**STRUCTURE AND STRUCTURALISM
IN PHILOSOPHY OF LANGUAGE AND SEMIOTICS**
by Susan Petrilli

Abstract

Structuralism covers a broad range of different tendencies in different disciplines over the entire twentieth century. The term *structuralism* is plurivocal: it is used for different trends from a variety of different scientific fields and may even diverge on the theoretical and methodological levels. This essay examines some of the main trends in structuralism not only in linguistics, but beyond in other areas of research on language and signs, including philosophy of language through to latest developments in semiotics, and most recently biosemiotics. A critical approach to structuralism is proposed for the development of critical structuralism involving such problematics as Marxian proto-structuralism; the intersemiotic transposition of semiotic approaches to linguistic and socio-cultural structures; ontological structuralism and methodological structuralism; the human being as a semiotic animal and a structuralist animal.

Le structuralisme couvre un large éventail de tendances différentes dans les différentes disciplines pendant le XXᵉ siècle. Le terme structuralisme est plurivoque: se réfère à des orientations différentes de différents domaines scientifiques, même sur le plan théorique et méthodologique. Cet article examine quelques-unes des principales tendances du structuralisme, non seulement en linguistique, mais aussi dans d'autres domaines de la recherche sur le langage et les signes, y compris la philosophie du langage et les développements les plus récents dans la sémiotique et la biosémiotique. Ce qui est suggéré est une approche critique du structuralisme, qui vise à développer une critique du structuralism portant sur des questions telles que le proto-structuralisme de Marx, la transposition intersémiotique des approches sémiotiques à les structures linguistiques et socio-culturelles, le structuralisme ontologique et méthodologique, la rèflexion sur l'être humain comme un animal sémiotique et structuraliste.

Lo strutturalismo copre una vasta gamma di tendenze diverse nelle diverse discipline nell'ambito del XX secolo. Il termine strutturalismo è plurivoco: si riferisce a orientamenti diversi di diversi settori scientifici, con divergenze anche sul piano teorico e metodologico. Questo saggio prende in esame alcune delle principali tendenze dello strutturalismo, non solo nell'ambito della linguistica, ma anche in altri settori della ricerca sul linguaggio e sui segni, tra cui la filosofia del linguaggio, fino agli sviluppi più recenti della semiotica e della biosemiotica. Ciò che si propone è un approccio critico allo strutturalismo, mirando a uno sviluppo della critica strutturalista che coinvolge problematiche quali il proto-strutturalismo di Marx, la trasposizione intersemiotica di approcci semiotici alle strutture linguistiche e socio-culturali, lo strutturalismo

ontologico e quello metodologico, la considerazione dell'essere umano come animale semiotico e animale strutturalista.

1. *Worldviews and structuralism*

Approaches to structure and structuralism can be differentiated on the basis of worldview, whether explicit or implicit. The focus may either be on structures and the world they belong to, or the conditions of possibility of the *already-made-world* with its regional ontologies (Husserl). This is necessary for critical analysis and alternative planning. The task recalls Husserl's *constitutive phenomenology* (1948). Husserl reconstructs operations that lead to the constitution of the existing world, thereby investigating the *human modeling capacity* not only in terms of factuality, reality and history, but also possibility. Unlike other animals, the human animal can construct infinite possible worlds, real or imaginary, concrete or fantastic, and not just a single effective world (Sebeok 1991b: 49–58).

The structure-world relation is conditioned in semiotics by two main trends: *de-codification* and *interpretation*. Different approaches to structure are either connected to *code semiotics* or *interpretation semiotics*.

Code semiotics alludes to a general sign model according to which messages are formulated and exchanged on the basis of a code fixed antecedently to sign use. The code is based on biunivocal correspondences between *signifiant* (*signifier)* and *signifié* (*signified)* and calls for message decodification without the risks of interpretation. In addition to *langue*/*parole*, *signifiant*/*signifié*, other dichotomies involved in the Saussurean sign model include diachrony/synchrony, syntagmatic axis/paradigmatic axis.

The fact of resorting or not to the notion of *code* distinguishes one approach to structure from another. This ambivalent semiotic notion denotes: 1) a preestablished set of rules for decodification; and 2) *meaning-making* potential.

