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INDEXES: CULTURAL NATURE AND NATURAL CULTURE

«In my youth I once read a French detective tale
where the clues were actually in italics.»
(Vladimir Nabokov, *Lolita*, 1955)

Abstract

Umberto Eco's essential contribution to semiotics consisted in finding a theoretical equilibrium between deconstructive tendencies, aiming at presenting cultural habits as pure conventional but naturalized products, and motivational trends, claiming the natural fundament of constructed cultural habits. Fully comprehending and turning into analytical frame the concept of sign in Charles S. Peirce was instrumental to reach such equilibrium. In no other aspect of Umberto Eco's semiotics it manifests itself with more evidence than in the characterization of indexes. The article seeks to propose a general theorization of their semiotic nature, starting from Umberto Eco's interpretation of Peirce.

1. Introduction: Umberto Eco's Pendulum

Umberto Eco taught us to see culture in nature. He indefatigably analyzed semiotic habits in order to show that they were such, although they had been naturalized by society and culture. In this respect, Eco's intellectual contribution also consisted in dispelling the rhetorics of motivation, those that create cultural exclusion by simulating the natural sources of meaning. At the same time, Umberto Eco avoided the opposite extreme. He taught us to see nature in culture. He relentlessly sought to unveil the universal mechanisms of meaning behind the particularities of signification, although to most these seemed irreducible to a common ground. From this point of view, Eco's philosophical legacy is also tantamount to the intellectual stance that refuses the rhetorics of arbitrariness, those that create cultural exclusion by overlooking the natural sources of meaning. Eco was able to keep a subtle but solid balance between these two theoretical traps because he fully understood Peirce, who himself gave rise to the philosophical project of semiotics exactly because of the necessity to find a new understanding of nature and culture,

arbitrariness and motivation. In no aspect of Peirce's semiotics, as interpreted and popularized by Umberto Eco, this effort of intellectual equilibrium is more evident than in the semiotic exploration of indexes. When the nature of these signs is misunderstood in terms of an excess of naturalization, indeed, they are used by cultures in order to create and naturalize artificial divisions. That is the case, for instance, when a symbol of identity is bestowed upon an indexical relevance and wrongly attributed a causal dimension. At the same time, when the nature of these signs is misconceived because of an excess of culturalization, the sense of the different extent by which signs can be motivated is lost too. Paradoxically, exceedingly de-naturalizing indexes can give rise, by contrast, to a naturalization of symbols. Developing Eco's intellectual project in the field of semiotics must, therefore, give rise to a full comprehension of how language interacts with reality in order to turn real relations into semiotic links.

2. Being, Mind, and Sign

In the philosophical ideology of Charles S. Peirce, meant as the abstract intellectual imaginary that inspires the generation of his theoretical concepts, a distinction is posited between two dimensions, differentiated, above all, as regards their ontological status. Defining them as a purely ontological level, on the one hand, and a merely phenomenological level, on the other hand, would be simplistic. In reality, in Peirce's philosophy, these two dimensions are themselves schematizations of the two polarities of the tension spanning between pure ontology and pure phenomenology. Both are implicitly characterized as theoretical limits: on the one side, a pure being that is completely accessible to cognition; on the other side, a pure cognition that is completely separated from being. The degree of cognitive accessibility to being within the span between these two theoretical limits defines the possibility of a semiotics, in terms of the relation between two points with diverse access to being within this span. Saying that something signifies something else, indeed, does not mean in Peirce, as the vulgate of semiotics regrettably suggests, that the former element is a manifestation and the latter a secret. It means, on the opposite, that, in relation to what is, the former element presents a lesser degree of accessibility than the former. It is as though, every time that there is semiosis, two points along the theoretical line that stretches between an unconceivable absolute being and an unconceivable absolute mind, were put into relation so that the one that is the most remote from the latter becomes an object to the one that is the most remote from the former, which in turn becomes its representamen. In the geometry of this ontological and phenomenological dialectics, however, it is evident that, whatever points are singled out along the abovementioned spectrum, a third point can be posited between the two, thus becoming a representamen of the former (the one that is closer to being) and an object to the latter (the one that is closer to the mind). In other words, if semiotics is the discipline that studies

signs, and signs are relations between a signifying entity and a signified one, there is no way to explain why one is the 'active' part of signification, whereas the other is its 'passive' part, without positing a third element that is intermediate between them, mediates between them, and provides a perspective (a "respect", in Peirce's definition of sign) for looking at the latter from the point of view of the former, to grasp the object through the representamen.

