

Cultural Natural Signs: Conviviality, Conquest or Conception?

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Hybridisation of culture has, so far, mostly been conceived of as the merging of different cultural spheres into a new one. Hence, the concept of hybrid cultural signs automatically draws a dividing line between the ‘cultural’ and the ‘natural’ worlds. Semiotic theory, however, has been based on models of *continuity* rather than division since the days of Charles Sanders Peirce. This paper argues in favour of such models and suggests that hybridity is not only a concept *connecting* various cultural signs in one continuum, but that in the process of semiosis the mental *reimbodiment* of objects outside ‘human culture’, namely from ‘nature’, leads to a continuous hybridisation process, which serves to conceptualise the universe in cultural terms, in order to make it comprehensible to the human mind. This paper, therefore, argues against thresholds between the cultural and the natural, which we find by the multitude in semiotic theory, ranging from the semiotic-nonsemiotic divide to the body-environment divide.

1. Prologue

In order to introduce to you the essence of my paper, let me sketch for you a scene from everyday experience. More precisely, this is an episode from my own life. I live in a part of Germany where, as the tourist advertisements say, you will find ‘pure nature’ easily. It is a landscape set between the moors and the sea, an area, though made accessible for tourism, still not ruined by urbanisation and full of spots where plants and animals are left to themselves.

Not long before I was to present this paper on culture and nature, I walked from my house to the sea, and I came across one of those spots. To protect the coast from the regular floods in winter, a considerable amount of earth has been used to build dikes. Some of that earth was once taken from fields not far from the shore. The resulting pit, some 200 meters long and maybe 50 meters wide,

eventually filled with water. Willows grew around it and the small grove, with its lake inside, formed a small ecosystem, still present. Now that day I came across this spot and even though I had seen it a hundred times before, a sign that had been erected at the side of the grove caught my attention (see Fig. 1). It announced that I was encountering here a ‘natural monument’.



Figure 1] ‘Natural monument’ sign.

Please allow me to focus somewhat more on the nature of this lake for a moment. Let me ask you to concentrate on the problem of naturalness, culturalisation, the world of plants and animals, and their obvious connection to the world of men. We have here an excellent example of how cultural signs and biological signs interpenetrate each other, influence each other and share the same semiotic principles of production and processing, in human thought sometimes aided by conceptual extensions such as tradition, history, and origin. This is the opening of this paper, and I invite you to join me on a journey from within the culture to without, across boundaries to the environment, and leaving behind such confines as have been set by terms such as *semiotic* and *nonsemiotic*, *body* and *environment*, and *nature* and *culture*. We shall find that this idea of confines is not new, even in thinkers who have postulated otherwise. As our vehicle for this journey, I suggest the theory of hybridity. I shall try to illustrate that all three divides are connected to one another, hence creating a binary world-view that inhibits a full-fledged semiotic understanding of the cosmos.

2. The semiotic paradox of divides

The habit of taking material from natural resources and adding it to the human body in order to produce clothing, accessories for decorative purposes, tools, or

weapons is as old as human *culture*. But does this practice indeed make up a divide between the so-called exclusive human domain and *nature*? Is there really a dividing line between semiotised material within culture and the unused matter beyond? An argument in favour of this divide was that the mentioned materials only gain the value of signs when they are used according to the standards of cultural signification. The whole argument ultimately boils down to the question of whether a nonsemiotic world exists, by its very existence defining the more sophisticated, however somewhat smaller, cultural domain. This question can be pursued in two ways. First, we could try to prove that there is a nonsemiotic world by finding something that has not yet gathered the value of a sign. The second way of defining the nonsemiotic is to state that there are beings in a biological world whose perceptions, communication, and lives are not meeting the standards of semiosis as we find it in humans. Let us explore these two lines of reasoning first.

