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Semiosis and *nāmarūpa*: Exploring the Early Buddhist Theory of Signs Through Cognitive Semiotics

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Abstract

This article aims to offer a comparative analysis between Buddhist thought and Peircean semiotics, situating the discussion within the framework of a Buddhist theory of signs that addresses aspects related to perceptual processes and cognitive experience. The influence of signs on cognition is what led Buddhism, from its earliest formulations, to adopt contemplative practice as a means of liberation from the effects of semiosis—an aspect that this paper hypothesizes to be represented by the *nāmarūpa* dyad. Following an examination of the perceptual and sensory processes underlying the functioning of *nāmarūpa*, the paper will analyze occurrences of this technical term and propose its semiosic functions, subsequently exploring how contemplative practice aspires to disengage from the power of signs.

Keywords: semiosis; buddhist philosophy of language; semiotics; buddhist philosophy of mind; buddhist meditation

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1. Introduction

This article aims to provide an overview of Buddhist perspectives regarding language and what could be termed the "sign", as well as its role in shaping cognitive experience. The primary objectives are twofold: firstly, to analyze the Buddhist conception of the "sign" and explore possible comparisons with the notion of semiosis, which finds remarkable parallels in Buddhist conceptions of *nāmarūpa*; secondly, to contextualize these conceptions within contemplative practices which, as will be shown, in all their forms strive toward the deconstruction of semiosis. In this respect, contemplative practice is situated within a philosophical framework wherein transcending or surpassing the semiotic dimension is considered achievable.

The analysis will focus exclusively on the Pāli Canon and on the comparison with the work of Charles Sanders Peirce ([1] henceforth abbreviated as CP). Although numerous insightful studies have acknowledged an elaborate conceptualization of the relationship between signs and the perceptual–cognitive system within Mahāyāna Buddhism [2–7], almost nothing exists regarding Pāli literature [8–11]. For example, still within the context of a Mahāyāna semiotics, there is the important volume by Rambelli, which attempts to outline a theory of semiotics based on Japanese Buddhism, particularly the Shingon tradition [12]. As for China, we have Greene's work, which analyzes meditative experience and visionary phenomena in Chán Buddhism [13].

Nonetheless, even if to date it is still less studied, the Pāli literature not only potentially provides foundational elements for later developments in Mahāyāna traditions but also offers equally profound and original considerations on the nature of a sign, how it contributes

to cognitive processes, and how it partially defines perceptual experience. Ultimately, the Pāli Canon presents a semantic theory of perception and a sophisticated semiotic theory of cognition.

The second section of this paper is about the *āyatanāni* (sense spheres) which assumes a basic dualism of the cognitive process: the internal/external or *ajjhatta/bahiddhā* contrast, which underpins perceptual circuit. It is argued that perception in Buddhism is constructed by a complex interplay between sense faculties within and external objects, forming an A/B circuit. Duality, however, is conceived of as a construction and not reflecting real ontological distinctions. This duality is perpetuated by the activity of the six internal and six external spheres and their corresponding contribution to discernment (*viññāṇa*) that arises by contact (*phassa*). Finally, this section emphasizes the provisional, temporary, and non-self quality of the system in question and its function as a point of entrance into semiosis.

Building its fundamental semiotic argument around *nāmarūpa*, the third part of the article argues that *nāmarūpa* is not merely a conjunction of name and form but is a stand-alone semiosic process. Using Peirce's triadic sign model (Sign–Object–Interpretant), *nāmarūpa* is seen to comprise representamen and object, with cognition (*citta*) as interpretant. The model places cognition's act as being inseparable from semiosis: in order to observe something, there is an emergence of a semiosic event. The article offers an analysis of how *nāmarūpa* functions dynamically—not as a product of cognition but as a semiogenetic energy that coheres subjectivity and world experience.

The approach is a close reading of Pāli canon texts alongside an interpretive application of Peircean semiotics. This is to say, examining how technical Buddhist expressions like *saññā*, *viññāṇa*, *phassa*, *manasikāra*, etc., map onto elements of semiotic theory and how these mappings present us with a rich theory of perception and cognition. It also employs secondary sources in Buddhist studies and semiotics to underpin its comparative methodology.

Lastly, the article tries to demonstrate that early Buddhist philosophy is an advanced theory of signs grounded in phenomenology and contemplative psychology. It indicates that Buddhist meditation is a serious effort to reverse semiosis—overturn conventional recognition and reification of signs that structure ordinary experience. Reversal brings liberation from the very processes of signification that constitute the self and world.

Buddhist thinkers arrive at such refined reflections primarily through contemplative experience. Indeed, meditation is essential for understanding why these considerations were formulated in the first place. Among the primary, perhaps preliminary objectives of contemplative practice is the dismantling of habituation processes driven by linguistic signs. These processes progressively inhibit perceptual stimuli in their pre-predicative nature, their "essence" (*yathābhūta*) [14], and instead organize them within a network of specific relationships, where certain sensory aspects are recognized as belonging to clearly defined identities and become designated by a perceptual coordinator. This semiogenetic process, or semiosis, parallels the direct recognition of a "sign" as a specific perceptual marker.

According to Peirce, signs pervade the entire universe [CP 5.448], and we can find systems of signs in every aspect of the world—not just in human language. Anything related to the organization of a system can be seen as involving a constant exchange of signs. It is therefore not surprising that Peirce's semiotics inevitably leads into a form of phenomenology (or *phaneroscopy*, as he began calling it in 1904), in which the analysis of signs and the analysis of phenomena in search of their fundamental formal structures is essentially the same undertaking.

Buddhism, as we will see, holds a remarkably similar view, making the analysis of phenomena the foundation of its contemplative practice. Everything that falls within

human attention can thus be considered a "sign" or a fundamental phenomenal unit, which Peirce called a *phaneron*.

The analysis of *phanera* (or *phanerons*) is called *phaneroscopy*, which is the study of the *phaneron* as it is, setting aside influences of an authorial, cultural, conceptual nature, and so on [CP 1.287].

Pāli Buddhism appears to make a principal distinction between the sign as the *outcome of semiotic activity*—thus recognizing a predetermined identity in experienced phenomena—and the sign as a distinct *marker*, "something that stands for something else" [CP 2.228] in a clear and evident manner. This latter could include not only a graphic sign but also any entity whose appearance implicitly conveys meaning. For instance, the appearance of gray clouds stands for something else in the mind of one who "interprets" that specific "sign", namely the possibility of rain. Conversely, when perceiving a certain set of sensory data—such as specific colors, scents, and forms—I directly associate them with a particular identity, such as "flower", and become unable to perceive this set of data within the sensory continuum in a pre-predicative manner. However, the "flower" does not stand for something else; it is instead an associative arrangement of sensations cognitively linked to the identity "flower". This identity is semiotic, defined by semiosis, and is the primary focus of Buddhist reflection within the Pāli Canon. Slightly less attention appears to be given to subsequent associations between a recognized semiotic identity and its reference to another sign. Nevertheless, as will be seen, the aspect of volition—whereby recognizing a certain identity involves implications (its possible uses, availability, and responsiveness to volitions)—is intrinsic to semiosis itself and extensively explored in contemplative reflections that the skilled meditator must master.

These two semantic aspects are represented by different terms, yet the processes defining them form part of a continuum concerning the nature of perceptions and cognitions.

For the purposes of our analysis, it will be necessary to employ certain technical terms when referring to the various semiotic aspects under examination. These technicalities have already been utilized in previous studies [9,15], where their utility in analyzing cognitive processes has been demonstrated, significantly clarifying the comprehension of the structures discussed. Therefore, reference to these prior works will be made to simplify our exposition.

The elements of Buddhist semiotics that will be examined in this article, presented along with their corresponding technical terms, are as follows:

§2. The dimensions or spheres (*āyatanāni*) of the perceptual-sensory circuit and the *ajjhatta/bahiddhā* (A/B) dichotomy.

§3. The discrete sign *nāmarūpa* (N/R) and fundamental semiosis (N/Rσ). This foundational process entails two secondary forms of semiosis: discernment (*viññāṇa*), dependent upon divisive semiosis (Vσ), and synthetic perception (*saññā*), dependent upon associative semiosis (Sσ).

§4. The perceptual-sensory circuit (*saññāvedayita*) and its transcendence.

§5. The functioning of the complete semiotic process (*saññā*, *viññāṇa*).

§6. Meditation as the practice aimed at transcending the sign.

All the aspects described in these five points, each of which will be analyzed in dedicated sections of the article, are also closely interconnected. As we shall see, a deeper understanding of any single aspect necessarily involves the examination of the functions of others.

Ultimately, we must clarify the meaning of "sign" in this text before proceeding. Within the context of Pāli Buddhism, there are at least three terms pertinent to the semiotic sphere. One, which will be the focal point of this paper, is the pair *nāmarūpa*. Another term intimately connected to semiotic reality is *saññā*, literally meaning perception but closely

linked, as we shall see, to the capacity to recognize "something" in its "determined", sign-based reality. The verb associated with this noun, *sañjānati*, implies not only "perceiving", but also "knowing" or "recognizing", insofar as something is recognized through the sign that describes it.

The third term that may be translated as "sign" is *nimitta*, and "The state of being entranced by *nimitta*s is clearly portrayed, in the *sutta*s, as one full of danger" [16] (p. 36). This aspect will be less central to our discussion, partly because it has been exhaustively treated in an article by Harvey, and partly because the kind of sign it denotes primarily concerns a particular referent. The term *nimitta* resembles closely the Greek concept of σημεῖον, aligning more closely with semiology than the broader semiotics relevant here. To clarify my intended meaning, I will summarize Harvey's conclusions regarding definitions of *nimitta*, drawing also from D'Amato's synthesis. A *nimitta* may refer to anything falling within the following categories:

(1) A deliberately made sign
(2) A natural sign or indication
(3) A specific type of natural sign—an omen or portent of future events
(4) A marker
(5) A sexual organ (male or female)
(6) A characteristic [2] (p. 187), [16] (pp. 31–32)

Keeping these definitions in mind, we can now consider the archaic Greek conception of sign. On the one hand, *nimitta* involves a mental image, representation (see Figure 1), or a focal point—a "sign" upon which one concentrates (*samādhinimittaṃ manasi kātabbaṃ; nimittaṃ manasi karoto*, [AN 3.102; SN 35.95]). On the other hand, we find the sign as a "manifestation", something that "represents" something else—an omen, a portent (*yathā kho, mārisā, nimittāni dissanti*, [DN 19])—or as an indication, a characteristic, a cause, a reason [AN 4.8]. In this sense, as we will see in §3, a *nimitta* is closer to the *Interpretant*, the aspect of the sign that can "stand for" something else.

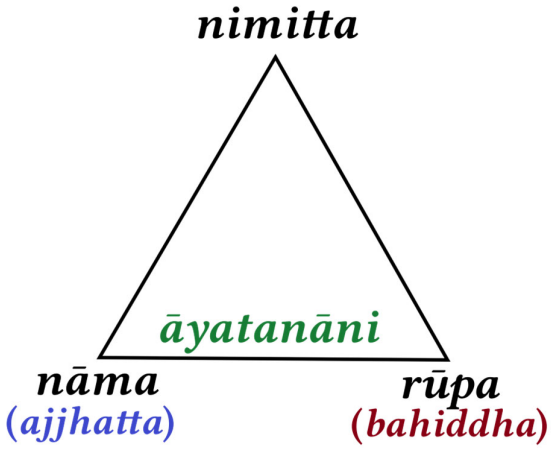

Figure 1. Hypothesis on the Functioning of the Semiotic Circuit in Pāli Buddhism. The base of the triangle is constituted by the A/B dynamic transposed onto the semiotic plane. The constituent elements of the N/R dyad correspond to aspects of the intentional process (pertaining to "internal" nominal cognition) and to perceptual markers (represented by the notion of "form", which pertains to the perception of the "external"). The mediating element between these two bases—which we may understand as FIRSTNESS (the "external" form) and SECONDNESS (the "internal" nominal intentionality)—is a THIRD element: *nimitta*, which has among its possible meanings that of being a "representation" of a given "sign", "mental image" or "mental representation". In this case, *nimitta* is just one of the possible signs. As a general interpretant however, that could potentially be any sign, we have *citta* as the most plausible candidate.

The notion of σημεῖον is, in this sense, remarkably similar. Before evolving into the semiotic sense of sign (which corresponds more closely, as we have discussed, to the notion of *nāmarūpa*), the Greek σημεῖον indicated something "marked", a "mark", a "token", an "indication", something recognized as standing for something else: σημεῖα τῶν δεδικασμένων ("marks of the judgments", [Herodotus, *The Histories* 2.38]). Similarly, sign can mean a "trace" (σημεῖα δ᾽ οὔτε θηρὸς οὔτε του κυνῶν, [Euripides, *Hippolytus* 514]).

If I see a road sign bearing a particular symbol, it is a *sign for* something else—that is, what it signifies within the code system of road regulations. A signal or a flag also represents forms of signs (ἀνέδεξε σημήϊον τοῖσι ἄλλοισι ἀνάγεσθαι, [Herodotus, *The Histories* 7.128]).

Similarly, if I see a cross depicted in a Renaissance painting, it is a *sign for* something meaningful within Christian doctrine. This applies equally to Buddhist and Greek contexts, as well as to non-human phenomena interpreted through humanly constructed systems of knowledge. The most evident example involves meteorological phenomena: dark clouds are a *sign for* impending rain. Another instance is the medical use of signs as symptoms, as employed by Hippocrates—σημεῖον χρηστόν [*Epidemics* 6.2.17]—where the occurrence of a bodily condition, such as irritation, constitutes a *sign for* something clinically interpretable. Additionally, mental images can also serve as signs; thus, the particular objects evoked in a meditator's mind during contemplative practice are designated as *nimitta*s, or "signs".

Thus, more explicitly than other terms, *nimitta* matches the definition of "something that *stands for something else*", as demonstrated by its pragmatic use. Even communication from a higher power, such as a deity, manifests through a "sign":

> ὑποκριταί, τὸ μὲν πρόσωπον τοῦ οὐρανοῦ γινώσκετε διακρίνειν, τὰ δὲ σημεῖα τῶν καιρῶν οὐ δύνασθε.

In this context, σημεῖα (signs) and καιροί (times or opportune moments) refer to prophetic signs or extraordinary events signaling a spiritual or eschatological shift. [Matthew 16:3]

Likewise, in Matthew 12:38, the phrase ἀπὸ σοῦ σημεῖον ἰδεῖν ("to see a sign from you") is employed; and again in Matthew [12:39], "no sign will be given" (σημεῖον οὐ δοθήσεται). This expands upon the Greek notion of omen (τὰ ἀπὸ τῶν θεῶν σημεῖον γενόμενα, signs given by the gods). Lastly, as an extension of "mark", the term can even denote a "landmark" or boundary (ἔξω τῶν σημείων τοῦ ὑμετέρου ἐμπορίου, [Demosthenes, *Against Lacritus* 35.28]).

