charles Morris of 1957, "Mysticism and Language," is rather unusual for those who identify him with his renowned books of 1938 and 1946. It is also available in Italian translation as part of a collection of writings by Morris in the volume *Segni e valori*, 1988. A revised edition is now available in a recent volume of Morris's writings, translated and edited by myself, *Scritti di semiotica, etica e estetica*, 2012.
- **6** "Semiosis and Semiotics: What Lies in Their Future?," was originally written by Thomas Sebeok on invitation from Norma Backes Tasca, member of the Associação Portuguesa de Semiótica, and published in 1989 in the Portuguese magazine *Cultura e Arte* (52, April 23, 1989: 208). The original English version was published soon after in the *International Semiotic Spectrum* (10, October 1989: 2). It is now included in *A Sign is Just a Sign* (1991: 97–99) and has been translated into various languages including German, Hungarian, Norwegian and Italian.

Chapter 16

Social symptomatology and semioethics

1 For a reformulation of communication theory in a global semiotic and semioethic perspective see: by A. Ponzio, *La comunicazione* (1999) and *I segni tra globalità e infinità. Per la critica della comunicazione globale* (2003); and by S. Petrilli, *Percorsi della semiotica* (2005), *Approaches to Communication. Trends in Global Communication Studies* (ed. 2008), *Sign Crossroads in Global Perspective. Semioethics and Responsibility* (2010), *Expression and Interpretation in Language* (2012), and *Nella vita dei segni* (2014); see also our co-authored volumes, *Il sentire nella comu-*

nicazione globale (2000), Semiotics Unbounded (2005), Semiotics Today. From Global Semiotics to Semioethics (2007), Lineamenti di semiotica e di filosofia del linguaggio (2008), Semioetica e comunicazione globale (2014).

2 After their first presentation at a conference in Lyon in 2004 (organized by the International Association for Semiotic Studies) and their publication in various editions (in English and Italian), the ten theses proposed for the future anterior of semiotics were developed and expanded into thirty theses and published in the volume, Tesi per il futuro anteriore della semiotica, by Cosimo Caputo, Augusto Ponzio and myself, in 2006. Formulated in the spirit of critique and dialogism to the end of stimulating discussion and research, they are proposed as the provisional synthesis of work in progress and as such are open to further revision and development. Far from being the expression of short-sighted parochialism, reference to the geographical location of a specific research group (the Bari-Lecce school of semiotics) is intended to evidence the condition of polycentrism, that is, how the plurality of different theoretical perspectives and trends in semiotics have developed in different cultural contexts across the twentieth century and onward. The Bari-Lecce school of semiotics originally developed around Ponzio's research at the University of Bari (now University of Bari Aldo Moro) and subsequently extended to the University of Lecce (now University of Salento) with the introduction of a chair in semiotics in 1997–1998. Special signposts for our theses and ultimately for semioethics are represented by such authors as Charles Peirce, Victoria Welby, Charles Morris, Emmanuel Levinas, Georges Bataille, Maurice Blanchot, Roland Barthes, Jacques Derrida, Mikhail Bakhtin, Louis Hjelmslev, Ferruccio Rossi-Landi, Giuseppe Semerari, Adam Schaff and, of course, Thomas Sebeok. His original proposal of "global semiotics" provides the larger context for our understanding of signs in the human world.

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Name and subject index

```
abduction vi, 39, 56-57, 67, 68, 71, 74-93,
                                               answering comprehension, see responsive
    108-110, 127-129, 241, 271-275,
                                                    understanding
                                               anthropocentrism 69, 135-139, 223, 302,
    293-294, 305-308, 316-319
 - and agapasm 66-76, 79-82, 93, 95
                                                    304-305, 314, 335, 350
 - and dialogism 85-86
                                                 critique of - 302, 305, 314, 334
 - and linguistic experience 38-39, 91-93
                                                    see also ethnocentrism, glottocentrism,
 - and otherness 60-61, 65-84, 85-87,
                                                    phonocentrism
    94-99, 108-111, 133-134, 174-179,
                                               Arduini, Stefano 227, 358
    184-185, 195-199, 226-229, 241-246
                                               Aristotle 66, 152, 231
    see also deduction, induction, inference
                                                 - and sign systems 171-217
 - and language 244-248
                                               articulation
 - and silence 111-114
                                                 double - 15, 43-44
Achille 199, 231-234
                                                 levels of - 47-61
adaptation/exaptation 144-145, 193, 197,
                                               artificial intelligence 248-253, 259-262
    265, 318
                                                    see also semiotic machine
                                               Ashby, Ross 224
agapasm 66-72, 75-82
                                               associative capacity 100-101, 108-111, 171
agape see love
Alighieri, Dante 230
                                                    see also primary iconism, similarity
                                               autopoiesis 18-21, 263
alterity, see otherness
Althusser, Louis 41, 212, 215-216, 220-224
ambiguity 140-146, 154-157, 162-169,
                                               Bakhtin, Mikhail, M. vi, xviii, xix, xx, 6-7, 9,
    204-206
                                                    14, 19-20, 22-23, 27, 31-33, 65, 69, 73,
 - and confusion 125, 140-141, 296-297
                                                    77, 79, 85, 88-89, 92, 95, 108, 11-114,
 - and definition 140-144
                                                    118-120, 130, 142, 158-179, 181-185,
 - and polysemy 141-143, 162
                                                    191-192, 194, 199, 203, 208, 210-211,
analogy 48, 50-51, 97, 145-147, 180, 242,
                                                    229, 238-239, 242-244, 292-293,
    297-298, 349
                                                    295-296, 315, 323, 330-332, 335-336,
    see also homology, model
                                                    347-348, 354
ananche 67
                                               Bal, Mieke 136
Anders, Günther 325
                                               Balibar, Etienne 220
Andersen, Peter B. 248, 254, 261, 264
                                               Baldwin, James M. 126, 128, 132, 349
                                               Bally, Charles 14, 346
 human/nonhuman - 21-24, 51, 87, 131,
                                               Bari-Lecce school of semiotics 337, 355
    270-271, 303-304, 308, 313-317, 340
                                                 ten core theses of the - 337-344
 rational - (animal rationale) xviii, 17,
                                               Barthes, Roland 15, 113, 226, 228, 246, 302,
 semiosic - 22, 257
                                                    304, 338, 350, 355
 semiotic - xviii, 21-23, 45-46, 61, 73, 194,
                                               Bataille, Georges 355
    197, 257, 299, 308, 337, 340-342
                                               Bateson, Gregory 25
 structuralist - 45-46
                                               behaviour
 symbolic (animal symbolicum) - 17
                                                 verbal/nonverbal - 111-117, 248-254,
answerability 11, 108, 118-119, 175-177
                                                    283-290, 306-312, 326-332
    see also responsibility, responsivity
                                                    see also verbal/non verbal signs
```

