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## Dynamics of the Collateral Encyclopedia

**Abstract:** Both Umberto Eco and Charles S. Peirce have been concerned with the notion of background knowledge. Eco refers to background knowledge as the *encyclopedia*; Peirce's term of reference is *collateral experience*. The aim of this article is to investigate the degree to which these two concepts are comparable. We focus on one major metaphysical issue, viz. the fact that Eco defines collateral experience, which is the first step in any process of cognition, as *private*, whereas Peirce, as a realist, would never accept the concept of private thoughts, feelings, etc. We suggest that freeing collateral experience from its nominalistic nomenclature makes possible a comparison and synthesis of Eco's and Peirce's conceptions when seen from the perspectives of their cognitive type, nuclear type, and molar content.

**Keywords:** Charles S. Peirce; cognitive type; collateral experience; molar content; nuclear type; Umberto Eco

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Symbols grow. They come into being by development out of other signs, particularly from icons, or from mixed signs partaking of the nature of icons and symbols. We think only in signs. These mental signs are of mixed nature; the symbol-parts of them are called concepts. If a man makes a new symbol, it is by thoughts involving concepts. So it is only out of symbols that a new symbol can grow. Omne symbolum de symbolo. A symbol, once in being, spreads among the peoples. In use and in experience, its meaning grows. (CP 2.203)

## 1 Introduction

Both Charles S. Peirce and Umberto Eco have developed concepts that describe the notion of background knowledge that is used in signification and communication. Peirce named this concept *collateral experience* and Eco calls it

the *encyclopedia*. That each has put forward such important similar concepts makes it interesting to compare the two to see if a synthesis might result, i.e. something we might call the *collateral encyclopedia*. Thus, this article undertakes an investigation of the 1999 version of Umberto Eco's encyclopedia from *Kant and the Platypus* in order to compare it with the Peircean concept of collateral experience. Given that Eco worked with several elements concerning the encyclopedia during the years leading up to the publication of *Kant and the Platypus*, we are not interested in, nor can we compare all of Eco's encyclopedia elements to the Peircean concept of collateral experience; rather, our interest is aimed at Eco's concepts of Cognitive Type (CT), Nuclear Content (NC), and Molar Content (MC) as we see these concepts as constituting the important (cognitive) dynamics of Eco's encyclopedia. Our hypothesis is that these concepts are compatible with our Peircean inspired concepts of emotional collateral experience (ECE), informational collateral experience (ICE), and cognitional collateral experience (CCE). These concepts are set out in Table 1.

**Table 1:** Key elements of Eco's *encyclopedia* and Peirce's *collateral experience*

ECO	PEIRCE
ENCYCLOPEDIA	COLLATERAL EXPERIENCE
Cognitive Type (CT)	Emotional Collateral Experience (ECE)
Nuclear Content (NC)	Informational Collateral Experience (ICE)
Molar Content (NC)	Cognitional Collateral Experience (CCE)

Now in order to compare the concepts and to see if they are – in any way – philosophically compatible, we must first investigate a few but important conceptual premises of each. In 1999 Eco published his book *Kant and the Platypus*, which seems to mark Eco's realistic turn heavily inspired by Peirce; and Peirce himself being a scholastic realist makes it possible to compare the concepts; add to this the fact that Eco already long before his realistic turn had used Peirce's concepts of *infinite semiosis* and the *interpretant*. Consequently, we believe that the concepts – at least seen from this particular perspective – are compatible. What indeed marks Eco's realism is his usage of Peirce's conceptual pair of the *immediate object* and the *dynamic object* when he writes:

[... T]here is a first moment of the reaction of the senses that is unquestionable; the moment in which the quality presents itself to me as the quality of something (Secondness); this something becomes the premise of every other inference, in the sense that I know that in case there is a dynamical object that is triggering the chain of my responses. At this point the work of the interpretation begins, and, when perceptual judgment establishes itself and takes shape, it resolves itself into the formation of the immediate object. (1999: 64)