In the first case, communication is conceived as information transmission from sender to receiver, encoded and decoded on the basis of a common code (P. Thibault, "Code", in Bouissac 1998: 125). The code is neutral, immune to interpretation, functional to communication of a message conceived as though it were a package transiting from one post-office to another. As anticipated, this model is connected to a questionable interpretation of Saussure's (1916) dichotomy between the system of language (*langue*) and individual use (*parole*) of that system, on one hand,

and to first generation research in information theory (Shannon and Weaver 1949) and cybernetics (Wiener, Ashby), on the other. The latter led to a limited interpretation of Saussure's sign model and its reformulation in terms of *code*/*message*, *emitter*/*receiver*. This explains why the Saussurean model thus (mis)understood is connected with *code* semiotics (Bonfantini 1981; Rossi-Landi 1968), being a trend which strongly influenced the development of semiotics in the 1960s and 1970s (Petrilli and Ponzio 2007, 2008),

As meaning-making potential the code allows for given interpretive itineraries rather than others, for orientation toward certain types of meaning rather than others. The code is understood differently from the first model in terms of constitutive traits, grammar, potential value for meaning construction. Also, a dichotomous, biunivocal relation is not established with behavior. Representatives of this conception include Malinowski (1923), Bateson (1951) and Halliday (1984).

This description of the Saussurean model does not offer an adequate account of communication as clearly emerges in the light of Peirce's *interpretation semiotics* and Bakhtin's philosophy of language (Ponzio 1990: 251–273), and of social-cultural transformations tending toward new signifying practices intolerant of polarization between code and message. These practices put the hegemony of the code and of the centripetal forces of language into crisis with respect to multi-voicedness and multi-availability of the sign. Meaning is inseparable from translation in interpretive processes; for that matter signs do not exist without another sign acting as interpretant (Peirce).

The trend that highlights structure connected with a code and a mechanistic conception of the communication system loses ground with the transition from code semiotics (also known as *communication semiotics*) to interpretation semiotics. This transition is connected to Peirce's semiotics which was rediscovered, so to say, during the first half of the 1970s (Eco 1975). But in Italy, Vailati (a major exponent of Italian pragmatism) was already familiar with Peirce thanks to Welby. Transition from code semiotics to interpretation semiotics is *semiology* merging into Peircean *semiotics*, which led Sebeok (1979: 61–83) to talk about "ecumenicalism in semiotics".

Eco's research evidences the code's role in the development of semiotics during the 1970s and Peirce's influence on transformation. His interest in Peirce can be traced 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 text; reformulation of the notions of *code* and *dictionary* in terms of *encyclopedia*; *unlimited semiosis* and the *limits of interpretation*. Eco revisits the question of the *open work* (1962) in terms of *unlimited semiosis* (1990; Eco et al. 1992),

he supersedes so-called Saussurean semiology, critiques *ontological* structuralism (Eco 1968), rejects the binarism of code and message, and focuses on the Peircean notions of *Dynamical Object* and *Ground* (1997). Already in 1976 he made the following statement: "I want to make explicitly clear that my present approach has to be labeled *Peircist*" (quoted from Sebeok, "Foreword", in Capozzi 1997: xiii).

A code governs information transmission from source to destination. But a code only does not guarantee signification. This is because a connection cannot be established between 1) a set of signals ruled by internal combination restrictions, and 3) a set of possible behavioral responses from the destination, without 2) a notion from a set of notions about the world which becomes communicative content. Systems 1), 2), and 3) are *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 1975: 38). Eco associates the Hjelmslevian and structuralist approach with Peirce's theory of interpretation (see Posner et al. 1997, 2: 2314; Bouissac 1998: 222).

2. *Structure and interpretive process*

Structure is not an a-priori with respect to semiosis, and semiosis cannot be reduced to codification and decodification. Structure cannot be separated from the process of semiosis, that is, from interpretation (e.g., Peirce's triadic structure of sign, or of argument).

As Sebeok observes, the Peircean description (*CP* 5.473) of semiosis or sign action conceived as an irreducibly triadic process or relation (sign, object, and interpretant) focuses on the interpretant. It concerns "what is involved in understanding, or teleonomic (i.e., goal-directed) interpretation of the sign" (Sebeok 2001: 17). In other words, 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.

According to Peirce the term *representation* was inadequate to indicate the general character of the sign. Sign processes should be described in terms of *mediation* (*CP* 4.3), they presuppose interpretation. Rather than *represent* the object directly to the interpretant, the sign *stands for* the object through mediation by the interpretant. The semiosic function is best described in terms of *mediation* (interpretation) rather than of *representation.* While the formula *aliquid stat pro aliquo* describes the sign relation in dyadic terms, Peirce's definition evidences the irreducibly triadic structure of the sign and places the condition for theorizing the movement of

renvoi and deferral that characterizes it. Sebeok emphasizes this aspect of Peirce's analysis of sign structures and relations (1979: viii).

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 analyzes the implications of this description: "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); "A sign is only a sign *in actu* by virtue of its receiving an interpretation, i.e., by virtue of its determining another sign of the same object" (*CP* 5.569). *Semiosis* considered from the viewpoint of the interpretant, of interpretive sign activity, of inference based on signs is described in terms of *interpretation*. All "signs require at least two *Quasi-minds;* a *Quasi-utterer* and a *Quasi-interpreter*" (*CP* 4.551). Activities that engender and interpret signs, that is, *expression* and *interpretation*, describe two faces of the same mental process.