Caputo, Cosimo 16, 336-337, 355

behaviourism/behaviouristics 15, 38, 91, Carnap, Rudolph 29, 39, 126, 272, 273, 275, 166, 270-273, 295, 297 348 Benjamin, Walter 320, 326 carnival 158, 175-177, 181-185, 322 Benveniste, Emile 15 see also body, intercorporeity Carr, Gerald F. 345 Bergson, Henri L. 19, 126, 232, 348 Berkeley, George 303 Carus, Paul 67 Cassirer, Ernst xxviii, 16, 17, 36, 38, 47 Bettetini, Gianfranco 327 Càtedra, Pedro M. 346 binarism 25, 27, 31-33, 38 Ceriani, Giulia 327 see also triadism Cervantes, Miguel de 231, 233 biology xv-xvi, 14, 18-19, 40, 49, 51, 100, Cézanne, Paul 95, 99-100 139, 164, 173, 195-196, 222, 270-271, Champagne, Marc 225 296-297, 300-301, 301-311 Chaplin, Charlie 262 biosemiosis, see semiosis Chomsky, Noam 15-17, 29, 34-40, 52, biosemiotics, see semiotics 90-93, 106, 149, 179, 219, 222, 257, biosphere 75-76, 132, 135-136, 139, 193, 287-291, 298, 304, 318 236, 301, 308–309, 323–324, 334–335 Christ, Jesus 71 see also semiosphere Cicero 246 Blanchot, Maurice 226, 355 Cixous, Hélène 136 Bloomfield, Leonard 15, 166, 273 Clark, Katerina 159 Boas, Franz 166, 352 Clever Hans effect 313-315 Bobbio, Norberto 352 Cobley, Paul vi, viii, xvii, xx, 3, 4, 70, 220, body 95-109, 292-297, 314, 330-332, 223, 302, 314, 315, 322, 347 334-335, 344 Cohen, Hermann xviii - and signs 19, 282-289 Colapietro, Vincent viii, 198, 349 grotesque - 19, 175, 322 Colli, Giorgio 231 see also carnival, intercorporeity Colorni, Eugenio 283, 284, 352 Bonfantini, Massimo A. 4, 25-27, 32, 48, 84, common sensism 152-154, 156, 350-351 303, 313, 345, 352 see also pragmatism/pragmaticism Boole, George 79 communication v-viii, xv-xxii, 3-13, 18, Boole (Everest Boole), Mary 71, 79, 126 21-23, 41-43, 194-200, 240-244, 259, Boothman, Derek 151, 266 263 Borges, Jorge Luis 231-233, 235 - and dialogism 21, 86, 290 Bouissac, Paul 24, 26, 300 - and otherness 330-332 Bradley, Francis H. 284 - models 18, 24, 27, 114 Brandist, Craig 346 -/production xxii, 250-251, 260-264, Brandt, Per Aage 248, 254, 261, 264 325-330, 335-337, 342 Bréal, Michel 9, 123-124, 126, 167, 272, 348 - and translation 194-200, 240-247, Bricmont, Jean 327 300-311 Bröndal, Viggo 16 - semiotics, see decodification/code and Bühler, Karl 238, 239 message critique of - v-viii, xxii Caesar, Julius xxii dual meaning of - 322-325 Calderoni, Mario 283, 348 global - xxii, 218, 278-279, 322-342 Capozzi, Rocco 354 intentional/unintentional - 21, 164, Caprettini, Gian Paolo 114 312-319, 323-329