All these potential definitions correspond closely with the conception of *nimitta*, although they differ from the more technical notion of *nāmarūpa*, which nevertheless strongly resembles the semiotic idea of "sign". The ancient Greek conception, in fact, is not perfectly correspondent to that developed in the context of the philosophy of language, semiotics and linguistics. For example, "the Stoics used to speak of a signifier (τὸ σημαῖνον), a thing signified (τὸ σημαινόμενον), and an external object (τὸ τυγχάνον, [Sextus Empiricus, *Adversus Mathematicos* VIII, 11–12]), but the combination of signifier and thing signified is not a σημεῖον" [17] (p. 260). The same happens in the difference between *nimitta* and *nāmarūpa*, with the latter being a more technical conception of the sign, strictly related to the idea of semiogenesis, and comparable to the process of semiosis.

2. The Spheres of the Perceptual-Sensorial Circuit

The term *āyatana* (plural *āyatanāni*) is undoubtedly among the most significant concepts in Pāli Buddhism [18], a fact that will become increasingly evident as we analyze occurrences of this term, especially regarding its relationship not only with cognitive and perceptual matters but inevitably also with language and semiosis in a broader sense.

Traditionally, *āyatanāni* are believed to refer to sensory spheres, which, according to Buddhism, number six—one corresponding to each sensory organ. However, this is only partially correct, as *āyatanāni* actually describe a complex circuit composed of twelve factors rather than six. Indeed, the six sensory spheres constitute only one component of this circuit, complemented by another set of six spheres, representing sensory objects. In other words, employing the terminology borrowed from theoretical biology [19–25], we have six classes of sensors, corresponding to the sensory organs, paired with six classes of effectors—that is, the organs capable of being intentionally targeted by these sensory organs.

The Pāli Canon distinguishes between these two sets by employing very particular terminology, the analysis of which proves equally fascinating. The canonical texts refer to the "six internal spheres" (*cha ajjhattikāni āyatanāni*), corresponding to the sensory organs, and the "six external spheres" (*cha bāhirāni āyatanāni*), corresponding to their associated effectors or sensory objects. Consequently, the sensory circuit oscillates between an "internal" (*ajjhatta*) and an "external" (*bahiddhā*) dimension. For convenience, we will refer to this as the "A/B circuit". We will demonstrate that this circuit profoundly relates to a broader semiotic system.

However, it should be noted in advance that the use of the terms "internal" and "external" presents several interpretative challenges. Particularly problematic is the potential for misunderstanding that might lead one mistakenly to conclude that Buddhism genuinely considers plausible the existence of something truly "internal" or "external" to something else. Hence, caution is recommended in discussing these terms, and we will subject them to rigorous scrutiny.

The A/B circuit primarily references the *āyatanāni*, frequently appearing in abbreviated form as shorthand for sensory or effector organs, conveniently labeled simply as *ajjhatta* or *bahiddhā*.

2.1. Effectual Organs and Sensory Organs

As previously mentioned, sensory organs number six. This is because, in addition to the five sensory organs familiar to us (sight, hearing, smell, taste, and touch), Buddhism posits a sixth sensory organ, "thought" or "mind" (manas). Within their system, there is an almost perfect correspondence between the organ and its function: the "eye" (*cakkhu*) specifically denotes the faculty of sight, and similarly for all the other senses.

However, the sensory organ alone is insufficient; it requires an effector organ—an effectual organ—with which it engages in interaction. This interaction, forming what we refer to as the circuit A/B, is responsible for discernment (*viññāṇa*). The choice to translate *viññāṇa* as "discernment" derives from its etymological root, associated with the act of knowing (*-ñā*) through division or differentiation (*vi-*), comparable precisely to the Latin *discernō* and the Greek διακρίνω.

A distinct *viññāṇa* arises for each sensory organ, conditioned by the contact (*phassa*) between the sensory organ and its corresponding effector. For example, visual discernment (*cakkhuviññāṇa*) specifically emerges from the interaction between the sensory organ of sight and its effectual organ, "form" (*rūpa*).

From this, we gain two insights: first, that discernment (*viññāṇa*) serves as a relational force bridging the fundamental components of circuit A/B; second, that there exists a specific relationship between these components, involving a unique effectual organ corresponding to each sensory organ. It follows, importantly, that *viññāṇa* cannot exist independently, but only in relation to something else. Equally significant is the notion that this cognitive potency (*ñāṇa*) is inherently linked to division (*vi-*, *dvi-*); its essential role is to differentiate one element from another, thereby segmenting the sensory continuum into

discrete units (*discrētum*). Table 1 illustrates the dynamics of circuit A/B, providing the original Pāli terminology of the participating organs:

Table 1. The "internal" sensory organs and their "external" effectual counterpart.

Sensory Organ (*ajjhatta*)	Effectual Organ (*bahiddhā*)
Eye (*cakkhu*)	Form (*rūpa*)
Ears (*sota*)	Sound (*sadda*)
Nose (*ghāna*)	Smell (*gandha*)
Tongue (*jivhā*)	Taste (*rasa*)
Body (*kāya*)	Surface (*phoṭṭhabba*)
Thought (*manas*)	Idea-phaneron (*dhamma*)

Numerous suttas detail the components of circuit A/B (e.g., SN 35.188 and 35.159). Frequently, these texts instruct meditators to direct attention either inwardly or outwardly to achieve full understanding (*aparijānana*), as exemplified in SN 35.111-2. Effectual organs are commonly referred to as "elements" (*dhātu*), as seen, for example, in SN 14.6 (*rūpadhātu*, *saddadhātu*, *gandhadhātu*, *rasadhātu*, *phoṭṭhabbadhātu*, *dhammadhātu*).

One particularly comprehensive *sutta* is MN 148, enumerating in detail all components of the "sixfold system" (*cha chakkāni*). This includes not only the six internal and external spheres but also their associated categories, all grouped in sextets. Thus, we find "six classes of discernment" (*cha viññāṇakāyā*) and "six classes of contact" (*cha phassakāyā*), reflecting the six sensory organs and their corresponding effectual organs. For example, it is stated: "Visual discernment arises dependent upon the eye and form; the convergence of the three is contact" (*cakkhuñca paṭicca rūpe ca uppajjati cakkhuviññāṇaṃ*, *tiṇṇaṃ saṅgati phasso*). Nevertheless—and importantly, we anticipate this point—neither the eye nor form, nor consequently visual discernment arising from them, possesses an autonomous or self-sufficient selfhood: "Should anyone assert 'form is a self', such a statement is unsustainable" (*'rūpā attā'ti yo vadeyya taṃ na upapajjati*). This is due to the evident arising and cessation (*uppādopi vayopi paññāyati*) of these phenomena. Because arising and cessation apply equally to the eye, form, and visual consciousness, none of these can be considered autonomous selves (*iti cakkhu anattā*, *rūpā anattā*, *cakkhuviññāṇaṃ anattā*), a principle equally valid for all other sensory and effectual organs.

Among the notable implications derived from Table 1 is the emphasis on the dynamics of the discernment process itself. Moreover, thought (*manas*) specifically corresponds to *dhamma*s as its effectual object. Thus, the precise interpretation of the term must necessarily be linked to mental phenomena—not in a Cartesian sense, but as that which can be intentionally apprehended by thought. The object of thought is *dhamma*, leaving few alternative interpretations other than "idea", "concept", or perhaps, as proposed here, *phaneron*.

> Peirce conceives of mind as the process of semiotic interpretation, and for anything to have being at all it must enter into the semiotic triad of Sign-Object-Interpretant. Therefore, mind is an inextricable element in the constitution of all being. [26] (p. 733).

Charles Peirce defined the minimal phenomenal unit or *phaneron* [CP 1.284] as "anything present to the mind at a given moment", or "whatever is present at any time to the mind in any way" [27] (p. 74). A *phaneron* is what is directly observable par excellence, i.e., there is nothing as directly observable as the *phaneron* [CP 1.286]. Temporarily adopting this conception of *dhamma* as *phaneron* is beneficial, as it aligns well with the subsequent developments in Abhidhammic thought and the so-called "*dhamma* theory" [28], where *dhamma* became a technical term denoting fundamental phenomenal units—elements irre-

ducible and not susceptible to further analytical decomposition, and thus termed "absolute realities" (*paramattha*) [29–33].

In pre-Abhidhammic Buddhism, it is difficult to sustain that the term *dhamma* carried such precise technical connotations. Nonetheless, it appears reasonable to interpret *dhamma* generally as "phenomenon", given its role as the effectual object of the sensory organ of thought (*manas*). In this sense, the sixth sensory organ might effectively serve as a coordinating entity for the other five, as the sensory continuum experienced by the initial five organs contributes collectively to immediate sensory experience.

Particular attention should be given to the object of sight—the form (*rūpa*). Specifically understood as visual form, it occupies the foremost position in the enumeration of effectual organs, an order significant for understanding its role within subsequent classifications of which *rūpa* is a part.

2.2. The Relationship Between the A/B *Circuit and the Five Aggregates*

In the system of the five aggregates, which, in some respects, represents an evolution of this scheme, the term *rūpa* is listed first, initiating the process of constituting experienced phenomena. It is followed by sensation (*vedanā*), which we may assume is a collective term referring to the set of outcomes produced by the six sensory organs. Similarly, *rūpa* does not merely denote visual form but rather stands as a representative term for a group, just as *vedanā* does. In other words, the first two terms of the five aggregates system correspond to the A/B circuit (or more precisely, b/a when following the correct order). They point toward a more complex process—or, more accurately, another aspect of the sensory circuit—that involves in greater detail the development of perception (*saññā*) and discernment (*viññāṇa*).

However, whereas the A/B circuit is fascicular—meaning the six sensory organs function simultaneously—the five aggregates system is concentric, with the sensory-objective core progressively enveloped by additional layers, ultimately forming a discrete unit. This unit is a "conceived" or "perceived" thing [SN 18.10, 26.10, 56.12; AN 4.90]. Buddhists recognize that every conceived thing comprises five fundamental constituent layers, which are precisely the five constitutive strata of the five aggregates [SN 22.82; MN 109]. In other words, any experienced "thing" is actually a complex aggregate composed of five factors [SN 22.48].

Thus, even in the context of the five aggregates, the A/B circuit remains fundamental. Therefore, before we can better understand the system they describe, we must first clarify the Buddhist conception of the A/B duality. Although these terms literally denote "internal" and "external", it would be highly misleading to interpret this system as representing a subjective/objective dichotomy—as if Buddhists genuinely believed in an "interior" that acts as a mirror processing data from an objective external world.

Certainly, Buddhists recognized that such a duality was at least conceived or experienced as such, yet this does not render it objectively real. Neither did Buddhists aim to negate one reality in favor of the other, which would implicate them, depending on which reality is elevated, in naive psychologism or objectivism.

The Pāli Canon is explicit in stating that both the six sensory organs and their corresponding six sense-objects are impermanent constructs (*anicca*). There is no preferential treatment for either element, and, for reasons outlined in §3, any duality forming part of a binary system is already regarded as illusory and impermanent in early Pāli Buddhism.

2.3. The Unreal Nature of the A/B *Circuit*

It therefore appears that the A/B circuit is part of human experience, which tends to perceive reality as structured around two fundamental polarities (plus a third relational

factor, which will become significant later), thus forming a triadic system. However, beyond the relative, conventional, or experiential nature of this circuit, there is no "real" reality inherent in these dynamics.

The *Ajjhattasutta* [SN 22.150] deconstructs the objective nature of the five aggregates as being impermanent. These aggregates are associated with the arising of pleasure and displeasure, but none of them represent anything beyond transient states (*viññāṇe sati viññāṇaṃ upādāya uppajjati ajjhattaṃ sukhadukkhaṃ. . . rūpaṃ niccaṃ vā aniccaṃ vā. . .—aniccaṃ, bhante*). Another discourse, SN 35.1, is even more explicit, enumerating all six sensory organs and designating them as impermanent. Recognizing this fundamental nature helps meditators become disillusioned, free from desire, and thus liberated (*nibbindaṃ virajjati; virāgā vimuccati; vimuttasmiṃ vimuttamiti ñāṇaṃ hoti*). It is noteworthy that the formula for liberation from desire associated with the six sensory organs represents a process of disassociation from possessiveness regarding experiences and the ensuing identification process, as explicitly stated: "that which is non-self must be accurately perceived and understood as such: 'this is not mine, this I am not, this is not my self'" (*yadanattā taṃ 'netaṃ mama, nesohamasmi, na meso attā'ti evametaṃ yathābhūtaṃ sammappaññāya daṭṭhabbaṃ*).

This concept is similarly expressed in SN 35.140, listing sensory organs as impermanent. In SN 35.141, they are indicated as sources of suffering (*dukkha*), whereas in SN 35.142, they are defined as devoid of self (*anattasambhūtā*). These are only select examples among numerous similar references.

The so-called "external" (*bahiddha*) does not possess greater reality. It is often referred to using the synonyms *bāhira* or *bāhirakā*. For example, SN 35.10 explicitly describes the external as "impermanent" across the three periods of time, affirming the impermanence of each individual sensory organ: "O monks, form is impermanent in the past and future, and even more so in the present" (*rūpā, bhikkhave, aniccā atītānāgatā; ko pana vādo paccuppannānaṃ*). Similar formulas are also employed to indicate the impermanence of the internal (see, for instance, SN 35.186-8). Evidently, suffering (*dukkha*) and selflessness (*anattā*) are similarly articulated across the three temporal dimensions ([SN 35.189-191 and 35.192-4], as well as [35.210-12 and 35.207-9]).

The external is suffering [SN 35.5; 35.144; 35.226], impermanent [SN 35.4; 35.143; 35.225], non-self [SN 35.6; 35.145; 35.227], impermanent across the three times [SN 35.10; 35.195-7; 35.213-5], suffering across the three times [SN 35.11; 35.198-200; 35.216-8], and non-self across the three times [SN 35.12; 35.201-3; 35.219-21].

The internal is similarly described: suffering [SN 35.2; 35.223], impermanent [SN 35.222], non-self [SN 35.224; 35.3], impermanent across the three times [SN 35.7], suffering across the three times [SN 35.8], and non-self across the three times [SN 35.9].

Clearly, when affirming the unreal nature, we do not claim the non-existence of the A/B circuit. Instead, we assert that this circuit cannot be considered ultimate reality but rather represents a relative reduction thereof—a conceptual and experiential construction of mundane reality that does not encompass the totality of possible determinations.

2.4. The Role of the A/B *Circuit in Semiogenesis*

At this juncture, it is necessary to address the topic of cognitive experience. The primary intention of this paper is to examine the processes which, according to the descriptions found in the Pāli Canon, are considered foundational to perceptual and cognitive experience. Although the A/B circuit is, to a certain extent, antecedent to the formation of specific percepts, given its fundamental association with sensation (*vedanā*), it must be noted that sensation itself plays an indispensable role in cognition. Indeed, the perceptual–cognitive process, as presented in the Pāli Canon, is viewed as a progressive layering process. Onto

a fundamental sensory core, progressive structures are superimposed, each performing distinct associative functions.

What is suggested by the five aggregates (*pañcupādānakkhandhā*, [AN 4.90]) is that the fundamental sensory core, *rūpa-vedanā* (which we recognize as practically equivalent to *bāhira-ajjhatta*, i.e., the *āyatana* core), subsequently incorporates a perceptual construct (*saññā*). Further, volitional or eidetic constructs (*saṅkhāra*) are added onto this perceptual layer. These constructs are crucial as they confer intentionality to the perceptual layer, aimed at grasping the potential implications of the percept already recognized at the sensory level—its possible uses, applications, and conceptualizations. Moreover, *vedanā*, *saññā*, and *saṅkhāra* constitute a distinct subgroup known as *cetasika* or "cognitive factors" [SN 41.6].