It seems here that Eco accepts this aspect of Peirce's realism. Thus, both the encyclopedia and the concept of collateral experience are anchored in a realistic metaphysics; and both involve – seen from the Peircean perspective – a synechistic relation between the ontological level and an epistemological ditto secured by the presence of a dynamical object causing immediate objects to occur in the semiosis act. Peirce writes:

We must distinguish between the Immediate Object, – i.e. the Object as represented in the sign, – and the Real (no, because perhaps the Object is altogether fictive, I must choose a different term, therefore), say rather the Dynamical Object, which, from the nature of things, the Sign cannot express, which it can only indicate and leave the interpreter to find out by collateral experience. For instance, I point my finger to what I mean, but I can't make my companion know what I mean, if he can't see it, or if seeing it, it does not, to his mind, separate itself from the surrounding objects in the field of vision. It is useless to attempt to discuss the genuineness and possession of a personality beneath the histrionic presentation of Theodore Roosevelt with a person who recently has come from Mars and never heard of Theodore before. (CP 8.314)

Reality is presented to us in true representations, as Peirce puts it (W2: 239). The quoted text seems to indicate that we can think of the relation between the dynamical object and the immediate ditto in terms of a continuum of space and time. For example the time it takes for us to interpret the immediate object seems to depend on our knowledge about it. Thus the more we know about Theodore Roosevelt, the faster we are capable of recognizing the immediate object as a sign of Roosevelt. The more we know about Roosevelt, the faster we are capable of activating our collateral experience. The more we know about Roosevelt, the faster we are capable of activating the relevant places in the encyclopedia. Eco himself gives another – but similar – example when he defines metaphor and the similarity that underlies it as a semiotic mechanism. It is the underlying structure of the semantic network organized as Peircean interpretants making up the encyclopedia that allows the maker of the metaphor to relate different semantic units within the network and thereby catching a glimpse of its very organization. Consequently, parts of the collateral experience and the encyclopedia are activated whenever we are engaged in signification or communication. Peirce states that collateral experience is a condition in order for signification and communication to take place. It is a complex system of shared knowledge that governs semiosis or semiosis acts (cf. Liszka, 1996; Bergman, 2011) Eco however works on defining the encyclopedia for several years whereas the concept of collateral experience is part of Peirce's late semeiotic – approximately 1896–1914 (Short, 2004: 225) – and he provided only a few remarks concerning the concept. However, when the mature Peirce

was preoccupied with laying down general semeiotic principles, collateral experience was also mentioned as a key idea in his terminology, e.g. in letters to fellow philosophers William James and Victoria Welby. Collateral experience is vital in order to understand how signification and communication is possible according to Peirce (cf. Sørensen, Thellefsen, & Thellefsen, 2014). But let us now take a look at the encyclopedia to answer these questions: What does it consist of? Does it have an interpretational direction? And, does it develop?

## 2 The encyclopedia

In 1999, when Eco wrote *Kant and the Platypus*, he had already defined the encyclopedia, so in order to understand the encyclopedia after 1999 we must naturally by aid of Eco rethink the encyclopedia in realistic terms. Consequently, this rethinking is our interpretation of Eco's encyclopedia, that is, not all the elements that we ascribe to the encyclopedia can be attributed to him. We believe – for example – that the Deleuze and Guattarian rhizome as Eco suggests as a metaphor for the realistic encyclopedia is to be seen as rather problematic; it was useful when the encyclopedia was dressed in nominalistic clothing because the rhizome has no direction, it has no beginning, and it has no end. Of course being a Peircean-inspired realist the direction is by no means a fixed or determined direction. The encyclopedia is renewed in communicative practices. It develops, not in a certain direction, but still it develops in a certain kind of direction embedded with a final interpretant that according to Peirce is nothing else than:

