

SEMIOTICS, LOTMAN, PEIRCE AND YOU: CAN WE REALLY COMBINE SUCH DIFFERENT APPROACHES?

CJRH

ABSTRACT. Have you ever wondered what Lotmanian and Peircean semiotics have in common, but were too afraid to ask? Have you ever wondered what semiotics can actually do with either of them? The answer may surprise you (though probably not).

1. INTRODUCTION

The history of semiotics is something of a chimera. Robust at times, fickle at others, it combines a great deal of past aspirations and a less grandiose institutional situation. And like a chimera, it is a multiform beast that cannot be tamed. On one side we have a continental tradition stemming from French thinking, then we have an American tradition that sometimes gets resignified via Italian influence. And yet we have a couple of extra heads altogether, like the Soviet semiotics, current Cognitive semiotics and so on, sharing in the same body we currently call semiotics. But what do we do with all this? Do we all really belong to this one weird body? Are we, perhaps, more like a swarm organism? Gut bacteria inside a larger corpus of academic research? We will try to make some sense of this situation in the following paper as a means of introduction to two specific varieties of semiotics, the Peircean and the Lotmanian, with a focus on the current panorama of biosemiotics.

2. RECLAIMING HISTORY

The history of semiotics, as we just mentioned, is rather daunting. Its body sprawls across eras, but what we currently do is set in a more constrained territory. As such, the reclamation of a body of knowledge belonging to more traditional areas of philosophy is commonplace for semioticians, revisiting early medieval classics as a direct lineage of pre- or proto-semioticians. Now, this makes sense if we think of semiotics not as a specific label of cultural studies or something along those lines, but rather as a line of thinking that particularly compels philosophers who care about signification in a wide sense. After all, semiotics is a way of asking about signs, their nature, their usage and their reason. In that respect, a question that often remains underplayed is whether semiotics is a method or a point of view (Deely, 2009, 12). This question is as valid as any, and there are no straight

answers to it. One of the features of current semiotics is its plurality of options—perhaps begrudgingly so—, which means that the answer to this question will depend on what we take semiotics to be, however paradoxical that may sound. But in order to give a fair answer, it is important to look back at the roots of the study of signification. In order to keep things simple, we will stick to the more commonplace assumptions on what matters to current semiotics. With this in mind, the best place to look for is in Augustine’s work.¹ This is because Augustine has given us one of the earliest systematic accounts of signification and some pointers to pursue this line of research altogether. Beyond the point of religious doctrine, Augustine makes a clear case for the division between *things* and *signs*, and reveals to us plainly that “things are learnt by means of signs” (Augustine, 397, Book 1, 2.2), which may not seem to be the sharpest insight for us nowadays, but it holds enormous signification in how we build a theory of semiotics altogether. This can apply to how we understand metaphor, for instance, but also to how we deal with understanding things we see in nature.² Now, the reason to go this far back to understand whether semiotics is a method or a point of view (or, in other words, a cultural analysis technology or a philosophical perspective on perception or general semantics) is to set a point of communion between traditions. Augustine accepted a notion of *general* sign that saw both natural causation and words as representational to some degree.³ Accepting both as signs gives us a working theory of signification and opens up the way to develop technologies of analysis, as it is the case with Augustine’s religious exegesis. If anything, it is easy to agree that Augustine is a good source of academic inspiration for semiotic thought and a foundational point for answering our questions, and a point of encounter for ways of thinking about signs altogether across ages (Deely, 2001, 216). Let’s jump ahead quite a bit, keeping in mind that “there has been a constant attempt to find a common basis for the theory of linguistic meaning and for the theory of pictorial representation, and also for the theory of meaning and the theory of inference.” (Eco, 1984, 19)

Now, we will skip some of the reclaimed monuments of semiotic thought such as Poincaré and Locke to focus on the more recent common grounds for everyone interested in academic semiotics. Our excursion at this point is more of a way to look for a solid antecedent to answer our questions than to present an accurate historical background. So our next stop is already quite recent: the origins of the bifurcation between future branches of semiotics.

¹There are brief mentions to classical antiquity in the historiography of semiotics, better documented by Nöth (1995, 16–17), including Plato, Aristotle, the Epicureans, the Stoics, etc.

²This insight is not necessarily novel at that point in history, but the systematic presentation and depth of content in Augustine’s thought is what really makes it a landmark to reclaim for semiotics (Morrissey, 2010).