The Peircean semiotic model is today gaining consensus over (Saussurean) semiological structuralism and its correlate mechanistic approach to communication (analyzed in terms of codification and decodification), extending its influence from philosophy and the language sciences to the human sciences generally (Petrilli 2010, 2012). However, this does not mean that the mechanistic model has stopped influencing communication theory.

Different conceptions of structure in code and interpretation semiotics transcend opposition between binarism and triadism which, in fact, is not in itself a criterion of distinction.

The Saussurean/Hjelmslevian/Greimasian approach to semiotics, on one hand, and the Peircean, on the other, are not two factions siding either with binarism or with triadism. The problem is not opposition between binarism and triadism, but the difference between a sign model that tends toward oversimplification with respect to the complexities of semiosis and a model like Peirce's which accounts for different aspects of the same processes. The limit of structuralism of Saussurean derivation is not binarism in itself, but in the fact that binarism finds expression in the concept of equal exchange between signifier and signified, in reduction of complex sign life to the dichotomy between code and message, of signhood to signality.

The interpretant relative to the signal or signality is the *identification interpretant*. In verbal signs the identification interpretant: a) allows for recognition of phonemic or graphic contour; b) identifies semantic content (*immediate interpretant* in Peirce's terminology; *meaning* vs *theme* in Bakhtin-Voloshinov's); c) identifies morphological and syntactic configuration. The relation of the identification interpretant to the interpreted is univocal and

predetermined by a code, as in signals. *But the signal component of the verbal sign does not characterize it structurally as a sign*. A structural description of the verbal sign limited to such aspects does not account for its specificity as a sign. Like all other signs, except for signals in *strictu sensu*, the verbal sign contains but is not reduced to signality (Petrilli and Ponzio 2005).

Therefore, validity of Peircean triadism is not given by triadic form, but by its specific contents – categories, sign typologies, dynamics of a sign model based on deferral from one interpretant to another. The categories of *firstness*, *secondness* and *thirdness*, the triad representamen, object and interpretant, characterization of sign on the basis of the triple tendency toward symbolicity, indexicality and iconicity all delineate and support a conception of semiosis that features otherness and dialogism.

Peircean logic is dialogic and polylogic. But the merit is not the triadic formula. Proof is Hegel's dialectics where triadism abstracts from the constitutive dialogism of life and produces unilinear and monologic dialectics. In the entry "Binarism", Hegelian philosophy is described as a means to superseding binary opposition in Lévi-Strauss's structuralism (see Bouissac 1998: 81). This is rather bizarre to say the least!

In his 1970-71 notebooks, Bakhtin describes Hegelian dialectics as transforming dialogic relations into abstract concepts, judgements, and stances associated with a single and solitary consciousness. The process consists in taking out the voices (division of voices) from dialogue, eliminating any (personal/emotional) intonations, and transforming live words into abstract concepts and judgments. Dialectics is achieved in the form of a single abstract and monologic consciousness. Peirce took a stand against the constitutive sclerosis of Hegelian dialectics, the expression of the search for a conclusion, oriented unilaterally toward a synthesis without the possibility of opening to the other and discordance (Bonfantini et al. 2006; Ponzio 2004c, 2006).

3. Structure and the distinction between genotype and phenotype in language analysis. Chomsky, Shaumyan and Rossi-Landi

Like Saussurean structuralism, the Chomskyian approach is also dichotomous (competence/performance, surface/deep structure, innate rules/experience). But, once again, the limit of Chomsky's approach is not the choice of binarism. His structuralist theory of generative grammar studies rules governing transformation from *deep structures* to *surface structures* (1965). This distinction and the other between *nuclear* and *non-nuclear sentences* (1957) are connected to a conception of language and

knowledge that needs to be questioned, and to an equally questionable method of analysis (Ponzio 2004).

The limits of Chomskyan linguistics emerge clearly in the light of a Peircean and Morrisian approach to sign studies. Chomsky sees no alternative to vulgar linguistic behaviorism (e.g. Skinner's), beyond appealing to rationalistic philosophy of the XVIIth century and taking sides with mentalism and innatism. That the Chomskyan conception of language remains tied to the classical alternatives, consciousness/experience, rationalism/empiricism has had negative consequences for language theory, even in relation to such a specialized branch as syntax (Ponzio 2011, 2012).