[...] the effect the Sign would produce upon any mind upon which the circumstances should permit it to work out its full effect. [–] ...the Final Interpretant is the one Interpretative result to which every Interpreter is destined to come if the Sign is sufficiently considered. [–] The Final Interpretant is that toward which the actual tends. (SS 110–1)

Of course, the final interpretant is related to the esthetical ideal according to Peirce, the summum bonum or the “highest good” (cf. Potter, 1997). We do not think that Eco will subscribe to this ideal, however; involving Peirce's realism in his encyclopedia, Eco must to some extent take the final interpretant into consideration. Being a realist Eco accepts that the dynamical object in some way forces itself upon us – it determines the interpretation and it makes the signification begin in one way or the other – it is a condition sine qua non. We cannot apply any interpretation whatsoever to a sign. Meaning is not a purely

subjective affair. Even if thinking, choices, and perspectives are included in signification, the choices are not entirely free from constraints. The dynamical object will put constraints of interpretations that are clearly outside the potential of the dynamical object. The point is that even if a sign can carry many different interpretations, there are also interpretations that it cannot carry. There are for example pragmatic rules, narrative frameworks, but also determinations coming from the processes of perception interlinked with the first mentioned.

### 3 The encyclopedia in the light of synechism

In his book *A Theory of Semiotics* Eco writes:

We can imagine all the cultural units as an enormous number of marbles contained in a box; by shaking the box we can form different connections and affinities among the marbles. This box would constitute an informational source provided with high entropy, and it would constitute the abstract model of semantic association in a free state. According to his disposition, his previous knowledge, his own idiosyncrasies, each person when faced with the sign-vehicle /centaur/ could arrive at the unit “Atomic bomb” or “Mickey Mouse”. (1976: 124)

*A Theory of Semiotics* dates from Eco’s nominalistic period; however, we believe that Eco still believes this is how the encyclopedia is generally organized – cultural units related as interpretants through semantic associations forming enormous and multi-dimensional networks of cultural knowledge. What we would like to focus on in this quoted text is how we are able to go from one cultural unit to another, from one part of the encyclopedia to another, so to speak. This ability is provided through our ability to form associations, which according to Peirce is the great law of mind, the law of associations (cf. CP 7.515), which again depends on our level of collateral experience. However, it occurs to us that Eco means that all cultural units within the encyclopedia stand in a continuous semantic associative relation to each other and the relations take on a global format in principle, which to us indicates a relation to Peirce’s concept of synechism that everything – generally – tends to swim in a continuum (cf. CP 1.171). However, in 1976 the encyclopedia is a closed system since Eco defines it in terms of a box. Consequently, it is only inside the box that cultural units are related and the box marks the border of the units’ interpretative potential. All relations are linked to a cultural order, or the way a society thinks and expresses itself in language or another semiotic system.

Eco does not want to deny the existence of objects in an extra-semiotic world, but – at this point – he wants to avoid making any ontological commitment of any sort. Hence, Eco signification is independent of any motivation or “naturalization”, and it lies wholly internal to the process of signification itself. This is not very synechistic – in fact it is quite the opposite, according to Peirce. However, in and after 1999 we believe that Eco breaks up the boundaries of the box and lets the units relate to potentials outside the semiotic box maybe in terms of his cognitive types (CT); this is, however, not true as we touch upon later. We also believe that Eco will employ more than mere semantic associations to the encyclopedia and maybe underwrite that Peirce’s three types of associations – resemblance, contiguity, and interest – can also be involved. We return to these three types in our discussion of Eco’s concepts of Cognitive Type – which exactly seems to relate to association of resemblance: “The *iconic component* is the most important and the reason why the Cognitive Type is referred to as a ‘type’” (Nino & Servanti, 2009: 5, quoting Eco, 1997: 153). Thus the Cognitive Type seems to be an icon. We furthermore interpret the Nuclear Content (which seems to relate to association of contiguity) as an index and the Molar Content (which seems to relate to association of interest) as a symbol.