³*Signa naturalia* and *signa data* are divided between those that lack intention, such as smoke signifying fire, and those that are expressly shown to signify something else respectively (Jackson, 1969, 13).

3. A BREACH IN KNOWLEDGE

There is no denying that the academic tradition of semiotics in Europe started with Saussure. The fact, however, that it developed from linguistics instead of, say, epistemology, has some potential explanatory power in how semiology came to be. But let's backtrack again. The question we were really posing at the beginning was more in line with "what do we do with semiotics" rather than "where does semiotics begin." One thing to know is that we simply won't come up with a universal answer,⁴ but we can be aware of the different possibilities. In understanding how signification of some sort works, we make a theory of what a sign is and does. Saussure's idea of the sign may not be original, but rather a reformulation of an age-old intuition of representation, but it allows for an understanding of linguistic expressions in particular to the point that it can develop into a tool for text analysis. As we extend this particular point of reference, we open new doors towards cultural signification. Not only are we limited to observing that /tree/ has a specific relation to the representation of a tree, but we can open ourselves up to metaphors, and from that to specific meaningful relations beyond the linguistic.⁵ We can start analyzing cultural objects, fashion, street signs, etc. by simply pointing out, at its most basic, that you can grab some intentional element and state that it stands for something specific beyond the element itself. But what if your starting point is different? What if you do start from a more "epistemological" ground? That seems to be the case with Peirce's semiotics. Where on the one hand we had a language-based understanding of a wide range of significative practices, on the other hand we have a very different proposition on the relation of signification that starts with perception and mental representation. These are certainly not incompatible, but it's important to understand that they are, indeed, different:

Perhaps the most striking difference between Saussure's *semiology* and Peirce's *semeiotic* is that Saussure emphasized the role of the static *synchronic* system of signs (*langue*) and defined his signs as having the *dual* character of *signifiant* and *signifié* (i.e. signifier and signified). Saussure centered on social linguistic communication, i.e. how *individual* psychical meanings become *socially* shared and communicated through speech. Saussure's prototype for the concept of sign was *speech*, the uttered (and heard) phoneme, word, sentence, message [...].

Peirce's starting point, in turn, was human cognition or cognition in general (ability to learn and investigate), how and when the

⁴Such a position is, however, coherent with what has been called the *imperialism* of semiotics. We will try to avoid this point of view, however.

⁵And here we're evidently talking about Saussure's intuition on the reach of semiology as encompassing linguistics and more.

increase in knowledge is possible. For him, the prototype of a sign was a *thought*, a thought as a *representation*. (Vehkavaara, 2007, 260)

So with this in mind, we can see that the difference between both systems, so to speak, probably won't lead you down the same path. That is what more or less happened with different semiotic traditions. But this text is not about Saussure. Instead, the figure of Lotman opens up different possibilities that were just not available for the Saussurean tradition (to call it something). In what follows, we will talk some more about both Lotman and Peirce, and what they can do for us when thinking about what we can do with semiotics.

4. A DIFFERENT TAKE

Culture is a wild beast, its behavior unpredictable, explosive, and beyond the boundaries we impose on it. That doesn't mean we can't study culture, and the verbally oriented semiotics sure has made a large effort to bring out the meaning within this chaos. Enter Lotman's semiotics. The way we understand cultural signification is deeply tied to practices within culture, but also to the interaction between areas of culture and even what lies beyond a specific cultural set. While all of this starts from a verbal point of view—the study of literary signification—, there is an important (and more or less independent) development on how signification is not limited to individual signs, but rather, they can be found within dynamic systems that interact with each other. This premise adds a touch of cybernetic conceptualization to the way we study cultural phenomena, so instead of trying to see how we fit signified and signifier together to bring out a specific meaning,⁶ we see *texts* across a spectrum of relations: between cultures, between individuals, between texts. But what exactly is a *text* in this case? The term is a technical one in Lotmanian semiotics, meaning, briefly, a bundle of significant elements chained together and within a certain sphere of general signification. In Lotman's work, “the concept of text is of primary importance: it is the basic entity of culture, the product of communication and the main object of semiotic study, and in that sense is opposed to the concept of sign.” (Semenenko, 2016b, 78) Simply put, it is a cohesive set of signs, assuming that individual signs do not have any priority in actual signification, but rather they only work when in specific sets. It follows from this definition that Lotman did not refer simply to written texts, obviously, but rather it expanded to different significative phenomena.