2.1 The nonsemiotic world of items

Instead of 'item' we may also use the terms 'thing', 'object', or 'material'. Nearly all terms, however, have been introduced into one cosmological model or another. Appropriate terminology, therefore, is difficult to approach. What here is called 'item' is that which is defined as 'not (yet) a sign'. What are 'non-signs'? I admit that this paper challenges the general existence of non-signs. I suspect that they are a theoretical construction to introduce yet another negative definition of what signs are. According to Ferdinand de Saussure, e.g., the nonsemiotic world is an 'uncharted nebula' (1998: 111–112). This is a negative definition *par excellence*: it defines everything known as signs, and at the same time spares Saussure from actually naming something which is not a sign. As we will see later, Saussure's approach bears some similarity to this paper's arguments, as there clearly are areas and things in the world which are not known to us. We know of the unknown, if only for the reason that our measuring apparatus has been able to penetrate some of the vast unknown of the universe, leaving yet uncharted areas behind the final frontier. Yet, the postulation that whatever matter is unknown remains in a 'nebula' of non-signs is a hypothesis only serving to assure us of the significant value of our knowledge. Moreover, it reduces semiotic theory to mere anthropocentrism.

To give another example, St. Augustine gives a clearer account of what non-signs are. He separates 'signs' from 'things' (Augustine 1952: 624–625; cf. Nöth

1990: 82). Keeping close to the definition of a sign as *something which stands for something else*, i.e., *aliquid pro aliquo*, he lists items such as wood, stone, cattle or other things of that kind as non-signs. Winfried Nöth calls this approach 'naïve realism' (Nöth 1990: 82). Indeed, here the question must be raised again of whether a sign is only a sign if it is grouped with other, similar signs, in a system appropriate to human understanding. Also, does the sign cease to be a sign if it appears out of this systemic context? Clearly, wood, stone and cattle can take on highly diverse sign values. We will discuss the case of living creatures later on. Concentrating here on the examples of wood and stone, suffice it to say that they gained sign value as soon as St. Augustine listed them as specimens of non-signs: wood or stone standing for non-signs, they paradoxically become *signs for non-signs*.

Another well-known approach, which has also been employed to divide the cosmos into the spheres dominated by humans and other creatures, is the one which devised the so-called semiotic thresholds. Umberto Eco employed the term 'threshold' to delimit the semiotic field (Eco 1976: 16–28). The interesting aspect here is that it is the methodological and disciplinary perspective of a semiotic science which governs the view of the cosmos. Below the lower semiotic threshold are those phenomena not guided by social convention, delimiting the semiotic field to the socio-cultural sphere. Beyond the upper semiotic threshold, according to Eco, there are those phenomena studied by other sciences than semiotics. Most interestingly, Eco sees any possible object as connected with semiotic, as well as nonsemiotic, value. As soon as something is studied as a sign, it becomes subjected to the semiotic field. If the same item is then studied as, say, a tool, it drifts from the semiotic field and is confined to the sphere beyond the upper semiotic threshold.

While it is obvious to acknowledge that the field of, for example, physics, sports, mathematics etc. is separated from the semiotic field if seen from the perspectives of the monodisciplinary physicist, sportsman, or mathematician (those not calling themselves semioticians¹), I would argue that the schizophrenic nature of items, as Eco sees them, is not given. As soon as semiotics puts itself

¹ Note, however, that the point has been made that there are not only *explicit* studies of semiotics, which would cover the theories of the sign proper, but also *implicit* semiotics, which, as Nöth remarks, 'covers the many semioticians *avant la lettre* who have contributed to the theory of signs since Plato and Aristotle, but also includes semiotically relevant current studies in the many

to the task of examining *anything* according to its sign value, this item cannot ever again disappear from the semiotic field. Neither can the semioticians see an item oscillating between the semiotic and the nonsemiotic, or else they would be disregarding their own discipline. In other words: whereas any other (possibly merely ignorant) person may not see things as semiotic, they must be so for the semiotician. In any other case, semiotics would be reduced to an alternative science that had no field of its own, any signs at the same time ‘resembling’ materials, tools, or other items subjected to other analysis.