The relation of semiosis is, therefore, only abstractly dyadic, since there is always the possibility that a third element emerges and mediates the relation between the first two, and so on and so forth. When I look at the picture of my father, this complex conglomerate of signs presents my mind with the potentiality of accessing a more remote point of the ontological spectrum and to bring it to the fore of my mind, yet this protrusion of a distant being into the mind is always partial, for the picture and the persona of my father are immediately bridged by a third element, whose accessibility to being and availability to the mind will be intermediate between the two: looking at the picture of my father will not return his ontology but rather evoke some mental images of him stored in my memory, images whose access to being and availability to the mind will be intermediate between the persona of my father and his picture: on the one hand, these mental images are closer to him; on the other hand, they are farther from me; I therefore pragmatically need a picture to access them. As they access them through the picture, they shall function as an interpretant between an intangible object and an unsatisfactory representamen. The theory of the "unlimited semiosis", though, correctly suggests that the emergence of these mental images does not ipso facto turn them into pure signs in an immediate relation with their object, for in this case too, other elements will emerge that situate themselves at yet another intermediate distance between the inaccessible object and these mental images, thus acting as farther interpretants between the former and the latter. In our concrete and, therefore, imperfect example, the mental pictures elicited by the picture of my father will unfortunately not return my father to life, but rather enliven his memory. The result will be at the same time relieving and frustrating, depending on whether it is emotionally received either from the point of view of the lost being (memories are still too poor to capture the concreteness of a lost beloved person) or from that of the present cognition (mental images stored in memory are still closer to the living presence of my father than a picture is). The value of the example above is not diminished by the fact that the picture represents a person who is known to the picture's beholder, for the presence of a mediating interpretant is always necessary for recognition, even when what is recognized is not a singularity (my father) but a category; a picture of a *donzella pavonina* certainly gives easier access to its object to people who are familiar, through experience or previously seen pictures, with the fish fauna of costal southern Italy, than to people who ignore it, although in this case access is rather not to the singularity of the fish (as it might happen with the picture of the only fish in my aquarium) but to its species.

Although it is not difficult to conjure an example so as to explain the dyadic relation between something that signifies something else and this something else that is thus signified, explaining the emergence of an interpretant between the two is more counter-intuitive. Why should there always be the possibility of an interspersion between two elements related through semiosis? And why must this interspersion always configure itself as an asymmetric mediation, giving rise to a sort of vectoriality between higher and lesser degrees of accessibility? In other and more succinct terms: how is it possible to measure the distance between mind and being? And what is the nature of this measure? Without it, indeed, semiosis would simply not be viable.

3. Reflexes, Signs, and Symptoms

In order to investigate the theoretical reasons for the potentiality of infinite intermediations between a representamen and an object, it is useful to reverse the direction of reasoning and, therefore, wonder about what conditions would, on the opposite, determine the impossibility of any such intermediations. In other words, in what circumstances would a representamen directly give access to an object, and vice versa, an object uniquely be given access to through a representamen? For that to happen, a situation should subsist in which two elements with uneven ontological status would be in such a relation that, given the presence of the more ontologically present entity, the less ontologically present entity would also come about. Such are, for instance, the conditions that underlie the emergence of what psychology calls “a reflex”. The doctor hits my knee with a little hammer and the knee-jerk reflex comes about. The reason for which the doctor does is exactly that I do not have any way to determine whether to react or not with my body to this stimulus, so that, when the reaction does not take place, or it exceedingly takes place, that immediately turns into a probable symptom of incorrect functioning of my nervous system. In the patellar reflex, indeed, the sensor neurons trigger the motor neurons in the spinal cord without activating those in the brain, which are triggered only *after* the reflex itself has occurred. In this case, then, a phenomenologically absent entity, that is, the knee-jerk reflex, is determined by a phenomenologically present entity, that is, the stimulus of the little hammer hitting the knee-cap, without the possibility of any intermediation. It is worthwhile noticing that, at the neuronal level, the possibility of intermediation arises when sensor neurons and motor neurons do not relate directly but through the mediation of brain neurons, that is, through the mediation of the mind. Hence, the link between the stimulus and the reflex can be defined as a binding relation of cause and effect: when there is no stimulus, there is no reflex; there is no reflex, unless there is a stimulus; and where such stimulus is there, the reflex must be there as well, at least if the body works correctly. The stimulus and the reflex, therefore, present a different

