Sara CANNIZZARO (London Metropolitan University [United Kingdom]) and Paul COBLEY (Middlesex University [United Kingdom])

Biosemiotics, politics and Th.A. Sebeok’s move from linguistics to semiotics

Abstract

This paper will focus on the political implications for the language sciences of Sebeok’s move from linguistics to a global semiotic perspective, a move that ultimately resulted in biosemiotics. The paper will seek to make more explicit the political bearing of a biosemiotic perspective in the language sciences and the human sciences in general. In particular, it will discuss the definition of *language* inherent in Sebeok’s project and the fundamental re-drawing of the grounds of linguistic debate heralded by Sebeok’s embrace of the concept of modelling. Thus far, the political co-ordinates of the biosemiotic project have not really been made explicit. This paper will therefore seek to outline

1. how biosemiotics enables us to reconfigure our understanding of the role of language in culture;

2. how exaptation is central to the evolution of language and communication, rather than adaptation;

3. how communication is the key issue in biosphere, rather than language, not just because communication includes language but because the language sciences often refer to language as if it were mere “chatter”, “tropes” and “figures of speech”;

4. how biosemiotics, despite its seeming “neutrality” arising from its transdisciplinarity, is thoroughly political;

5. how the failure to see the implications of the move from linguistics to semiotics arises from the fact that biosemiotics is devoid of old style politics, which is based on representation (devoid of experience) and “construction of [everything] in discourse” (which is grounded in linguistics, not communication study).

In contrast to the post-“linguistic turn” idea that the world is “constructed in discourse”, we will argue that biosemiotics entails a reconfiguration of the polis and, in particular, offers the chance to completely reconceptualise ideology.

Key-words: Th.A. Sebeok, linguistics, (bio)semiotics, politics

1. The role of language in culture

Although Thomas A. Sebeok played a central role in propelling international study of communication in the 1950s, his career before his sojourn studying animal communication at Stanford was focused mainly on linguistics and the ethnographic study of language[1]. His study of language (singular) as a general phenomenon was based on solid fieldwork in immense quantity on languages (plural). Sebeok repeatedly defined himself as “a biologist manqué”[2] and even suggests that he “became a professional linguist and, alas forever, a geneticist manqué”[3]. *Perspectives on Zoosemiotics*, the book which collects the post-1964 watershed works on animal communication is dedicated to the geneticist who taught Sebeok at Chicago, Joseph J. Schwab. However, the figure who haunts its earlier pages is Roman Jakobson, Sebeok’s one-time mentor who bequeathed the idea of “distinctive features” as “universal building blocks of language”[4]. Sebeok, at this stage in his career, clearly considered distinctive features the “most concretely and substantively realized”[5] part of general linguistic theory. In this way, then, Sebeok’s thinking on linguistics followed the orthodoxy of the time, in thrall to the “language myth”[6] in which linguistic communication is seen to be embodied in basic coded elements quasi-independent of human interaction[7]. Yet, even in the post-1964 essays re-printed in *Perspectives* he notes that the “phylogeny of distinctive features […] has clearly not yet progressed beyond mere speculation”[8], thus opening biosemiotic questions even while engaging in the customary closure of communicational questions characteristic of that period in institutional linguistics.

Ultimately, Sebeok’s project was to lead to the fundamental re-drawing of the grounds of linguistics through his embrace of the concept of modelling. A small part of this project was inspired by the Chomskyan revolution in language study from mid-century. Yet while this revolution morphed into a further variant of the “language myth”, particularly in its spawning of cognitivism[9], Sebeok embedded language in the much broader frame of semiotics, revealing language to be a modelling process whose origins and ramifications were to be found far beyond the utilizing of coded elements. That modelling was central to Sebeok’s semiotics after his rediscovery of Jakob von Uexküll in the mid-1970s and that this effectively forged the field of biosemiotics is well known. What is less discussed but will be considered in what follows is the massive political shift that this development heralded.

2. Communication as adaptation vs. language as exaptation

But firstly, let us consider what Sebeok’s notion of modelling entails. Taking his cue from the Tartu-Moscow notion of modelling system, and Juri Lotman’s model of the semiosphere, Sebeok proposed a reconfiguration[10] of the “Primary Modelling System” that can be argued to constitute a core distinctive paradigmatic feature of biosemiotics. In reconfiguring the pre-existing notion of modelling system Sebeok suggested that (what was once called) “Soviet semiotics”[11] did not sufficiently take into account how humans could communicate and build “cultures” well before mastering externalised verbal signs. Primary modelling, evident in humans since *Homo habilis* circa three million years ago, preceded and is the basis of the verbal encoding and decoding that developed with *Homo sapiens* (around 300,000 years ago). In the previous millennia communication had been carried out among humans by exclusively nonverbal communication; verbal communication, speech and writing – syntax-based linear communication or externalised verbal communication – were exapted[12] as opposed to adapted. Human modelling as such is unique among animals because it features both nonverbal and verbal communication[13] or, as Terrence W. Deacon[14] puts it, we are “apes plus language”. Early humans’ possession of a mute verbal modelling device featuring a basic capacity for syntax allowed humans to assemble standardised tools but circumstances had not yet arisen whereby it was expeditious or hominids were in agreement to encode communication in articulate linear speech[15]. Thus, for Sebeok, there are sign systems (nonverbal communication) which in terms of evolution are antecedent to, and give rise to, externalised linguistic sign systems. Nonverbal communication is recognised by Sebeok as an adaptive communicational capacity possessed by all living beings[16]. It is, in fact, only hominids across the whole animal kingdom that possess two mutually sustaining repertoires of signs: the zoosemiotic nonverbal and the anthroposemiotic verbal[17].