There are two key concepts that we need to explore in order to unpack Lotmanian thought beyond the idea of the text. First we have *modelling systems*. A modelling system, roughly, is the underlying mechanism that gives rise to how we understand the world around us, a “structure of elements and rules of their

⁶Oversimplification, I know.

combination, existing in a state of fixed analogy to the whole sphere of the object of perception, cognition, or organization. For this reason, a modelling system may be treated as a *language*” (Lotman, 2011, 250), whereas a model, at its most general is “an analogue of an object of perception that substitutes it in the process of perception.” (Lotman, 2011, 250) Modelling systems are flexible and dependent on other systems, and as we know, for Lotman language is the primary modelling system in humans. This means that we need to have at least two different levels of modelling: *primary* and *secondary* modelling systems. A primary modelling system is the basis through which perception is organized. It is the radical, most basic way in which we understand significant phenomena. For Lotman, this is language.⁷ Lotman, following in the footsteps of the Saussurean tradition (Deely, 2015, 40), sees in language the basis of human cognition and it is through language that other, secondary modelling systems (such as culture) come to be. We have to explore this further to make sense of both the claim and our incoming counterclaim. In Lotman’s view, human thought is organized by language and by the opposition between what lies within language and what lies beyond. So while language is the primary modelling system for him (because it organizes thought), it requires of duality in order to be meaningful. If language is the only thing there is, there is no chance for it to signify anything at all (because all there is is just language), so it depends on something to be grounded and to give structure to. Similar to how we see Saussure’s idea of the sign, language in Lotman’s thought cannot do anything unless it comes in contact with another language.⁸ (Kull, 2005, 177) So while language is the primary modelling system, it does not work independently. A primary modelling system is then a direct disposition to structure the world around us. A secondary modelling system, on the other hand, can be thought of as a significant activity *born* from the usage of a primary modelling system, such as art. Secondary modelling systems “(such as myth, folklore, ritual, literature, and fine arts) are formulated as those that are built upon natural language (primary system) and acquire supplementary secondary structure of a special type.” (Semenenko, 2016b, 37)

Let’s move on for now to the concept of *semiosphere* as the final cornerstone of Lotman’s thought. Inspired by the concept of *biosphere*, the semiosphere is “the semiotic space necessary for the existence and functioning of languages, not the sum total of different languages; in a sense the semiosphere has a prior existence and is in constant interaction with languages.” (Lotman, 2001, 123) In order to make sense of this, we can depict it as a certain enclosed culture/language pair within an environment which may or may not share boundaries with other groups in a similar setting. While this may sound trivial at first, there’s important implications that stem from conceptualizing such an object. A semiosphere has, notably, *boundaries*, and these are not static and solid, but instead they are

⁷We will contest this perspective soon enough.

⁸Or code, as we will see.

porous, flexible, malleable, allowing for the interaction with other enclosed *groups* (though the concept here is actually just another semiosphere). The idea of the semiosphere is not limited to groups of a certain scale, but rather it is more of an identifier of commonalities in how significative activities are done by certain groups, the characteristics of a culture, etc. The concept of semiosphere is rather general, so a direct application, while possible, will not yield a full picture of what can be done with the concept itself.⁹ Instead, we have a tool for dealing with significative processes not as unilinear, but as manipulable within a developed context that adds and changes signification in time. In general lines too, “a mechanism consisting of a sender, receiver, and transmitter of information does not work as a semiotic mechanism, while not embedded in a semiosphere,” (Kull, 1998) so the most striking feature of all the concepts we have reviewed so far is, it would seem, that they are absolutely interdependent.

So when it comes to Lotman, we have *text*, *modelling* and *semiosphere*. What do we do with these concepts and why are they relevant at all to us? When they come together, they form the basis of an anthropocentric cultural communication model, making it useful when dealing with phenomena described in the category of (Lotmanian) secondary modelling systems. We can delimit their context, observe their interaction with other systems and specify what part of it makes sense to study, roughly speaking. There are some issues that we may all be wary of, however, the most important of which is the controversial notion that language is indeed a *primary* modelling system. This in fact has been contested on a number of occasions as a restriction that does not do justice to the concepts used by Lotman himself. We owe this criticism to Thomas Sebeok, who saw the deficiency in establishing natural language as the basis of all modelling activity (Chang, 2009, 173). The exceptional condition of natural language makes it suspect as the basis of all modelling activity in living beings if we are to consider non-linguistic animals that, by all accounts, communicate to some degree. Sebeok states that