It is essential to understand that this aggregative process functions as a recognition of the perceived "thing", occurring at extraordinary speed. A specific cluster of sensations (*vedanā*), derived from experiencing a continuum of effectual stimuli, is assigned to a particular percept (*saññā*), which is subsequently linked to a set of potential utilities or volitional possibilities (*saṅkhāra*). This progressive stratification enables the recognition of an entity in its attributed identity. Thus, when an individual experiences a certain form, tactile sensations, odors, and so forth, that have been learned to correspond to a particular specific identity—such as "flower", "table", or "pen"—the sensory stimuli associated with that ideal prototype are inevitably integrated into a perception that is already semiotic in nature. *Saññā*, the percept, is thus inherently a "sign" such as "flower", "table", or "pen". Only upon recognizing the designated percept can one subsequently link it to its volitional possibilities. This process effectively "separates", "distinguishes", or "discerns" a given sensory continuum into specific, discrete signs.

For this reason, the phase following *saṅkhāra* is precisely *viññāṇa*. Such discernment stands in contrast to the sensory apprehension phase, yet it arises directly from the contact (*phassa*) between effector and sensor. Thus, the aggregative process reflects an embryonic theory of intentionality and identity recognition of "something". When something before us is perceived as a "flower", it should be understood as a multifactorial aggregate—the combined set of sensations triggering the associative process between perceptual marks and the percept itself, the association between percept and volitional constructs, and the definitive recognition of the entity as possessing a separate identity: a "flower" is not a "table", nor a "pen", etc. The identity of "flower" claims to exist within a vacuum that ostensibly renders it autonomous and self-sufficient. Naturally, this is not actually the case, and such isolation of the perceived entity is one of the sources of suffering, as it leads to forgetting the impermanent nature of these constructs. In reality, these constructs are interconnected within a network of interdependent relationships, wherein the determination of x depends precisely upon its contrast with y, z, and so forth reciprocally: "there is no such thing as a sign in isolation, every sign being a constituent of a sequential set of signs, so that apart from membership in this set, a thing has no meaning" [34] (p. 88).

Consequently, the aggregative process involves the A/B circuit as the sensory-effectual core underlying the initiation of aggregation itself, upon which depends the acquisition of a specific percept—a "sign" determined by the synthetic association of sensory data with a particular designated identity.

3. Semiosis and *nāmarūpa*

The process of semiogenesis, or semiosis, establishes within the human cognitive apparatus the ability to distinguish discrete entities as endowed with distinct identities that set them apart from one another. Thus, a flower is not a stone, a stone is not a tree, a tree is not a flower, and so forth. Humans are so accustomed to this discriminative

capacity that we tend to consider it naturally inherent in human cognition, leading to a common misunderstanding. While the tendency to establish discrete signs can indeed be demonstrated—and consequently assumed to be inherently human—the assertion that identities constituted through semiosis reflect natural identities, that is, objective facts, remains to be proven. Nevertheless, humans commonly presume the naturalness of both processes, implicitly accepting as self-evident that the necessity of naming something a "flower" or a "fruit" arises because objective realities corresponding precisely to "flower" or "fruit" exist in what we conventionally refer to as the "external" world (a problematic assumption in itself). Accepting this as a given, humans merely label something already discrete, autonomous, and self-sufficient: a flower inherently is a flower precisely because it is neither a fruit, nor a stone, nor a tree, and so forth.

The establishment of these associations through the process of semiogenesis also gives rise to intricate networks of relationships within a system that regulates interactions among various signs. These relationships are maintained through common consensus, underpinning conventions and beliefs, norms, laws, customs, notions—phenomena typically regarded as "truths". The solidity of such sign-derived "truths" is critically questioned within the Buddhism of the Pāli Canon, which undermines the very processes by which perceptions reinforce convictions of truth. A fundamental feature of semiosis, indeed, is its dependence upon perception and cognition. There can be no percept without semiosis, and no manner of comprehending the world absent the mediation of signs. Consequently, humans become subjected to signs, which ultimately escape their control, guiding them as anticipatory forms of knowledge.

This foundational, nuclear force resulting inevitably from semiosis, is referred to by Buddhists as *nāmarūpa*. Numerous reasons support interpreting *nāmarūpa* as the most authentic notion of "sign", although, as previously indicated, another conception of the sign exists—*nimitta*—though this aligns more closely with the notion of a "mark", as seen in the Introduction. While from the Abhidhamma onwards the term *lakkhaṇa* would gain increasing importance—eventually becoming a specific way of understanding the concept of "sign"—in the Pāli Canon this term generally carries the meaning of "characteristic", without having a technical use. However, it is especially in Mahāyāna Buddhism that the idea of "characteristic" can also be understood within a specific semiotic framework.

In the Pāli Canon, much of the idea of the sign is instead conveyed by *nimitta*, although this is not the only term that can be understood as such. Nevertheless, it is certainly the sign *par excellence*, or what Peirce referred to as the sign of the second correlate [CP 2.247]. The term *nimitta*, in fact, depending on the context, can refer to what Perice calls an icon [CP 2.304], an index [CP 2.248], or a symbol [CP 2.249].

As we saw in the introduction, a *nimitta* is well suited to represent a sign that refers to the object it denotes by virtue of the characteristics it possesses—like an icon [CP 2.247]. Or, again depending on the context, it can serve as a *representamen* whose representative qualities consist in something determined by a specific factor [CP 2.283]. We also find cases in which a *nimitta* behaves like a symbol—that is, as a *representamen* whose representative character consists of a rule that determines its *interpretant*, like words, phrases, and the conventional use of other signs themselves [CP 2.292].

If on the one hand the *nimitta* represents a sign, on the other we must ask ourselves by what process a given sign influences the surrounding environment. This process, defined as *semiosis*, is explained by Peirce as the interaction of three fundamental factors, of which two are of interest to us at the moment: the *representamen* and the referent object. The *representamen* is the subject of a triadic relation [CP 1.541] that refers to a second element, which is its object of reference. In other words, the *representamen* is a sign that refers to an object, something with which it has some kind of relationship [CP 2.228]. Peirce also

describes the relationship between the first and second element as one between agent and patient, cause and effect [CP 1.359], or again, immediate consciousness and dead external thing [CP 1.361]. The theory this paper draws on, and which has already been outlined in previous research, is that these two basic elements of the semiosic process correspond to the two components of the *nāmarūpa* dyad.

The *nāmarūpa* binomial possesses two aspects: firstly, as a semiotic force intrinsically connected to the perceptual process; secondly, as the discrete sign—the identity of the perceived and therefore known entity, such as "flower", "fruit", and so on. To distinguish these two functions, we shall represent the discrete sign with the binomial N/R and the semiotic process itself as N/Rσ. Additionally, I propose that multiple semiotic forces (σ) exist, thus necessitating multiple σ terms. The term N/Rσ designates fundamental semiosis—the semiotic force of attribution, the manifestation (appearing) of a specific identity as such. For the identity "flower" to manifest cognitively, it is insufficient merely to possess the corresponding word, understood either as a concept or a sound-image—that is, a collection of phonetic data associated with yield a pronunciation connected to a specific concept. The association of these two aspects entails a twofold nature of the sign, thus revealing its inherent duality.

However, this duality does not arise from a bipolar A/B distinction, as the sign simultaneously embodies both dimensions concretely, thereby exhibiting its own agentivity. In fact, there is no "internal" psychological competence distinct from the concrete, external, physical enactment of the sign. This aspect falls outside the scope of the N/R binomial, relating instead to other specialized terms within Pāli Buddhism, such as *adhivacana* [Snp 5.18; DN 15; SN 17.3, 22.62, 22.84, 35.241, 35.238, 36.4, 41.5, 45.4, 45.7, 47.20], which specifically denotes the concrete act of designation performed vocally (*adhi* + $\sqrt{vac}$). The most used formula we can find in the canon that makes use of *adhivacana* is "this is called *x*", where a term marked in the accusative form is accompanied by *adhivacanaṃ*. Thus, *x*-ACC *adhivacanaṃ* means "this is called *x*". For now, we set aside these further aspects and concentrate explicitly on the duality of the sign.

3.1. The Composition of the N/R *Binomial*

The constituents of the binomial N/R are precisely name (*nāma*) and form (*rūpa*). As we shall see, the name is not to be understood as the phonetic execution, nor as phonetic identity. It corresponds to the Saussurean *signifier* [35], but it is also an autonomous force, described in the process of nominal apprehension, which informs us about how a certain nominal identity comes into being. Due to its particular nature, we understand that it transcends the mere role of the Saussurean signifier. In certain respects, the *nāma* is simultaneously both "concept" and "sound-image". The Buddhist conception of the sign, as we are beginning to understand, differs significantly from that of structural linguistics.

It is well known that Peirce's theory of signs is fundamentally different from the dualistic model of Saussure's semiology. The latter conceives a sign as a bifacial entity composed of a signifier and a signified. This model lacks a third element, an *Interpretant*, which is part of the Peircean idea instead [36] (p. 207). Nonetheless, the other two elements of Peirce's triadic model do not correspond perfectly to Saussure's signifier/signified dichotomy. It is possible that their theory of the sign is completely different from this perspective.

> Saussure defined a sign dyadically as consisting of a signifier coupled with a signified; that is to say, a sign *is* a dyad. And that, already, is two differences from Peirce's view, in which a sign is defined triadically but not as a triad; instead, Peirce made a sign to be just one of triad. But more important still, Saussure's signified is always a concept, whereas in Peirce's scheme, objects of signification include all that may in any way be thought of, spoken of, defined,

> described, judged to be or judged not to be, postulated, imagined, pictured, depicted, mapped, outlined, diagrammed, felt, pointed to, inferred, or, among other possibilities, shown; objects may therefore be physical things and events, both real and unreal, individuals and species and types, processes and persons and nations, places and times, possibilities and impossibilities, thoughts, ideal entities, and so on. [37] (p. 511)

Nonetheless, according to Short, "Saussure stipulated that the conceptual signified is always assigned to the material signifier by a convention. The role of convention might be said to make semiology implicitly triadic" [37] (p. 511).

If, therefore, the *nāma* partly constitutes both concept and acoustic image, what does *rūpa* denote? According to the texts, *rūpa* is a synecdochical notion: the term denotes the object or the effective organ intended by the sensory faculty of vision. There are five other objects, one corresponding to each sensory organ. When referring to the totality of sensory and/or effective organs, Buddhists tend to indicate only the first term; thus, the eye or the form serves as a metonym to signify the entire set. *Rūpa* itself is identified as the first of the five aggregates but is understood as an extended cognitive form, not merely a visual form. This is because the activation of the cycle of the five aggregates arises from any contact between an effective organ and a sensory organ. Hence, *rūpa* signifies the first term of a group, representing the entirety of that group.

The binomial N/R is thus a compound of two fundamental components: a nominal identity (a concept evoked by a word) that is *associated* with a given effective datum (a specific sensory datum). Not every sensory datum can be intended by the nominal identity. In the case of form, for example, what we have is a cognitive prototype—the ideal form of the object—associated with its name, which is used as a model to recognize anything that can be identified by the same *nāma* due to resemblance. This is also the model of modern cognitive linguistics based on prototype theory [38–41].

We therefore understand that the two parts of the binomial N/R cannot occupy two distinct positions within the A/B polarity, as the datum of *rūpa* encompasses both the "internal" aspect of the prototypical cognitive image and the "external" aspect of the effective image to which it must apply. We might thus speak of a *concept-form* to approximate the Saussurean *signified*, but as noted, a perfect equivalence is impossible.

Similarly, *nāma* indicates both an "internal" conceptual identity and an "external" phonation to evoke it, or even a written code through graphic signs, if preferred. In many respects, as we shall see, a comparison with Peirce's semiotics—which always involves a triadic system or three levels—is more apt, allowing greater flexibility in the comparative reading of Buddhist texts.

Knowing the actual composition of the N/R binomial is considered the acquisition of "correct view" (*sammādiṭṭhi*), as explained in MN 9. In this sutta, in addition to revisiting the composition of the "six sensory classes" that the meditator must know (*chayime… vedanākāyā… saḷāyatanañca pajānāti*) and the six effective classes—here called "six classes of craving" (*chayime… taṇhākāyā*)—along with the six classes of contact (*chayime… phassakāyā*) and the six classes of discernment (*chayime… viññāṇakāyā*), it is stated that the *chayimāni āyatanāni*, the "six spheres", "originate from N/R and cease when N/R ceases" (*nāmarūpasamudayā saḷāyatanasamudayo*, *nāmarūpanirodhā saḷāyatananirodho*). Since the system of six spheres depends directly on N/R (we might say N/R ⇒ A/B), it is crucial for the meditator to understand what N/R is for the purpose of attaining its "cessation", with consequent liberation from all its attendant afflictions.

Although N/R acts as a unified force with distinct and specific characteristics, its components can be analyzed separately. MN 9 informs us that the first component, the "name", taken individually, is a force comprising five fundamental phases: *vedanā* (sensation), *saññā*

(perception), *cetanā* (volition/intention), *phasso* (contact), and *manasikāra* (attention). The first two—sensation and perception—are phases shared with the process of aggregation, which is noteworthy for reasons explained later, while the other three appear related to a sort of apprehension process through an intentional force. *Cetanā* is a term associated with cognition (root $\sqrt{cit}$), but more specifically it refers to volitional understanding. We may therefore understand *cetanā* as "intention" in the dual sense of "understanding" and "volition". This is not an instinctive volition, as in the case of *saṅkhāra*, but something partially linked to cognition. Contact (*phassa*), which separates *cetanā* from the final element of nominal constitution, demarcates a more strictly cognitive phase from one of grasping the intended "thing". Contact may also describe the encounter between perceptual marks and sensory organs and should not be interpreted merely as physical grasping but as the moment when the relationship is established between the cognitive construct determining the nominal identity of the perceived thing and the sensory data to which this identity refers. Finally, *manasikāra* is another term related to intentionality but primarily connotes attentional capacity—an "attention" that is a more developed form directed toward the object, the "thing" endowed with a nominal identity (let us not forget that we are discussing the components of *nāma*). According to SN 47.42, *manasikāra* is also at the origin of *dhamma*s (*manasikārasamudayā dhammānaṃ samudayo*).

For these reasons, the similarities with the process of the five aggregates are considerable. These components describe the composition of the nominal identity attributed to a "something", and the text informs us that to arrive at nominal identity, it is necessary to process sensory data, associate them with corresponding percepts, recognize volitional understanding in those percepts, establish contact (*phassa*), a "grasping", an encounter between the effective and cognitive aspects, and finally invest the grasped object with the necessary attention.