The perspectives of the erstwhile “Soviet Semiotics”, which put verbal language at the basis of all communications and of the organisation of culture, was at risk of both glottocentrism and anthropomorphism. In light of the recognition that there is communication prior to verbal language, Sebeok recast Tartu-Moscow notion of modelling systems and observed that (verbal language) “is the modelling system the Soviet scholars call primary but which, in truth, is phylogenetically as well as ontogenetically secondary to the nonverbal”[18]. Thus, according to Sebeok, “natural language” or the primary modelling system is not verbal language, but is a cognitive capacity manifested in “nonverbal communication” through chemical, thermal, olfactory, acoustic and visual means. In humans, such primary modelling existed, phylogenetically, alongside the cognitive capacity manifested in the production of externalised verbal signs (secondary modelling system). However, it was not until *Homo sapiens* that such signs (secondary modelling systems) were routinely circulated.

To grasp this point, it is necessary to move back further, as Sebeok does, beyond the period of “Soviet semiotics”, to the work of the theoretical biologist, J. von Uexküll. Signs, as well as what makes up signs, constitute what Uexküll[19] has called an *Umwelt*. The theory of *Umwelt* posits that all species live in a “world” that is constructed out of their own signs, the latter being the result of their own sign-making and receiving capacities. A fly, for example, has a much different sensory apparatus for making / receiving signs than does the human. Beyond those capacities of semiosis (sign action) there is a world, the “real” one, in a sense, which cannot be reached. Yet, while it is true that within a species’ *Umwelt* there are all manner of possibilities of illusion – through misinterpretation of signs, through overlooking of signs and through signs not being 100% adequate representations of reality – the testimony that an *Umwelt* is a fairly good guide to reality is offered by the survival of the species within a given *Umwelt*. Semiotics is the study of comparative *Umwelten*[20] and, as such, must be concerned with animal and plant communication whilst principally attending to the human *Umwelt* which is characterised by what Sebeok called “language” – not linguistic communication but the innate and phylogenetically developed “modelling” device mentioned above.

It is in this that Sebeok develops what is probably the core proposition of biosemiotics: that the primordial and overarching form of communication is nonverbal[21]. Nonverbal communication characterizes all life, including a large part of human life. Although humans also utilize verbal communication, nonverbal communication is implicitly overlooked in many realms of human endeavour. In fact, as we signalled above, Sebeok holds that natural language “evolved as an adaptation; whereas speech developed out of language as a derivative exaptation”[22]. That is, while the primary modelling system (refigured by Sebeok), sustaining nonverbal communication and driven by the increased brain size and differentiation capacity had a palpable survival function, the development of the secondary modelling system was not a necessary survival mechanism. Primary modelling, argued Sebeok, “has been built by selection for the cognitive function of modelling and, as the philosopher Popper and the linguist Chomsky have likewise insisted, not at all for the message-swapping function of communication”[23]. Hypothetically, hominids might have continued communication by nonverbal means for many more millennia; yet they began to utilize their capacity for differentiation along with their evolved vocal apparatus to produce verbal communication, little knowing that the much later developments of speech and cheirography would generate oral narratives forging communities and written scripts facilitating agriculture and economics.

Exaptation, here and also as Stephen J. Gould and Elisabeth S. Vrba discussed it, demonstrates that one should not assume that the current utility of a biological phenomenon is a result of natural selection. An exaptation may be desirable and potentially an enhancement of the capacity for survival; but that does not necessarily entail that it is indispensable for survival, nor that the phenomenon in question is the product of natural selection. As Davide Weible shows[24], *exaptation* has become a useful term for scholars in biosemiotics. Yet, what exaptation demonstrates most strikingly in respect of human evolution is that the phenomenon often central to definitions of humanity – language – is, in the verbal forms that have provided the foundation for communication and culture, only beneficial in evolutionary terms at one remove or more, or even, perhaps, in various cases, not beneficial at all. The communicational forms that are often taken for granted in the human *Umwelt* and, sometimes, have been assumed to be the only portal through which humans can grasp life, are, in this account, merely the veneer of anthroposemiosis.

3. Transdisciplinarity as apparent “neutrality”

Moving the focus on semiosis from the level of signs circulating in the polis to those circulating in comparative *Umwelten* in the way that we propose might be seen as a gesture towards the apolitical, a gesture that is ultimately reactionary since it is a denial of the politicization of signs. Yet nothing could be further from the truth. Contemporary semiotics, in its transdisciplinarity, has no pretentions to “neutrality”.