ontology: although the reflex is always potentially there if the nervous system of a body is healthy, it will not become an actual reflex without the stimulus.

Nevertheless, it would be improper to deduce that the stimulus and the reflex are linked by a relation of semiosis. If that was the case, then an intermediation should be possible between the representamen (the stimulus) and the object (the reflex); but such is not the case, as empirical evidence shows. In reality, the stimulus is not the representamen of the reflex; it is its cause. And the latter is not the object of the former; it is its effect. A semiotic dimension intervenes when the patellar reflex is turned into the representamen of an object, that is, the correct functioning of the nervous system. This relation, however, is not the same as the relation between the occurrence of the stimulus and the occurrence of the reflex. Indeed, the reflex turns into the representamen of a nervous condition only because it is perceived “under some respect and capacity”, as Peirce’s definition of the sign reads, that is, in its capacity of revealing, by its mere presence or absence, the correct functioning of the nervous system. In this case, the relation between the representamen and the object is a semiotic one, exactly because it is not at all immediate. First of all, it is not immediate as regards the history of the relation. The term “knee-jerk” was indeed recorded for the first time by Sir Michael Foster in his *Textbook of Physiology*: «Striking the tendon below the patella gives rise to a sudden extension of the leg, known as the knee-jerk».¹ The relation of cause and effect between the stimulus and the reflex already existed: someone whose knee-cap would be accidentally hit before 1877 would have manifested a knee-jerk reflex even before that date; however, a long history of physiological observation and experiments was necessary for this cause-effect relation to turn into the basis of a semiotic relation, such as that, by producing the knee-jerk through a stimulus, the correct functioning of the nervous system could be inferred. Even after this semiotic relation is established, however, and codified into physiology textbooks such as that of Michael Foster, its status is different from that of the cause-effect link. For the former to come about, indeed, the reflex must stand for the correct functioning of the nervous system not only under some respect and capacity (before the “discovery” of the patellar reflex, indeed, its inadvertent manifestation would merely stand for the fact that someone had hit the knee-cap with a hard and sharp object), but also *for someone*: only a competent observer, indeed, that is, a doctor well trained in physiology, could infer from the activation of the reflex that the nervous system causing it works correctly. An incompetent doctor would not influence the presence of the cause-effect link but would definitely hamper its actual (and not only potential) turning into the basis of a semiotic relation.

One should not deduce from that either, however, that the doctor, as competent observer of the cause-effect link, is the interpretant of it, that is, what determines its turning into a semiotic relation. The doctor is merely the interpreter, and not

¹ Foster 1894: III, 984.

only of a cause-effect relation, but also of the semiotic relation that it entails; the doctor is, indeed, the interpreter of an interpretant. The occurrence of the thought of the relation is, according to Peirce himself, sufficient to establish the “real connection”: «[Indices are] signs which represent their objects by virtue of being connected with them in fact, although this fact be but the actual occurrence of a thought. [...] The denotation of an index is essentially singular».²

Thus far, the article has inquired into the theoretical possibility of indexes meant as “natural signs”, stemming from direct relations of causality in the environment. In the following paragraphs, it will be pointed out that, according to Peirce as interpreted by Eco, such direct relations, although subsisting at the ontological level, cannot be conducive to semiosis, unless they are accompanied by an interpretant that turns them into indexical links deposited in the common sense of a community of interpreters.