While I not only embrace but admit the possible accusation of pansemiotism here, my main objection against the upper semiotic threshold is especially nurtured by Eco’s drawing of disciplinary borders. His division between semiotic and nonsemiotic remains artificial and is guided by cultural propositions, for clearly the concept of disciplinary fields is not inspired by nature as such. Semiotics, however, should be seen as a transdiscipline *par excellence*, as such busying itself with signs from any field of human knowledge.

2.2 The nonsemiotic world of beings

In the realm beneath the lower semiotic threshold, we find the processes of communication in animals and plants. While Eco’s upper threshold is a rather disciplined border, as mentioned above, the lower one definitely separates biological life from the human sphere of signification. This second divide hence does not yet separate the body from its environment, but only the cultural from the natural sphere. Everything above that threshold, according to Eco, in the realm of culture, is coded in a specific, cultural way. Naturally, the question is what ‘culturally coded’ means. The point has been made that, by discovering more and more sophisticated sign systems in the realm of animals, or even plants, the semiotic threshold has been lowered and is being lowered still. I do not wish to go into the question of whether animals are capable of producing signs and of observing signifying actions in a way comparable to human custom. This would be a completely different endeavour beyond the scope of this paper (but compare Martinelli 2002 for a detailed analysis of this subject).

neighboring fields of semiotics.’ (Nöth 1990: 4.) In accordance with Peirce, I hold the limits of these neighbouring fields to be virtually nonexistent. In this judgment I follow his intention to ‘outline a theory so comprehensive that ... the entire work of human reason ... shall appear as filling up of its details.’ (CP 1.1.) In this regard, physics, sports, and mathematics *are* fields of semiotics.

More detailed work on the delimitations of the cultural has been done by Yuri Lotman, who admittedly was not so much interested in *excluding* animal and plant life from human culture as in *defining* the possible limitations of the latter. We must, in contemplating these differences, keep in mind the binary, or dyadic, foundation of Russian semiotics. A thorough study of Lotman's work therefore will reveal that the limitations of culture also comprise the limits between various strands of culture, and most notably those between one's own and the foreign, thus creating structural dichotomies as models. The space of culture in Lotman's theory is called the *semiosphere*, contrasted with the *biosphere* of biological life (Lotman 2000: 125). The important features of culture are communication, language, and the intricate means of using these to pass culture on to following generations (Lotman 2000: 124, see also Lotman 1981: 125, and cf. Nöth 2000: 133).

The borders between the semiosphere and the nonsemiotic, however, may also be understood as the borders between the signs already culturally coded and those not yet culturally coded. Such a division would render the *entire* universe semiotic, true to Peircean theory, and would hence differentiate only between certain types of coding: cultural and non-cultural.² The possibility of dividing the world into these domains must remain questionable, however (cf. Nöth, Kull 2001: 71–75).

Another point made by Lotman (1981: 26–27) concerns the rules and methods of how information is stored and communicated by culture. Certainly there are distinct differences here between 'culture' and 'mere biological life'. I do not wish to argue against this point. However, sign processes will transcend borders, and culture, too, depending on the biological processes which support cognition and mental activity. It is not possible that there is any culture without biological life, and in order to function properly and interact with the surrounding world, a culture will have to incorporate biological life from the so-called nonsemiotic world substantially. The process of semiosis therefore transcends the nature-culture divide and requires a redefinition of the various semiotic spheres which constitute the universe.

² I prefer to avoid the term 'natural' here, as this would imply that there is a coding system of nature similar to a coding system of culture. Truly, there are many other coding systems; either they should be summarised under the label 'nature', including culture, or the term nature should be avoided. As this paper argues, there can be no nature-culture dyad. Both are intertwined and form the unity of the cosmos.