interspecific - 313-314

verbal/nonverbal - 17-23, 41-43, designatum 272-274 193-200, 310-315, 340 see also denotatum, referent conscious/unconscious 167-168, 177-178, desirous striving 80, 106 196, 211, 217-218, 286, 315-316, 334, detotalization/totalization 31, 69, 110, 148, 160, 173, 176, 184-185, 319, 321, 349 consciousness/self - 171-172 328-330, 334, 337, 344 content dialogism xx, 6-7, 17-22, 69-70, 85-87, expression and - xviii, 16, 26, 131-135, 158-160, 170-188, 194-199, semantic - 35, 44, 272 226-228, 229-244, 277-278, 318-319, Cornu, Auguste 212 330-332, 355-356 cosmology - and otherness 6, 70, 175, 278, 346 - and logic 66-70 - and the properly human 183-188 evolutionary - 65-82 - and translation 183-188 dialogue xx, 19, 23, 31-32, 65, 80, 118, 120, critique xviii-xxii, 6-10, 11-12, 19, 61, 73, 78, 126, 157, 165, 173, 177, 181, 184, 194, 82, 160, 164, 191-193 - and semioethics 96 223, 238-239, 261, 280, 295, 301, 315, - of communication v-viii 318, 320, 321, 324, 329, 331, 350 - of identity logic 80-82 - and body 19, 350 - of imagery 145-148 - and dialectics 32, 350 - of language 78, 85, 160-161, 171-178 difference 14, 23-27, 41, 60, 100, 133-134, - of representation 94-96 140, 148-150, 154, 164, 196-197, language and - 295-297 210-211, 269, 326-330 Marxian - 6, 41, 291-293, 246 - and identity 59-61, 311-312 - and otherness 59-61, 86-87, 244-248, Croce, Benedetto 150, 218, 283-284 cryptosemioticians xv, 137, 255, 302, 308, 311-312 333, 342 -/indifference 72, 133-134, 223, 278-280, Culler, Jonathan 15 331-335, 337-342 Cust, Elizabeth (Nina) 79, 126, 149, 164 - in translation 312 Dingler, Hugo 284 discourse Danesi, Marcel vii, viii, xv, xvi, 21, 47-53, - genres (primary/secondary) 160, 55-61, 229-230, 257-258, 334, 353 174-175, 181, 185, 243 Darwin, Charles 72, 75, 345 direct/indirect - 165, 171, 181, 243-244, Deacon, Terrence W. 21, 40, 96 deduction vi, 37, 55-56, 68, 74, 84-85, 92, 297, 318 Dostoevsky, Fyodor M. 108, 159-161, see also abduction, induction, inference 176-177, 184, 242 definition 142-146 Driesch, Hans 19 Durst-Andersen, Per 202, 238-239, 245 Deely, John xvii, 20, 303, 308, 345, 346, 351 Deledalle, Gérard 9 Deleuze, Gilles 200 Eco, Umberto 25, 26, 27, 43, 86, 87, 88, 89, De Mauro, Tullio 304 100, 273, 309, 313, 352 De Michiel, Margherita 181 education denotatum 272-274 significal - 145-147 see also designatum, referent Eeden, Frederik van vii, 126, 348-349 Enriques, Federigo 283 Depretto, Catherine 346 Derrida, Jacques 7, 269, 331, 355 Enzensberger, Hans Magnus 328, 349 Descartes, René 90, 346 Epimenides 58

Fowler, Thomas 58

Frege, Glottob 205, 274

Freud, Sigmund 286, 317, 346

equal exchange, see logic Gaia 300, 307, 323 Galen of Pergamon v, vii, xix, 278 equivocation 224-247 see also understanding/ Garaudy, Roger 212 misunderstanding Garroni, Emilio 14, 15, 304 generative-transformational linguistics 35, Eschbach, Achim 328, 348 40, 119, 291 ethics xvii-xxi, 12 critique of - 38-41 see also semioethics Genosko, Garv 26 ethnocentrism, gift 108, 171, 278, 316, 351 critique of - vi, 314, 334 - economy 351 see also anthropocentrism. Gilles, Félix 200 glottocentrism, phonocentrism globalization v, xxii, 250, 280, 285, 322, European Commission 326, 351 326-330, 332-333, 335, 340-343 exaptation, see adaptation - and communication 300-306, 326-332 existentialism 215-217, 221-22, 328 destructive character of - 325-330, 335, exposition 38, 51, 146, 219, 223, 259, 265, 340, 346 - and life 280, 322 evolution 9, 18, 22, 49, 65-76, 78, 80-82, glottocentrism vi, 134-135, 209, 302-305 84, 86, 88, 90, 92, 124, 130, 135-138, critique of - 305, 314, 315, 334-339 148, 154, 197, 248, 249, 307-310, see also anthropocentrism, 322-323, 325 ethnocentrism, phonocentrism expressibility 20-21, 240-243 God 51, 109, 309 extralocalization (extralocality/exotopy) Godard, Barbara 136-137, 349 159-160, 174-175, 178-182, 184, 243, Godelier, Maurice 41, 220, 221 308, 346 Gordon, Terrence W. 348 Gorlée, Dinda L. xx, 191, 212 Gorz, André 329 Gould, Stephen J. 197, 318 Favareau, Donald xvi, 49, 96, Gramsci, Antonio 141, 150-152, 265-266, Feuerbach, Ludwig 212-217, 220, 222 284, 348 figuration (picturing, depiction) xviii, 25, 33, Grant, Ulysses 311 35, 87, 95-96, 105, 108-110, 123-124, great time 65, 108, 159 133, 180, 210, 227, 229-230, 235, 272, Greimas, Algirdas Julien 15, 31 282, 308 see also representation Hall, Edward T. 111 firstness 31, 67, 89, 95, 97, 99–100, 109–110, Halle, Morris 27 117, 228-229, 245, 271 Halliday, Michael 25 see also secondness, thirdness Hamlet 111 Fisch, Max 258 Hardwick, Charles S. 9-10, 65, 71, 79, 82, Floch, Jean-Marie 327 115-116, 127, 129, 152, 182, 190, 282, 329 Floreano, Dario 336 Harris, Roy 346 Foscolo, Ugo 231 Harris, Zellig 15 Foster, John Bellamy 325 Hasle, Per 248, 254, 261, 264 Foucault, Michel 330