4. Interpreting Interpretants

But what is the interpretant underneath the interpreter’s thought? The interpretant is exactly the idea of a relation between a representamen and an object that is deposited in the common sense of a community of interpreters. In this case, in particular, it is deposited in the rather technical knowledge that, brought about by a long history of medical research, sees in the correct activation of the patellar reflex a probable symptom of the good health of an individual’s nervous system. Conceiving of the indexical relation that is at the basis of one of the semiotic types singled out by Charles S. Peirce as based, in its turn, on a causal relation, is essential in order to both characterize the former (and distinguish it, for instance, from icons or symbols) but also in order not to mistake it for the latter. To the reader who is not conversant in semiotics, it should be reminded that, in Peirce, icons, indexes, and symbols are three different modalities of semiosis, depending on whether a logic of similarity, causality, or conventionality prevails in the relation between the representamen and the object (but complexifying this introductory definition is, however, precisely among the goals of the present article). Peirce himself sought to dispel the abovementioned ambiguity by positing the factual connection as a necessary, although not as a sufficient, condition for an index: an index must be based on factuality but it cannot be based on factuality only: «For example, the symptoms of disease are indices. For though they cannot serve as signs without being interpreted as such, yet that which renders them fit to be the signs they are is their factual connexion with the diseases, which would exist though nobody had remarked it».³

² Peirce 1908: 842.

³ Peirce 1903: 491.

The only correct way to interpret such characterization without incurring into contradictions is to consider it as a short form, a sort of abbreviation, for a more articulated definition, in which indexicality is defined not as stemming from causality, but as stemming from the cultural reception of it. That is probably the reason for which Peirce himself often defines the relation that underpins indexicality as characterized by *reality* and not by causality:

[...] the mode of representation may be by likeness or analogy, in which case, the sign may be called an Icon; or it may be by a real connexion, as a certain kind of rapid pulse is symptom of a fever, in which case the sign may be called an indication or Index; or finally the only connexion may lie in the fact that the Sign (a word, for example) is sure to be interpreted as standing for the Object, in which case the Sign may be called a Symbol [...].⁴

In other contexts, and in other interpretations of Peirce, indexicality is defined as based on a relation of temporal and spatial contiguity between the representamen and the object. That too, however, appears to be imprecise. Indeed, it is true that, in most circumstances, causality entails the contact in time and space between cause and effect or, to say it better, between the state of the world that results after the exertion of a cause (effect) and the agency that impacts on such state (cause). Reducing the definition of indexicality to spatial and temporal contiguity only, however, would characterize it merely from a logical point of view, and not from a substantial point of view. A simple example will clarify that: walking along a shore, one realizes that the strand is full of footprints. These footprints function as icons, meaning that, in order to identify to what animal species its owner belongs, they must be recognized as tokens resembling an iconic type. The interpreter, however, does not receive these footprints simply as drawings, or as photographs, but as signs of the real presence, in the space of the footprints but at a previous time, of the animal to which the footprints belong. Indexicality therefore emerges from a causality (the pressure of the animal's weight on the sand has created the footprints), which in turn emerges from spatial and temporal contiguity (if the animal had not been there few minutes before the interpreter, the footprints could not have been created), yet both, i.e., causality and spatio-temporal contiguity, must be turned into the basis of a sign by an interpretant, which cannot simply be causality itself, or contiguity itself. The chain leading backwards from indexicality to causality, and from this to spatio-temporal contiguity, cannot be reversed: causality entails spatio-temporal contiguity, but not vice versa, simply because, as logicians know, correlation is not causation; similarly, indexicality entails causality but not vice versa, for there are many effects that do not turn into the signs of their causes because there is no interpretant receiving them as such. As Peirce would suggest: «An Index is a sign whose signative virtue resides in its

⁴ Peirce 1909: 637.

factual relation to its object. Certainly, not everything that is in factual relation to another, or is seen to be so, is thereby an index of that other».⁵