If we take a look at the box in the light of Peirce’s synechism, it would seem that the encyclopedia consists of knowledge – cultural units, as Eco states – which stand in a continuous relation. It consists of a network of cultural units interwoven into larger cultural units. It contains knowledge about all kinds of concepts or symbols and “It spreads among the peoples. In use and in experience, its meaning grows” (CP 2.302). The encyclopedia – potentially – covers all thoughts, it covers all meaning, and the idea of the encyclopedia seems inspired by Peirce’s doctrine of synechism. However, Peirce would not accept that the encyclopedia involves only human thoughts and knowledge since he clearly states that the universe is perfused with signs (EP II: 394), using this pan-semeiotic view to underline our point. However, this is how we understand Eco’s encyclopedia in the light of Peirce’s realism.

## 4 The cognitive elements: Cognitive type, nuclear content, and molar content

In *Kant and the Platypus* (1999) Eco defines and employs three important concepts he believes are fundamental in any process of signification, namely the Cognitive Type (CT), the Nuclear Content (NC), and the Molar Content (MC). Given the importance of the concepts and the way Eco defines them, we believe

that they must function in the encyclopedia as important cognitive elements or be a very central part of the dynamics of the encyclopedia.

In *Kant and the Platypus* Eco investigates signification by using an example with Montezuma and the horses. This is a fantastic lucid example of the process of signification; Eco tries to explain how the Aztecs grasp the fact that they see an animal they have never seen before. First of all, they employ a perceptual type of the animal, making recognition of it possible, the perceptual type is what makes it possible for them to distinguish among objects; in terms of associations, this is an iconic association, an association of resemblance. The Aztecs do not know what kind of animal the horses are so they compare them with an animal that they do already know. “An animal has appeared before us that seems like a deer, but isn’t” (Eco, 1999: 113). Eco tells the tale of the messengers returning to Montezuma informing him about the terrible animals, gesturing, probably making a lot of noise while reporting what they saw – again using associations of resemblance. The point is that Montezuma – when he finally was confronted with the Spaniards – would not be in doubt when he saw the animals the messengers had described to him.

[...] I would say that, no matter how confused the messengers’ description may have been, Montezuma must have easily identified those things called macaoa. Simply, faced with the direct experience of the macatl, he must have adjusted the tentative idea he had conceived of them. Now, like his men, every time he saw a macatl, he too would recognize it as such, and every time he heard talk of macaoa, he would understand what his interlocutors were talking about. (1999: 115)

Montezuma compared what he saw with his encyclopedia and corrected his idea so it matched reality. In this way he created a cognitive type (CT) from the descriptions of the messengers. He also combined the words *cacaoa* with *macatl*, consequently creating a relation between concept and phenomenon again through associations of resemblance. We may say that the CT is private mental images in relation to the phenomena we experience; it is an individual process of signification. Eco puts it this way:

Whereas at first the Aztecs might have felt that their CT was private, as soon as they all began indicating the same animals by pronouncing the name macatl, they must have realized that, on the contrary, the CT had established an area of consensus. At first the area of consensus could be postulated only to explain the fact that they understood one another by using the same word. But bit by bit they must have proceeded to collective interpretations of what they understood by the word. (1999: 121)

It seems safe to say that, according to Eco, creating a CT is the first step in a signification process. The Danish scholar Frederik Stjernfelt points to the CT as

the first stable structure formed in perception, which is a perceptual type and therefore prelinguistic, i.e. free from semiotic doubt and cultural relativism (cf. Stjernfelt, 2007: 69). This also means that the content of the encyclopedia is not simply and solely based on cultural conventions; the basis of signification is also pre-cultural. The question is however: how does the CT break the boundaries of private experience?