The semiosphere is externally constituted by that which is not in agreement with the coded structures within (Lotman 2000: 131–142). Nöth explains that there can be semiotic space within and outside the semiosphere (Nöth 2000: 133); however, it seems that the emphasis on culture denies that there are semiospheres to be assumed in nature, hence the contrasting term biosphere. In the biosphere, we may assume, by negating Lotman's characteristics of the semiosphere, there is no information not inherited, there are no specialised means to organise information, and there are no rules to determine the overall system of information communication (cf. Lotman 1981: 26–27). It is exactly this terminological emphasis on communication which renders the biosphere so obscure, as 'language' is the basis for cultural action, and the 'social conflicts' and the 'semiotic systems' located in the semiosphere are the cultural 'messages' which are formulated in 'texts' (cf. Lotman 1981: 27–29), thereby leaving the seemingly non-linguistic biosphere behind. This logocentrist view of culture has the unfortunate effect of drawing a definite border which is difficult to overcome. Following these lines of argumentation, a linguistic basis of coding would have to be found in the biosphere so as to qualify it for semiotic consideration.³

2.3 Dissolutions of the semiotic-nonsemiotic divide?

There are several semiotic approaches that may serve to either weaken or even overcome the divides between the semiotic and the nonsemiotic. One of the more traditional approaches to this aim is Algirdas Julien Greimas's text semiotics. He undertakes to give a possible definition of what 'natural signs' (Greimas 1987: 20) could be. However, from the outset, Greimas does not move from the cultural sphere in his argumentation. His examples are strictly culture-governed: first, he mentions examples illustrating 'cause and effect', such as a cloud signifying rain, rain signifying autumn and so forth, or the knee-jerk reflex signifying

³ It should be pointed out here that the metaphor of the 'text' that has been favoured throughout the twentieth century by semioticians indeed lacks some qualities which are necessary to illustrate transcending sign systems. Texts are human artefacts, they are two-dimensional, and they consist of one material only, namely whatever substance the threads of code consist of. The metaphor of the forest as an alternative may be considered worthwhile. *Silva signorum*, as I may phrase it, shows many qualities of the view of sign systems used in this paper: forests are natural, or they can be planted and hence be man-made. The forest is made up of many different species, and even more interactions between them. Also, the forest consists of prominent signs and hidden signs. It is a mesh of signs much more complicated than a text, governed by a multitude of rules, and, last but not least, it will always transcend the cultural sphere and move into nature.

good health. Admittedly, Greimas agrees that these interpretations are bound to peculiar cultural spheres (Greimas 1987: 21). Still, he does not go so far as to admit that any phenomena may also attain sign value completely beyond culture, hence a cloud resembling a physicosemiotic body in itself, or the knee-jerk reflex being a biosemiotic sign signifying a chain of sign events in the body without so much as a cultural interpretation being necessary in the first place. Greimas's approach may be acknowledged as a 'bridge spacing the gap' between pansemiotism and anthroposemiotism, but it must be admitted that the semiotisation of the natural environment takes place in a 'semiotics of nature based on cultural codes of interpretation of this environment' (Nöth 2000: 134⁴). This means the 'natural world is only significant in a man-made way. Natural semiotics is rendered an exclusive result of the human codification of nature.' (Nöth 2000: 134.) Nöth calls this perspective 'intersemiotic'; it should be pointed out, however, that the perspective remains anthropocentric, as Greimas himself declares: '...a *human world* is detached from the totality of the "natural" world, which is what is specific to each cultural community. Only those events of the world which have people as *subjects* are part of such a semiotics; natural events (e.g., earthquakes) are excluded.' (Greimas 1987: 30.) Greimas' 'natural semiotics' therefore is less a bridge between the semiotic spheres than a proof of the thesis of this paper, namely that any contemplation of the natural world, regardless of its independent semiotic value, must result in a culturalisation of the natural.

A theory truly dissolving the semiotic-nonsemiotic divide is Peirce's approach. He claims that 'all this universe is perfused with signs, if it is not composed exclusively of signs' (CP 5.448 FN). This remark has been widely disputed, especially in regard to the question of whether everything really *can be* a sign. Again, I shall not venture into this discussion here. It is, however, fundamental that, by the process of signification, where from firstness via secondness to thirdness all sign-forms may appear, the variety of signs reaches far beyond those bound to convention. The latter, in Peircean terminology symbols, or legisigns, constitute just one of the many classes of signs he devises in his system.⁵

⁴ All quotes translated by the author.