Chomsky's approach is alien to Kantian critique as much as to Husserl, Peirce, Cassirer, Merleau-Ponty, Morris. Unlike Chomsky's dichotomy between linguistic competence and experience, modern conceptions after Kant describe experience in terms of interpretive operations, *abductive* inferential processes included. According to this approach, experience converges with interpretive operations and, consequently, is innovative and qualitatively superior with respect to input. After all, experience converges with competence. What Chomsky (1986) baptized *Plato's problem* (how overall competence derives from limited linguistic experience) is a consequence of the false dichotomy between competence and experience and ensuing conception of experience as a passive state of the subject (Ponzio 1973, new ed. 2006).

According to Morris *syntactics* is connected to *semantics* and *pragmatics*, unlike Chomsky who, like Carnap, separates it from semantics and pragmatics. Chomsky speaks of *syntax* which he distinguishes from phonology beyond semantics. In truth, in linguistics (see "Syntactics" in Posner et al. 1997–2004, 1: 14–82) and in accord with Morris's description of the three branches of semiotics (syntactics, semantics and pragmatics), phonology and syntax (in *strictu sensu*) of natural language must all be considered as part of *syntactics*.

Posner distinguishes among three aspects of syntactics present in Morris (1971: 13–31): syntactics[1] which covers the formal aspects of signs; syntactics[2], relations of signs; syntactics[3], how signs combine to form complex signs (Posner et al. 1997–2004, 1: 14). A branch of syntactics[3] which studies combination rules for complex signs is the study of combination rules in a sign system called "string code". An example of syntactics[3] is Chomsky's transformation rules from *deep structures* to *surface structures*.

But Chomsky confuses levels of analysis. He mistakes the level of description of the objects of analysis for the level of construction of the models of analysis. Unlike Rossi-Landi's (1961) *methodics of common*

speech or Shaumyan's (1965) bigradual theory of generative grammar, Chomsky's generative structuralism is a unigradual structural theory. In other words, Chomsky fails to distinguish between the *genotypical* (ideal) *level* and the *phenotypical* (empirical) *level* of structures. His error is no different from that of Oxonian analytical philosophy. Representatives of analytical philosophy claim to describe ordinary, daily, or colloquial *language in general.* In reality, they describe the characteristics of a given natural language, English. Confusion between two levels of language, the general and abstract, on one hand, and the concrete level of a given language at a certain moment in historical development, on the other, is recurrent – and not only in Oxonian philosophy or in more recent language analyses inspired by it.

Chomskyan generative grammar also mistakes the specific characteristics of a specific language – again English – for the universal structures of human language. Untranslatability of sentences used to exemplify his analyses is symptomatic. The structuralist transformational model proposed by Chomsky confuses elements that in reality belong to two different degrees of abstraction: ideal language and natural language.

Chomskyan theory of linguistic structure denies the interpretive character of the syntactic component of linguistic competence, limiting interpretation to the semantic components. Chomsky separates *generation* (which concerns relations between *deep structures* and *surface structures)* from *interpretation.* He privileges syntax which he considers as an *unfounded* fundamental, an a-priori conceived in terms of innatism, exempting it from interpretation and from the dialogic relation between interpreted and interpretant (Ponzio 2004a: 42–44). Chomskyan grammar with its methodologic suppositions and dualism between competence and experience, deep structures and surface structures, does not exemplify syntactics[3] as understood by Posner or Morris.

Ponzio proposes a structural interpretive linguistic theory that *generates* (in Chomsky's sense) an utterance in relation to another utterance that interprets it, that acts as its interpretant. All utterances are engendered, that is, produced, identified and characterized by interpretants.

The interpretant of a *sentence* (the dead cell of a linguistic system) or *utterance* (the live cell of discourse) is not a deep structure grounded in underlying elementary sequences, but another verbal sign. An interpretant identifying an utterance or any verbal sign whatever is *unexpressed* until the conditions are realized for its explication. The *identification interpretant* identifies the verbal sign's: a) phonemic or graphic configuration; b) semantic content; and c) morphological and syntactic features.

The three structural dimensions of semiosis (syntactical, semantical, pragmatical) cannot be separated. This means that the interpretant

engendered by an utterance is not only an identification interpretant, but also an *answering comprehension interpretant.* The latter is focused on the pragmatical dimension of signs, without which it is difficult (if not impossible) to even just recognize the sign at the levels described. Just as syntactics is present in all aspects of signs (Morris), meaning (i.e., the relation between interpreted and interpretant) is also present at the level of identification of the units composing words, phrases, utterances and texts.

As anticipated, a fundamental limit evidenced by Shaumyan in Chomsky's transformational model is that it confuses elements which in fact belong to two different degrees of abstraction, ideal and natural language: Chomsky's model cannot be applied to a natural language different from that elected for his description, English. This led Shaumyan to contrast his own bigradual theory of generative grammar to Chomsky's unigradual theory: differently from Chomsky, Shaumyan distinguishes between two levels of abstraction, genotypic language and phenotypic language.