[l]anguage itself is [...] a secondary modelling system, by virtue of the all-but-singular fact that it incorporates a syntactic component (for there is, as far as we know, no other such component in zoosemiotic systems [...]). Syntax makes it possible for hominids not only to represent immediate reality [...], but also, uniquely among animals, to frame an indefinite number of possible worlds.” (Sebeok, 2001, 149)

⁹Take, for instance, studies on, say, ‘the Australian semiosphere’ (Kolar-Panov, 1997), the idea of the semiosphere as a model of human cognition (Semenenko, 2016a), or the application of the semiosphere to biosemiotics (Kull, 2005). These are all aspects that fit with Lotman’s description, but also need some extra input in order to work.

His argument effectively expands Lotman’s concepts towards the non-linguistic, and shifts the level of theoretical modelling systems by one, turning thus what Lotman coined as secondary modelling systems into tertiary modelling systems. Sebeok accepts the value of Lotman’s theory, but appends notions gained from Jakob von Uexküll’s theoretical biology and an understanding of signification based on Peirce’s philosophy to make a seemingly more coherent account of semiosis at all levels. But what does Peirce have to do with all this really, and why should we care?

5. ANOTHER GUESS AT THE RIDDLE

While skipping Uexküll’s contribution to this dialogue should be anathema, for the sake of brevity we will only point out that the concept of *Umwelt* is of decisive importance in how Sebeok reached his conclusion and why biosemiotics is actually relevant within the current landscape of semiotics.¹⁰ For now, however, we will focus on Peirce’s contribution to the discussion as it will serve a larger purpose on applicability, at least for now. As we asked before, what does Peirce really have to do with all this? We have become accustomed to the basic representational and relational character of the sign as described by the good old Representamen-Object-Interpretant triad. This is useful in the conception of how a sign works and how Peirce (partially) thought perception worked. It’s not a complete story though, because we can’t get much work done by just assigning positions to a certain act of cognition, so to speak. On top of that, it would seem that we are giving primacy to the sign, at odds with Lotman’s basal notion of text. This is not really the case, because Peircean semiotics—just like Lotman’s work—is an intricate, sometimes patchy and confusing meshwork of concepts that operate together to actually make sense. However, there are caveats we must sift through before we can start thinking of tying the knots we plan to bring together.

Let’s start by stating the obvious: that signs do not give priority to linguistic expressions. The abstraction of the sign is, instead, a way to ascertain the generality of signification processes where the *standing-for* relation is placed not constrained by mental capacities, but by the presence of the relation itself. There is a lot of room for interpretation and heated discussion here, so we must make a distinction between psychologist and non-psychologist explanations of the sign. Nöth describes the situation in the following way: “Peirce does not define [semiosis] as the agency of an *interpreter* or *code-maker* [...]. With Peirce, the notion of the “action of the sign” has to be taken literally. The sign, and not some interpreter, is the agent in semiosis”¹¹ (Nöth, 2015, 161). In order to understand this position, we can think of the opposition between points of view described by

¹⁰And if anything, his *A Foray into the Worlds of Animals and Humans* (Uexküll, 2010) is probably the best starting point to check out.

¹¹We have suddenly shifted to the concept of semiosis a couple of times now. The quick and dirty definition of semiosis is *the action of signs*, but it is sometimes, depending on the author,

Nöth. A psychologist view of the sign will consider that the *standing-for* relation is only true when perceived or mentally processed (so you need to have an agent). An anti-psychologist view will not care whether there is a perceiver as long as the relation seems to stand logically. We will discuss this further in a moment, but for now it is only important to remember the distinction we have just made.

The sign relation itself, as we know, is comprised of three parts: representamen, object and interpretant. Instead of going through each one, the point to make is that the relation itself does not state the *need* for a cognitive agent to give validity to the relation. Instead, however, Peirce depends on other metaphysical devices to make it work. One of those devices is the idea of *synechism*, or the principle of continuity. This is crucial because it appends the notion that mind is both a part of nature and continually present in different degrees across nature. That would partly explain why the sign relation doesn't need an explicit cognitive agent, because the universe is already furnished with mental capacities.¹² That's not the end of the story (hardly!). We need to remember that semiotics forms a special category together with logic and mathematics, which, to Peirce, exist independently of mental phenomena (Stjernfelt, 2014). That is, Peirce, as a realist about logic, and considering the way he connects logics and semiotics, seems to have a strong argument for a mind-independent, non-psychological form of the sign.