A lesson is offered from history. In addition to his work in cybernetics and communication theory during the 1950s, as well as his inauguration of semiotics for the present era beginning with his editing of the *Approaches to Semiotics* volume in 1964, Sebeok also disseminated the transdisciplinary approach that was characteristic of Tartu-Moscow semiotics as a whole[25]. However, the Tartu-Moscow School was grounded in the interdisciplinary developments of 1950s and 60s Soviet academia which were, in turn, influenced by cybernetics; thus, it seems that biosemiotics, in building on Tartu-Moscow semiotics’ transdisciplinarity, automatically inherits cybernetics’ transdisciplinarity[26]. Historically, transdisciplinarity did become putatively aligned with “neutrality”. Maxim Waldstein claims that due to its closeness to mathematical sciences, cybernetics appealed to Soviet scholars as an “ideology-free” and thus neutral language. This is because cybernetics was believed to aid the clear formulation of problems and thus could have favoured the reception and expansion of structural linguistics. Arguably then, cybernetics was being “marketed” as the “maths of the humanities”, particularly in light of it being underwritten, as previously shown, by instances of mathematical modelling. For example, such a “rhetoric of exactness” is found in Warren McCulloch and Walter Pitts’ theory of formal neural networks which postulates that “any functioning [of a system] which can be defined in its entirety logically, strictly and unambiguously in a finite number of words, can also be realised by such formal neural networks”[27]; that is, anything that can be put into a question with words can be solved. As Waldstein contends, this impetus towards exactness and the “ideological neutrality” that is indigenous to cybernetics constituted a point of appeal for the semiotics developed during Soviet times in that it promised to be “a recipe for transformation of linguistics and other human sciences into ‘true sciences’”[28]. This is because such a promise was directly in opposition to Stalinist thinking which impeded scientific discovery. As Laurent Schwartz usefully illustrates: “In physics […] such fields as quantum physics were sometimes condemned as anti-Marxist, and in biology all progress was rendered practically impossible for twenty-five years because of Lysenko”[29], who was a member of the USSR academy of sciences who championed the non-Darwinian theory that within species there is no overpopulation nor struggle for survival. He affirmed that a progressive biological science would be indebted not to Darwin but to Lenin and Stalin[30]. On the other hand, “under Stalin, mathematics was probably more secure than other branches of science, doubtless because it is less accessible”[31]. Hence, the reason why academics in the humanities fixated on mathematical models: they were representative of theory that was not accessible to the majority, even intellectually. In fact, in 1964 the term *secondary modelling system* (notably, *modelling* is a mathematical term) was used as an euphemism for *semiotics* because the very term *semiotics* became quasi-prohibited by scientific state officials[32].

In other words, one may argue that the early “alliance” of Soviet academia with cybernetics can be seen as the beginning of a process of de-Stalinisation of knowledge, which is the core of what was later dubbed Eurocommunism, or “the vast process of change involving the left everywhere in the world – that of de-Stalinisation”[33]. In fact, as Carl Boggs and David Plotke argue, Eurocommunism presents itself as a political formation that sets out to transcend the failures of the past through, amongst other things, involvement in political struggles that take place within institutions and a principled support of social and political pluralism[34] much like that which “Soviet” academics were trying to achieve. Additionally, Massimo L. Salvadori[35] argues that the core basis of Western European Communist parties (the Eurocommunists) was a desire for autonomy from the [Stalinist] USSR and the adhesion to principles of democracy. Hence one may argue that Soviet academia’s desire for autonomy and its pursuit of “scientific neutrality” through mathematical models could be seen as a precedent for Eurocommunism, or its historical context.

Yet, of course, one can see how such a “neutral” view was an ideological – in this case, anti-Stalinist – position in itself. Hence, as a prefigurement of neutrality and transdisciplinary applicability that was in itself fundamentally political, cybernetics is said to have favoured (in Soviet academia, but arguably also in West-European countries) the birth of semiotics as a science aimed at the study of “any sign system in human society”[36]. The universal model of applicability proposed by cybernetics, or its transdisciplinary character, was thus assimilated into the “Soviet Semiotics” project as illustrated by Daniel Peri Lucid[37]. The recognition that cybernetics had a strong influence on the birth of Tartu-Moscow semiotics is important because this division of semiotics was then co-opted by biosemiotics, through the elaboration of Lotman’s work on modelling[38] and semiosphere[39]. In this respect, an awareness of Soviet semiotic interest in cybernetics constitutes the historical and disciplinary basis for understanding, conceiving and relaunching a new biosemiotic and transdisciplinary polis, for however contradictory this expression might sound.

The transdisciplinarity of contemporary semiotics after Sebeok is a curious phenomenon. It stems, in part, from the acutely political attempt to carry out research in a “neutral” frame under a repressive regime. Yet, the broadening of semiotics is also a political move in a much more general sense. Discovering that semiosis is politically charged in the polis is one thing; but conveniently forgetting that semiosis occurs and is built on the development of signs in realms far beyond the polis is considerably more “apolitical” and reactionary than attempting to assume a supposedly “neutral” transdisciplinary vantage point. It is the equivalent of mapping some of the co-ordinates within the dark cupboard under the stairs of a vast mansion and proclaiming “We’re now able to know the house”.

4. Old polis: Representation and the construction of [everything] in discourse

Biosemiotics’ ranging across the whole of semiosis – animal and plant – has been in distinct contrast with the powerful idea, developed in the last forty years, that many of the determinants of human life are “constructed in discourse”. The “linguistic turn” in social thought, inaugurated by Richard Rorty’s 1967 collection[40], has been influential in areas of knowledge where the volume is seldom if ever cited. More important still, perhaps, and arguably more nebulous, has been the work of structuralism and poststructuralism and their basis in a philosophy of the sign derived from Ferdinand de Saussure that is often critiqued but infrequently rejected altogether. This has been elaborated upon, disseminated through the human sciences in the West and almost naturalized in Francophone academia from the 1950s onwards and from the late 1960s onwards in the Anglophone world. One subject area in which this perspective has held sway is the one in which both authors of the current article work: media, communications and cultural studies.