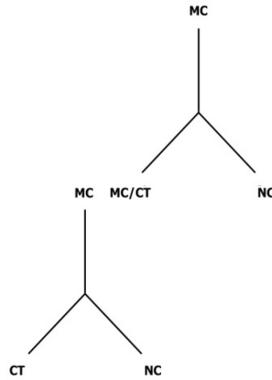
The private boundaries of the CT are broken as soon as the Aztecs began indicating the same animals by pronouncing the name ‘macatl’. The CT goes from private to public and it changes its nature of sign, hence, it becomes a Nuclear Content. At this semantic level we also employ associations of contiguity.

In time, when the Aztecs understood what kind of animal the horses were, they perhaps made cultural representations of it; maybe they painted them on canvases, maybe they used them in fables, in religious ceremonies, etc. In this way the meaning of the horses transcended the mere NC – the horse gained a place in the Aztecs’ encyclopedia interwoven in their cultural legacy. At this level they employed associations of interest.

Summing up, the CT is the perceptual type of the animal, making recognition of it possible; thus, this is the private part of cognition; the NC involves central pieces of information about it (it has a mane, it is a quadruped, it has a long tail, it can be used in situations of war), and the MC will involve different sets of elaborated representations of it (cultural representations – cultural knowledge). Now, given the inspiration of Peirce on Eco’s thinking – here the idea of infinite semiosis – the three cognitive elements must in some way be connected to each other. New CTs must evolve from the MC adding to the NC and again to the MC. Inspired by Peirce’s triadic sign, we present Eco’s cognitive elements as in Figure 1.

Having looked at Eco’s encyclopedia, its content, and its dynamics, we turn now to focus on Peirce’s concept of collateral experience. To Eco, the encyclopedia is the backbone in signification and, as we recall, collateral experience is likewise fundamental to Peirce in relation to signification.

According to C. S. Peirce, collateral experience is a necessary condition for grasping relations as significant. Or, formulated in the terminology of his semeiotic, when we attempt to assign attributes to objects via representamens and interpretants, collateral experience also comes into play. In what follows, we try to demonstrate – roughly – how collateral experience is at work in the process of signification.



**Figure 1:** The unlimited semiosis of cognition in Eco's perspective:  
From the MC, new CTs may arise; this process is in principle infinite.

Let us return to Eco's example of Montezuma and the horses for our demonstration. Eco writes that the first Aztecs to hasten to the coast witnessed the landing of the conquistadors. Eco further writes that what they saw must have completely amazed them: the ships, the Spaniards' awesome and majestic beards; their protective covering; their unnaturally white skin; the muskets; the cannons and the horses; all of which are information or signs the Aztecs in some manner must relate to their collective collateral experience. In the example it is clear that the Aztecs possessed only some vague idea of what they were looking at. However, they must have had some ideas about the Spaniards since they were able to perceive them as something. Based on the collateral experience, they must have been able to wonder about these strange looking animals – indeed they described a horse in the following way: “An animal has appeared before us that seems like a deer, but isn't” (1999: 113). The Aztecs must have had an idea of the horses as animals, however leaving them with a feeling of uncertainty and doubt since they did not know exactly what kind of animals they were. They compared what they saw with what they already knew – their collateral experience. This background knowledge was sufficient to create hypotheses; and because the Aztecs had but limited knowledge about the Spaniards' horses the dominating feeling must have been a feeling of doubt and uncertainty. In this phase of the process of signification the number of hypotheses was high since doubt dominated the minds of the Aztecs. Of course interacting with the Spaniards and seeing their horses up close, the Aztecs quickly learned about them – doubt was replaced with belief; hypotheses were

rejected and some conclusions were formed. As the Aztecs learned more and more about the Spaniards, their knowledge about them grew, allowing them to remove several hypotheses and to replace them with other hypotheses.