The second component of the N/R binomial, MN 9 tells us, is symbolized by the set of possible effective conformations, described in the Buddhist system by the ways in which the four fundamental elements combine with each other. MN 109 is another sutta attributing the existence of "form" to the combination of the four elements (*cattāro kho. . . mahābhūtā hetu*, *cattāro mahābhūtā paccayo rūpakkhandhassa paññāpanāya*). Everything in the so-called external world is considered by Buddhists as a combination of the four fundamental elements: *cattāri ca mahābhūtāni*, *catunnañca mahābhūtānaṃ upādāyarūpaṃ*. This is the nature of "form" (*idaṃ vuccatāvuso*, *rūpaṃ*). For us, these four elements are representations of effective possibilities, phenomenologically reduced to what most closely approximates the essential constitution of the thing, in a pre-predicative, thus pre-apophantic, manner—without the nominal aspect.

In this sense, what they call *nāma* most closely approaches the Peircean conception of the "sign", or more precisely, the *Representamen*. In the semiotic relationship, the representamen is the subject of a triadic relation involving a "second", which is its "object", which in turn refers to a "third" [CP 2.303], the "interpretant" [42] (p. 1464).

The semiotic triangle that we derive (Figure 1) differs significantly from Peirce's model (Figure 2), insofar as it does not presuppose the existence of an "external" reality that is objective in the sense of being real and autonomous. The cycle underpinning the triangle is that between the intentional process (implicit in the force of the nominal sign, the Representamen) and perceptual markers. Could we replace the two base vertices with the elements of the A/B circuit? Partially, but only to the extent that the two components of the semiosis N/R are perceived as internal and external—that is, as A/B—but not in the sense that the internal and external realities constitute concrete and real facts. As we have seen, everything we believe to be "external" is impermanent, as is everything we believe to

be "internal". This impermanence merely refers to the fact that such realities are neither autonomous nor self-sufficient.

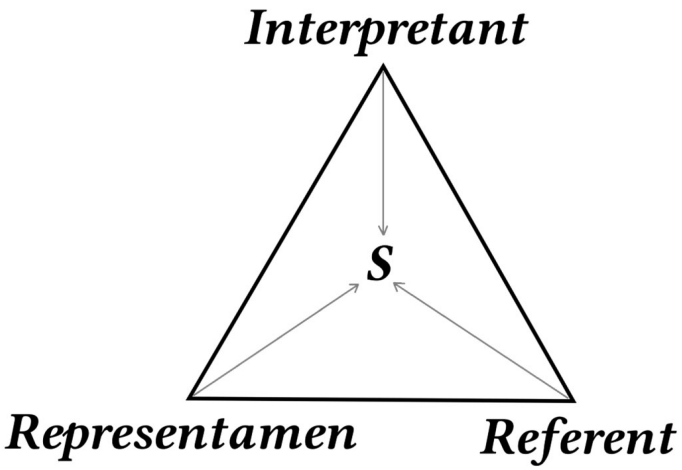

Figure 2. Peirce's semiotic triangle. According to other interpretations, the *Referent* can be intended as the *Immediate Object*, that is in relation to a *Dynamical Object*, which is the reality of the *Object-Referent* upon which the idea of the *Immediate Object* is constructed. The *Representamen*, in turn, can be intended as the *Signifier* of the Sign, while the *Interpretant* is the *Signified* or the *Meaning* of the Sign.

In Peirce's system, the Representamen is sometimes simply referred to as the Sign, but it is more accurate, as other scholars have noted, to designate it as the Signifier of the Sign, while the vertex of the triangle, the Interpretant, constitutes the Meaning, that is, the Signified or Meaning [43] (p. 106). However, these two terms—which recall Saussurean dualism and its semiology—do not correspond perfectly to the theory of the Genevan linguist. Peirce's sign is, in fact, a complex entity that cannot be fully explained by the mere two-sided nature or the union of concept-form and sound-image. Certainly, the latter aspect—the sound-image, or more faithfully, the "acoustic image"—is well suited for comparison with nominal identity, the *nāma*. Nevertheless, as we have observed, the *nāma* is not simply a set of phonemes associated with designate a concept by means of something evocative from the act of phonation; rather, for Buddhists, it is an intentional process linked to sensations and perceptions, coordinated by aspects of volitional intent and invested with particular attention.

According to one of Peirce's definitions, the *Interpretant* is that which a sign produces as an effect of the semiotic process; that is, it is the effect or outcome of the sign's action upon an interpreter—a third element mediating between a *Firstness* and a *Secondness*. It should also be emphasized that this process does not merely involve thought. In his more mature theory, Peirce conceives of the interpretant not only as a feeling, but also as an action or a concept [37] (pp. 489–491).

Indeed, Peirce distinguishes among three kinds of interpretant: the *Immediate Interpretant*, which concerns the pure interpretability of the sign; the *Dynamical Interpretant*, which refers to the actual effect produced on a given occasion—a concrete reaction; and the *Final Interpretant*, which corresponds to the ideal effect or ultimate meaning toward which interpretation tends [37] (pp. 494–496). These three aspects constitute an independent trichotomy, which Peirce calls the *modal trichotomy*. It thus becomes evident that Peirce's system is, in essence, a series of interrelated trichotomies, wherein a vertex of one trichotomic triangle often serves simultaneously as a member of another triangle in a different system. In this way, various systems recursively reference and encompass one another, forming a kind of fractal model. One example of this is the nature of the sign:

> besides this first triadic relation, the sign must take part in a *second triadic relation* in which the interpretant represents not only the object, as it does within the first triadic relation, but *the sign's representation of the object*. While in the former triadic relation the interpretant is simply another sign that refers to the object to which the sign itself refers, in the latter the interpretant is the representation *that* the sign represents the object. [44] (p. 534).

Another example is the *phenomenological trichotomy*, comprising the *Emotional*, *Energetic*, and *Logical* levels [37] (pp. 495–497), which, respectively, denote the feeling (or quality of experience, the emotion aroused), the physical action or bodily reaction that conforms and responds to the stimulus, and finally the constitution of a mental domain or a norm that is internalized and acquired.

Short demonstrates that the Immediate/Dynamical/Final trichotomy is a modal trichotomy (possibility—actuality—ideality) but does not coincide exactly with the triad *Firstness–Secondness–Thirdness* [37] (pp. 495–497). Naturally, the threefold model derives from that general idea, but the various trichotomies are not perfect transpositions of this model onto other dimensions (such as the modal one). What remains consistent is the trichotomic pattern itself, which takes different structural forms depending on the context.

However, the most renowned trichotomy is, of course, the one describing the semiosic circuit, which accounts for the process of semiosis. It should also be noted that Peirce profoundly revised his conception of the sign and the interpretant over the years. Initially, the sign was conceived solely as a thought; later, Peirce expanded the concept to include natural indices, symptoms, icons, and so forth. Consequently, the interpretant could no longer be understood merely as a thought but could instead manifest as a physical act or a sensation.

> In 1903, Peirce introduced three trichotomous divisions of signs (2.233-268); the first trichotomy pertains to what a sign is in itself, the second to the sign's relation to its object, and the third to the sign's relation to its interpretant. Under the second heading, a sign is an icon if it exemplifies or resembles its object, an index if it is existentially connected to its object, and a symbol if there is a rule of interpretation that determines its object. Under the third heading, Peirce attempted to explain and generalize the familiar triad of term, proposition, argument: "for its interpretant," a rheme is a sign of possibility, a dicisign is a sign of actual existence, and an argument is a sign of law (2.243, 250-3). [37] (pp. 502–503)

One might argue, as Liszka does [45], that the Interpretant lies at the very core of Peirce's theory. Indeed, the Interpretant reveals the intrinsically triadic nature of the sign: each semiosis binds sign, object, and interpretant in a relation that cannot be reduced to mere pairs. This triadicity [CP 2.243] accounts for the fact that meaning is not simply a mechanical effect but rather an evolutionary regularity. In turn, the Interpretant constitutes a fractal-like reference to yet another sign unit: triadicity thus emerges as the fundamental form of signification, transcending the mere dyadic relation between sign and object. The Interpretant is therefore both a translation and a practical effect of the sign; as translation, it is nothing other than the referral of one sign to another, a continuous semiosis.

3.2. The Relationship Between Name-and-Form (N/R) and Cognition

The N/R dyad operates through the association of two forces which, within the unity of the N/R pair, acquire an agency of their own. This force "yokes" the human being, a metaphor found, for instance, in SN 12.58. According to this text, there exist phenomena prone to being yoked. These phenomena also generate pleasure and attachment in the human, but when the human being focuses on such yoked phenomena, N/R arises

(*saṃyojaniyesu. . . dhammesu assādānupassino viharato nāmarūpassa avakkanti hoti*). In turn, N/R serves as a condition for the six sense spheres (*nāmarūpapaccayā saḷāyatanaṃ*). The cessation of suffering necessarily involves the cessation of N/R (*nāmarūpanirodhā saḷāyatananirodho . . .pe. . . evametassa kevalassa dukkhakkhandhassa nirodho*).

The N/R dyad possesses numerous characteristics enumerated in the suttas, many of which connect it to the other two semiotic forces I have previously mentioned. However, before listing the principal features of N/R, I wish to highlight the comparative possibility already presented to us by a brief yet fundamental sutta: SN 47.42. This text revisits the four elements on which the meditator should concentrate in sati meditation. These elements are of exceptional interest, as they are presented in a doubled form. They are body (*kāya*), sensation (*vedanā*), cognition (*citta*), and phenomenon (*dhamma*). According to the sati meditation model, the meditator is to contemplate two aspects of each phenomenon, marked by the repetition of the term, the first in the locative case, yielding expressions such as "body in the body" (*kāye kāya*). Among the various hypotheses proposed to scholars, the one I find most plausible is that this formulation indicates how perceptual experience is doubled due to the A/B dualism. This dualism is indeed evoked later in the explanation of sati meditation.

The interpretative proposal, following the same *kāye/kāya* model, centers entirely on experience and subjectivity: sensation (*vedanā*) as lived experience contrasted with sensation as intentional object. For example, if I go outdoors and feel a cool breeze, I experience that sensation purely as a lived feeling; whereas if I deliberately touch a cold glass to verify its temperature, that sensation is objectified. The same applies to cognitions or thoughts (*citta*) and, naturally, to phenomena or mental objects (*dhamma*).

Sati meditation requires that each of these four factors be meditated upon both internally and externally (*ajjhattaṃ vā bahiddhā vā*), as well as simultaneously internally and externally (*ajjhattabahiddhā*). For the purpose of our interpretation, it is important to recall that *ajjhatta* and *bahiddhā* are essentially synonymous with the internal and external sense spheres, respectively (*cha ajjhattikāni āyatanāni* and *cha bāhirāni āyatanāni*).

> This interpretation of internal and external as the subjective and objective aspects of experience can be further confirmed by the sūtras' explicit references to the six sense bases (*āyatana*) as "internal" (*ajjhattika*), and to their respective objects as "external" (*bāhira*). It should also be noted that, when mentioning the six internal and six external bases, the terms for internal and external are in their adjectival forms (*ajjhattika* and *bāhira*), while in the Satipaṭṭhānasutta and other passages teaching specific contemplative techniques, the terms used are adverbs (*ajjhattaṃ* and *bahiddhā*). [46] (p. 346)

What emerges is a brilliant reflection that Buddhists make through contemplative practice on the experiential dynamics between sensory and effectual organs, and on the nature of the subject and the object.

> The *sutta* instructs that the entire set of sense-spheres—internal (the senses) and external (objects of the senses)—are to be contemplated either internally, or externally, or both internally and externally; e.g., in the case of the sixth sense-sphere, both the internal sense, the mind (*mano*), and its corresponding external sense-sphere, phenomena (*dhamma*), are to be contemplated either internally, or externally, or internally and externally. [47] (p. 116)

However, it is necessary to avoid falling into a simplistic error. This is not a Cartesian dualism, nor, least of all, a process of "copying" sensory data by the cognitive apparatus. Such a view would generate precisely what Buddhism seeks to avoid, namely an externalist extremism analogous to the Western objectivist perspective. This perspective holds that

the only concrete reality is that which exists "outside" our senses, which experience the world by creating cognitive copies of it—mental images that are merely reflections of the truth, translated into electrochemical stimuli within the brain. Conversely, the opposing view—that the only reality is internal—would constitute a second extreme to be avoided. We must bear this in mind when encountering this dichotomy in reference to the "organs". Naturally, these terms also possess additional meanings, as in MN 28, where they are applied to the four great elements and refer, in the case of external elements, to those found in nature, or, in the case of internal elements, to their contribution to anatomical constitution and the onset of diseases.

Thus, by simplifying the interpretation into a self/other axis—while remaining aware of what this self/other implies in terms of the underlying sensory/effective dichotomy—we may also accept the reading of the commentarial literature, such as that offered by Qian Lin [46] (p. 19). For example, in the interpretation of the *Vibhaṅga*,

> To explain "internally" it uses *atthi imasmiṃ kāye*, which most likely refers to oneself. For "externally" it uses *atthi'ssa kāye*, likely indicating another person. And for the "internally-and-externally," it says *atthi kāye*, which can be understood as referring to a body not specific to any being. [46] (p. 327)

Qian Lin likewise fundamentally agrees with the experiential reading and the subjective/objective viewpoint: the two terms "refer, explicitly or implicitly, to the subjective and objective aspects of experience" [46] (p. 343), albeit without drawing the further conclusions that we propose in this paper regarding the biosemiotic interpretation, which significantly broadens the understanding of what constitutes a genuine functional circuit and a unified system involving the self/other dynamic. In the following sections, I will endeavor to expand on this perspective.

As we shall see, the sutta in SN 47.42 connects this contemplative exercise—aimed at transcending the A/B dichotomy—with the issue of the N/R dyad. The text's purpose is indeed to explain the origin (*samudaya*) of the four elements on which the meditator focuses their contemplations in the practice of *sati*. The origin of the four elements is explained as follows:

kāya—āhāra
vedanā—phassa
citta—nāmarūpa
dhamma—manasikāra

That the body arises from nourishment (*āhāra*) is perhaps the least surprising element. The relationship between sensation and contact (*phassa*) further confirms the essentially relational nature of *vedanā*: serving as a bridge between the effector organ and the sensor. However, we arrive at the origin of cognition (*citta*), which is here situated in a peculiar relation specifically to N/R. The reason for this subordination of cognition to the N/R dyad can be attributed to a limited set of hypotheses.

The most compelling is likely that cognition intervenes as the interpreter of the sign: it functions as the actual bridge between the two facets constituting N/R, it is what experiences the semiotic aspect, holds it before itself, and thus recognizes it as referring to something else.

This thereby generates a particular triangle (Figure 2) between the nominal object, the representamen, and its counterpart referent, or immediate object, united by a cognitive interpretant, without which no interpretation of the sign—that is, the relationship between the two components—can occur.

Regarding the relationship between phenomenon (*dhamma*) and attention (*manasikāra*), I will elaborate extensively in §5. For now, turning to Peirce's semiotics, we find something noteworthy to highlight.

3.3. On the Principal Functions of the N/R *Binomial*

Some of the fundamental notions related to the topic of *nāmarūpa* are found in numerous suttas, which attests to their significance. I will here present some of the principal occurrences in order to give an indication of their weight within the canon.