The idea of the world “constructed in discourse” has underpinned much of the study of the media which is concerned with the key issue of “representation”. Introduced in its recognizable form by, among others, Roland Barthes in *Mythologies*[41], representation has occupied a privileged role in signification, even in its variant of representation through code[42], and generally neglects the pragmatic / subjective aspect of sign processes. For example Stuart Hall[43] claims that “the meaning is not in the object, person or thing, nor is it in the word… The meaning is constructed by the system of representation”. One can immediately see that this approach privileges representation over other aspects of signification, as if construction of meaning excluded emotional, physiological and environmental constraints or its actual context of use. Hence one may argue that Hall’s view tends to worry about the “text in principle” rather than the “text in practice”. Even the tedious ideological debate[44] about the active or passive status of readers or media audiences which was conceived in the 1980s as a solution to the orthodoxy embedded in approaches to representation, misses the point. It ignores the fact that representation certainly influences the process of signification but it is very far from being the sole player in signification, or the only factor responsible for the construction of meaning.

More redolent, still, of a linguistic perspective, in *Mythologies*[45]Barthes introduces the concept of myth; that is, a linguistic epiphenomenon amounting to a collective representation of reality which, in his view, is not a reflection of reality itself but a reflection of culture. In other words, myths are responsible for making “culture” pass as “nature” or for turning “the social, the cultural, the ideological, the historical into the ‘natural’”[46]. For example, in discussing the myth of the Romans in films, Barthes states that “in Mankiewicz’s Julius Caesar, all the characters are wearing fringes. Some have them curly, some straggly, some tufted, some oily, all of them well combed, and the bald are not admitted, although there are plenty in Roman history”[47]. In short, Barthes underlines the discrepancy between fiction (Romans with a fringe) and reality (Romans who must have suffered hair loss and thus no fringe). In “Myth today”, the final theory-based essay of *Mythologies*, Barthes uses Louis Hjelmslev in order to turn this amusing but simple observation into a complex linguistic argument, invoking different levels of form, substance, plane of expression and plane of content in the act of representation.

Barthes claims that “myth hides nothing and flaunts nothing: it distorts; myth is neither a lie nor a confession: it is an inflection”[48]. Yet he constantly proposes the idea that the representation of reality as elicited by myths is false: “The […] sign, the fringe of Roman-ness […] reveals a degraded spectacle, which is equally afraid of simple reality and of total artifice. For although it is a good thing if a spectacle is created to make the world more explicit, it is both reprehensible and deceitful to confuse the sign with what is signified”[49].

Barthes’ worry is that viewers of Joseph L. Mankiewicz’ s movie will inevitably confuse the false Romans (with the fringe) with the real Romans (who may have not had the fringe). Through the concept of myth, Barthes takes complexity away from signification and turns it into a typical formal logic problem in which the analyst’s job is to determine the True or False aspect of a final proposition (in this case, the cultural proposition elicited in representation i.e. that Romans with fringes is a false statement). In so doing, Barthes reduces the whole process of signification solely to its representational aspect, a view that subsists merely “at the surface level” of analysis[50]. This perspective, not just prevalent but naturalised in media studies, reduces signification to representation. It singularly fails to address the question of why audiences / readers / human beings willingly and persistently allow themselves to “get fooled” in watching movies that present false Romans or characters or settings that are equally fictitious. Nor can the question simply be answered by quasi-ethnographic audience study. It needs to be addressed by broadening, or even abandoning, the current linguistically-based concept of representation.

It is hardly surprising that the “representational” perspective ultimately finds itself in a cul-de-sac. It is glottocentric and therefore fails to take account of humans as thoroughly semiotic entities within a vast environment of (non-human) semiosis. Based on linguistics, it can only posit a very limited version of the sign, one which is mired in the vicissitudes of linguistic communication, chatter and figures of speech which make up the loose, common understanding of “language”. When one thinks of the sign in its full complexity – as semiotics does, but other fields do not have the time to do adequately – a different picture emerges. This fact is exemplified especially in the work of the American philosopher, John Deely, whose intellectual lineage can be traced back through the work of Sebeok and Uexküll through the Catholic thinker, Jacques Maritain, Charles Sanders Peirce, and to the *Tractatus* of Joao Poinsot, Aquinas and, ultimately the Stoics and Epicureans. For Deely, following Poinsot, signs are a matter of “relation” – not, as the representational perspective would have it, some entity standing in for some other entity from which it is different. For Poinsot and, later, for Peirce, the sign needs to be understood as the entire relation of its constituents. What is frequently considered the sign – the “relation” between some ground and some terminus – was discovered by the Latin thinkers to be false because it excluded the very awareness of sign functioning that distinguishes humans from other animals. The real relation that constitutes the sign consists of ground, terminus and “relation” as a triad. Furthermore, Poinsot delineates the functions of signs in relation to objects. As such, the relation of representation must differ from that of signification simply because an object can represent another and also represent itself. A sign is only a sign of something if that something is other than the sign[51]. Lastly, Poinsot emphasized that the relation in a sign is not so much suprasubjective as contextual: in one set of circumstances the relation in a sign could be of the order of ens reale (mind independent), in another set it could be of ens rationis (mind dependent)[52].

“Representation” assumes that human semiosis is mind-dependent (*ens rationis*), constantly preventing humans from gaining anything other than a tantalising glimpse of the mind-independent (*ens reale*) universe. Yet, as Deely is at pains to stress in the wake of Poinsot, the sign fluctuates between both forms of dependency according to context. One might add that implicit in the contextuality of the sign is the sharing of some parts of signhood across the world of humans, other animals and plants, the variegation of semiosis being so extensive that “representation” does not really come close to capturing it. Deely writes, initially with reference to St. Thomas,

So the levels of dependency in being are complete, from the most tenuous of pure relations to the fullness of the divine being, with the twist that, according to Aquinas, the inner life of God consists in a community of persons each of which is a pure relation, but now relations themselves subsisting! It is an astonishing picture, much more interesting and intricate, actually, than anything dreamed of in modern philosophy, bogged down as it became in the technical detail necessary to try to maintain at all costs the facade of representations blocking our access to the order of ens reale, our development of knowledge of the things-in-themselves, things in the subjective constitution according to which they exist and interact among themselves and with our bodies[53].