We could divide the antipsychologist positions into two sides for the sake of simplification: those who believe that the Peircean conception of semiosis entails the possibility of sign relations without any actual living beings at all; and those who believe you don't need a cognitive apparatus to have sign relations, but you're still limited to perceptual beings, at least to *actualize* them. Without going any further, the distinction between poles is sharp, but there is no clear agreement on where to put the line to understand just where exactly signs work at all.¹³

In general lines then, Peirce gives us conceptual technology to talk about both signs and what is required for signs to exist, which is why Peircean semiotics is so successful across different areas of the semiotic spectrum. But, as it stands, this particular conception of the sign goes far beyond the dualistic approach of the traditional Saussurean model. The main particularity is in how we make the distinction of what a sign actually *does*. So if for Saussure the sign is *representation*, for Peirce it is more akin to *action*. That is, the whole idea of the *representamen* is not so much about what something 'looks like,' but rather about what it produces in the perceiver.

If we think about this difference for a moment, the most striking feature lies in that, by not being attached to linguistic expression, a Peircean sign does a lot

interchangeable with *sign*, *signification* or even *meaning-making*. It is best to tread carefully with this concept.

¹²Roughly speaking.

¹³This is one of the areas where biosemiotics is most relevant.

more work in framing *general* behavior, including that of non-linguistic animals. For most people involved in semiotics this is already quite an obvious feature, but what generates some friction and needs much more discussing is how we can put things together within a coherent framework. In what follows we will try to come to terms with these differences and find angles of productivity and applicability as means of scientific progress within semiotics.

6. PUTTING IT ALL TOGETHER

It would seem, sensibly speaking, that the intersection between Lotmanian and Peircean semiotics is rather reduced, and that both ends may be at odds with each other. The main reasons why this may be lie in a couple of factors:

6.1. The linguistic approach. As we have seen, Lotman takes what can be qualified as an anthropocentric stance, which does not particularly fit the conception of what is exactly semiotic in Peircean terms. Not only that, but the compatibility itself of their concepts of sign is not readily available (if we accept that a Lotmanian concept of the sign is Sasseurean).

6.2. Their theoretical background. From the previous point, it is easy to understand that Peirce and Lotman's backgrounds do not overlap all that much, and evidently, being that both come from different eras and different cultural contexts, their interests and how these are reflected in their work take them across very different paths. The Christian morality reflected in Peirce's work, Lotman's interest in cybernetics, these produce different conceptualizations and lead to treating similar concepts in absolutely different ways.

6.3. Their aims. Peirce, as a philosopher, does not really put much stock in the study of culture. Instead, he focuses on metaphysics, epistemology and, sometimes, theology. On the other hand, Lotman is culturally inclined through and through, and he uses literature as a means to explore cultural communication and change. Their theories are dependent on their aims, and so their are built to do different things altogether.

Now, all these points are strong enough independently of each other to make us wonder if it is really possible to make them work together. However, it is important to note that Lotman was acquainted with Peirce's work to some degree (but this is obviously a one way street), and that semiotic principles seem to apply in a wide fashion across significative phenomena. We have to turn to Jakobson here who, being profoundly influenced by his reading of Peirce, and being a significant influence in Lotman's thought (Andrews, 2003, 21–23), provides a sort of interface between them. Very briefly though, Lotman understands Peirce's semiotics (quite possibly through the filter provided by Morris) as prioritizing the sign (Semenenko, 2016b, 72), an approach that appears incomplete to him because of his focus on

“semiotic space” (Andrews, 2003, 24). The elephant in the room here is the fact that Jakobson’s Peirce was basically limited to the index-icon-symbol trichotomy, and that his conception of the sign was not clearly not-dyadic (Andrews, 2003, 22). Lotman makes passing mentions to this basic classification of sign types without going much further. But what really does matter though is if this situation is an actual deal-breaker. Beyond recognizing the abundantly clear difference between approaches and schools, attempts at reconciliation are not a great beacon of hope, subsuming one in the other¹⁴ or forcing a compatibilization of specific concepts by reworking how the theories work altogether.¹⁵ There is some usefulness in these attempts, but they don’t really answer whether these approaches are compatible in practice or if it’s even desirable to try and make them work together.