⁵ From the many varying approaches Peirce takes to this subject matter, I will be so bold as to propose here that the Peircean classification of signs in itself is merely an artificial system devised by the great scholar in order to metaphorise his theory, which in itself is processual rather than class- or system-oriented.

2.4 Hybridisation and the pansemiotic bridge

Even if we pursue a course that clearly divides *culture* from *nature*, as, e.g., Umberto Eco did, we have to accept that a basic tendency of, e.g., using tools, is also existent in the world of animals. Otters use stones for breaking shells, chimpanzees ‘fish out’ ants by use of sticks, and many animals build shelters.

In these examples, we may see how the nature-culture divide is being weakened from below. At the same time, humans have continuously been extending the variety of resources nature offers. This inclusion of, as yet, protosemiotic⁶ matter into the process of cultural development produces *hybrid artefacts*. They are hybrid because they consist of so-called natural material – i.e., material that does not originally have cultural value or purpose – and a cultural concept of how to use the item. We must understand that this process started at the most archaic levels of evolution. Culture – in whatever terms we may define it – always carries a basic function. It helps the human being understand the cosmos by ‘humanising’ it. By this I mean that the items and material found in the cosmos are evaluated according to their uses and functions for the human being.⁷ They hence have a double sign value. First, the natural signs – which, I argue, do exist beyond the confines of our mind – interact on the foundations of natural laws, or relations beyond the obvious to the human mind. Second, items and materials gain a second sign value by their being taken into human culture. This distinction being only existent in theory but both sign spheres occupying the same physical world, it is obvious that these signs must become hybridised.

⁶ Protosemiotic here refers to possible-signs that are as yet non-signs only in regard to purely human signification. Indeed, for the human being – as I may add here for emphasis – signification is not only a possibility, it is a must, perhaps even a ‘curse’. Humans will never be able to fully understand nonhuman signification, as they cannot leave the cognitive apparatus of their species behind. Also, meaning for us is always given; even in producing new meaning, we must refer to existing meanings (cf. Greimas 1966: 19). The transformation of the protosemiotic to the semiotic adheres to the same principles, governed, however, by the rules of human signification alone. I also agree with Nöth, who emphasises that the acknowledgement of semiotic processes beyond the confines of culture goes along with the rediscovery of Peirce’s concept of semiosis, a concept large enough to cover for much more than cultural signification (Nöth 2001: 14–15).

⁷ Taking this argument literally, it follows that God was wrong when he asked Adam to give everything its proper name. He should rather have said that Adam was to give every item on earth its *most appropriate* name according to Adam’s subjective view of the universe, in order to conceptualise the world in human terms.

From these preliminary thoughts it becomes clear that, in discussing hybridity, the material form of items must not be the focus of investigation. Indeed, matter and concept together form a hybrid artefact. Hence, a stone in the field neglected by any passers-by is not a culturally hybrid item; still it has its proper place in the sign systems of minerals; it evinces form, radiation, and constituents which determine its place in cosmic evolution. However, as soon as somebody picks up the stone for *any* purpose, the stone is immersed in human culture. Its pure 'naturalness', if you allow for such a term, is ultimately lost. Its colour may now be regarded as beautiful, its mineral contents as valuable. Its form may appear useful as a wedge or a doorstop or its heaviness as a weight. In this way, any item, material, or appearance in the universe may become 'culturalised'.⁸

From this semiotic process of immersing nature in culture, two statements follow: first, hybridisation of culture and nature already begins with using stones as tools, or animal fur as clothing. Any habit, technology, or other cultural practice results in hybridisation of the culture and its *Umwelt*. In modern times, it has reached the level of melting metal from ore and refining plastics from oil, using sophisticated machines for calculation, firing rockets for the purpose of destruction etc. Humans are thus able to produce prostheses for a large variety of cultural uses in the essential natural environment. The consequence is the extension of the culture into nature, a result which makes it easier to understand the *Umwelt*, and at the same time reduces it, since the *Umwelt* becomes itself a part of the semiotic process *within* the interpreter.