With his pioneering book of 1961, *Significato, comunicazione e parlare commune* (which anticipates Shaumyan's book of 1965 on dynamical linguistics), Rossi-Land too proposes a bigradual theory of language. He introduces the concept of *common speech* for operations carried out through speech and essential to successful communication independently from complications arising in concrete reality. The assumption subtending this concept is that beyond all historical and geographical differences, there exist basic similarities in the biological and social structure of all human communities.

Common speech explains linguistic difference, variety and multiplicity in terms of the variety in expedients, solutions, and resources that characterize each single language and that serve to satisfy the social needs of expression and communication common to all languages. No doubt, nothing is ever complete and definitive given that language is in continuous development and transformation. By contrast with 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 Steiner (1975) indicated as "the enigma of Babel", that is, diversity and multiplicity among languages. Rossi-Landi's *common speech* does not imply mythical unity at the origin of all languages, even less unity of the human species by natural law. Common speech proposes a model: it refers to real processes but is a theoretical construction and not a *immediate* description of real processes.

Unlike the concept of ordinary language developed by analytical philosophers and the notions of competence and generative grammar proposed by Chomsky, common speech has an interpretive function that can

be applied to different languages. Common speech proposes a general model to *explain* linguistic usage and not just *describe* it and as such is applicable to all languages. Linguistic usage is not subtended by something mentalistic or ontologically pre-existent to natural languages: Rossi-Landi's model is an interpretive hypothesis which aims to explain real linguistic phenomena. In other words, Rossi-Landi explains the structural features of concrete linguistic usage in a given natural language (phenotypic level) in terms of his common speech hypothesis (genotypic 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 commune*, Rossi-Landi excludes any claim to a science of sign behavior of the biopsychological or sociological orders, nor does he claim to compete with glottologist and their analytical and historical work on different languages. The common speech hypothesis is not a general theory or doctrine of the cognitive speculative order. It aims at offering a structural background and explaining language. Nor does a focus on the a-priori in language mean to adopt a deductive aprioristic approach. On the contrary, Rossi-Landi develops a *hypothetical-deductive*, that is, *abductive* method, his *methodics of common speech*. He aims to explain the language-related event on the basis of hypotheses concerning the general conditions that make that event possible.

53

4. *Structuralism and critique of the social*

From the perspective of philosophy of language, a structuralist approach focused on the general conditions that make meaning and communication possible is "*critical structuralism*". *Possible* is understood in Kant's sense as referring to the *a-priori* in language, the conditions that make given facts possible, rather than merely describe them. Rossi-Landi's research on structures common to different natural languages which make them possible is emblematic.

In his description *common speech* has a *methodic function*. *Common speech* evidences how language functions, identifying operations inevitably involved when we speak. Rossi-Landi's investigation is inspired by Kantian transcendental logic, which he reformulates in relation to the study of verbal language. At the same time, common speech theory supersedes Kant with its focus on the transcendental character of language, which Kant left aside. Rossi-Landi recovers Kant through Cassirer, 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).

This approach recalls the notion of "*innere Sprachform*", which Cassirer borrowed from Humboldt, and is connected with language conceived as *energheia* rather than product, as *ergon*. Rossi-Landi critiques Chomsky's Cartesian linguistics which is not free of the classical alternatives consciousness/experience and rationalism/empiricism. Chomsky ignored Kantian critique which superseded both abstract rationalism and abstract empiricism.

Peirce's semiotics is connected to Kantian philosophy and is explicitly anti-Cartesian. Peirce proposes a "New list of categories" (*CP* 1.545–559), reinterpreting the a-priori and the transcendental in linguistic and semiotic terms. He refuses the rationalism/empiricism dichotomy as unfruitful and abstract (*CP* 5.215–263, *CP* 5.264–317). Rossi-Landi also critiques generic opposition of idealism to empiricism and application of the logico-linguistic approach to the study of signifying structures in historical processes. He appreciates Vico's historicism (1976) which he implements in his critique of the Cartesian model. Insofar as it is based on the notions of evidence and deduction, the latter cannot be applied to the historical or "human" sciences.