Ultimately, Deely[54] concludes that “the social construction of reality, no doubt, occurs in the political order” and that “reality” “as we experience it is neither purely objective [in the sense of things experienced as objects in an *Umwelt*] nor purely subjective nor purely intersubjective, but rather a constantly shifting mixture and proportion of all three not at all easy (perhaps not even fully possible) to keep complete track of”. As a statement about semiosis aligned with the biosemiotic idea of *Umwelt*, this demonstrates how biosemiotics does not really partake of the old style of politics based on linguistics and envisaging power in the masking of reality with illusion. Rather, it proceeds from humans’ suspension in a universe of changing relations, sometimes “illusory”, sometimes “real”; sometimes reliable enough to preserve members of a species, sometimes not. Such fluctuation and change entails that humans are not forever barred from reality, as the theory of representation insists; nor are they able to easily access the road to reality as adopting the theory of representation seems to imply. Rather, humans are charged with the task of enacting a semiotic awareness appropriate to the vagaries of relation. These changing relations, in the world of humans, have often been investigated by theories of ideology.

5. New polis: Ideology as the lived biosemiotic relationship to existence

As adumbrated above, Barthes’ concern was with the discovery of the power relations hidden in texts through representation; in other words, with ideology. The concept was especially taken up in media and cultural studies in the wake of Louis Althusser’s “Ideology and ideological state apparatuses”[55]. Arguably, though, insufficient attention has been paid to some of the complexities of signhood in this landmark essay and, consequently, approaches in media and cultural studies which advocate the falsity of representation[56] fall victim to one problem in Althusser’s statements, specifically that “ideology” “represents the imaginary relationship of individuals to their real conditions of existence”[57]. As Kevin McDonnell and Kevin Robins[58] convincingly contend, this aspect of Althusser’s argument is vitiated by the idea of falsity implied in ideology: “It reduces ideology to mere false consciousness. […] Ideology is no false consciousness, because it duplicates a concrete reality, one that really does exist, one that imposes itself on the texture of everyday life. […] Nor is ideology, in this conception, immaterial, a mere epiphenomenon; it is an illusion, but one that is ‘the most efficacious reality, the spell that holds the world bewitched’ (Adorno)”.

This statement of the importance of the “imaginary”, with its Lacanian overtones, has been seized too readily by many from a representational perspective. For example, in media and cultural studies John Fiske argues[59] that when confronted with popular texts, which are supposedly high in ideological content, one can choose whether to produce “a preferred reading according to the dominant code”, a “negotiated reading”, or a “radically opposed reading”[60]. Clearly, it is important, as Fiske argues, that through the act of reading one can rebel against the repression exercised through ideology by (what Althusser calls) the ideological state apparatuses, in the very fact that readership implies “subjectivity” and activity (rather than passivity). Yet, the choices offered are rather too mechanical: very ideological, quite ideological, anti-ideological. It is easy to see why the renewed idea of “ideology as false consciousness” was readily taken up in media studies with Althusser as a cover – it provided the means to theorise a heroic reader who was not only capable of “resisting” or opposing ideologies (like Barthes’ reader) but was also totally in control of his cognitive capacities and was free to choose whether to accept or resist ideological propositions.

However, a more careful reading of Althusser’s essay, reveals a fact that rather undermines this position: that is, that the subjectivity implied in readership, does not exist prior to ideology, but is constituted by it. Famously, Althusser explains this point by positing a hypothetical situation in which, a policeman (representing the ideological state apparatus) shouts at a passer-by: “You, for whom I have shed this drop of my blood” / “Hey, you there!” The passer-by is then compelled to pay attention to, and reply, upon turning around: “Yes, it’s me!” This vignette illustrates how the ideological state apparatus (the policeman) constitutes the subject, the individual whose identity (it’s me! – self-recognition) has emerged at the same time in which the ideological act (the shout) was perpetrated. Impinging on the same example, Fiske argued – possibly following Michel Pêcheux[61] – that one can “resist” ideology in that “if you hear in the street a shout ‘Hey You!’, you can either turn in the belief that you are being addressed or you can ignore it… you thus reject the relationship implicit in the call”[62]. However, conceiving the reader as a form of active audience that is active by the very means of being capable of resisting ideology is a view flawed from the start, because it presupposes that the subject exists and is as such (i.e. an “active” reader) before its encounter with ideology. This is a contradiction, despite its pretention to be an exploitation of an Althusserian loophole. In Althusserian terms, ideology cannot be resisted in that it is constitutive. That is, there is no such thing as an “I” before the very call “You”, a perspective which is fully semiotic (subjectivity emerges out of relations of meaning) and that puts a heavy burden on the workings of “culture”, “nurture” and “ideology” to sustain selfhood.