1. Discrimination, "discernment" (*viññāṇa*) is a condition for N/R (*nāmarūpa*), and from N/R arise the six sense spheres (*saḷāyatana*) through the same conditionality (*viññāṇapaccayā nāmarūpaṃ; nāmarūpapaccayā saḷāyatanaṃ*) [AN 3.61, 10.92]; [DN 15]; [MN 38, 109, 115]; [SN 12.1-2, 12.4, 12.20, 12.34-5, 12.59, 12.67-8, 12.70, 22.82]; [Ud 1.3]; [Ds 2.3.3.22]; [Dt 2.1.6, 2.5]; [Kv 15.2]; [Vb 6.1, 16.4]. It is said that "where consciousness is established and proliferates, there appear name-and-form" (*yattha patiṭṭhitaṃ viññāṇaṃ virūḷhaṃ, atthi tattha nāmarūpassa avakkanti*, [SN 12.64]).

A variant formulation refers to N/R as the source of the six sense spheres (*saḷāyatanaṃ nāmarūpanidānaṃ*) [MN 11]; [SN 12.11]. Another variant speaks of the origin (*samudaya*) [SN 22.56-7]; [MN 9] or the vital condition (*viññāṇūpanisaṃ nāmarūpaṃ, nāmarūpūpanisaṃ saḷāyatanaṃ*) [SN 12.23]. Still other texts describe it as a surge or arising (*upayanti*) [SN 12.69].

2. The cessation of N/R is the cessation of discrimination and vice versa (*yattha nāmañca rūpañca, asesaṃ uparujjhati; viññāṇassa nirodhena, etthetaṃ uparujjhati*) [Snp 5.2]; the cessation of name-and-form is also the cessation of the six sense spheres (*nāmarūpanirodhā viññāṇanirodho viññāṇanirodhā nāmarūpanirodho nāmarūpanirodhā saḷāyatananirodho*) [DN 14]; [MN 38, 115]; [SN 12.1, 12.39, 12.51, 12.59, 12.65, 22.56-7]; [Ud 1.2]. Since the chain of dependent origination, of which the relationship between *nāmarūpa* and *viññāṇa* forms a part, is also called the "origin of the world" (*loko samudayati*) [SN 12.49-50], the cessation of N/R, and consequently of discrimination, constitutes the "end of the world" (*loko nirujjhati*).

Certain considerations are exclusively Abhidhammic in nature, and therefore to be regarded as potentially subsequent to an earlier, more archaic phase, but are nonetheless interesting for the reflections they offer—extended from the Buddha's teachings, for example:

3. The appearing or manifestation of N/R implies the arising of volitional formations or mental constructs (*yattha atthi nāmarūpassa avakkanti atthi tattha saṅkhārānaṃ vuddhi*) [SN 12.64]; [Kv 1.6]. This assertion may be anticipated by AN 9.14, which attributes the constitution of intentional-volitional thoughts precisely to N/R (*saṅkappavitakkā uppajjanti. . . nāmarūpārammaṇā*).

There are also certain specific, technical aspects that help us gain a profound understanding of the functions and capacities of the N/R dyad. Some of these functions have already been analyzed in detail in previous studies, and therefore here I will limit myself to introducing them. As previously explained in those contexts, these specific aspects are often associated with more archaic texts within the broader canon, such as Snp 4 and 5, which compels us to approach them with particular consideration:

1. The N/R dyad acts as a kind of obstructive element interposed between the experiencer and the experienced, giving rise to apophantic perception. In other words, the human who sees perceives nothing but N/R, and having thus seen, will interpret all phenomena in accordance with N/R (*passaṃ naro dakkhati nāmarūpaṃ, disvāna vā ñassati tānimeva*) [Snp 4.13]. This aspect has been analyzed in two previous studies [9,15].

Similarly, N/R functions as a habituating force, analogous to its apophantic nature; those habituated to N/R believe that truth corresponds to what aligns with N/R (*niviṭṭhaṃ nāmarūpasmiṃ, idaṃ saccanti maññati*) [Snp 3.12]. Moreover, the N/R dyad participates in the A/B dualism, insofar as within this dyad N/R constitutes what is perceived as "external", while its counterpart, the "body", is implicitly understood as the internal. When such dualism is present, contact (*phassa*), which depends on the A/B dynamic, also arises, together with the six sense spheres, and the emergence of pleasure and pain (*iti*

ayañceva kāyo bahiddhā ca nāmarūpaṃ, itthetaṃ dvayaṃ, dvayaṃ paṭicca phasso saḷevāyatanāni, yehi phuṭṭho bālo sukhadukkhaṃ paṭisaṃvedayati etesaṃ vā aññatarena) [SN 12.19]. This text is particularly important as it explicitly addresses dualism (*dvaya*).

2. The N/R dyad is a self-replicating force, contagious like a disease, and is therefore associated with proliferation (*papañcanāmarūpaṃ*), a transversal capacity acting across both A/B dimensions (*ajjhattaṃ bahiddhā ca*), and described as "the root of illness" (*rogamūlaṃ*) [Snp 3.6]. This force is also responsible for attachments, insofar as it leads to recognition of the desired object, thereby constituting a genuine chain (*saṃyojanaṃ*). However, one who is not attached to N/R is not afflicted by these bonds (*taṃ nāmarūpasmimasajjamānaṃ, akiñcanaṃ nānupatanti saṅga*) [SN 1.36].

3. The N/R dyad is a force that establishes limits, and these limits are founded on the dichotomous basis of A/B: "they have created a boundary of name-and-form, but the one called 'wanderer' has reached that destination" (*pariyantamakāsi nāmarūpaṃ; taṃ paribbājakamāhu pattipattaṃ*) [Snp 3.6].

Now, Peirce describes the sign as part of a triadic system: a semiotic triangle (see Figure 1), whose other two vertices are the interpretant and the dynamical object. By the latter, Peirce means an element of actual reality—the supposed concrete referent to which the sign refers [42]. In Peirce the object is not only an "external" referent but is double: the dynamical object constrains the sign, the immediate object is the object as the sign constructs it [36] (pp. 219–220).

This particular aspect is quite problematic when compared with Buddhist semiotics, as we will see. The sign is also referred to as the "representamen", since it is something that stands for something else (*aliquid stat pro aliquo*). In this sense, the representamen not only refers to the dynamical object (the "real" one), but also implies an immediate object [48] (p. 51), which is nothing other than the way the dynamical object is focused upon—its attributes as rendered relevant by the sign in its act of signification [17,49].

This is one among the many possible definitions of the sign that have been proposed by linguists and philosophers, which should give us a sense of the complexity of the topic [48] (p. 5). We are speaking of a science that seeks to study signs and the relationship between organisms and the semiotic world, yet even arriving at a definition of "sign" proves problematic.

4. The Inhibitory Process of Perception-Sensation and Its Transcendence

According to SN 35.23, the sensor-effector dynamic constitutes the "whole" (*sabba*) within our experience. In other words, it is "all that we experience". Nonetheless, Buddhism does not merely describe the constitution of conscious experience; it appears to propose a method for liberation from what is, in effect, an imprisoning mechanism—an ensemble of "chains" or "fetters" (*saṃyojana*). Liberation from these chains requires a concrete and active practice, not merely an exercise in analysis and reflection. This is therefore the purpose of contemplative practice, which, as partially seen in the case of sati meditation, leads the practitioner to focus on specific aspects of the contemplative process with the aim of transcending them.

However, there is a fundamental aspect of this mechanism that must be understood. The intent of the contemplative exercise appears to be the attainment of a phenomenological essence of things, a reality termed precisely "that-which-is" or "thusness" (*yathābhūta*), and this is no coincidence. What we perceive, directed by the complex orchestration of cognitive processes, is nothing other than the interposition of a lens between ourselves and the experience of the real. As stated initially, it is the constitution of duality—the antinomy A/B—that underlies everything. This antinomy depends on the fundamental semiosis,

the N/Rσ, and it is precisely this mechanism that must be dismantled in order to achieve "liberation" (*vimutti*) from dual reality.

4.1. Going "Totally Beyond" Perception-Sensation (Saññāvedayita)

Since everything within A/B is not created *ex nihilo* but rather represents a reduction or distortion of reality, Buddhist reasoning concludes that sensory and perceptual processes primarily function as inhibitory forces. What they inhibit is the sensation of novelty in relation to recurring stimuli, which must be reduced to specific percepts. For this reason, the sensation-perception axis is fundamental, underpinning not only the five aggregates but also the process of nominal apprehension. Its importance is such that Buddhists frequently refer exclusively to the sensation-perception axis and the necessity of its "cessation" to imply all problems derived from it. A specific term designates this axis: *saññāvedayita*, literally "perception-sensation".

The rationale for regarding *saññāvedayita* as an inhibitory process lies in its mode of operation: human beings experience sensations in a constant and uninterrupted continuum. There is no discontinuity between the perception of a vase of flowers, the table it rests on, or their shared background. Likewise, perception itself is inherently pre-predicative: there is no specific identity—and it would be impossible to quantify one—for the various perceptual forms of the "brownness" of the table, and it would be naïve to believe that all nameable browns faithfully represent the reality of color, or that the table's "roughness" or "smoothness" nominally correspond to its actual nature. Infinite sensory experiences are possible, yet the human apparatus groups them into categories under the banner of a specific nominal identity, subsequently organizing them into specific percepts. Similarly, an organized set of sensations is rendered recognizable and attributable to a particular nominal identity through perceptual association. The "table" corresponds to specific *saññāvedayita* associations, traced back to the nominal identity "table". It follows—and this is evident from everyday experience—that we are so habituated to perceiving a "table" when encountering what we customarily designate as such, that the mere pre-predicative experience is no longer accessible to us. The raw visual, tactile, and auditory sensations of what we call "table" are inhibited because, as soon as sufficient sensory data is collected, these are immediately subsumed under the percept "table". Thus, the *saññāvedayita* process produces an inhibition of mere sensation in favor of the perception of the nameable object.

For this reason, the *saññāvedayita* process is of paramount importance, and there is notable emphasis on the necessity of its "cessation". The cessation of *saññāvedayita* is directly linked to overcoming a series of dimensions. Curiously, these dimensions coincide with those that the practitioner must transcend through progressive meditation exercises, namely the eight *jhāna*s.

DN 33 specifies that "for one who has attained the cessation of perception-sensation, perception and sensation cease" (*saññāvedayitanirodhaṃ samāpannassa saññā ca vedanā ca niruddhā honti*). The same statement appears in DN 34; SN 36.11, 36.15; AN 9.36. The objective, therefore, is to reach a state characterized by the cessation of both sensations and percepts. The association between the cessation of this inhibitory process and meditation on the eight *jhāna*s is corroborated in numerous suttas. For instance, DN 16 enumerates all eight stages, citing the cessation of perception-sensation as the attainment associated with the eighth *jhāna*.

> *atha kho bhagavā paṭhamaṃ jhānaṃ samāpajji, paṭhamajjhānā vuṭṭhahitvā dutiyaṃ jhānaṃ samāpajji, dutiyajjhānā vuṭṭhahitvā tatiyaṃ jhānaṃ samāpajji, tatiyajjhānā vuṭṭhahitvā catutthaṃ jhānaṃ samāpajji, catutthajjhānā vuṭṭhahitvāākāsānañcāyatanaṃ samāpajji,ākāsānañcāyatanasamāpattiyā vuṭṭhahitvā viññāṇañcāyatanaṃ samāpajji, viññāṇañcāyatanasamāpattiyā vuṭṭhahitvāākiñcaññāyatanaṃ samāpajji, ākiñcaññāyata*

nasamāpattiyā vuṭṭhahitvā nevasaññānāsaññāyatanaṃ samāpajji, nevasaññānāsaññāya tanasamāpattiyā vuṭṭhahitvā saññāvedayitanirodhaṃ samāpajji.

This connection between "going completely beyond the dimension of neither-perception-nor-non-perception" (*sabbaso nevasaññānāsaññāyatanaṃ samatikkamma*), whose significance I will shortly elucidate, is also reiterated elsewhere, such as in DN 15; SN 6.15, 16.9, 48.40; SN 36.19, 54.8; partly in SN 14.11; and in AN 8.66, 9.38, 9.41, 9.42, 9.51.

4.2. The Jhānic Meditation as a Progressive Transcendence from Signs

SN 41.6 explains that "when a mendicant has emerged from the attainment of the cessation of perception and feeling, only three types of contact are experienced", namely "vacant, signless, and undirected contacts" (*suññato phasso*, *animitto phasso*, *appaṇihito phasso*). Here, for the first time, we encounter an explicit reference to signlessness, that is, the dissociation of perception and feeling from the sign process (*nimitta*) [2,16,50,51].

In the path of the eight *jhāna*s (I will refer to them as Jh. for brevity), the meditator progresses through a series of renunciations or transcendences, described as *overcomings* in the case of *jhāna* 5 through 8. This meditation is described as a progressive transcendence of different *āyatana*s. The terms used to describe the overcoming differ from one *jhāna* to another:

Jh. 1 *vivicca* ("seclusion")
Jh. 2 *vūpasama* ("rupture")
Jh. 3 *virāga* ("fading away")
Jh. 4 *pahāna* ("giving up")
Jh. 5–8 *samatikkama* ("overcoming")

The reason for this different terminological choice is that the discussion here is not about circles or "worlds", but about negative elements. The meditative exercise emphasizes the necessity to abandon, detach from, or renounce a series of factors that would hinder proper "development" (*bhāvanā*). The first four stages are therefore entirely situated within the domain of the conventional worldly sphere. In Jh. 1 the term *atthaṅgama*, "end", "cessation", "disappearing", is also mentioned, as processes are discussed that thus must be brought to cessation.

Once those worldly factors that obstructed self-development have been overcome, the entire second part of meditation, from Jh. 5 to 8, focuses exclusively on *samatikkama*. *Overcoming* is the essential instrument for this contemplative state, which is described as "formless" (*arūpa*) in contrast to the first group of four *jhāna*s, which were instead "form-based" (*rūpa*). Forms are the element that grounds all the processes of worldliness as we know them. It is in the transition to worlds of a nature different from the form-based one we know that the contemplative exercise reaches its most advanced stage.

Examples of *samatikkama* as *overcoming* can be found in numerous suttas. For instance, DN 1, DN 2, MN 8, MN 66, to name a few where it is mentioned in relation to Jh. 8.

An extraordinary mention is also made in Snp 4.1, which can be seen as the prototype for all these usages, given the antiquity of Snp 4 in general. In this text, it appears in the form *samativattati*, with a practically identical meaning:

yo kāme parivajjeti,
sappasseva padā siro;
somaṃ visattikaṃ loke,
sato ***samativattati***
He who, being mindful,
avoids sensual pleasures,
as though stepping beyond the head of a serpent—
he **overcomes** attachment to the world.

Beyond the undoubtedly evocative poetic metaphor, in this text we must note the following terminological relationships: the world (*loka*), which is that which must be transcended, is placed in relation to sensual pleasures (*kāma*). In fact, the avoidance (*parivajjeti*) of the latter leads to the transcendence (*samativattati*) of the world, hence the relational link between world-pleasures and attachment (*visattika*). Lastly, the second relationship that must be noted is that between being aware (*sato*) and the overcoming (*sato samativattati).*

The text presents the world as a problem insofar as it is the place where morbid attachment to the senses occurs (*kāme*. . . *visattikaṃ loke*), and it presents as a solution the transcendence (of the world) through detachment and the attainment of the state of full awareness (*parivajjeti*. . . *sato samativattati*).