The second statement follows from the first. If anything is used by humans, if everything conceptualised, graded, considered, or calculated becomes part of the human culture, there is virtually nothing 'purely natural' left in the universe, save for objects or concepts as yet unknown to humankind. For any theory depending on a nature-culture divide, this is an ultimate problem. Nature in itself, as long as it is by definition demanded to exist completely unattained by culture, would remain unobservable. This phenomenon may be described as the *ecological paradox*. Peircean semiotics, however, offers a valid solution to this problem, which I will try to sketch.

⁸ This argument challenges the notion that a difference exists between *usage* and *meaning*; the point, however, already has been made by semiotic studies of commodities (cf. Douglas, Isherwood 1996: 62; Csikszentmihalyi, Rochberg-Halton 1981, or Appadurai 1986)

The second statement draws on the fundamental notion of how the universe must be designed. Obviously, the universe is divided into those objects which are culturally coded and those which are not (and rendered unknown). In the process of human semiosis, the extensions of the human body have reduced those areas on the planet Earth which are excluded from that cultural coding to a small number, now comprising only the deepest depths of the oceans, several happy species of insects and plants, and the tiniest spaces of the microcosm. Man also strives to extend his area of knowledge to these. Nature has thus almost entirely been conquered by culture. This makes it hard to define the confines of 'real' nature in the ecological or semiotic discourse. Whatever we speak of when referring to *nature* has long since been made part of our culture. Animals and plants, ores and minerals have acquired cultural value; indeed any attempt at excluding animals or plants from what is frequently called cultural behaviour can only result in paradoxically including, re embodying or immersing these same animals and plants into culture, as necessarily they must be culturally coded – and graded – before being able to serve as counterexamples.

The result of these thoughts is that we need to establish a pansemiotic view in order to understand the effects of cultural signification in the larger semiotic sphere which comprises the cosmos. Pansemiotism has been condemned by more conservative semioticians (cf. Nöth 2001: 15). Pansemiotism has thus almost become an accusation close to an insult.⁹ Nöth prefers to use it cautiously, with a question mark (Nöth 2001: 15). He argues that:

...to describe Peirce's universal semiotics as a pansemiotic theory is a gross simplification. Semiosis, in the framework of Peirce's theory, presupposes thirdness, but the world not only consists of phenomena of thirdness, but also of phenomena of firstness and secondness, which are not yet semiotic phenomena, although they may have 'quasi-semiotic' characteristics, since Peirce's theory of continuity does not establish a mere dichotomy between semiosis and nonsemiosis, but distinguishes many transitions between genuine and degenerate quasi-semiosis. (Nöth 2001: 15.)

⁹ Some semioticians also despise the pansemiotic view for the same reasons Eco introduced his threshold: they require the concept of *difference* in order to specify semiotics. Regarding the same congress I mentioned above, a colleague argued that 'if everything is semiotic, semiotics does not exist', hence falling for the old trap of negative dyads. However, such thinking leads to unwelcome and inappropriate constructivism. For example, we do accept the existence of the universe although we know of nothing that is *not* the universe. Also, definition along the lines of Peircean thought should result in an additive reasoning, not a negative. Difference in Peirce is only at the root of semiosis, not in its interpretative result.

I would like to focus on the point of continuity here. Indeed Peirce's thorough system of categories of signs and semiotic processes allows for two interpretations, the first of which would suit those semioticians who prefer to draw borders between nature and culture, semiotic and nonsemiotic and so forth. This interpretation would locate definitely quasi-semiotic processes below the mentioned semiotic thresholds, so as to be neglected by semiotics. The second interpretation, which is preferable, should emphasise the continuous nature of Peirce's theory and allow us to neglect the existence of thresholds in the first place. We may thus create a pansemiotic bridge, covering the gap between nature and culture, which is the vehicle for an understanding of the transcendence of sign processes in the cosmos.