Marx's "proto-structuralist" analysis of economic relations also deserves mention, French Marxist structuralism aside (Althusser, Godelier, Sebag). The study of communication is pivotal in his critique of political economy. Marx analyzes commodities thematizing the language of commodities and the commodity's arcanum (*Capital*, I). He critiques the fetishistic view of political economy which views the relation among commodities as a natural relation among things, rather than as a specific type of relation among social individuals. He studies the structure of commodities as messages not only at the level of exchange but also of production. 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, that is, as a message. To keep account of such issues means that economics can be considered as part of semiotics (Rossi-Landi 1975). No doubt Marx's approach can be described as semiotic (Ponzio 1990: 174–188), or better *cryptosemiotic.*

The structure of the market responds to the economic structure of human relations, which are relations of social production. The Marxian approach to structure is exemplary for semiotics. What Marx achieved in his analysis of commodities and capital can be achieved in anthroposemiotics: identification of the structure of relations among human individuals instead of relations among things and individuals reduced to the status of things. The semiotic approach allows for appropriate use of the notions of structure and superstructure in a Marxist framework. Difficulty in the study of relations

between structure and superstructure often derives from failing to consider the mediating element in these relations, that is, the totality 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 ideological elaboration of the superstructure must be added *sign systems* (Rossi-Landi 1985). From the viewpoint of semiotics, the structures of nonverbal communication (e.g. those pertaining to the circulation of commodities) and the structures of verbal communication are structures in the circulation of messages: different structures in the same communication process: "*Man communicates with his whole social organization* (Rossi-Landi 1968, Eng. trans.: 67).

All cultural phenomena are communicative phenomena based on sign structures and systems. Human nonverbal communication is part of a whole, which includes verbal communication. A cultural fact is understood as a message organized via sign systems. Therefore, a general theory of society coincides with general semiotics (Eco 1968). To study one sign system is useful to study another, considering that what one studies is essentially the same thing, i.e., homological structures. Whether a question of verbal or nonverbal messages semiotics addresses the same problems – the work that produces them and makes communication possible.

Lévi-Strauss (1958a) applied the categories of linguistics to the rules of matrimony and kinship systems. In other words, he applied categories elaborated in the study of verbal communication to the study of nonverbal communication, with which he made a truly formidable contribution to cultural anthropology.

Rossi-Landi (1968) experimented the opposite procedure: he applied categories elaborated in the study of nonverbal communication sign structures, the categories of economics in its classical phase of development (with Ricardo and Marx) to verbal language. However, the difference between Lévi-Strauss's approach and Rossi-Landi's is substantial and is the difference between *ontologic structuralism* (Lévi-Strauss) – criticized by Eco in *La struttura assente* (1968) – and *methodologic structuralism* (Rossi-Landi).

Lévi-Strauss's reasoning is questionable when he applies the categories of verbal language to nonverbal communication in the name of "recurrent hymns to the *esprit humain*", appealing to a universal unconscious activity, to universal structures of the *esprit humain.* He refers to a combinatory principle subtending all codes, an elementary mechanism grounded in the human mind. Therefore, the universe of social relations, myths, and language becomes the stage for a game played behind our backs, which does not involve us as responsible agents. On this account human individuals do not determine their own relations but *are related*

passively according to universal laws and structures which they obey automatically.

Instead, Rossi-Landi recognizes human beings as the concrete subjects of history, the responsible agents of culture and communicative systems which led to his thesis of the *homology* between verbal and nonverbal communication. Linguistic and nonlinguistic work are placed on the same level (Rossi-Landi 1968, Eng. trans.: 36). A global semiotic approach addresses human beings as *homo loquens* and *homo laborans*, recognizing that they are constructed historically with the production of instruments and artefacts, verbal and non-verbal. *Methodological structuralism* is connected to the homological method and formulation of a unitary definition of the human being as an animal that speaks and works, two modes of social behavior described as homologous.

The homology between material and linguistic production throws new light on the concept of double articulation in language (Martinet 1960). Transition from articulation of sentences into words and monemes, to articulation of monemes into phonemes evidences the dual orientation of the processes of linguistic production (Rossi-Landi 1968, Eng. trans.: 119–121, 158–158). Speakers carry out linguistic work – phylogenetically and ontogenetically – proceeding from sounds that are initially disarticulate to articulate words, phrases and sentences of increasing complexity.

The structural theory of double articulation assumes that language is a formal machine, while neglecting experience and the needs of linguistic behavior. It also neglects the problem of the generation of meaning and use of sentences, limiting itself to a description of their constituent parts. When sentences are analyzed or *ordered* (Martinet) into words and monemes and monemes into phonemes, nothing is said about semantic content 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. Nothing is said about the human operations that produce semantic content. The work of analyzing sentences into words and monemes, and monemes into phonemes is abstract analytical work. However, analysis must not lose sight of the concrete social linguistic work which produces these "pieces", nor of the overall machinery they belong to as, instead, the linguists tend to do. Abstract analytical work must not be mistaken for the concrete social linguistic work which produces languages and which continues when we speak, when we use the materials, instruments and models of linguistic capital.

An interdisciplinary semiotic approach, intersemiotic translation of different approaches to social structures in different fields is favored by a *homological scheme for linguistic production* (Rossi-Landi 1968, Eng. trans.: 118–152). Unlike double articulation theory the latter is potentially

interdisciplinary because it is intentionally *predisciplinary*. To refer to a pre-categorial level with respect to the categorial *already-made-world* means 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 developed.