The usual vulgate through which indexicality in Peirce is explained and thought of is, therefore, improper. Indeed, it transmits the impression that the force constituting the semiotic relation between an object and its indexical representamen is always the same. This received idea bestows upon indexes a sort of naturalization, as if they were signs of a different nature than symbols and icons; the product of nature, more than the product of culture. The difference between indexes and symbols has always been perceived as stark, and somehow blurred with that between arbitrariness and motivation, originating from Ferdinand de Saussure's linguistics. Symbols would therefore be arbitrary, whereas indexes would be motivated. That is improper as well. On the contrary, one should rather define indexes as signs endowed with an arbitrary interpretant based on a motivated relation. The distinction with icons is subtler but has also been conceived as much sharper than it actually should. Indeed, as it has been underlined elsewhere, the difference between an icon and an index too is a matter of degree, not of nature; in icons, it is simply more difficult to comprehend what spatio-temporal contiguity and, therefore, what causal link has brought about the iconic relation that, by virtue of a similarity, links together a representamen and its object.⁶ Peirce himself seems to be aware of this gradualness when he writes:

[...] indices, or those signs which represent their objects by virtue of being connected with them in fact, like a clock, or a barometer, a weathercock, a photograph, etc. (The photograph involves an icon, as indeed do very many indices, while on the other hand drawings, portraits in so far they afford information do so because it is known that they actually imitated the natural objects and as such they are indices, not icons. But if you draw a fancy picture of a man with certain physiognomical peculiarities in order to see what sort of an impression of such a man's disposition you will get in this way, or if you construct a geometrical diagram according to a certain precept and observe certain relations between its parts which appear to be consequences though they were not explicitly required by the precept construction, these things are signs of their objects merely, by virtue of the analogy, and are true icons).⁷

But, also when he suggests that, after all, the index is an icon of a peculiar kind: «In so far as the Index is affected by the Object, it necessarily has some Quality in common with the Object, and it is in respect to these that it refers to the Object. It does, therefore, involve a sort of Icon, although an Icon of a peculiar kind [...]».⁸

⁵ Peirce s.d.: S104.

⁶ Leone 2017a.

⁷ Peirce 1905: L67.

⁸ Peirce 1903: 540.

Considering a footprint on a beach as an index, indeed, means recognizing that a spatio-temporal contiguity has produced a causality, and that this has, in turn, brought about an indexicality, whose semiotic and, therefore, triadic and non-dyadic nature, can be recognized exactly in relation to the possibility of a fake. Everything that can be faked is a potential object of study for semiotics, as Umberto Eco wittily declared in the *Trattato di semiotica generale (A Theory of Semiotics)*.⁹ Spatio-temporal contiguity, however, cannot be faked, because it is not a phenomenological matter but an ontological one. It can be ignored, but that does not entail its inexistence. Either something is in a certain space and at a certain time or it is not. Also, causality cannot be faked either, because that would contradict the notion itself of causality. If an element A contains in itself an agency that, when A ontologically occurs in the same space and at the same time that B, changes B, so that change in B is actually the effect of the agency of A, then the relation between agency and change must be a dyadic, not a triadic one. Every time that A is in spatio-temporal contiguity with B, B will change accordingly. If it does not, it is because the relation between agency in A and change in B is not one of direct causation but one of metaphorical causation, or simple correlation. One of the most relevant difficulties of social sciences, for instance, is that the relations of causation that they identify in the world are not properly such. The increase of wealth in a society does not reduce the demographic rate in that society in the same way in which heating water over 100 degrees Celsius makes it boil. But that is exactly the reason for which Peirce does not define the relation that underlies indexicality as “physical” but as “quasi-physical”: «An index is a representamen which refers to its object in a quasi-physical way, independently of whether there is an interpretant or not».¹⁰

The present section has sought to complexify the customary but stereotypical definition of “indexicality” in Peirce by pointing out the difference between a physical and a real relation between the representamen and the object. Further light on the topic will now be cast through investigating the possibility of faking an index, that is, through conventionally staging a sign that is usually received as “natural”. The possibility of such staging actually point at the elements of conventionality that are hidden in the definition of an index.

5. *Faking Indexicality*

If spatio-temporal contiguity cannot be faked, because it is an ontological matter, and if causal relation cannot be faked either, for otherwise it would not be dyadic, indexicality, which emerges from both, can always be faked. There is no index that

⁹ Eco 1975: 18.