Hegel, Georg W. F. 31-32, 288, 295

Heijerman, Erik 10, 348

Herzfeld, Michael 300

Herczeg, Giulio 202

heterogeneity/homogeneity 100-101 iconism heteroglossia 6, 159, 166, 192, 263 primary - vi, 59-61, 90, 94, 96-107, 110, Hinde, Robert A. 15 347 Hielmslev, Louis 16, 17, 26, 31, 304, 337, 350, see also image, modelling, similarity Ident, see identity, subject, subjectivity Hippocrates of Cos v, vii, xix, 278, 303, 308, identity 27, 41, 48, 60, 67, 72-77, 79-81, 84, 342, 345 86, 94-96, 98, 133-134, 178-184 Hobbes, Thomas 232, 345 - logic 60, 77, 79, 120, 126-127, 177 Hodgson, Robert Jr. 227, 345 critique of the logic of - 80 Höffding, Harald 126 ideology xvii, 8, 27, 71, 96, 165-168, Hoffmeyer, Jesper vii, xxi, 22, 195, 256-257 170-172, 211-224, 229, 254, 280-282, Holquist, Michael 159, 163-164 287-289, 314, 324-332, 340-342 Homer 230-231, 236 image 94-108 Homo xviii, 22, 30, 43, 49, 72, 197, 249, 289, - and primary iconism 103-107 315, 318, 338, 351 - and similarity 96-98 - habilis 249, 30 see also iconicity, iconism - homo loquens and homo laborans 43 imagery - homo sapiens sapiens 197 critique of - 145-147 - homo faber and homo loquens 289 indexicality xix, 31, 69, 74, 83-84, 89, 96, - homo donans 351 99-102, 109, 114-116, 141, 190, 193, see also semiotic animal 236-238, 300, 319 homo homini lupus 72 indirect speaking 171-172 homological method 287-289 induction vi, 56, 68, 74, 84-85, 92, 297, 318 homology/analogy 43, 48, 51, 53, 131, 142, see also abduction, deduction, inference 180, 242, 256, 265, 284-287, 289, 292, inference vi, 6, 29, 39, 67, 76, 78, 82-86, 99, 297-298 143, 148, 154, 228, 241, 297, 312, hospitality 73, 78, 103, 119-120, 265, 280, 318-319 325, 328-333, 339 typology of - 68 human sciences 65-66, 160-161, 171-178 see also abduction, deduction, induction humanism 12-13, 124, 212-213, 215-217, intercorporeity 20-21, 185, 223, 225, 239, 220-225, 322, 330, 332, 337 241, 315, 329-330, 334-346, 342 - and antihumanism 220-223, 225 see also body, carnival, dialogism - of identity 330 interpretant/interpreted 7, 18, 23, 32-34, 84, - of otherness 13, 330, 332, 337 86, 166, 182, 190 Humboldt, Wilhelm von 36 dynamical - 10, 33, 128-129, 181-183 Husserl, Edmund 12-13, 23, 38-39, 80, final - 10, 128-129, 181-182 87-92, 94-95, 98-108, 284 immediate - 10, 33, 128-129, 181-183 Huxley, Thomas A. 126, 149 - of identification 33, 35, 166, 171, 179, 182, 227, 237, 272, 277 Ibarra, Néstor 235, 284 - of responsive understanding 35, 37, 48, iconicity vi, xix, 59-60, 83, 89, 91, 94-96, 292, 113, 119, 179, 272, 276-277, 309, 339 101-103, 114-121, 130-131, 133, 141, 190-191, 193-194, 226, 228-229, 232, interpretation vi, 11, 26-28, 34-35, 39, 69, 234-236, 238, 240, 243-244, 246-247 76, 92, 98, 136, 162–169, 179, 195, 262, - and abduction 91 277, 292 - and creativity 95 semiotics of – see semiotics - and silence 117-119 - and linguistic conscience 162-164

- and meaning 11, 236-240 - as modelling 219, 340 - and significance 162-164 - as metasemiosis 314 - /translation vi, vii, xx, xxi, 7, 20-21, langue/parole 15, 24, 32-33, 49, 112, 114, 26-28, 41-47, 103, 180, 194-199, 119, 161, 194, 201-204, 208, 219, 227, 227-229 242, 258-259, 292-293, 298 - as the criterial attribute of life 306-311 Leibniz, Gottfried Wilhelm 57, 232, 318 intertextuality 119, 176, 227-229 Leone de Castris, Arcangelo 218 Irigaray, Luce 136 Leopardi, Giacomo 47, 94, 108, 347 Ivanov, Vjaèeslav, V. 15, 21, 178 Lévi-Strauss, Claude 15, 31, 42, 43, 300 Levinas, Emmanuel 71, 73, 80, 82, 88, 89, 94, Jakobson, Roman xx, 7, 14, 27, 29, 114, 116, 95, 97, 98, 99, 117, 171, 198, 199, 211, 192-193, 201, 203, 210, 230, 236, 234, 235, 239, 243, 315, 330, 355 238-239, 258, 273 Lieb, Irwin 348 James, Henry 73, 126, 348 life 194-199, 306-311, 336-341 James, William 126, 232-233, 275, 347, 348 - and literary language 32, 165, 171, 172, lerome, St. 246 173, 176, 177, 184 Johansen, Jørgen Dines 304 - and semiosis 20 John, St. 71 quality of - xii, 61, 76, 138, 223, 280, 324, Johnson, Mark 257 327, 333, 337, 341, 344 Jowett, Benjamin 110, 126 see also biosemiosis, biosemiotics iudgment linguistic relativity 200-204, 208-211, predicative - 87-91, 94-108 217-218, 242, 282, 288 linguistics 3, 14-17, 33-36, 38-40, 165-167, Kanaev, Ivan I. 19 172-175, 291-293, 300-305 Kant, Immanuel xv, xviii, xix, 16, 17, 25, 36, Cartesian - 17, 36 39, 66, 90, 92, 149, 152, 206, 287, 303, - and economics 3, 5-6, 41-42, 282-285, 340 288, 292-293, 305 Kantianism, see Kant - of silence 119-120 Klee, Paul 227 meta- 119, 159-161, 165-167, 175, 185, Kolakowski, Leszek 217 199-202 Krampen, Martin 18 listening xix, xx, 11, 73, 78, 80, 113, 117–120, Kristeva, Julia 136-137, 246 159, 176-179, 185, 278, 280, 324, Kull, Kalevi vii, viii, xv, xvi, xvii, xviii, xx, xxi, 330-333, 337-342 21,195, 303, 309 Locke, John xv, xix, 224, 303, 315, 350 Kumar, Amith P. V. 181 logic 65-83 - and cosmology 66, 67, 68, 347 Lakoff, George 257 - and ethics 83 Lalande, André 124, 126, 348 - and mother-sense 76, 77-82, 130, 131, language 124-127, 148-151, 165-170, 136, 137, 143, 349 244-246, 295-300 - and semiotics vi, xix bigradual approach to - 35-38 - of equal exchange 3-7, 32, 33, 184, 259, critique of - 78, 85, 139-148, 146, 160, 162, 261, 279, 292, 293 171–177, 297, 349, 353 Lomuto, Michele 339 - and social reproduction 283-285, Lorenz, Konrad 308 289-292 Lotman, Jurij M. 15, 21, 161, 308 - and speech 35-36, 208, 239 love 9, 59, 65, 66-69, 70-76, 79, 82, 153 - and work 285-287, 342-343