5. *The semiotic animal is also a structuralist animal*

A scientific approach studies a world that is in constant movement and transformation, formulating laws and hypotheses about it. These can be formulated on the basis of the constants, states of equilibrium, systematic and essential aspects present in the world. Equilibrium or stability (in nature and culture) uniquely concerns a system of elements relatively isolated from other systems, which exists objectively and constitutes a potential object of knowledge. Therefore, to know reality we must understand the laws of its dynamics and development as well as the structural laws of relatively isolated systems in a state of relative equilibrium. We need to study the structures of dynamics and the dynamics of structures. A global understanding of reality requires consideration of these two types of complementary law[1]. To study the (genetic, causal) laws of something's development means to understand the (coexistent, morphologic) laws of its structure. Knowledge of structure is just as essential as knowledge of the genesis and development of the objects under observation.

This is why knowledge of coexistential, morphologic laws is among the most ancient forms of knowledge in human history: it dates backs to when human beings learnt to differentiate among plants and animals, when they learnt to articulate reality on the basis of the capacity (acquired with practice) to recognize the coexistential traits of differentiation. As a semiotic animal the human being is also a *structuralist animal* (Schaff 1974). Structuralism is not only a trend among semioticians, but also among human individuals in everyday life insofar as they are human.

---

[1] In relation to the issues discussed in this paper it is important to signal the morphodynamic structuralist tradition featuring René Thom and Jean Petitot. This particular trend has made an important contribution to a deeper understanding the role of morphologies in the development and dynamics of structures (see, e.g., Thom 1972;

Petitot 1985). However, I can only signal these aspects of the topic under discussion in the present paper given space limitations, reserving myself for closer examination in my ongoing research.

References

MIKHAIL M. BAKHTIN
"From Notes Made in 1970-71." Eng. trans. in M. Bakhtin 1986, 132-58.
1986 *Speech Genres & Other Late Essay*. Austin: Austin University of Texas Press, 1970–71.

GREGORY Bateson, J. Ruesch
Communication, New York: Norton and Company, 1951.

MASSIMO A. BONFANTINI
Le tre tendenze semiotiche del novecento, *Versus* 30: 273–294, 1981.

MASSIMO A. BONFANTINI, SUSAN PETRILLI, AUGUSTO PONZIO
Dialoghi semiotici, Naples: E.S.I., 2006.

PAUL BOUISSAC (ed.)
Encyclopedia of Semiotics, New York: Oxford University Press, 1998.

ROCCO CAPOZZI (ed.)
Reading Eco. An Anthology, Foreword T. Sebeok, Bloomington: Indiana
University Press, 1997.

RUDOLPH CARNAP
Philosophy and Logical Syntax, London: Kegan Paul, 1934.
Foundations of Logic and Mathematics, Chicago: University of Chicago Press, 1939.

NOAM Chomsky
Syntactic Structures, The Hague: Mouton, 1957.
Aspects of a Theory of Syntax, Cambridge (Mass.): MIT Press, 1965.
Knowledge of Language, New York: Praeger, 1986.

UMBERTO ECO
Opera aperta, Milan: Bompiani, new ed. 1976. *The Open Work*, Cambridge: Harvard University Press, 1989, 1962.
La struttura assente, Milan: Bompiani, new ed. 1980). [Absent Structure.], 1968.
Trattato di semiotica generale, Milan: Bompiani; *A Theory of Semiotics*, Bloomington: Indiana University Press, 1976, 1975.
I limiti dell'interpretazione, Milan: Bompiani; *The Limits of Interpretation*, Bloomington: Indiana University Press, 1990.
Kant e l'ornitorinco, Milan: Bompiani; *Kant and the Platypus*, New York: Harcourt Brace, 1999, 1997.

UMBERTO ECO, RICHARD RORTY, JONATHAN CULLER, CHRISTINE BROOKE-ROSE
Interpretation and Overinterpretation, ed. Stefan Collini, Cambridge: Cambridge University Press, 1992.

MICHAEL HALLIDAY
An Introduction to Functional Grammar, London: Edward Arnold, 1984.

EDMUND HUSSERL
Erfarung und Urteil, ed. L. Landgrebe, Praha: Akademia; *Experience and Judgment*, revised and ed. L. Landgrebe, Eng. trans. J. S. Churchill and K. Ameriks, Evanston: Northwestern University Press, 1973, 1948.

CLAUDE LEVI-STRAUSS
1958a   "The Structural Study of Myth," in *Myth. A Symposium*, ed. T. Sebeok, pp. 81–106, Bloomington: Indiana University Press.
1958b   *Anthropologie structurale*, Paris: Plon.