¹⁰ Peirce 1901-1902: 1147.

cannot be faked. A footprint can be produced by simulating the shape, size, and depth that a truthful footprint would produce; crime stories are full of ingenious characters who, having committed a crime, fake some clues, many of them being indexes, in order to divert the attention of the police. Many of the research passions of Umberto Eco, from the fake in the arts up to conspiracy theories, exactly revolve around the cultural possibility of bringing about fake indexicality, whose rhetoric of motivation is such that its persuasive effects are usually greater than those of fake iconicity or fake symbolism.¹¹ Eco was deeply interested in lying and famously defined semiotics as the discipline that studies everything that can be used to lie, perhaps the most successful definition of it ever.¹² One thing is to forge a mostly symbolical document, like the Donation of Constantine, another thing is to forge a mostly iconic document, like the numerous fakes by Modigliani, and yet another is to forge a mostly indexical document, like the Holy Shroud of Turin.

Indexicality is, therefore, not based on the way in which the human mind understands contiguity and causation but on the way in which a culture posits both. The concept of *hypoicon*, meant as an icon in which the relation of similarity or analogy between the representamen and the object is preponderant even beyond the inevitably cultural and, therefore, arbitrary reception of it, should be paralleled by a similar concept of “*hypoindex*”, that is, an index in which the strength of the relation of spatio-temporal contiguity and, therefore, causality emerge as real even beyond their cultural reception. Peirce seems to refer to this kind of strong indexicality when he distinguishes between degenerate indexes, on the one hand, and pure indexes, on the other. This distinction is fundamental also in order to seek to clarify a matter that has frequently been left in an ambiguous formulation, or not dealt with at all, that is, the relation between pragmatic indexicality on the one hand, and semiotic indexicality on the other. When Peirce refers to pure indexes, he has in mind pragmatic indexicality:

The other form of degenerate sign is to be termed an index. It is defined as a sign which is fit to serve as such by virtue of being in a real reaction with its object. For example, a weathercock is such a sign. It is fit to be taken as an index of the wind for the reason that it is physically connected with the wind. A weathercock conveys information; but this it does because in facing the very quarter from which the wind blows, it resembles the wind in this respect, and thus has an icon connected with it. In this respect it is not a pure index. A pure index simply forces attention to the object with which it reacts and puts the interpreter into mediate reaction with that object, but conveys no information. As an example, take an exclamation “Oh!” The letters attached to a geometrical figure are another case. Absolutely unexceptionable examples of degenerate forms must not be expected. All that is possible is to give examples which tend sufficiently in towards those forms to make the mean suggest what is meant. [...]

¹¹ Leone 2017b.

¹² Eco 1975: 18.

An index is a sign fit to be used as such because it is in real reaction with the object denoted.¹³

On several occasions, Charles S. Peirce combines together two conceptual definitions: on the one hand, the index as that type of sign in which the relation between the representamen and the object is characterized by spatio-temporal contiguity, which begets a factual or real connection, which begets, in turn, the indexical link. That is the case of the weathercock, which indicates the direction of the wind because of its position in time and space in relation to it, because of the agency that the wind exerts on the direction of the weathercock, and by virtue of the presence of a cultural interpretant (common sense knowledge about the function of weathercocks in a society) allowing an interpreter to turn a spatio-temporal and factual connection into a sign. On the other hand, Peirce considers as indexes those signs that somehow force the attention of the interpreter to direct itself in a certain way. The most common of these signs is the one that gives its name to its entire semiotic category, that is, the pointing index. When an index is pointed at something, be it also an empty spot in space, the attention of the beholder is somehow compelled to follow this indication, which creates a connection between the emergence of this sign in a perceptual scene (the tip of the pointing finger) and the area of such space toward which attention is attracted to.

One of the strong argument that the present paper intends to propose is that the semiotics of Umberto Eco entirely revolves around a problematization of the notion and analysis of indexicality. This semiotic attitude, consisting in detecting the cultural determinations of naturalized habits, is also what ultimately defines the philosophy of Umberto Eco, who was essentially a subverter of clichés. His way of seeking to make reality more intelligible to human beings crucially entailed underlining how semiosis, although omnipresent in culture, is frequently forgotten and overlooked, its arbitrary results transformed into areas of motivation. Such preoccupation of Eco is not only semiotic but also philosophical, in the sense of a social philosophy of knowledge, for Eco correctly intuited that arbitrary constructions of motivation are a fundamental mechanism in the genesis of power and its counterpart, that is, subjugation. It is through naturalizing cultural arbitrariness that relations of power are created among human beings.