Neglecting this fact amounts to a desire to take the most “convenient” aspect of Althusser’s Marxism (that authorities are repressive – the convenient aspect of this statement serving as a rationale for “response”, including “reader response”), and neglecting the less convenient, that is, that the human being’s subjectivity is not as unconstrained as such approaches would like to think. In contemporary semiotic terms, humans do not pre-exist semiosis and then struggle when they are somehow “inserted” into it. Nor are humans the conscious creators of semioses by which they can exercise control and power. In an *Umwelt*, as has been noted, humans inhabit from the start the very signs that their sensorium allows them to promulgate. Humans cannot “get outside” semiosis and control it; along with other living creatures, they are semiosis. This corresponds with the other plank of Althusser’s work on ideology: concrete reality as a lived relation. For Althusser[63], the imaginary and the lived are in a complex interplay: ideology

is a matter of the lived relation between men [sic] and their world. This relation, that only appears as “conscious” on condition that it is unconscious, in the same way only seems to be simple on condition that it is complex, that it is not a simple relation but a relation between relations, a second degree relation. In ideology men do indeed express, not the relation between them and their conditions of existence, but the way they live the relation between them and their conditions of existence: this presupposes both a real relation and an “imaginary”, “lived” relation. Ideology, then, is the expression of the relation between men and their “world”, that is, the (overdetermined) unity of the real relation and the imaginary relation between them and their real conditions of existence. In ideology the real relation is inevitably invested in the imaginary relation, a relation that expresses a will (conservative, conformist, reformist or revolutionary), a hope or a nostalgia, rather than describing a reality.

In this formulation there is an indication of the consonance of Althusser’s conception of ideology with the insistence of contemporary semiotics on the sign as always relation, but a relation oscillating between mind-dependent reality and mind-independent reality. Ultimately, Althusser’s “imaginary”, an idea that sustains the representational perspective, indicates a falling back on extraneous and confused speculations from Lacanian psychoanalysis in the hope that it will shore up a theory of subjectivity that will then complement the theory of ideology. Clearly, Althusser’s insight into ideology as both “lived” and a “relation” was groundbreaking, more so than the representational paradigm which grew out of the “imaginary” view of ideology; but a more consistent approach would focus on ideology, its instruments and its effects, in terms of that which constitutes them: human semiosis.

This bears upon the issue of representation and resistance. Ideology, like “information” cannot be “resisted” because it is not something that is transferred or forced upon humans; it is instead the relation of meaning that emerges when humans interact with real objects in a cultural, physiological and environmental context. These three contextual levels, and not just the cultural-linguistic one, all play a part in framing the way in which ideology is constituted. Ideology frequently showcases untruths, to be sure; but, from a semiotic standpoint, it is no more “false” than shouting out or laughing uncontrollably are “false”. The “linguistic turn”, along with the representational paradigm, has fostered the seemingly ineluctable impression that, for humans, ideology supervenes on a realm of mendacity and a realm of reality. Upheld by “language” as a representational medium, the realm of mendacity suffuses the polis, holding it in a firm grip which refracts all perception and only very occasionally gets broken in such a way that it allows humans to glimpse the real – i.e. social – relations that obtain within the polis alone. In semiotics, particularly after biosemiotics, humans inhabit a synthesis of their sensoria and their cognition, constantly negotiating mind-dependent and mind-independent relations.

Relying on linguistics as the basis of an understanding of how semiosis occurs, as well as for an assessment of sociality and what to do with problems that arise from sociality, not only occludes humans’ consanguinity with non-human inhabitants of this planet but also fails to address the complex edifice of human communication. Biosemiotics has had this edifice in its sights since being founded by Sebeok. Biosemiotics has sought to proceed, in a transdisciplinary mode, from a concept of semiosis as “global” and with its own contextual effectivities sustaining *Umwelten*, rather than assuming that signification can be graded according to measures of truth and falsity derived from cultural taxonomies. In short, biosemiotics’ reconfiguration of the polis consists of having bigger fish to fry than traditional political approaches that signal the tyrannies of language and pursue the representational paradigm. This is not a matter of biosemiotics simply drawing back and stating that local political struggles are somehow less significant than the bigger picture, as some advocates of environmental politics have done. Rather, it is a global view recognizing that every semiosis, local and quotidian, is subject to relation and is therefore the object of politics. Central to the representational view and, for Deely[64], the key impediment of modern thought, is the inability to arrive at a coherent distinction between mind-dependent and mind-independent being. Relations create a public sphere in which there is room for freedom, but there is also the possibility of reaching an understanding of nature, likewise through relations. The task for science and philosophy, then, is to sort out what belongs to the mind and what belongs to nature[65], an advanced act of modelling that falls to the human alone. Sebeok espoused through biosemiotics a new semiotics driven by the idea of modelling; whether he contemplated, in the terms outlined above, that he was inaugurating a radically new understanding of the polis, is not known. What is clear, however, is that the transdisciplinary project of biosemiotics heralds an opportunity to completely recapitulate politics, avoiding, this time, the blinkered representational stalemate borne of linguistic approaches’ parochialism.

References

ALTHUSSER Louis, 1969: *For Marx*. London: New Left Books.

―, 1971: “Ideology and ideological state apparatuses”, in L. Althusser, *Lenin and Philosophy and Other Essays*. London: New Left Books, pp. 121–176.

BARTHES Roland, 1957a [1973]: *Mythologies*. London: Paladin, 1973.

―, 1957b [1973]: “Myth today”, in Barthes 1957a [1973], pp. 109-29

―, 1957c [1973]: “The Romans in films”, in Barthes 1957a [1973], pp 26-28.

―, 1977: “Change the object itself”, in R. Barthes, *Image – Music – Text*. London: Fontana, pp. 165-169.

BIGNELL Jonathan, 1997: *Media Semiotics: An Introduction*. Manchester: Manchester University Press.

BOGGS Carl and David PLOTKE, 1980: “Introduction”, in C. Boggs and D. Plotke (eds.), *The Politics of Eurocommunism*. Montreal: Black Rose, pp. 5-12.

BRIER Søren, 2008: *Cybersemiotics: Why Information Is Not Enough!* Toronto: University of Toronto Press.