Now regarding signification, the Spaniards' horses initiated the process of signification and, as a dynamical object, it forced itself upon the minds of the Aztecs in perception, but included more than perception revealed. It was an object of actual experience. The Spaniards' horses made the Aztecs attentive, causing emotional responses in them, or interpretants. The horses carried some information, and the Aztecs began making hypotheses – e.g., “Are they deer?” “Are they Gods?” At the first stage of the process of signification, the Aztecs could make a number of possible hypotheses about the Spaniards' horses; and thereby creating immediate objects, which according to Peirce, “... is the Object as the Sign itself represents it, and whose Being is thus dependent upon the Representation of it in the Sign, from the Dynamical Object” (CP 4.536). At this stage in the process the Aztecs could not really say what the dynamical object was – there were several possibilities – because they could not assign a lot of predicates to the Spaniards' horses in terms of meaning. Put another way: the range of information was broad in terms of immediate objects that the Spaniards' horses could refer to. Even so, the Spaniards' horses captured the attention of the Aztecs, initiating the process – involving a dominating first act of experiencing and feeling – and the Spaniards' horses caused the Aztecs to wonder what they were; and thereby the Aztecs represented aspects of the dynamical object via immediate objects. As the Aztecs learned more about the Spaniards' horses they abandoned (probably mostly in an unconscious manner) a series of first hypotheses. When the Aztecs had gathered enough information about the Spaniards' horses in order to interpret their actions, the initial signification process was finished; of course it didn't just stop, it continued for as long as there were Aztecs interpreting the Spaniards' horses, adding knowledge to the common collateral experience of Aztecs.

## 5 The three levels of collateral experience

We believe that the Peircean collateral experience is operative on three different – but interrelated – levels: the emotional level, the informational level, and the cognitive level, respectively. Our premise is the following: First, it is important to remember that Peirce had a broad concept of “experience”; to him experience relates not only to brute facts, but also to the total cognitive result of living, including interpretation and feeling (CP 7.538). According to Peirce, there are no

other forms of consciousness besides the momentarily present content, the directly present, and the process of bringing to mind (CP 7.551). They form the system of consciousness. The momentarily present corresponds to feeling, the directly present corresponds to information, while bringing to mind corresponds to cognition. Hence, in the process of signification, collateral experience is operative at three different levels. But how this collateral experience works on these three levels when signification is in process remains the question. Collateral experience includes awareness of past acquaintance with things associated with the object being perceived, felt, and cognized. Furthermore, we remember that, according to Peirce, there is an intimate relation between the three types of signs – icon, index, and symbol – and the laws of association.

[...] signs denote what they do on the three principles of resemblance, contiguity, and causality. There can be no question that anything is a sign of whatever is associated with it [...] nor can there be any doubt that any sign recalls the thing signified. So, then, the association of ideas consists in this, that a judgment occasions another judgment, of which it is the sign". (CP 5.307)

Therefore, we can assume that there is also an intimate relation between collateral experience and the three types of association – resemblance, contiguity, and interest. Returning to our example, we can say that collateral experience was operative on three different levels: association by resemblance enabled the Aztecs to compare the feelings caused by the object (the Spaniards' horses) with feelings with which they were already acquainted (the emotional level). Association by contiguity enabled the Aztecs to acknowledge a qualitative content resulting from the frequent experience of two objects together or a power from without (the informational level). And finally, association by interest enabled the Aztecs to relate the two first-mentioned (levels) and their objects, because of some purpose that they had in mind. The Aztecs wanted to know, for example, whether or not the horses were divine. A conclusion may be that collateral experience is crucial for any process of signification – whether the Aztecs put forth and tested a hypothesis (What are these strange looking animals?) or made conclusions about the Spaniards' horses (They are not Gods but animals). This can be summarized in Table 2, in which we also have placed Eco's three cognitive concepts.