- and subjectivity 70-74, 76-82 metaform 59-61 typology of - 73 Lucid, Daniel P. 49 Lucretius 70 Lukes, Steven 282 Macchiavelli, Niccolò 150, 152 machine semiotic - 247-253, 254, 259, 260-266, 279, 317, 324 Magdoff, Fred 325 Malinowski, Bronislaw 15, 25 Malshe, Milind 181 Marcuse, Herbert 343 Margulis, Lynn 250 Martinet, André 15, 43, 44, 49, 52, 297 Marx, Karl xviii, 8, 19, 41, 42, 82, 214, 215, 216, 224, 286, 288, 340, Marxism 6, 160, 166, 169, 181, 212, 213, 215-217, 220-222, 293, 346 - and existentialism 215-217, 221, 222 - and humanism/antihumanism 220, 224, - and language 6 Mathesius, Vilém 14 Maturana, Humberto R. 18, 21 Mattiussi, Claudio 336 McChesney, Robert W. W. 325 Mead, George, H. 91, 269, 272, 275, 294, 295 Mead, Margaret 350 meaning vii, xv-xxi, 4-11 common - 148-149, 162-163, 287-289 - and values 292-294 - and translation 236-240 triad of - 127-130, 131, 181, 245, 307 see also sense, significance Medvedev, Pavel N. 158, 159, 160, 176, 178, 184, 346 Menard, Pierre 231-233 Merleau-Ponty, Maurice 38, 39, 88, 95, 98, 99, 100 metaphor 50-55, 60-61, 84-85, 94-95, 100-109, 139-147, 168-180, 199, 229-230, 257-258 - and iconicity vi-vii - and modelling 229-230

- and translation 229-230

Merrell, Floyd vii, 192

metasemiosis, see language, modelling methodica - of common speech 282-292 - of common semiosis 282-292 migration, see globalization and - 325, 328, 329, 335 Mill, John Stuart 232 mind 66-68, 71, 78, 96-97, 102, 115, 126-129, 155, 168-169, 181, 245, 254 quasi- 29 model typology of -s (or forms) 53, 55 modelling vi, xv-xix, 18, 21, 22, 47-54, 58-66, 130-134, 228-230 - and the jigsaw puzzle 51, 55, 58-60 - and primary iconism vi, 59-64, 90, 94, 97, 99, 100, 103, 107, 347 - system 21, 49, 50, 59, 228, 317, 318 - and translation vi-vii, 130-134, 229-230 primary - 21, 49-51, 59-61, 130, 229-230, 249, 298–302, 317–318, 338–339 secondary - 21, 49, 130, 197, 218-219, 318 tertiary - 50, 59, 197, 298 monologism/polylogism 32, 33, 95, 108, 109, 119, 134, 142, 149, 166, 184, 192, 199, 200, 209, 210, 238, 240, 330 Monti, Vincenzo 231 Morris, Charles vi, vii, xix, xxi, 3, 4, 7, 8, 10, 17, 30, 31, 34, 38, 39, 40, 48, 72, 91-93, 129, 211, 222, 239, 249, 250, 269-280, 283-285, 289, 292-295, 297, 302, 307, 309, 310, 316, 324, 330-333, 338, 345, 347, 350-355 mother-sense (primal sense) 79-83, 130-137, 143, 349 mother-wit 78 Mukařovský, Jan 14 Müller, Horst 249 Müller, Max Friedrich 126 multiculturalism 328-330 Neurath, Otto 126 Nöth, Winfried 248, 250-254, 324