BRONISLAW MALINOWSKI
 "The Problem of Meaning in Primitive Languages," in C.K. Ogden and I.A. Richards 1923, pp. 296–336, 1923.

ANDRE' MARTINET
Éléments de linguistique générale, Paris: Colin, 1960.

KARL MARX
Capital, Vol. 1; Eng. trans. B. Fowkes, intro. E. Mandel, London: Penguin Books, 1976; Vol. 2, 1978; Vol. 3, Eng. trans. D. Fernbach, Intro. E. Mandel, London: Penguin Books, 1981 (in assoc. with New Left Review), 1976–1981.

CHARLES MORRIS
Writings on the General Theory of Signs, ed. T. Sebeok, The Hague: Mouton, 1971.

CHARLES K. OGDEN, & IVOR A. RICHARDS
The Meaning of Meaning, London: Harcourt Brace, 1923.

CHARLES S. PEIRCE
*Collected Papers,*Vols. I-VI, ed. C. Hartshorne, P. Weiss, A. W. Burks. Cambridge (Mass.): The Belknap Press, Harvard University Press. [*CP* followed by volume and paragraph number.], 1931–1958.

JEAN PETITOT
Morphogenèse du Sens. Paris: PUF, 1985.

SUSAN PETRILLI
Sign Crossroads in Global Perspective. Semioethics and Responsibility. New Brunswick: Transaction Publishers, 2010.
Expression and Interpretation in Language. New Brunswick: Transaction Publishers, 2012.

SUSAN PETRILLI, & AUGUSTO PONZIO
Semiotics Unbounded. Toronto: Toronto University Press, 2005.
Semiotics Today. From Global Semiotics to Semioethics. Ottawa: Legas, 2007.
Lineamenti di semiotica e di filosofia del linguaggio. Bari: Graphis, 2008.

AUGUSTO PONZIO
Man as a Sign. Berlin: Mouton de Gruyter, 1990.

Linguistica generale, scrittura letteraria e traduzione. Perugia: Guerra, 2nd ed. 2007, 2004a.

Semiotica e dialettica. Bari: Edizioni dal Sud, 2004b.

2006   *The Dialogic Nature of Sign*. Ottawa: Legas, 2006.

La filosofia del linguaggio. Segni, valori, ideologie. Bari: Giuseppe Laterza, 2011.

Linguística Chomskyana e ideologia social. Tradução & Apresentação de Carlos Alberto Farmaco. Curitiba, Paraná (Brazil): Editora UFPR, 2012.

ROLAND, POSNER, KLAUS ROBERING, & THOMAS A. SEBEOK (ed.)

Semiotik/Semiotics. 3 Vols., Berlin: Walter de Gruyter, 1997–2004.

FERRUCCIO ROSSI-LANDI

Significato, comunicazione e parlare comune. Padua: Marsilio, new ed. A. Ponzio, 2006, 1961.

Il linguaggio come lavoro e come mercato. Milan: Bompiani; new ed. A. Ponzio, 2003; *Language as Work and Trade*. South Had1ey (Mass.): Bergin and Garvey, 1983, 1968.

Linguistics and Economics. The Hague: Mouton; 2nd ed., 1977, 1975.

FERDINAND DE SAUSSURE

Cours de linguistique générale, eds. C. Bally and A. Sechaye. Paris: Payot; *Course in General Linguistics*, Eng. trans. W. Baskin, Intro. J. Culler. London: Peter Owen, 1959, 1974, 1916.

ADAM SCHAFF

Strukturalismus und Marxismus. Vienna: Europaverlag; *Structuralism and Marxism*. Oxford: Pergamon Press, 1974.

THOMAS A. Sebeok

The Sign & Its Masters. Texas: The University of Texas Press; It. trans. and Intro. S. Petrilli, pp. 15–21, *Il segno e i suoi maestri*, Bari: Adriatica, 1979.

A Sign Is Just a Sign. Bloomington: Indiana University Press; *A Sign is just a sign. La semiotica globale*, It. trans. and Intro,, 7–19, S. Petrilli. Milan: Spirali, 1998, 1991.

Global Semiotics. Bloomington: Indiana University Press, 2001.

CLAUDE SHANNON, WARREN WEAVER
The Mathematical Theory of Communication. Urbana: University of Illinois Press, 1949.

SEBASTION SHAUMYAN
Strukturnaja linguistica. Moscow: Nauka; *A Semiotic Theory of Language*, Bloomington: Indiana University Press, 1987, 1965.

GEORGE STEINER
After Babel. London: Oxford University Press, 1975
RENE' THOM
Stabilité Structurelle et Morphogénèse. Paris: Interéditions, 1972.

GIAMBATTISTA VICO
Principi di Scienza nuova, 3 Vols., ed. F. Nicolini. Turin: Einaudi, 1976.