6. Indicality and Indexicality

Peirce seems to encourage, moreover, the inclusion, within the conceptual sphere of indexicality, not only of gestural indexes, but also of those deictics that, in contemporary pragmatics, are studied under the label of “indexicality” too; when I say “here”, for instance, this word has a conventional and, therefore,

¹³ Peirce 1904: 517.

symbolical nature in the terms of Peirce; its object, however, is signified by the verbal (written or oral) representamen through the spatio-temporal connection that it has with a certain point of space and time, so that this condition of spatio-temporal contiguity between space, time, and the word turns into a factual link and, consequently, into the possibility of an indexical interpretant to emerge. All languages seem to be endowed with the capacity for signifying the connection between a certain place in time and space and the location in time and space of the expression that points at it; verbal signs that create these connections vary from language to language, meaning that their acting as verbal representamens of such indexical connection is in itself arbitrary; there is no particular motivation for which one should use the word “here” instead of the word “ici” in order to create a spatio-temporal and, therefore, real and indexical connection between the time and place in which the word is uttered and a spatio-temporal area of proximity around the physical source of such utterance. Hence, the word “here” is a representamen that conventionally and, therefore, symbolically relates to the idea of pointing at a space and time close to the physical source of utterance of the word; the connection between the source of this utterance and the space and time signified by the word, however, is not arbitrary at all but motivated by a relation of spatio-temporal contiguity. Signboards in parks or other public areas contain the typical indexical sentence “you are here”, combined with an arrow or other indexical visual sign pointing at a place in the map. This sentence is composed by three English lexemes, all of them endowed with an indexical signification. The three of them are conventional, meaning that there is no particular motivation for their having the phonetic and graphematic shape that they have (indeed, they would be translated into different words with the same meaning in other languages); they are, however, motivated by the binding conventionality of language: in English, in order to say “here”, one must use this word; there is no other alternative way of expressing the same indexical meaning; that is not a motivation in the sense that the meaning of “being *hic et nunc*” is contained in the shape of the word “here”; it is contained, however, in its usage according to the English *langue*. The relation between the sentence and the place in which it manifests itself in its graphic form, however, is fully indexical, although it does not relate directly to space but to an iconic representamen of it (the map); the sentence, then, indexically refers to space through this iconic signification, so that a mental operation of projection is necessary in order to correctly interpret the sentence. If someone read it without operating this projection into the iconic representamen, then the sentence would signify the pleonasm that its reader is there where he or she reads the sentence, and not actually in the place of the map where the sentence is readable. Nevertheless, although this indexicality is referred to the map where the sentence is written, and not to the actual space where the sentence is read, its indexicality is clear: it stems from the physical contiguity between the sentence, the graphic sign of the arrow, and the iconic representamen of the

space where both appear; in this case too, however, the presence of a cultural interpretant in the social encyclopedia is necessary in order for this conjunction of verbal and graphic indexes to express their indexical signification. First of all, one should know English in order to correctly interpret the sentence “you are here”; knowledge of English, however, would be required to correctly interpret the symbolical link between the sentence and its object, and not the indexical link between the sentence and the point in space represented in the map; such link, however, also requires a certain visual competence in realizing that the red point on the map, or the arrow represented therein, signify an indexical relation to the iconic representation of it.