CHERNOV Igor, 1988: “Historical survey of Tartu-Moscow semiotic school”, in H. Broms and R. Kaufmann (eds.), *Semiotics of Culture. Proceedings of the 25th Symposium of the Tartu-Moscow School of Semiotics, Imatra, Finland, 27th-29th July 1987*. Helsinki: Arator Inc, pp. 7-16.

COBLEY Paul, 2006: “Myth”, in K. Brown (ed.), *Encyclopedia of Language and Linguistics*, vol. 8. Amsterdam and London: Elsevier, pp. 415-418.

―, 2010: “Introduction”, in P. Cobley (ed.), *The Routledge Companion to Semiotics*. London: Routledge, pp. 3-12.

―, 2013: “Semiotic models of communication”, in P. Cobley and P.J. Schulz (eds.), *Theories and Models of Communication* [Handbooks of Communication Science, vol. 1]. Berlin: Mouton de Gruyter, pp. 223-40

―, 2014: “Codes and coding: Sebeok’s zoosemiotics and the dismantling of the fixed-code fallacy”, *Semiotica*, 2014, 198, pp. 32-45.

DEACON Terrence W., 1997: *The Symbolic Species*. Harmondsworth: Penguin.

DEELY John, 2001: *The Four Ages of Understanding: The First Postmodern Survey of Philosophy from Ancient Times to the Turn of the 21st Century*. Toronto: University of Toronto Press.

―, 2009: *Purely Objective Reality*. Berlin: Mouton de Gruyter.

DYER Gillian, 1982 [1999]: “Semiotics and ideology”, in G. Dyer, *Advertising as Communication*. London: Routledge, 1999, pp. 91-109.

FISKE John, 1989: “Popular texts”, in J. Fiske, *Understanding Popular Culture*. London: Unwin Hyman, pp. 83-101.

―, 1990: “Ideology and meanings”, in J. Fiske, *Introduction to Communication Studies*. London: Routledge, pp. 156-179.

GOFFMAN Erving, 1979: *Gender Advertisements*. New York: Harper and Row.

GOULD Jay and Elisabeth S. VRBA, 1982: “Exaptation – A missing term in the science of form”, *Paleobiology*, 1982, 8.1, pp. 4-15.

HALL Stuart 1973: “Encoding and decoding in the television discourse”  *Centre for Contemporary Cultural Studies Stencilled Occasional Paper No. 7*. Birmingham: Centre for Contemporary Cultural Studies. Available from <http://www.birmingham.ac.uk/Documents/college-artslaw/history/cccs/stencilled-occasional-papers/1to8and11to24and38to48/SOP07.pdf> [Accessed on 19/02/2015].

HALL Stuart, 1980: “Encoding / decoding”, in S. Hall, D. Hobson, A. Lowe and P. Willis (eds.), *Culture, Media, Language*. London: Unwin Hyman, pp. 128-138.

―, 1997: “The work of representation”, in S. Hall (ed.), *Representation: Cultural Representations and Signifying Practices*. London – Thousand Oaks: Sage, pp. 13-74.

HARRIS Roy, 2008: *Mindboggling*. Luton: The Pantaneto Press.

HOFFMEYER Jesper, 1996: *Signs of Meaning in the Universe*. Bloomington: Indiana University Press.

JHALLY Sut, 1990: *The codes of advertising. Fetishism and the political economy of meaning in the consumer society*. New York and London: Routledge.

KULL Kalevi, 1998: “On semiosis, Umwelt and semiosphere”, *Semiotica*, 1998, 120.3-4, pp. 299-310.

LUCID Daniel Peri, 1977: *Soviet Semiotics: An Anthology*. Baltimore and London: Johns Hopkins University Press.

McDONNELL Kevin and Kevin ROBINS, 1980: “Marxist cultural theory: The Althusserian smokescreen”, in S. Clarke, T.Lovell, K. McDonnell, K. Robins and V. Jeleniewski(eds.), *One-Dimensional Marxism: Althusser and the Politics of Culture*. London: Allison and Busby, pp. 157-231.

NEUMANN John von, 1948 [1963]: “The general and logical theory of automata”, in A.H. Taub (ed.), *Collected Works*, vol. 5. New York – Paris: Pergamon Press, 1963, pp. 288-318.

PÊCHEUX Michel, 1982: *Language, Semantics and Ideology*. London: Macmillan.

RANDVIIR Anti, 2007: “On spatiality in Tartu-Moscow cultural semiotics: The semiotic subject”, *Sign Systems Studies*, 2007, 35.1-2, pp. 137-158.

RORTY Richard M. (ed.), 1967: *The Linguistic Turn: Essays in Philosophical Method with Two Retrospective Essays*. Chicago – London: University of Chicago Press.

ROSS George, 1980: “The PCF and the end of the Bolshevik dream”, in C. Boggs and D. Plotke (eds.), *The Politics of Eurocommunism*. Montreal: Black Rose, pp. 15-48.

SALVADORI Massimo L., 1978: *Eurocomunismo*. Torino: Giulio Einaudi.

SCHWARTZ Laurent, 1984: “Soviet anti-semitism and Jewish scientists”, in T. Freedman (ed.), *Anti-semitism in the Soviet Union: Its Roots and Consequences*. New York: Freedom Library Press of the anti-defamation league of B’ nai B’rith, pp. 179-185.

SEBEOK Thomas A., 1972: *Perspectives in Zoosemiotics* The Hague: Mouton.