The term *jhāna* is undoubtedly one of the most frequently used to denote contemplative practice. However, as I hope is now clear at this point, the term does not refer to Buddhist meditation *tout court*, but rather to a specific contemplative technique, just as are the *brahmavihārā* mentioned previously or the *satipaṭṭhāna*.

Jhāna meditation is consistently described in the Pāli Canon as being highly standardized. It is perhaps the contemplative exercise with the clearest and most codified form. Specifically, *jhāna* meditation consists of eight stages, in two groups of four. The first group is even explicitly referred to as "first *jhāna*", "second *jhāna*", and so forth. In Pāli:

Jh. 1 *paṭhamaṃ jhānaṃ*
Jh. 2 *dutiyaṃ jhānaṃ*
Jh. 3 *tatiyaṃ jhānaṃ*
Jh. 4 *catutthaṃ jhānaṃ*

The definition of the four *jhāna* (from now on I shall refer to them as Jh. 1–4 for the formal ones and Jh. 5–8 for the formless ones) is probably the single most problematic theme in the entire field of research on contemplative practices. Compared to other terms, the lemma *jhāna* itself is perhaps the one that has received the most attention from scholars.

The term in question, comparable to Sanskrit *dhyāna*, is difficult to reconstruct. According to some interpretations—though not universally accepted—it derives from an Indo-European root of which Greek σῆμα is also a cognate [52] (p. 1323). This would connect the contemplative exercise to the idea of "sign", a fact that, as we shall see, is at least theoretically correct, regardless of the etymology of the term.

Certainly, the *jhāna* exercise is at least partially indebted to Vedic contemplation, the *dhī*. The Vedic contemplative exercise is conducted in a unity of vision and perception. The term *dhī* is comparable to the Avestan *diδāiti*, "to see", and is traceable to the Proto-Indo-Iranian $d^{h}ayH$-("to perceive"). For this reason, it is recognized that *dhī* primarily indicates perception and secondarily thought. It also denotes desire, but it is more appropriate to interpret it as intentionality, given that the Vedic contemplative exercise is founded precisely upon the directing of attention toward a deity as the object of the poet's veneration [53]. This directionality, this impulse toward the divine, is carried out by focusing entirely on the deity, in a simple relation between contemplator and contemplated, a $C_1 \rightarrow C_2$, where the arrow indicates *dhī* as intentional impulse. In the relation $C_1 \rightarrow C_2$, we can say that C_2 is the sign of the contemplation of C_1, which is also true in the Buddhist exercise.

I invite the reader to consider an additional meaning of the term "sign", which will be fundamental for us in the course of our analysis. Let us understand a "sign" also as something that is fixed and statically determined—a focalization of a cognitive datum, be it an image, a sound, or something else. What matters is that it be "fixed" in some way by mental exercise. Buddhist contemplation makes use of various types of "sign" as the foundation of meditative practice. One of these is the *nimitta*, a term that is indeed translated as "sign" [16], and which indicates any mental object upon which the meditator

directs their total attention during the contemplative exercise. The technical usage of *nimitta* develops from a much more general, though no less important, conception. To recognize, in fact, that the mind reasons through "signs" is the fundamental step in setting up an exercise of fixation on a specific sign as a practice for the development of attention.

In common experience, in fact, signs follow one another in a continuous and unrelenting flow—a chain of reciprocal references that enables the "discursivity" of thought, but that is also indicative of subjection to the mechanisms that govern the production of "signs". The prototype of the sign, its fundamental cognitive basis, is precisely "form"—a term denoting the most basic nature of the cognitive datum, the foundation around which a more determined sign-value will be constituted. Thoughts are thus, more basically, a constant flow of "signified" forms (forms made into signs).

What distinguishes the *nimitta* from the normal signs that govern our thoughts is the fact that the *nimitta* is the result of an exercise aimed at halting the normal flow of thoughts, by fixing (directing) conscious attention on a single, fixed, stabilized sign.

Now, every meditation is based on this directed attention toward a "focal sign". Cousins defines the *nimitta* as "the object of meditation, of whatever kind" [54] (p. 5). This, at least, is the meaning "in the older literature". Special attention should be paid to the "whatever kind": it is not necessary, in fact, for the *nimitta* to be a sign of particular symbolic value. The contemplative exercise will concentrate primarily on deconstructing its more complex layers, to arrive at a phenomenologically pure form, to use Husserlian terminology. If, therefore, we begin with a leaf, the meditation that fixes this sign in the mind will progressively "decompose" the cognitive elements of the leaf into its most basic components, such as green, smoothness, pointed oval shape, etc.

In later developments, the *nimitta* will indeed be classified in various ways, depending on the contemplative stage in question: preparatory (*parikamma*), acquired, or introjected (*uggaha*), and semblance (*paṭibhāga*). This is a form of rarefaction, in that the final stage aims at the pure concept, stripped of its physical substrate, residual only of its mere ideational or perceptual association (*saññ-ja*). From this point of view, such an exercise is nearly identical to the Husserlian ἐποχή, and the attempt to arrive at a pure εἶδος in the phenomenological sense [55–58].

The jhānic exercise is described in a very large number of suttas, such as SN 16.9, DN 16, 17, MN 30, AN 9.36 and 10.8, and various others dedicated to individual phases, such as AN 5.256, 5.257–263, and some recurring ones that often add details, such as AN 5.264, 5.265–271 or again AN 6.73, 6.74. These are only a few of the dozens of possible examples. This exercise is mentioned so many times as to leave little doubt about its importance.

The exercise is presented by repeating specific formulas. In the case of Jh.1, for example, we find:

> *ahaṃ, bhikkhave, yāvade ākaṅkhāmi vivicceva kāmehi vivicca akusalehi dhammehi savitakkaṃ savicāraṃ vivekajaṃ pītisukhaṃ paṭhamaṃ jhānaṃ upasampajja viharāmi.* [SN 19.9]

One of the recurring formulas we encounter from the beginning is the scheme of abandonment-acquisition. Every meditation begins with the separation, abandonment, or renunciation of something from a previous state, and the acquisition of something new. In this case, the separation is from passions (*kāma*) and unbeneficial factors (*akusala-dhamma*). What is acquired is *savitakkaṃ savicāraṃ vivekajaṃ pītisukhaṃ*. I will examine these factors in detail in a dedicated section.

According to the Abhidhamma, *vitakka* has at least two meanings. In a general sense, it is "a tendency to speculate and fix upon ideas" [54] (p. 39), while in a technical sense it denotes "the ability to apply the mind to something and to fix it upon a (meditative) object" (ibid.). One must also consider the connection of the pair *vitakka/vicāra* with language as

the principal instrument for conducting thought. According to Polak [10] (p. 53): "All the evidence in the Nikāyas suggests that *vitakka* is a verbal type of thought".

Vicāra also carries a dual meaning: generally it is "the tendency of the mind to wander", but in its technical sense it is a form of examination of the object toward which attention is directed. We could say that *vicāra* may be understood as an *exploratory intention* (see Table 2).

Table 2. Comparison between the different possible meanings of *vitakka* and *vicāra*.

	Common Meaning	Technical Sense	Contemplative Phase
vitakka	Speculation	Fixed object of meditation	*Attentive* investigation
vicāra	Mind-wandering	Examination of the object of meditation	*Intentional* exploration

Cousins explains this oscillation of *vitakka/vicāra* as an oscillation between "thinking about" and "thinking of" [54] (p. 39). In my view, these correspond to two levels of *intentionality*, both of which may exhibit a focused aspect relevant to meditative practice (*ekaggatā*), specifically concerning the development of attentive inquiry or exploratory intention directed toward the intended object (see Table 2).

The one-pointedness of cognition (*ekaggatā*) is "generally understood as a synonym for *samādhi*" [54] (p. 35). Whether or not this understanding is valid is important to grasp at this stage of the analysis. Indeed, if *ekaggatā* and *samādhi* are the same thing, it is unclear why two distinct terms are employed. The Pāli Canon generally displays meticulous attention to technical terminology, and therefore the use of two perfectly synonymous terms, without at least implying different nuances, is at the very least curious.

Certainly, *citta-ekaggatā* refers to a condition involving the focusing of the cognitive apparatus. This does not necessarily indicate a condition equivalent to unification, which is how we have understood the absorption phase represented by *samādhi*. Far from being an interpretation based on more recent readings, it is evident that already in the Pāli Canon *samādhi* is to be understood as a total indistinction between subject and object—a form of synthetic absorption which, if anything, constitutes a further and more advanced stage than *ekaggatā*. In *samādhi*, one transcends the phase of perfect fixation on a sign within the cognitive stream, in order to overturn the very distinction between the cogitating self, which directs its attention to the sign, and the cogitated sign, the object of the meditator's attention. According to some, the actual state of *samādhi* is already present in Jh. 2. On a technical level, Jh. 2 is defined as *cetaso ekodibhāvaṃ* [54] (p. 37). Hence, a unified state of cognition, but since it is not a specific mention of *samādhi*, I harbor some doubt that it refers to this. I also concur with Dennison in that the state of *ekaggatā citta* "describes a depth of concentration in which the mind is absorbed in the object" [59] (p. 33), which would render it similar, though not identical, to *samādhi*. The most reasonable hypothesis is that it refers to the specific exercise aimed at the development of the subsequent *samādhi*.

4.3. Formal and Formless Dimensions: The Biosemiotics of Meditation

In the context of meditation, these are phases of the contemplative exercise rather than independent contemplative practices in their own right. Furthermore, they are sequential and interconnected even in situations lacking the focal aspect—namely, when the mind oscillates between speculation and inattentive wandering. Meditation transforms this oscillation, which is typical in the ordinary flow of thoughts, into one between the establishment of attention (fixating on the object to halt the flow) and exploration (contemplative intentionality).

Turning, then, to how all this applies to contemplative practice, it is conceivable that the first four *jhāna*s are designated *rūpa* ("formal") precisely because they are contemplative exercises centered on having an object of focus. This would logically imply, as a consequence, that Jh. 5–8, the *arūpa* ones, are so called because they follow the process of stripping away intentional flows through the progressive deactivation of the mechanisms of relationality with the perceptual *rūpa*-object. Therefore, one enters a phase of contemplation aimed at the absence of a referent object, which in practical terms translates into a transcendence of the worldly circle within whose boundaries the presence of a sensory object subsists.

This progressive stripping away is represented in Table 3, where we see how each Jh. progressively removes an aspect of the nature of the perceptual object from the relationship with the meditator. Again, in Table 3, we observe the last four Jh.s and their characterization as "amorphous" spheres, which translated into our terms simply means "devoid of signs". Yet even without the sign, there remain mechanisms of a perceptual nature that continue to function, since the background of every semiotic process—the worldly environment, the "circle"—continues to be present, or rather, the meditator continues to be-in-the-circle. The Pāli Canon expresses this condition very clearly as the persistence of the dichotomy between external and internal [46,47].

Table 3. This table schematically presents the evolution of the first four *jhāna*s based on the model described above: factors acquired in the present state are indicated in green, those retained from the previous state in yellow, and those abandoned from the previous state in red. I have marked with [−] the jhānic moment in which the factor is effectively lost, while if it is retained, a [+] has been indicated. Any variations or clarifications regarding the retained factor are reported in the footnotes. There are cases in which the texts do not make clear whether a factor is retained or not; these I have marked with [~], since it is indeterminate, even though it is reasonable to assume that in some form it is retained. There is, finally, a case of substitution, indicated in the context of Jh. 4, where a cell is split in two to signal that the lost factor is replaced by a condition that expressly refers to it.

Jh. 0	*kāmā*	*akusalā dhammā*							
Jh. 1	[−]	[−]	*vitakka/vicāra*	*pīti* [1]	*sukha* [1]				
Jh. 2			[−]	[+] [2]	[+] [2]	*ajjhattaṃ sampasādanaṃ*	*cetaso ekodibhāvaṃ*		
Jh. 3				[−]	[+] [3]			*upekkhako*	*satimant* [4]
Jh. 4					[−] [5] (*adukkhamasukhaṃ*)	[~]	[~]	*upekkhāsatipārisuddhiṃ*	

[1] *viveka-ja*; [2] *samādhi-ja*; [3] *kāyena*; [4] *sato ca sampajāno*; [5] *dukkha* here appears connected to *sukha*, as something to which the meditator "gives up" together with the cessation of *somanassadomanassānaṃ*.

To perceive oneself in a world means to conceive of one's own interiority as localized in an exterior environment that is precisely the world. This particular condition, in Pāli Buddhism, is still far from the truth, and thus from liberation.

But how can meditation occur in the absence of a referent object? Indeed, it is properly only in Jh. 7 and 8 that we witness this peculiar phase of the absence of a referent object. In Jh. 5 and 6, the issue remains that of the constitution of a "phantom" perceptual object, or more precisely, of an involuntary perceptual object. These are matters that anticipate the issues clearly articulated by Nāgārjuna regarding the problem of meditation centered on emptiness (*śūnyatāśūnyatā*).

The Jh. 5–8 axis directs contemplation toward the constitution of the perceptual circle itself. In cases of normal perceptual experience, as in any circumstance that involves a subject/object relationship, the fundamental precondition is the establishment of a worldly circle as a specific perceptual domain, the ground upon which any relational connection is established according to Buddhist theory.

According to Cousins, Jh. 1–4 may derive from an embryonic threefold system. To this system are likely added other contemplative practices that the Buddha probably learned

from earlier traditions, and the eightfold system, based on two groups (Jh. 1–4 + Jh. 5–8), according to Cousins, "must be the Buddha's own creation" [54] (p. 70).

As I anticipated, we can understand the progression of Jh. 1–4 as involving three fundamental aspects: something is abandoned from the previous state, something is retained from the previous state, and something is acquired from the subsequent state. With this tripartite division in mind, we also understand the necessity—explicit in the description of Jh. 1—of positing a pre-jhānic starting phase, a kind of Jh. 0 (see Table 3) from which something is abandoned as one enters Jh. 1.

This results in a complex system of alternation (and partial overlap) of elements, in which what is acquired in one contemplative stage is abandoned (transcended) in the next, in a continuous form of surpassing, as shown in Table 2.

Jh. 5–8 also follows a similar scheme. However, due to the different nature of the elements it seeks to transcend, fewer factors are involved, such as the mere awareness of the infinity of space. Now, to express this condition of abandonment or separation, the suttas employ terms like *vivicca* ("secluded", Jh. 1), *vūpasamā* ("rupture", Jh. 2), *virāgā* ("fading away", Jh. 3), or finally *pahānā* ("giving up", Jh. 4) and *"end"* in the sense of "disappearing" or cessation (*atthaṅgamā*). Concerning Jh. 5–8, what is particularly interesting is that the transcendence of the factor to be abandoned is always described as a "going beyond". The text speaks of "completely going beyond" (*samatikkamā*). For example, to attain Jh. 5, the Buddha speaks of "completely going beyond the perception of forms" (*sabbaso rūpasaññānaṃ samatikkamā*). We can understand this kind of complete surpassing as a genuine metaphor for transcendence—not in a mystical sense, but as an actual overcoming of something that normally acts as a limit (see Table 3).