3. The semiotically hybrid nature of culture

In the process of semiosis, Peirce clearly defines a process where the semiotic world cannibalises the nonsemiotic world. Semiosis started from the point of utter chaos and will (ultimately but still hypothetically) result in a universe governed by the rule of thirdness. Peirce, however, does not speak of the universe as only consisting of signs if chartered by human thought. According to Peirce, as mentioned above, the entire universe is composed of signs.¹⁰

It is plural, not monadic, systems which govern the universe and, following from that, human cognition. This is not a new insight, but has long been observed by the pragmatist tradition. Note, however, that 'pluralism' does not exclusively focus on concepts such as difference.¹¹ Rather, plurality is conceived of as a logical concept at the root of any cognition. The minimal form of plurality, namely binarity, is contained in any thought, as Peirce emphasises. Each meaning is already a form of reaction:

¹¹ Hence, a distinct and fundamental division has to be made between Peircean and Saussurean views of the universe. In the latter's conception, anything not coded by cultural signs remains vague and unchartered – virtually nonexistent. From Peirce's point of view, forces of nature are also in themselves semiotic. He devised a complex variety of sign types for any possible phenomenon. Hence, if there was something nonsemiotic, according to Peirce such a thing or concept should not only be beyond our knowing of it, but also beyond any possibility of hypothetical existence.

¹² Difference in plurality and hybridity does play a role in structuralist and/or poststructuralist theory, where the essence of sign relations will always depend on the exclusive position of a sign in a system which constitutes itself in difference to other signs in the system.

We can make no effort where we experience no resistance, no reaction. The sense of effort is a two-sided sense, revealing at once a something within and another something without. There is binarity in the idea of brute force; it is its principal ingredient. For the idea of brute force is little more than that of reaction; and this is pure binarity. Imagine two objects which are not merely thought of as two, but of which something is true such that neither could be removed without destroying the fact supposed true of the other. Take, for example, a husband and wife. Here there is nothing but a real twoness; but it constitutes a reaction, in the sense that the husband makes the wife a wife in fact (not merely in some comparing thought), while the wife makes the husband a husband. (CP 2.84.)

The result of binarity, namely the relation between elements, naturally belongs to the category of secondness. It connects the phenomena of firstness (mere feelings yet bearing no true meaning), as without secondness nothing could be experienced: 'The world would be reduced to a quality of unanalyzed feeling. Here would be an utter absence of binarity. I cannot call it unity; for even unity supposes plurality. I may call its form firstness, oriense, or originality.' (CP 2.85.)

This plurality inherent to the signs results from the process of semiosis, the principally endless chain of experiences leading to ever new signs, which will again be incorporated into the process. Experience requires continuity, and continuity is a projection on the past: experience is 'esse in praeterito' (CP 2.84). As experience – as a result of semiosis – is found in the interpretant, or effect of the sign, plurality is an important criteria for thirdness: 'The general idea of plurality is involved in the fundamental concept of thirdness, a concept without which there can be no suggestion of such a thing as logic, or such a character as truth.' (CP 4.332.) Hence, plurality means multitude in signs and thus in the cognisable world ('variety of nature', cf. CP 1.160; 8.307). The universe in itself *is* plural, its singular appearances are our own constructs. They do not lie in the nature of the universe itself:

In the little bit that you or I can make out of this huge demonstration [of the universe], our perceptual judgments are the premises for us and these perceptual judgments have icons as their predicates, in which icons' qualities are immediately presented. But what is first for us is not first in nature. The premises of nature's own process are all the independent uncaused elements of facts that go to make up the variety of nature. (CP 5.119.)

In the terms used in this paper: experience in essence is hybrid. The 'internal' and the 'external' flow together in the signs; representamina of manifold kind, be they acoustic, pictorial, tactile, olfactory etc., together form new interpretants.

If this plurality, and hence hybridity, is active in the whole universe, the human body is an object of hybridity, and the human mind is an agent of hybridisation. There cannot be a body without a mind, or a body without the environment. The borders between these are drawn for reasons of argument and proper research, but in our understanding of the universe they should be neglected.