**Table 2.** Montezuma's horses and the processes of signification according to Eco and Peirce

<b>Semeiotic</b>	<b>Eco's levels of cognition</b>	<b>Levels of signification</b>	<b>Peirce: Breadth x Depth</b>	<b>Collateral experience</b>
The first glimpse of the Spaniards' horses	Cognitive Type a private feeling	Emotion (dominant) Information Knowledge	The number of predicates is low, and the number of possible immediate objects is high.	Emotional collateral experience, association by similarity
The relation of information about the Spaniards' horses – form, smell, contour, etc.	Nuclear Content general knowledge about the sign	Emotion Information (dominant) Knowledge	The number of predicates increases as the number of possible immediate objects decreases.	Informational collateral experience, association by contiguity
The Spaniards horses are neither gods nor deer but a combination of the words <i>cacaoa</i> and <i>macatl</i> - <i>cawayo</i> (Aztec transformation of Spanish word for horse, <i>cabello</i> )	Molar Content the sign's relations in the encyclopedia	Emotion Information Knowledge (dominant)	The number of predicates is high, and the number of possible immediate objects is low.	Cognitive collateral experience, association by interest

The left-hand column, top to bottom, sets out the process of semeiotic, from the first glimpse of the Spaniards' horses – a condition of constraint caused by the dynamical object – to the point where the Aztecs recognize the glimpse as a certain form involving general information about the horses – ending with a the ability to place the horse in a cultural context.

The second column from the left, top to bottom, contains Eco's three fundamental concepts of cognition: from the CT through the NC to the MC.

The middle column, top to bottom, contains the levels of signification as they develop from an emotionally dominant level, where the glimpse can refer to many things, to the level dominated by knowledge, where the horse is identified.

But we have also added a fourth column from the left. This stems from Peirce's early definition of information (see e.g. Nöth, 2012: 140), where Peirce defined information as breadth x depth.<sup>1</sup> This column implies that when we are uncertain of what kind of dynamical object we are experiencing, the number of predicates ascribed to the object – e.g. the first glimpse of what we later will know as horses – will be low, while the number of possible immediate objects will be high. As the Aztecs learned more about the animal, they could ascribe more predicates to the dynamical object and, as they did this, the number of hypotheses increased. Finally, when the Aztecs had learned even more about the horses, as they experienced them in their interactions with them, they could ascribe so many predicates to the horse that it became a *cawayo*. Consequently, when the number of predicates attributed to a dynamical object increases, the amount of information (and meaning) conveyed by it increases, as well (cf. Nöth, 2012: 139).

Finally, the last column on the right-hand side of the table implies that there are three kinds of collateral experiences: emotional, informational, and cognitive – we associate the dynamical object with feelings, information, and cognitions that we are already acquainted via resemblance, contiguity, and interest.

Having looked into (a part of) Eco's concept of the encyclopedia and a Peircean concept of collateral experience, let us now – also having the above schematics in mind – return to the hypothesis that we proposed in section 1 – it is possible to make a synthesis of these concepts into a “collateral encyclopedia” and to describe part of its dynamics.

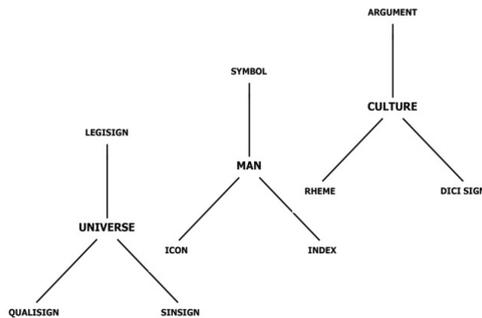
## 6 Peirce and Eco

We first ask ourselves: In what way – if at all – is it possible to compare Eco's three fundamental cognitive elements to Peircean collateral experience? We pose this question because these three elements from Eco can be seen as important dynamics of the encyclopedia. We consider the first element, the CT:

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<sup>1</sup> Peirce later named breadth and depth denotation and signification, respectively (cf. e.g. EP2: 304).