Another aspect of this meditation that is pivotal for our analysis is that the dimensions to be transcended from Jh. 5 to 6 are called *āyatana*s. The same name used to indicate the elements of the A/B dynamic.

I consider this terminological aspect to be important. Jh. 1–4 pass through a process of separation, distancing from what is harmful to the meditator—separation signaled by the frequent presence of terms characterized by the prefix *vi-*, which indeed indicates departure, division, etc. We see this in *vivicca* (*vi-* + $\sqrt{}$*vic* + *-ya*), in *vūpasamā* (*vi-* + *upa* + $\sqrt{}$*saṃ* + *a*), in *virāgā* (*vi-* + $\sqrt{}$*raj*). A different case occurs in Jh. 5–8, where the preferred device is transcendence, surpassing, overcoming (*samatikkamā*). I deem it important to highlight this terminological issue, as it will be useful again in the final section. The progressive abandonment of any dependence of one's perceptions on these processes of "formal relationships" is further evidence that "to develop the jhānas requires disengagement from the human default sensory consciousness" [59] (p. 31).

Something else that is worth highlighting here also concerns Jh. 5–8, specifically the final two. The *circle* (*āyatana*) that is transcended in Jh. 5 is the habitual worldly circle of human experience (see Table 4). We therefore know what name the Buddhists would give to the *Umwelt* of biosemiotics. The expression "totality of formal perceptions" (*sabbaso rūpasaññāna*) perfectly describes the type of relationship between effector and sensor that is established within the framework of an environmental relational dynamic. The environment (*Umwelt*) is, in this case, the scenario that enables the effector/sensor relationality, namely the *saññāvedayita*.

The practice of Jh. 5–8 is a progressive surpassing-transcending of the operativity of the "circles". We learn that there is not only the worldly circle but also two others, which we must suppose to be superimposed, acting as interconnected levels, different planes of experience. Certainly, *rūpasaññāna* is the most superficial one, the strongest mediating element in our experience. We also learn that each circle is connected, in its functionality, to a specific mechanism, as I have summarized in Table 5. Therefore, the

contemplative exercise consists of a cessation (*nirodha*) or *passing away* (*atthaṅgama*) of that which allows the specific *āyatana* to remain operative and effective upon us (cf. MN 44: ***saññāvedayitanirodhaṃ*** *samāpajjantassa kho, āvuso visākha, bhikkhuno paṭhamaṃ nirujjhati vacīsaṅkhāro, tato kāyasaṅkhāro, tato cittasaṅkhāro*).

Table 4. Journey of Jh. 5–6 into different worlds marked as "spheres" or "dimensions" (*āyatana*).

(*jhāna*)	What is Surpassed [1]	On What Understanding [2] Is Determined By
Jh. 5	*sabbaso rūpasaññānaṃ; paṭighasaññānaṃ; nānattasaññānaṃ amanasikārā*	*ākāsānañcāyatanaṃ*
Jh. 6	*sabbaso ākāsānañcāyatanaṃ*	*viññāṇañcāyatanaṃ*
Jh. 7	*sabbaso viññāṇañcāyatanaṃ*	*'natthi kiñcī'ti ākiñcaññāyatanaṃ*
Jh. 8	*sabbaso ākiñcaññāyatanaṃ*	*nevasaññānāsaññāyatanaṃ*

[1] *samatikkamma*; [2] *upasampajja*.

Table 5. The jhānic journey through different "worlds"/"circles" visualized in its entirety. The group Jh. 1–4 includes the conventional *loka* as the perceptual sphere (*saññāvedayita*).

(*jhāna*)	*āyatana*	Dependent On
Jh. 1–4	*saññāvedayita*	*rūpasaññāna*
Jh. 5	*ākāsānañcāyatana*	*ananto ākāsoti upasampajja*
Jh. 6	*viññāṇañcāyatana*	*anantaṃ viññāṇanti upasampajja*
Jh. 7	*ākiñcaññāyatana*	*'natthi kiñcī'ti upasampajja*
Jh. 8	*nevasaññānāsaññāyatana*	*sabbaso ākiñcaññāyatanaṃ samatikkamma*

Another fascinating point is that the texts recognize that the triggering mechanism of the *saññāvedayita* mechanisms is an *impact* (in other contexts referred to as *phassa*, "contact") with something. This is a perfectly biosemiotic claim, namely that the triggering factor of the perceptual-sensory dynamic is always the impact between an effector organ and a sensory organ. The cessation of the "world" of formal perceptions occurs through the "cessation of the mechanisms of impact" (*paṭighasaññānaṃ atthaṅgamā*). According to Bucknell, "This indicates that *paṭigha-saññāna* is identical with the preceding item, *rūpa-saññā*" [60] (p. 384), and he also considers *nānatta-saññā* a "further synonym". With this, the perception of distinction also ceases—of "difference" between things; or rather, the meditator can cease to focus on the perception of the "multiplicity" of things (*nānattasaññānaṃ amanasikārā*)—this passage implicitly suggests that the appearing of things as different and distinct (i.e., separate from one another) pertains to our peculiar way of constructing a world. This leads to the consequence of tending to isolate objects, abstracting them from their network of mutual interdependence as epiphenomena of a total and indivisible flow. The aspectual difference of individual manifestations is not denied here, but rather their autonomy and self-sufficiency—hence their possession of an independent "self". This belief is part of the worldly sphere that Jh. 5 seeks to overcome.

The sphere immediately following that of the "environment" is defined as "of infinite space" (*ākāsānañcāyatana*). There may be several reasons for choosing this term.

It is in contrast with the previous sphere that the sense of the dimension of infinite space is understood, as the environmental perception, as we have called it, necessarily requires the delimitation of a certain space in order to function. Such space is defined precisely, and every definition is synonymous with a delimitation, hence the setting of boundaries and limits, from the particular limitations of the sensory organs.

Limitation is an inherent fact of the nature of the sensory organs of human beings, as well as any other living being with perceptions. After all, my eye cannot see infinitely, just as my ear cannot hear infinitely different sound waves, and so on. There is a precise limitation that may vary in detail from person to person, which determines the limit of

my sensory sphere. However, it is also true that human beings tend to project this same system they have in their own lived experience onto the construction and organization of social dimensions. For example, we can see it in every construct that humans make. We need to set limits, that is, to draw boundaries within which to operationalize certain normative, social, cultural functions, and so on. The city has its limits, the laws have their limits; otherwise, without this limitation, one cannot define what a city is, what a law is, and so on. It is in the setting of the limit, therefore, that implies the construction of otherness to the norm, which constructs anomie. If I do not know the limits of the law, I cannot impose a penalty indicating who has transgressed, that is, who has entered illegality. Similarly, I will have to set a boundary within which certain limits apply, which may be, for example, the boundary of a particular state. It is important to emphasize all these aspects, because the next sphere, the one the meditator accesses as soon as they have surpassed these perceptual-sensory mechanisms, is defined by infinite space. For this reason too, the domain of contemplative absorption is "inconceivable" (*jhāyissa*. . . *jhānavisayo acinteyyo*, *na cintetabbo*, [AN 4.77])—not because it is inherently impossible to understand, but because ordinary cognitions cannot grasp it.

In biosemiotics, Jakob von Uexküll describes the particular relationship between an organism and its environment (*Wirkraum*) as the setting of a closed space [61] (p. 72). For Uexküll, the environments personal to each organism are in some way "soap bubbles" (*Seifenblase*) as he calls them [61] (p. 75), which constitute an inner world, an *Innenwelt*, that is closed. If, therefore, the foundation of formal perceptions—which Buddhists call formal to mean, as we have already said with the term "form", any kind of perceptual mark that represents an effector that can be received by the sensory organs—is characterized by closure, it follows that the transcendence of it must instead lead to an open space. But what does open mean? It means, simply, without boundaries. And if delimitation is characterized by closure, openness, on the contrary, will be characterized by the infinite, that is, by the absence of a limit. However, a problem arises here, since this dimension is still defined as a sphere, that is, as a circle, just like the previous dimension, which creates an apparent paradox.

4.4. The Dimension with No Possible Object to Perceive: Understanding the Definitive Signlessness

We must first understand that this is a contemplative exercise and therefore involves both the practical dimension and the conceptual understanding acquired by the meditator from a theoretical point of view, even though I believe this distinction between practice and theory is factually non-existent in Buddhist meditation. In any case, what I believe is being said to the meditator to avoid as a danger is precisely the idealization of the concept of infinity. Since meditative practice is fundamentally anchored in experience, what should not happen is the idealization or conceptualization of what is anticipated in these texts in the form of teachings. In other words, these texts, which are in some way a manual for contemplative exercise, are anticipating to the meditator that once they have transcended the dimension of worldly perceptions, they will access an open, that is, infinite, dimension.

However, the meditator might idealize this dimension in turn, making it a conceptual boundary, no longer a boundary limited by physical sensory organs, but one delimited by their conception of infinity. This, in turn, becomes a limit. This will also happen in the next dimension. What is happening with the setting of a circle of infinite space is that the concept of infinite space is being reconceptualized in the form of a non-worldly but mental limit. Because, although the perceptual limits have been transcended in terms of confinement, the perception itself has not been transcended. Thus, the meditator will approach infinity as an object of perception. And if the subject-object dynamic persists, even having infinite space as the transcendence of the previous limit as the object of perception, then it will act

on the meditator exactly as a limitation in turn. It is precisely in the subject-object dynamic that the limit persists. Therefore, approaching infinite space, that is, the transcendence of the previous limit, as an object means setting a background of the kind of a circle, as we defined earlier. Because any perception that oscillates within the subject-object dynamic must necessarily occur within the context of a circle.

The transition to Jh. 6 entails access to another sphere, one of infinite consciousness (*viññāṇañcāyatana*). From a technical standpoint, the term "consciousness" still refers to something involving division (*vi-*), being a form of knowledge (*ñāṇa*) that proceeds through separation (*vi-*). A term more akin to its function might therefore be "discernment". Thus, the paradox of an unlimited discernment is of particular interest, since we have seen that every form of knowledge necessarily involves the establishment of a limit. Yet this system of paradoxes is itself typical of Buddhist lexicon and serves to indicate precisely the transcendence of something. However, even in this case, transcendent consciousness can become the "object" of perceptions, in the sense that the meditator can dwell in this dimension, rendering it in turn a limiting circle, a dimension of transcendent consciousness (*viññāṇañcāyatana*). Naturally, this dimension too, insofar as it is made an object of experience, must be transcended.

Finally, we arrive at one of the greatest problems in the history of Buddhist studies. Jh. 7 leads the meditator into a dimension literally defined as the understanding that "there is not anything" (*natthi kiñci*). The term *kiñci* (*ka* + *ci*) is a very common pronoun that indicates precisely "something" or "anything". We may understand it as that which denotes any object of perception. In the normal circular dynamic, a perception is defined as the relation between "whatever thing" (*yaṃ kiñci*) is perceivable by "someone" or "anyone" (*kañci*, *kaci*). This oscillation *kañci* ↔ *kiñci* constitutes the basis of any "circle". Jh. 7 aims to remove *kiñci*, but not in an ordinary sense, which would not resolve the issue. The crux, in fact, does not lie in the perception of a *kiñci* in ordinary experience—for example, when a cup of coffee is in front of me, that is my *kiñci*, and I am the *kañci* of that cup. If I remove the cup, turning my attention away from the *kiñci*, I have not truly solved the problem. The nature of the issue lies in the very establishment of the *kañci* ↔ *kiñci* dynamic, and even if I avert my attention from one *kiñci*, that mechanism will resume operation as soon as another arises. The aim of Jh. 7 is the attainment of a condition in which the *kañci* ↔ *kiñci* dynamic no longer subsists.

The meaning of the *natthi kiñci* dimension should therefore not be understood ontologically: in no way is it being asserted that "nothingness exists", as some are inclined to translate. The sense of *natthi kiñci* is that "the object of perception does not exist *as such*", because the distinction between perceiver and perceived as separate entities does not exist—hence, they are neither autonomous nor self-sufficient. The statement *na kiñci* is therefore not a nihilistic "nothing", but rather a "non-thing" understood as a "thing perceived as *autonomous*". The ordinary *kañci* ↔ *kiñci* dynamic is based on the assumption that perceiver and perceived are distinct, autonomous, self-sufficient entities, endowed with a separate identity. We know that Buddhism denies the autonomy of selves, and it is in this light that one must understand the *na-kiñci* that composes the term *ākiñcaññā* (*na-* + *kiñci* + *ana* + *-ya*). To translate this term as "non-somethingness" is entirely misleading and leads to nihilistic interpretations of Buddhism that have nothing to do with what is being conveyed in the suttas. To quote a scholar more authoritative than myself on this matter: "The Buddha's approach to teaching, which negates and implies rather than positively asserts, is characteristic of what in later times was termed *śūnyavāda*, the 'doctrine of emptiness', a form of metaphysical quietism in which philosophical realism is negated, for philosophical and spiritual purposes. The idea of 'emptiness', although not used by the Buddha as such, denotes the ultimate insubstantiality of things, and hence the unreality

of the world of normal experience, an unsatisfactory state of affairs from which liberation must be sought" [62] (p. 239).

The most coherent reading of *ākiñcaññā* is as a synonym of *suññā* in a dynamic sense. If *suññā* is certainly a synonym of *anattā*, in the sense that it describes its consequent quality ("non-autonomous"), *ākiñcaññā* represents another implicit consequence in the recognition of the emptiness of all phenomena: their non-autonomy also in relation to the perceiver, and vice versa. The cup of coffee that is perceived by me is not independent or autonomous from my perceiving it, and vice versa. The cup implies me, and I imply the cup. Even in relation to something seemingly ephemeral, there is interdependence, inter-relationality. With this understanding also comes the sense of *ākiñcaññā*, the practical consequence of such realization: the "thing" no longer *appears* as an object of perception, because it is no longer perceived *as* an object. Rather than the terribly misleading "sphere of nothingness", I therefore propose considering the translation of *ākiñcaññāyatana* as "sphere of non-somethingness".

This should altogether resolve the issue of perceptions, yet one final obstacle remains to be addressed: precisely the reification of non-perception itself. Just as the *Madhyamaka* warns against the idea of emptiness, which is not *emptiness*, the exercise of Jh. 8 anticipates these same reflections: the idea of non-perception is not the absence of perception (that is, the absence of distinction between subject and object), since if the *directionality* of our perception *toward* "non-perception" persists, then "non-perception" becomes the object of perception. The definitive transcendence, the "complete going beyond the sphere of non-somethingness" (*sabbaso ākiñcaññāyatanaṃ samatikkamma*) in Jh. 8, means accessing "neither-perception-nor-non-perception" (*nevasaññānāsaññā*).

Moreover, it is interesting to note that the attainment of Jh. 8 corresponds with the unlocking of genuine supernatural abilities. There is thus a translation into an extremely practical consequence: Jh. 8 means transcending not only perceptual limits but also, along with them, transcending human nature itself [SN 16.9].