4. The natural monument

Let us return here to the ‘natural monument’ I sketched at the beginning. Here is my semiotic analysis of this remarkable concept.

First, in nature as such, nothing can serve as a ‘monument’. A monument is a cultural item erected for the purpose of commemoration of a person, an event, a national tradition etc. Therefore, we find here a first hybridisation. A cultural concept such as ‘value of uniqueness’ is attributed to a lake in a grove and labelled as perhaps prototypical, or as a primary example of such ecosystems.¹² At the end of this process stands a concept of nature that is fully immersed in the human system of values. The natural site is not protected because of its own existence – if that were the case, each patch of grass would be attributed the same value. How can we know if an oak has more existential value in it than a daisy? We cannot know, as there are only human values that we can set and henceforth perceive. I cannot even assume that there is such a concept as ‘value’ beyond my human conception of the world, apart from my personal conviction that existence always means something in its own context.

Second, if you remember, the site I mentioned was not entirely ‘natural’. It had been dug by humans and only subsequently filled with water. As a matter of fact, the willow trees around it are cut regularly so passers-by may still be able to see the waterfowl. This is a second hybridisation of the same object, namely the attribution of ‘nature’ to something of essentially ‘cultural’ origin. This is closer to the truth of things, namely that the difference between nature and culture is a construction in our minds. Still, the ‘naturalness’ attributed to this ‘cultural’ site

¹² The official legal text behind the sign reads: ‘Natural monument (§17 BNatSchG): Natural monuments are legally binding appointed separate creations of nature, the special protection of which is necessary for reasons of scientific research, natural history, or applied geography, their rarity, their character or beauty. The protection may include the surroundings required for the protection of the natural monument.’ From this legal text, the cultural coding of still so-called natural resources becomes even more apparent.

will not be attributed to, say, a steel plant or a skyscraper, even though in these examples we find similar effects: first, they are built by humans, second, biological life will settle there beyond our own designs or will, and third they are subject to decay, transformation and erosion and they require maintenance just as the monument lake in the grove does.

5. Résumé: The ecological paradox

I have seemingly arrived at a dead end: if everything is nature, and everything at the same time is culture, then what is the point of making a difference between the two in the first place? I should like to point out here that it is not the purpose of this paper to avoid terminological difficulties. The study of writing, of sports, and of architecture is obviously different from the study of whales, of flowers, or of the planets. The former may clearly be attributed to 'culture', the latter to 'nature'.

Still, we have come to think of whales as something 'valuable' and 'precious'. We have come to think of planets as something 'worthy of study', and flowers may represent 'love', as the rose does, or mourning, or a thousand other sentiments. Anything can become a sign; any 'natural' thing may become 'culturalised'. Hence, natural resources may dwindle in substance, but they have long ceased to exist as a sign resource in themselves: they have become included in human culture.

The only true paradox is, hence, human beings engaging in a discourse on nature. As soon as nature becomes a topic of discourse, it is not nature any more, but a part of culture. This fact was ignored by semioticians before the birth of bio- and zoosemiotics because they would not acknowledge the sign value of things *beyond* human signification. But the tree is worthwhile as a tree, as a growing thing which does not even bear a name. In Peircean terms: there is a natural thirdness of nature which enters our perception only by way of cultural firstness. Cultural thirdness then is the alienation of these sign values. The tree, such as the oak, birch etc., in our biological sign systems has nothing to do whatsoever with that 'tree' which is natural in itself.

I name this the ecological paradox. Even by discussing the measures to protect nature, we are diminishing it. We cannot escape it; the way of human signification dictates that semiosis result in symbols, or thirdness. However, by acknowledging this process, and possibly deconstructing it, we may be able to go beyond the nature of our culture and see that there is a different, alien, but quite real

culture of nature. Both form the unity of the universe, and nurture each other. Let us appreciate this holistic perspective, to which semiotics opens a door.

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