Nuessel, Frank viii, 162, 349

Ogden, Charles K. 126, 145, 146, 158, 273, 274, 295, 348	philosophy of language – as philosophy of the live word 159–161,
otherness	177
- and dialogism (dialogic otherness) xx,	– and the sign science 289–292
131, 226, 330	phonocentrism 134, 314
- and primary iconism 99-102	critique of – 334
chronotopic – 158–159	Plato 35, 81, 231, 320
dialogical – and translation 226–227	play of musement vi, 52, 70, 83, 108, 136,
humanism of – 13, 330–332, 337,	200, 240, 299, 312–319, 240, 299, 353
logic of – xx, 3–13, 20–27, 67, 69, 72–79,	
83–86, 95–102, 108–110, 130–134, 194,	plurilingualism 6, 14–15, 22, 33, 108, 134,
199-203, 208-211, 218-219, 226-229,	149, 166, 173, 184, 192, 199, 202,
234–240, 265, 319, 330–335, 337–341	206–208
outsideness, see extralocalization	plurivocality/univocality 6, 86, 142, 149, 162,
outsideness, see extratocalization	165, 173, 186, 210, 214, 296, 300
	Pollock, Frederick 126, 348
Pareto, Vilfredo F. 5, 292	polylogism, see monologism/polylogism
Parmenides 231	polyphony 159, 175–176, 202, 210, 238–239
Pasolini, Pier Paolo 331, 332	Poincaré, Jules Henri 126
Pautasso, Sergio 14	Ponzio, Augusto v, vii, viii, xv-xviii, xxii, 4-8,
Peano, Giuseppe 283	17–19, 21–23, 26–27, 32–34, 38, 40, 45,
Peirce, Charles S. vi, vii, xix, xxi, 3, 4, 7, 9, 10,	49, 53, 69, 70, 84, 85, 92–95, 107–109,
25, 28-32, 36, 38, 39, 48, 51, 65, 66-75,	114, 119, 160, 173, 178–184, 209–216,
79–86, 88–90, 92, 94, 96, 97, 100,	221, 222, 228, 234, 239, 248, 250,
107–109, 115–117, 125–126, 128, 129, 131,	253-254, 260-265, 274, 278, 280,
132, 152–156, 158, 182, 183, 189,	287–288, 295, 301, 303–309, 312–313,
190-194, 201, 212, 227, 230, 235, 236,	318, 325–330, 332, 336–339, 342–346,
238, 239, 247–250, 252–255, 269,	348, 352–355
271–276, 282–283, 292–296, 299,	Ponzio, Luciano 95, 332
301–303, 308–309, 315, 316, 318, 324,	Posner, Roland 26, 34, 39, 40, 352
330, 345, 347, 348, 350, 353, 355	pragmatics xix-xxi, 275-277
perception vi, xx, 39, 69, 78, 90–94,	pragmatism/pragmaticism 9, 25, 65-67,
100–102, 105–110, 113, 119, 127, 128,	91–92, 152–155, 269, 271–283,
130, 139, 147, 167, 202, 208, 210, 211,	294–296, 324–328, 337–342, 347–349,
237, 310, 318	350–351
double - 108, 109	– and common sensism, <i>see</i> common
Perniola, Mario 333	sensism
Perron, Paul 324	Prezzolini, Giuseppe 313, 350
Peschl, Markus 261	Prieto, Luis J. 15
Petitot, Jean 45	Prodi, Giorgio 310, 354
Petrilli, Anthony 139	Proni, Giampaolo 26
Petrilli, Susan 9-13, 70-78, 86-87, 123-125,	Propp, Vladimir 15
135-136, 139-141, 143-146, 162-167,	psyche
194-196, 209-211, 225-228, 257-259,	- and language 165-171
290-293, 323-325, 345-350	– and sign 165–171
phenomenology 12–13, 23, 39, 87–91, 107, 209	psychology 65, 132, 167, 168, 169, 173, 292, 300, 309, 349