Whereas the conventional nature of verbal deictics is clear, non-verbal indexical signs with a deictic significance, such as arrows or the ‘same’ pointed finger, have too often been considered as simply motivated. Umberto Eco has given an important contribution, already in his *Trattato (A Theory of Semiotics)* (1975), to dispel such misconception: from Sherzer’s seminal study on lip-pointing among the Cuna of Panama on (1973), increasing ethno-semiotic evidence has been gathered about the fact that postural and gestural indexicality too is object to cultural variation¹⁴ and, therefore, underpinned by the institution of an “indexical common sense”. But Eco’s ability of ‘awakening culture’ from the illusion of being nature is evident in the whole immense intellectual production of the Italian scholar: his insights about literature, the arts, and perhaps especially about cultural practices, quotidian rituals, and everyday life are all attentive to exploring and mapping the encyclopedia of cultures, showing that it emerges from the activity of language in nature and not from that of nature in language. After all, Eco defined the threshold that he posited between semiotics and cultural anthropology, in his seminal treatise of general semiotics (1975) as a “political one”, respectful of academic domains rather than motivated by disciplinary definitions. Indeed, the field of semiotics is culture as a whole, as it is for cultural anthropology, and blurring and intermingling between the two disciplines has going on since the onset of the former, younger methodology. Yet, what characteristically defines the approach and the novelty of semiotics is precisely an attention to the verbal and non-verbal making of cultures as encyclopedias, as meshes of semiotic habits that turn into the paradoxical, cultural ‘second nature’ of a society.

7. Conclusions

A particular intellectual strategy emerges from the majority of Umberto Eco’s theoretical works. It might be characterized as follows: variability, variation, and variety are consubstantial dimensions of both nature and culture, although the

¹⁴ Enfield 2001.

latter, also in its relation with the former, tends to organize singularities and idiosyncrasies into types. After all, language is nothing but the result of the human patterning of nature. Nevertheless, one should neither believe that such variability hinders and frustrates any cognitive and, a fortiori, linguistic effort, nor that it is illusory and actually mysteriously stems from the same underpinning universals. In the concrete field of the history of ideas, Eco contrasted the first conception of variability through his dialectics with Jacques Derrida and deconstructionism, whereas he countered the second conception through his controversies with the exclusively deductive semiotics of Algirdas J. Greimas. In between these two excesses, Eco proposed a simple but clever solution, which is the same he adopted in order to deal with the issue of the relation between literal and metaphorical meaning: the latter cannot be fully grasped if the former is not posited. Similarly, cultural variability is appreciable only on the background of a grid of meta-semiotic understanding of the variations that it produces. As regards the study of the types of signs singled out by Peirce, and continuously problematized by the US philosopher, such theoretical attitude consists in distinguishing between different degrees of variability: indexes, which were the primary object of the present article, are of course multifarious, but their variety can be entirely comprehended and systematized only on the basis that they all stem from a more general principle, called "indexicality". Semioticians should, of course, study indexes, but always with the effort of framing them as instances of the semiotic principle from which they descend. That should not entail, however, that the principle of indexicality, as well as that of iconicity, is universal and immutable. It is simply more cross-culturally stable than the signs that it brings about. To give an example: lip-protruding and finger-pointing are both gestural indexes, using different parts of the body with divergent dynamics, yet they always refer to the same principle that undergirds indexicality, that is, the creation of a link between a spatio-temporal contiguity, a factual relation, and the emergence of an indexical interpretant. It is only by virtue of this abstract common root, indeed, that subtle differences among indexical cultures can be appreciated. Visiting a Buddhist temple in China, for instance, one realizes that local devotees avoid pointing at details of Buddha's iconography with their fingers, and prefer doing it with their open hands, as if this second indexical gesture was somehow endowed with a "softer" Gestalt than the other. This difference, however, that probably derives from a complex interaction between cultures of subjectivity and gestural patterns (fingers "individualize" their object more than open hands do), can be taken into account only if compared in relation to a common semiotic formula, which is the one that Peirce first, and Eco after him, painstakingly sought to pinpoint. That does not mean either, however, that the abstract level of "indexicality", as those of "iconicity" or "symbolicity", be immune from variety. Semiotic anthropology and cultural semiotics must precisely undertake the task of showing how not only indexes but also the same ideology of indexicality changes in the passage

from a culture to another, or in the transition from an epoch to another. Eco's contribution somehow stopped at this threshold, the "political frontier" between semiotics and anthropology, which he himself had set in the *Trattato di semiotica generale*. Hence, there is perhaps no better way to pay homage to the great Italian intellectual than challenging such a threshold, and seeking to develop an even more-encompassing understanding, not only of how indexes change on the background of a common indexicality, but also of how indexical ideologies change on the background of a common nature.

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