If we want to move past this quibble, we can try to think what it is we need to make them work together. Can we make a more robust theory of cultural communication if we append a metaphysical understanding of the sign? Is synechism workable with the idea of semiospheric boundaries? These are big theoretical hurdles that we can’t just skip past, but there is perhaps a different way to look at things. If, say, I have a cultural system and I want to understand what significative processes it may go through if it enters into a communicative stance with a foreign cultural system with which it has nothing in common, perhaps it is best if we use a dual stance, setting rules for macro-interactions and micro-communicative acts. It is here that we can find biosemiotics to bring stronger support to the way we develop our theories.

6.4. Naturalization. Lotman had few remarks about the semiotic capabilities of non-linguistic animals, but he was keenly aware of the complexities of this world (Kull, 1999, 117), and he was interested in cybernetics (which we may remember had quite some things to say about the biological world), but we may also remember the fact that primary modelling worked on the basis of language, so we are left adrift by this paradox. We may also remember the criticism to this perspective and embrace it whole-heartedly. Now the question is, can we apply some theoretical forms of Lotman’s to the non-linguistic realm? We most likely can, but the lack of the verbal and visual approach we can count on when dealing with culture sets a big problem for us to face. We may have a trump card with us though, and you may have guessed already which one it is, so the issue here is already solving itself because of our needs. If we want to make some sense of the non-linguistic world, we may indeed have to jump to a notion of the sign that *doesn’t assign preference to the linguistic*.¹⁶ And if we do need such a sign, or at least such an understanding of what sign processes are like, then we need to find

¹⁴As is the case with merrell (2008) and his idiosyncratic Peircean reading of Lotman.

¹⁵As in Laas (2016).

¹⁶A caveat is that we may also need to use Uexküll for this, but that’s neither here nor there.

way to ‘compatibilize’ the harsh philosophical panorama given to us by Peirce with a more common-sense approach to cybernetic processes in communication.

This is probably where *you* enter the equation. What can you and I actually do with this? Is the analysis of ‘animal culture,’ so to speak, feasible as a project? Can the study of cross-boundary communication between cultures be enriched by understanding the abstraction of sign processes? Are culturally evolutionary processes potentially universals within signification? If we were to encounter an alien civilization, would applying both Lotmanian and Peircean principles actually aid us at all?

The key to all this is understanding that no theory can be complete on its own when it is grounded on certain specificities given by its references and context. Lotman gives us some really useful tools for framing a number of semiotic processes that lie outside of the scope of Peircean semiotics, but this can give us a number of problems because what works for one theory may actually be opposed to the notions of the other side. Theory building is a long-term endeavor, and biosemiotics is in the particular position of tying many different ends (Favareau, 2012, 17), but this is also a positive prospect for a creative solution (and all the problems that come with it). If Lotman allows us to establish a constrained dynamic for certain cultural and individual units, Peirce allows us to theorize about their beginnings and their inner workings, which means that, in theory, we can make a compatible framework for specific situations of analysis. Problems ahead lie in deciding what the units of analysis may be, the extent in which the framework is effective, the potential inner contradictions we may find, and so on. The prospect of a biosemiotic approach (that is, naturalistic, without assigning priority to the linguistic, focused on biological processes and accepting semiosis as part of them) using both is not far-fetched, because their applicability is proven, but moving forward, we need to understand the concessions both systems make and what we can do to move past them.

The finality of all this is, beyond presenting two different, sometimes less-than-compatible perspectives on the semiotic endeavor, is to raise awareness of how different approaches can be subsumed by the semiotic, and so we can be both expectant of variety while also we are wary of internal contradictions. The biosemiotic is only bio- insofar as it grounds sign processes (of all types!) in some naturalistic premises, which means that a biosemiotically informed reading of Lotman is not only possible, but desirable and useful for the further application of his theories. Peirce has, on the other hand, received wide attention from biosemioticians *because* his concepts are readily available for the philosophical discussion of the semiotic without the linguistic and because the application of these becomes immensely useful for exactly that. As cognitive semiotics, for instance, has moved to a more scientific approach of the phenomenological, the semiotics of culture can find a similar path without having to limit itself to the mere application of old models. And so we move forward boldly, but carefully avoiding the traps set along the way.

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