to Eco the CT is a private experience of any phenomenon; it is a perceptual type and therefore prelinguistic – free from semiotic doubt and cultural relativism. The emotional collateral experience is subjective, however by no means private. This subjective emotional experience of doubt and belief stands – potentially – in a continuous relationship with other emotions and other subjects and the universe. Here the two concepts really are different. Indeed the difference between private and subjective is whether or not one can say that the universe is perfused with signs. Since the CT is fundamental in cognition and is a condition for both the NC and the MC, the theory still has some nominalistic traits. However, since Eco will now admit to a dynamical object – or an ontological basis for the sign – he has opened “the box” of the encyclopedia of human culture and knowledge represented by many different sign systems. Also the encyclopedia in a Peircean perspective – however with a much more robust realism underlying it – will be open towards all kinds of semeiosis. We depict these relationships in Figure 2:



**Figure 2:** The *encyclopedia* in a Peircean perspective

The intention of Figure 2 is to show how we believe the universe, man, and culture are related in a Peircean perspective. It is important to understand that universe is a potential from which man during evolution has emanated. That is – man is only one out of an infinity of actualizations of the potential; however, man stands in a continuous relation to the universe as do his thoughts and his cultures as well. The reason we mention the sign types in the triads is to stress the point that the universe consists of signs of presentation, man consists of signs of representation, and culture consists of signs of signification. Man evolved from the universe, culture evolved from man; consequently, there is a continuous relationship between the universe, man, and culture. Man cannot

create anything that was not presented in the potential of the universe (cf. Nóth, 2014).

A collateral encyclopedia will have to involve all triads if we decide to make the Peircean perspective the most fundamental; it must be open to all kinds of semeiosis. Eco's CT, NC, and MC can be related to the above triads – however, concerning the first triad only in a very vague sense ontologically. Eco admits that there IS something, something of resistance, something that will make semiosis begin, but he does not want to try to get any deeper into what that IS. The NC consists of the attributes of a sign that add to the meaning of the sign; in this case this matches the idea of the informational collateral experience since this also adds to the meaning of the concepts in terms of information. The MC is the sign understood in relation to its cultural bearings; this seems to correspond to the cognitional collateral experience, which is the knowledge that enables us to understand the sign's connotations.

It is interesting that both the cognitive concepts of Eco (at least in our interpretation) and the collateral experience can be seen as organized via associations of the type resemblance, contiguity, and interest. This means that the encyclopedia in a Peircean perspective must involve synechism transgressing the private experience of the CT. If we are to understand the encyclopedia of Eco in the light of Peirce, we must free the CT from the perspective of the private. By doing this it seems to us that the encyclopedia is a very strong metaphor of a thorough organization of knowledge, which is organized continuously by means of associations.

## 7 Conclusion

In this article we undertook to compare Eco's 1999 concept of the encyclopedia to a Peircean concept of collateral experience in order to make a tentative synthesis of the two. To achieve this goal, we interpreted Eco's three fundamental concepts – CT, NC, and MC – as different but interlinked dynamics within the encyclopedia. Furthermore, we saw these in relation to Peirce's concept of collateral experience, or more precisely, our interpretation of Peirce's concept. Consequently, what we have compared thus far is the CT, NC, and the MC with the emotional collateral experience, the informational collateral experience, and the cognitive collateral experience. Of course the three cognitive elements seems to be what the encyclopedia consists of. Now, adding the three types of associations – resemblance, contiguity, and interest – to Eco's concepts enables us to understand how they work. Hence, we have the



Figure 3 depicts the dynamics of the collateral encyclopedia. It shows the signification process; the starting point is the dynamical object, which constraints the immediate objects (the NCs and the ICEs) and thereby the signification process. In any ordinary situation, there are myriads of dynamical objects potentially at play. However, in this synthesis (which displays only a section of a signification process), we see that we can compare the CT the ECE, the NC to the ICE, and the MC to the CCE given their iconic, indexical, and symbolic nature, respectively. We believe this constitutes the dynamics of the collateral encyclopedia.

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