puzzle	290-293, 297, 298, 302, 305, 308, 310,
forms and - 50-51	323, 338, 346, 350
- s in logic 55–57	Schaff, Adam 27, 45, 142, 212–217, 221–224,
typology of –s 48	329, 337, 355
typology of 3 40	Schiller, Ferdinand C. S. 347, 348
Rauch, Irmengard 345	Schmitz, H. Walter 10, 128, 159, 163, 345,
Rabelais, François 158, 159, 175, 178, 181,	348, 352, 353
185, 322	Searle, John R. 254, 275, 276
Reisig, Christian Karl 9	Sebag, Lucien 41, 220
reality and illusion 311–318	Sebeok, Thomas A. vi, xv–xix, xxi, 18, 20–26,
reason/reasonableness 3, 9, 67–71, 73–74,	28–29, 31, 41, 46–53, 55, 58–61, 70, 87,
	92, 108, 116, 124, 130, 137, 198, 200,
80, 153 market – 326	
	212, 218, 219, 224, 225, 229, 248,
referent 50–51, 55–60, 227–229, 273–275	249–250, 255–258, 270–271, 276–278,
see also denotatum, designatum	297–299, 300–303, 305–321, 322–324,
religion 163–164, 277–278	330, 335–336, 338–339, 341, 345, 350,
representation 28, 29, 50, 53, 58, 296,	352–355
94–96, 108, 109, 172, 182, 191, 192, 229,	Sechehaye, Albert 14, 346
290, 319	secondness 31, 67, 89, 100, 117, 229, 245, 271
see also figuration	see also firstness, thirdness
responsibility v-vi, xvii-xviii, 22, 73,	self 12–14, 45–46, 70–76, 311–312, 94–98,
118–119, 208–211, 218–225, 332–336	108–111, 311–312
Revzin, Isaak I. 15	open/closed - 271, 277-280, 333, 353
Ricardo, David 42	and the other 70-73/not-self 168-169
Richards, Ivor A. 127, 258, 273, 274, 295, 348	surrender 79–81
Rifkin, Jeremy 329 Robering, Klaus 34, 39, 40, 248, 271	see also subjectivity
Rocci, Andrea 334	semantics xix, 4, 9, 16, 30, 39, 48, 85, 123,
Rossi-Landi, Ferruccio vi, xvii, xxi, xxii, 4, 6, 7, 15, 24, 26, 27, 35–38, 40–44, 48, 49,	125, 164, 167, 217, 221, 271–273, 275, 296, 305, 350
53-55, 59, 61, 73, 88, 93, 113, 142, 144,	referential/nonreferential - 273-275, 305
148 - 152, 191, 200, 201, 203–209, 212,	semeiotics, see symtomatology
219, 239, 242, 260, 264, 270, 272, 278,	Semerari, Giuseppe 352, 355
282–299, 305, 324, 330, 337, 342, 345,	semioethics v-vii, xv-xx, 5-12, 70-76,
351–353, 355	123–124, 269–272, 277–282, 330–341
Rudy, Stephen 49	- and global semiotics 277-280
Russell, Bertrand 126, 158, 205, 232, 348	see also semiotics, significs
Ryle, Gilbert 283, 284	sémiologie/semiology vi, xv, xix, 4, 15, 25,
Nyte, dilbert 203, 204	29, 32–33, 302–310, 323, 327, 338–339, 350
Sagan, Dorion 250	semiosis 25–31, 34–38, 65–75, 85–90,
Salthe, Stanley 195	130–136, 178–183, 194–199, 240,
Santaella, Lucia 324	247–261, 277–282, 283–292, 300–311,
Sapir, Edward 15, 200, 211, 217–219, 297	314–317, 319, 322–325, 329, 330,
Sartre, Jean Paul 215–217, 222	332–337, 339–344, 350–354
Saussure, Ferdinand de vi, xv, 3-6, 14-16,	bio- 254–259
18, 24, 25, 27–29, 31, 32, 38, 53, 161,	cosmo- 69, 135–136
166, 178, 190, 219, 263, 273, 284, 287,	geo- 69, 70, 135–136
× -, -, -, -, -, -, -, -, -, -, -, -, -,	U

```
helio- 69, 70, 135-136
                                                 common - 56, 83, 126, 141-142, 148-155,
 levels of - 270
                                                    162-163, 304, 351
                                                 mother- 76-82, 130-131, 136, 137, 143, 349
 meta- xviii, 22, 186, 196, 197, 198, 247, 257,
    259, 264, 2170, 306, 330, 339, 340
                                                Sève, Lucien 212, 213, 221, 222
                                                Shakespeare, William 111
 - and life 306, 336-341
 spheres of - 220, 314, 323
                                                Shannon, Claude E. 18, 24, 27
 typology of - 256, 315, 352
                                                Shaumyan, Sebastian, K. 15, 16, 35
semiosphere/biosemiosphere/semio-
                                                Shepherd, David 108, 346
    biosphere 75-87, 132-135, 193-198,
                                                Shintani, Laura A. M. 225
    248-254, 300-308, 334
                                                Sidgwick, Henry 143
    see also biosphere
                                                sign,
semiotics
                                                 doctrine of -s vi, xv-xviii, 22, 66, 67, 68,
                                                    70, 87, 165-170, 178-188, 195-198, 248,
 a new geneology of - 136-138
 bio- vii, xv-xxii, 17-20, 49-52, 124,
                                                    258, 303-305, 311-316, 334-335, 350,
    194-199, 212, 254-259, 276-280,
                                                     353, 354
                                                 prolegomena for a theory of -s 269-270
    302-312, 324, 354
 branches of - 39, 271, 275, 307, 323-324
                                                 - s about signs vii-viii, 269-272
 cognitive - 183, 345
                                                 - and meaning xv, xxi, 4, 11, 123, 125, 139,
 communication -/signification - 25, 255,
                                                    140, 141, 210, 236
    305, 323-324
                                                 - and structure xix, 14-19, 23-48,
 critical - v-vii, xviii-xix, 3-12, 25, 94, 130,
                                                     206-208, 271-287
    136, 215, 293, 305, 314, 320, 327, 322,
                                                 - and values v-vii, xviii-xxii, 3-12, 76-83,
    333, 334, 340
                                                    123, 127-131, 271-281, 292-295,
 decodification/code and message/equal
                                                    334-337, 341, 345
    exchange - vi, vii, 3-5, 14-17, 24-33,
                                                 -/signal 20, 29, 32, 33, 45, 81, 126, 134,
    40-43, 303-317, 336, 354
                                                    179, 211, 243, 277
 future perfect of - 336-344
                                                 - residue 206, 291, 292, 337
 global - vi-vii, 9-12, 20-23, 65-66,
                                                 - triads vi, xix, 10, 25, 28-31, 68, 96, 101,
    269-271, 277-282, 300-318, 319-324,
                                                    115, 126-128, 131, 181, 210-211
    325-333, 335-336, 338-341, 345, 350,
                                                 typology of -s 89
    353-355
                                                 verbal and nonverbal -s 15-16, 21-22, 30,
 interpretation - vi-vii, 3-5, 7, 25-27, 31,
                                                    41-43, 54-58, 70, 78, 81, 85-86,
    33, 39, 171, 199, 290, 301-305
                                                    111-120, 285-292, 322-330
 meta- 70, 161, 340
                                                signifiant/signifié 6-7, 16, 27-28, 33, 60,
 - and global communication 322-326
                                                    66, 172, 178, 228, 246, 273, 292-293
 - and globalization xxii
                                                significance xix, 7-12, 123-136, 159-165,
 - and responsibility 332-336
                                                    180-183, 208-220, 275-280, 332-333
 - and translation 300-320
                                                    see also meaning, sense
 - as metasemiosis xviii, 22, 186, 196, 197,
                                                signification xix, 8-10, 127-131, 140-141,
    198, 247, 257, 259, 264, 270, 306, 330,
                                                    292-295
    339, 340
                                                significs xix, xx, 9-12, 123-128, 131-133,
 - of culture 15-27, 308-309
                                                    139-148, 345-349
 special - 326-327, 333
                                                 - and semioethics 123-124
                                                 - and the Signific Movement in the
sense
                                                    Netherlands 346, 348, 349
 actual - (or theme, M. M. Bakhtin) 33, 165,
    181-183, 194, 200, 210, 237, 238, 240,
                                                 - and theory of meaning 9, 126, 131, 139,
    277
                                                    167, 179, 331, 348
```

```
    as philosophy of interpretation/

    significance/translation 123, 127, 132,
    180
silence xix, xx, 6, 110-120, 148, 164, 174,
    244, 245, 348
 signs of - 111-120
 - and listening 117-120
 - and understanding 111-113
 typology of - 114-116
similarity 21, 51, 60, 69, 74, 82, 90, 93-110,
    116-117, 141-142, 190-194, 227-229
Skinner, Burrhus F. 38, 91, 270
Smart, Benjamin H. 10
Sobrero, Alberto 150
Socrates 320-321
Solimini, Maria 212
speech
 common - xi, xii, xvi, 6, 35-37, 40, 88, 113,
    148-152, 191, 201-203, 219, 242, 246,
    282-285, 287-290, 296-297, 354
 - and plurilingualism 206-208
Spencer, Herbert 126
Stalin, Joseph 158
Stalinism 6, 158, 213, 215-216, 220, 222,
Steiner, George 37, 200, 211
Stirner, Max 73
Stout, George F. 126, 128, 348
structuralism vi, xix, 14-18, 20, 22-46,
    31-32, 35-46, 50-58, 92, 107, 128, 215,
    222, 287, 290
 critical - 35-38
 methodologic - 43-45
 ontologic - 43-45
 - and binarism ix, 25, 27, 31, 33, 38, 383
 - and biosemiotics vii, ix, xv, xvi, xvii, xxi,
    xxii, 17, 49, 124, 195, 212, 256, 276, 302,
    308-309, 325, 355, 362, 364, 366-367,
    373, 375, 382-383
 - and dialogism ix, x, xi, xii, xx, 6-7, 19-23,
    31-33, 73-76, 83-86, 119-120, 131, 134-
    135, 158-160, 170-173, 237-239, 242,
    263, 278, 300, 319, 330, 333, 335, 348
structure 23-30
    see also structuralism
subjectivity 70-75, 82, 89-90, 133, 311, 312
    see also Ident, subject
```