―, 1981: “The ultimate enigma of ‘Clever Hans’: The union of nature and culture”, in Th.A. Sebeok and R. Rosenthal (eds.), *The Clever Hans Phenomenon: Communication with Horses, Whales, Dolphins, Apes and People*. New York: New York Academy of Sciences, pp. 199-205

―, 1991a: “Communication”, in Th.A. Sebeok, *A Sign Is Just a Sign. Advances in Semiotics*. Bloomington – London: Indiana University Press, pp. 22-35.

―, 1991b: “In what sense is language a ‘Primary Modeling System’?”, in Th.A. Sebeok, *A Sign Is Just a Sign. Advances in Semiotics*. Bloomington: Indiana University Press, pp.  49-58.

―, 2001a: “Introduction”, in Th.A. Sebeok, *Global Semiotics*. Bloomington – London: Indiana University Press, pp. 1-7

―, 2001b: “Nonverbal communication” in P. Cobley (ed.) *The Routledge Companion to Semiotics and Linguistics*.London: Routledge, pp. 14-27.

―, 2011 “Summing up : in Lieu of an Introduction”, in P. Cobley, J. Deely, K. Kull, S. Petrilli (eds.) *‘Semiotics Continues to Astonish’: Thomas A. Sebeok and the Doctrine of Signs.* Berlin: Mouton de Gruyter.

SEBEOK Thomas A. and Marcel DANESI, 2000: *The Forms of Meaning: Modeling Systems Theory and Semiotic Analysis*. Berlin: Mouton de Gruyter.

UEXKÜLL Jakob von, 2001a: “An introduction to Umwelt”, *Semiotica*, 2001, 134.1-4, pp. 111-123.

―, 2001b: “The new concept of Umwelt: A link between science and the humanities”, *Semiotica*, 2001, 134.1-4, pp. 107-110.

VESTERGAARD Torben and Kim SCHRØDER, 1985: *The Language of Advertising*. London: Basil Blackwell.

WALDSTEIN Maxim, 2008: “ Soviet Science and Academic Autonomy: The Structuralist

*Sturm und Drang* ”, in M. Waldstein, *Soviet Empire of Signs: A History of the Tartu School of Semiotics*. Saarbrücken: VDM Verlag, pp. 15-38.

WEIBLE Davide, 2012: “The concept of exaptation between biology and semiotics”, *International Journal of Signs and Semiotic Systems*, 2012, 2.1, pp. 72-87.

WILLIAMSON Judith, 1995 [2002]: *Decoding Advertisements: Ideology and Meaning in Advertising.* London: Marion Boyars, 2002.

[1] Sebeok 2001a.

[2] E.g., Sebeok 1991a, p. 9 and 2011 p. 457.

[3] Sebeok 1972, p. 2.

[4] *Ibid*., p. 86.

[5] *Ibid.*

[6] For example, the essays in Sebeok 1972.

[7] Cobley 2014.

[8] Sebeok 1972, p. 88.

[9] Harris 2008.

[10] Sebeok 1991b.

[11] Lucid 1977.

[12] Gould, Vrba 1982.

[13] Sebeok 1988 [1991].

[14] Deacon 1997, p. 5.

[15] Sebeok 1988 [1991] p. 55

[16] Sebeok 1981 and 1988.

[17] Sebeok 1991b, p. 55.

[18] *Ibid.*

[19] Uexküll 2001a and 2001b.

[20] Cobley 2010.

[21] Cf., especially, Sebeok 2001b.

[22] Sebeok 1991b, p. 56.

[23] *Ibid.*

[24] Weible 2012.

[25] Randviir 2007.

[26] Waldstein 2008, p. 17.

[27] McCulloch and Pitts, quoted in Neumann 1948 [1963, p. 309].

[28] Waldstein 2008, p. 18.

[29] Schwartz 1984, p. 179.

[30] *Ibid.*, p. 185.

[31] *Ibid.*, p. 179.

[32] Chernov 1988, p. 12.

[33] Ross 1980, p. 15.

[34] Boggs, Plotke 1980, p. 7.

[35] Salvadori 1978, p. xxv.

[36] Ivanov, quoted in Waldstein 2008, p. 20.

[37] Lucid 1977.

[38] Sebeok 1988; Sebeok, Danesi 2000.

[39] Kull 1998; Hoffmeyer 1996; Brier 2008.

[40] Cf. Rorty (ed.), 1967.

[41] Barthes 1957a [1973].

[42] Cobley 2013.

[43] Hall 1997, p. 21.

[44] Quoted by e.g. Fiske 1989, Bignell 1997.

[45] Barthes 1957a [1973].

[46] Barthes 1977, p. 165.

[47] Barthes 1957c [1973, p. 26].

[48] Barthes 1957b [1973, p. 129].

[49] Barthes 1957c [1973, p. 27]; italics ours.

[50] Cobley 2006, p. 417.

[51] Deely 2001.

[52] *Ibid.*, p. 729.

[53] Deely 2009, p. 115-116.

[54] *Ibid*., p. 116.

[55] Althusser 1971.

[56] E.g., Hall 1980; Dyer 1982 [1999]; Fiske 1989 and 1990; Goffman 1979; Jhally 1990; Vestergaard, Schrøder 1985; Williamson 1995 [2002]; Bignell 1997.

[57] Althusser 1971, p. 162.

[58] McDonnell, Robins 1980, p. 222.

[59] Following Hall 1973.  DONE

[60] Fiske 1990, p. 187.

[61] Pêcheux 1982.

[62] Fiske 1990, p. 175.

[63] Althusser 1969, p. 233.

[64] Deely 2009, p. 172.

[65] *Ibid.*