symbolicity xix, 31, 69, 74, 83, 84, 96, 99, 100, 102, 115, 116, 141, 190, 229, 236, 238, 300, 319 symptom vii, 255, 343 see also semioethics symptomatology v, vii, xix, 278-280, 309, 322-336, 337-341, 343, 345, 350 synechism 9, 20, 67-71, 76, 246, 334-335 syntactics xviii, 21, 22, 30, 34, 35, 39, 40, 48, 51, 196, 271-273, 277, 340, 350

Tabakowska, Elzbieta 227 Tasca, Norma Backes 354 task of the translator 319-322 terminology 124-127 terminus ad quem 88,91 terminus ad quo 88,91 text 25, 160-161, 171-174, 227, 233-236, 247 see also intertextuality theme (E. Husserl) 104-106 Thibault, Paul J. 24, 25, 29, 31, 32, 273 thirdness 31, 67, 98, 100, 115, 117, 229, 245, 271 see also firstness, secondness Thom, René 18, 45, 308 Threadgold, Terry 263, 352 Tihanov, Galin 346 Todorov, Tzvetan 7 tolerance/intolerance 103, 321, 331, 344 Tönnies, Ferdinand 126 Toporov, Vladimir N. 15, 21 Torop, Peeter vii, xxi, 181, 195, transduction 256 translatability/untranslatability 200-207, 209-211, 217-218, 240-247, 304-305, translatant/translated 86-87, 226, 233, 236, 238-239, 242-244, 246 translation v-vii, 85-87,130-135, 178-188, 189-212, 226-243, 254-268, 300-320 paradox of - 226-227, 230-233 semioethic turn in - studies 211-219 - and biosemiosis 254-258 - and dialogism 226-227

- and ideology 211-219

- and linguistic work 259-264

- and the properly human 183-187 voluntarism 220, 222-224 - typology of - 259 see also humanism/antihumanism, triadism 31-32, 38, 67-69, 96, 128 existentialism, Marxism see also binarism Vrba, Elizabeth 197, 318 Trubetzkov, Nikolaj 14 Vygotsky, Lev S. 173 truth 5-6, 12, 56-58, 65, 107, 109, 151, 153-157, 162-165, 172, 180, 189, 192, 210 Walras, Leon 5, 292 tyche 67 Watson, John B. 166 Watt, W.C. 302 Uexküll, Jakob von xv-xviii, 18-22, 49, 255-256, 302, 308, 311, 312 Weaver, Warren 18, 24, 27 Uexküll, Thure von 18, 255, 256, 302 Wiener, Norbert 24 Ullmann, Stephen 273 Welby, Victoria vi, xix, xx, 4, 8, 9-11, 25, 61, Umiker-Sebeok, Jean 116, 354 65, 69-74, 76-85, 88, 90, 109, 115, 118, Umwelt xvi, xvii, xxi, 18, 22, 49, 104, 195, 123-137, 139, 140-142, 143-150, 152, 198, 311, 322 156, 158, 159, 162-170, 172-174, 179, understanding/misunderstanding xix, 180-183, 185, 189-193, 204, 209, 139-140, 146, 155, 156, 180-181, 204, 210-211, 220, 222, 238-239, 258, 278, 244, 272, 296, 349 282-283, 293, 296-297, 320, 330-331, responsive - xix, 35, 48, 77-80, 92, 103, 335, 337, 345-349, 352, 355 178-183, 199-200 Wells, H. G. 126 unfinalizability/finalizability 159, 192, 220 Whorf, Benjamin Lee 200, 201, 208, 211, 217, Uspenskij, Boris 15, 308 218, 297 utterance 91-94, 114, 117, 119, 120, 141-143, Williams, Raymond 282 145, 159-161, 166, 170, 172-176, Wittgenstein, Ludwig 61, 95, 143, 190-192, 179–183, 185, 191, 198, 200, 237–240, 207, 208, 237, 283, 284, 288 242-243, 245, 246 Wood, Ellen 325 work vagueness and generality 80-81, 141-142, dream- 317 154-156 interpretive - 7, 39, 168, 174, 286, 317 Vailati, Giovanni 10, 25, 61, 124-126, 131, linguistic/non-linguistic - 168, 174, 141, 144, 146, 147, 158, 222, 258, 283, 248-259, 285-287 284, 295, 296, 313, 345, 348, 352, 353 writer 171-172 Valéry, Paul 234, 235 see also indirect speaking Valesio, Paolo 116 writing 20-22, 51-52, 80-82, 128, 130, 145, value, see sign and -246-247 Varela, Francisco J. 18, 21 see also language, modelling Vaughan, Genevieve 282, 351 Vautier, Bénédicte 346 Vernadsky, Vladimir 306 Yates, Eugene F. 195 Vico, Giambattista 37, 53, 61, 257, 258 visible/invisible 95-97, 109-110 Voloshinov, Valentin N. 6, 7, 15, 33, 134, Zaliznjak Andrej A. 21 Zbinden, Karine 181 158–161, 165–169, 171, 181, 182, 202, Zeno of Elea 57, 231, 232, 233-234 208, 210, 237-239, 293, 346