And if in the ordinary condition, as previously stated, my ear cannot hear all types of sound, being "limited" by its nature, on the contrary, the Buddha declares: "Whenever I wish, O mendicants, with clairaudience that is purified and superhuman, I hear both kinds of sounds, whether human or celestial, whether near or far" (*ahaṃ, bhikkhave, yāvade ākaṅkhāmi dibbāya sotadhātuyā visuddhāya atikkantamānusikāya ubho sadde suṇāmi, dibbe ca mānuse ca, ye dūre santike ca*). Likewise—and this is even more important—the Buddha possesses clairvoyance, literally described as "divine and purified eye" (*dibbena cakkhunā visuddhena*). With this eye, he sees perfectly all sentient beings and their life cycle, death and rebirth, as a temporal unity.

Once the "complete transcending of the realm of nothingness" [60] (p. 378) has been achieved, the meditator gain access to what presumably is the world without boundaries, thus not a closed dimension, but the All, to which corresponds liberation.

5. Phaneroscopy and Semiosic Process

From SN 47.42, we know that cognition (*citta*) is responsible for *nāmarūpa* (*nāmarūpasam udayā cittassa samudayo*). According to SN 27.10, cognition is also responsible for discernment, because discernment is nothing more than a corruption of cognition (*viññāṇasmiṃ chandarāgo, cittasseso upakkileso*).

In AN 9.14, it is stated that the constitution of volitional-intentional thoughts is also founded upon *nāmarūpa* (*saṅkappavitakkā uppajjanti. . . nāmarūpārammaṇā*). However, it is also established that there exists a codependence between *nāmarūpa* and *viññāṇa*. The semiosis process dependent on *nāmarūpa* indeed requires two additional semiosic forces, which are closely interrelated. In previous studies [9,63], I identified these forces as *viññāṇa*

(Vσ) and *saññā* (Sσ) as inter-related, and described them, respectively, as "divisive" or "discerning" semiosis, and "synthetic-associative" semiosis. These forces are fundamental to two aspects of cognitive experience. As Polak notices, "*saññā* is connected to language, as one of its aspects is naming. Language brings with it the manifoldness of names, their variety and diversity, and most importantly sharp delineations, as every word is clearly distinct and separated from other words. Thus if we perceive reality based on the categories of language, we are sharpening the delineations in order to clarify things, giving boundaries" [10] (p. 49).

5.1. The Semiosic Functions

Two specific verbs describe the functions of these two types of semiosis. As SN 22.79 informs us, "it is called perception because it perceives" (*sañjānātīti kho*, *bhikkhave*, *tasmā 'saññā'ti vuccati*), and "it is called discernment because it discerns" (*vijānātīti kho*, *bhikkhave*, *tasmā 'viññāṇan'ti vuccati*). Although these definitions may appear tautological, they indicate the necessity of focusing on the verbal roots to grasp the intended meaning. The verb *sañjānāti* relates to "knowing" (*jānāti*) through association or putting "together" (*saṃ-*). Discernment also involves knowing but differs in its prefix, which implies "separating" or "dividing" (*vi-*). For this reason, the two verbs *sañjānāti* and *vijānāti* may be understood as indicating "to perceive" and "to cognize", respectively.

The text provides examples: perception recognizes "things such as yellow, red, and white" (*nīlampi sañjānāti*, *pītakampi sañjānāti*, *lohitakampi sañjānāti*, *odātampi sañjānāti*). In other words, as previously noted, perception is connected to sensations but associates these with nominal identities. Discernment, in turn, distinguishes "things such as bitter, pungent, sweet, hot, mild, salty, and bland" (*ambilampi vijānāti*, *tittakampi vijānāti*, *kaṭukampi vijānāti*, *madhurampi vijānāti*, *khārikampi vijānāti*, *akhārikampi vijānāti*, *loṇikampi vijānāti*, *aloṇikampi vijānāti*).

Considering the dependency between Vσ and N/Rσ, and the relationship between Vσ and Sσ, we can hypothesize that, on the one hand, Vσ partitions the various N and R within the unitary continuum of sensations, while Sσ subsequently intervenes by associating a specific N with its corresponding R, thereby enabling recognition. The combination of these fundamental forces, together with the emergent capacity of the designated entity to appear as such, constitutes N/Rσ, which explains its dependence on Vσ. The complexity of this mechanism is illustrated in Figure 3.

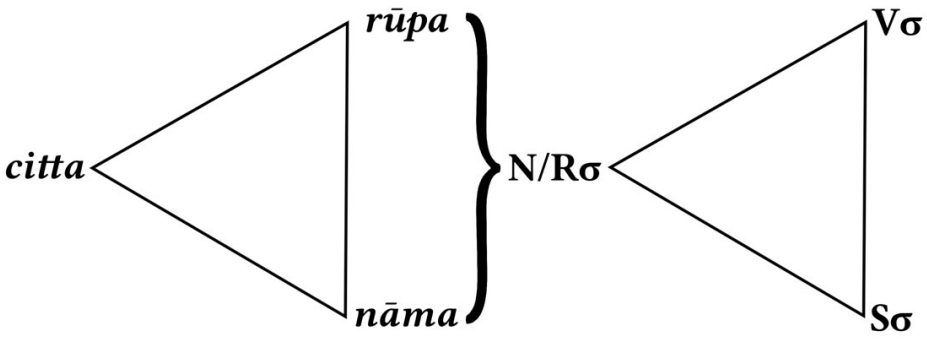

Figure 3. This scheme represents the circuit that connects the cognitive circuit of the sensor-effector dynamic (the A/B circuit that describes the triadic nature of the sign) to the semiosic circuit, i.e., the process of semiogenesis. The center of everything is the N/R binomial, which is at the same time the sign and the semiosic force.

One of the most significant aspects of Peircean semiotics is that a sign continually generates and refers to other signs. To understand how this is possible, it is necessary to conceive of Peirce's triangle as a system of reciprocal references and constant sign

generation. The Interpretant, the apex of the triangle, is nothing other than a reference to another sign, another Representamen, which in turn produces further signs, and so forth.

5.2. The Triadic Nature of Phenomena

This aspect is implicit for Peirce in the very nature of phenomena, a further point that his theory shares with Buddhist semiotics: "for Peirce, the theory of signs was simultaneously a cognitional theory and a metaphysical theory" [26] (p. 734). Thus, this is not merely a question of "sense" and "meaning". On the contrary, for Peirce, it is incorrect to sustain "that whatever is knowable is comprised of sense contents" [64] (p. 138).

The theory of signs is not merely a theoretical representation concerning the functioning of language, but rather a triadic structuring that is present in everything, in every phenomenon in a broader sense. Peirce conceived every phenomenon simply as an exchange of signs; thus, not only is the model of semiosis based on three fundamental aspects, but the analysis of any phenomenon in a broader sense would, according to him, reveal a triadic structure. This analysis is unveiled through a detailed phenomenology, which Peirce occasionally refers to as "phaneroscopy". His aim is to recognize what is given to experience. The phenomenon—or more precisely, the "phaneron"—is understood as that which is present to the mind at any given moment. The phenomenon relates to three different types of objects that constitute its modes of being [43] (p. 66), which Peirce terms "Firstness", "Secondness", and "Thirdness". What is crucial about this tripartite nature of experience is that Peirce understands these three categories as "indecomposable concepts". Similarly to Husserl's quest for the essence of phenomena, or to the Abhidhamma's search for phenomenological units (*dhamma*s) [14] that are not further divisible by human analysis, Peirce seeks to reach the foundation of what is experienced. An excellent comparative study between Peirce's thought and Buddhist philosophy has been initiated by Lettner [51,65], and it is my intention to extend the author's reflections with further comparative insights.

It is not easy to provide a precise definition of the three qualities, as Peirce himself often remains somewhat vague. Referring to other scholars who have examined them, we can summarize their main characteristics as follows:

Firstness: pure quality or immediate sensation, still pre-predicative [43] (pp. 74–77).

Secondness: concrete, reactive, and physical experience, predominantly relational and dyadic, involving a reaction to the concrete object [43] (pp. 77–80).

Thirdness: the aspect of mediation between the two poles; the law, the positioning of the object within a network of shared relations; use, convention, symbol [43] (pp. 80–86).

Technically, in Peirce's framework, the referent object is not the "first" in the relation, but the "second". In our interpretation, where the object is identified with *rūpa*, it is considered the effective nucleus from which the process begins—subsequently guided by the sensory, then perceptual, and finally cognitive domains. However, in Peirce's model, the process is reversed: first comes the *Representamen*, that which stands for something else, followed by the *Object*, which is what the Representamen refers to. In contrast, we have placed the object–*rūpa* in the primary position, insofar as it corresponds to the definition of the potential quality of the sign (appearance). For us, what the sign enters into relation with is the nominal reality, established by *nāma*.

The necessity of a third element to mediate a dual system or a duopoly is recognized by Peirce as a fact inherent in the inadequacy of Secondness, which by itself would be incapable of encompassing the entirety of human mental experience; this inadequacy appeared to him as self-evident [66] (p. 81). For Peirce, the two-element system is not a true polarity between two mutually opposing elements, but rather a concentric system that expands outward from the fundamental core of Firstness—an essence that is practically unattainable—by means of a degree of Secondness, which introduces characteristic features, reaction, and

relation. Yet it was necessary to posit a third mediating element, an interpretant that would complete what was, in every respect, a genuine trichotomy.

For Peirce, the sign—which regulates every phenomenal relation and is not confined to human language—is necessarily triadic. Peircean phenomenology, therefore, is "the study of what seems rather than a statement of what appears" [43] (p. 70). It must not adopt a judgmental stance towards what it examines, and no evaluations of truth or falsity should be imposed on the outcomes of the inquiry. Ultimately, what it seeks are the phanera, that is, what is general in all phenomena—those "indecomposable" elements corresponding to the "collective total of what is present to the mind" [43] (p. 70).

Peirce is careful to emphasize that this is by no means a psychology of the phanera, since for him they belong "both to the inner and outer worlds without distinguishing them, whereas psychology is based upon that distinction" [43] (p. 71). This refusal to differentiate between inner and outer reflects a form of antidualism akin to Buddhist critiques of the A/B binary, which can be presumed to represent the most relative plane, furthest from the unity of the totality, and from which all illusory dualisms derive: inside/outside, effector/sensor, self/other, subject/object, experiencer/experienced, I/world, phenomenon/thing-in-itself, and so forth.

Just as Buddhist A/B dualism corresponds to the equidistance Peirce situates between extreme internalism and externalism—the belief in a distinct and independent psychological "interior" and material "exterior"—we can identify similar correspondences in the triadic system. This has already been noted in the Buddhist theory of the sign (Figure 1) modeled in comparison with Peirce's theory (Figure 2). The basis, constituted by the oscillation between the two poles composing the N/R binary, is mediated by a third aspect representing cognition. Likewise, in Peirce, Thirdness is the only genuinely "cognitive" aspect [43] (p. 81), since it is only at this level that one can speak of "what we can know", of concepts shaped by cognitive necessity. Hence, Peircean phenomenology is not psychology, but it can explain psychological phenomena. Indeed, phenomena we consider psychic are themselves divisible into three main categories [43] (p. 86), corresponding to the phenomenological ones. These are three fundamental phases of every psychic experience:

Firstness: feeling, sensation

Secondness: willing, volition

Thirdness: knowing, cognition

Peirce's triadic model, in all its variations, is more akin to concentric spheres than to an actual triangle. Firstness represents the core, fundamental aspect upon which Secondness rests and between which Thirdness mediates. It is difficult to find an exact counterpart in Buddhism, yet there are notable similarities. For example, based on the interpretation of the sign given in Figure 1, we observe two core aspects: a Firstness corresponding to *rūpa*, the "sensory" dimension that pertains to the most immediate feeling (*vedanā*), alternating with a Secondness constituted by *nāma*, which we know encompasses a volitional aspect (*cetanā*), as explained in MN 9. Finally, Thirdness, or the cognitive mediation between the two, is constituted by *citta*, cognition itself—what the Abhidhamma also calls *paññatti*, the conceptual designation.

Together, the two fundamental poles constitute primary semiosis: N/Rσ. For this reason (see Figure 3), this indeed forms a triangle that refers to another, namely the triangle of semiosis (see Figure 4).

It may also be defined as a semiosic circle, a triangle within another triangle where the base of the former unites to become the apex of the latter. The latter represents a force so potent that, as Peirce asserts, it is not confined solely to linguistic aspects. Semiosis is a process that extends to all phenomena, and this holds true for N/Rσ as well. As AN 3.61 reminds us, it is even connected to embryonic development, since it is with *so* that

the dynamics of A/B arise, upon which N/R depends. Thus, the human body is determined by semiosis, but so too is the world itself; as Snp 3.12 states, this force is "established" within the world itself (*niviṭṭhaṃ nāmarūpasmiṃ*...), and by doing so it "persuades" beings to regard it as truth (*idaṃ saccanti maññati*), a distinctive feature of N/R semiosis also attested in MN 11 and MN 38.

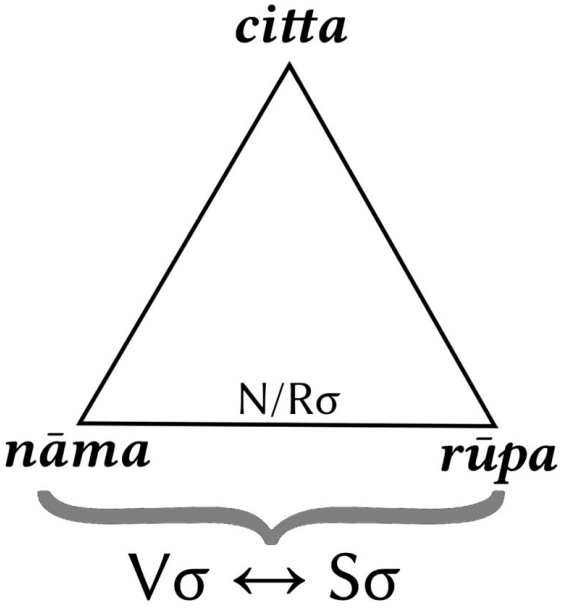

Figure 4. Sign-process and its relation to the semiosic triangle (N/Rσ ← Vσ ↔ sσ). In this case, we consider *citta* as the true *Interpretant* of name and form in light of what is said in SN 47.42, that is, *citta* is condition for *name-and-form*.

Moreover, according to AN 9.14, N/R is also responsible for intentional thought (*saṅkappavitakkā*), which together with N/R "arises" (*uppajjanti*... *nāmarūpārammaṇā*). Intentional thoughts are characterized by their proliferation and diversification into elements (*nānattaṃ gacchanti*... *dhātūsu*) and their origin in contact (*phassasamudayā*). Thus, the circle closes: the binomial A/B is held together by the mutual origination of its reciprocal elements, a fact confirmed by the same sutta's assertion that *vedanā* is the locus where intentional thoughts converge (*samosaraṇā*). We also read in AN 6.61 that "name, friends, is one extremity; form is the second extremity; consciousness is in the middle, and craving is the seam" (*nāmaṃ kho*, *āvuso*, *eko anto*, *rūpaṃ dutiyo anto*, *viññāṇaṃ majjhe*, *taṇhā sibbinī*). And again: "the six internal sense bases, friends, are one extremity; the six external sense bases are the second extremity; consciousness is in the middle, and craving is the seam" (*cha kho*, *āvuso*, *ajjhattikāni āyatanāni eko anto*, *cha bāhirāni āyatanāni dutiyo anto*, *viññāṇaṃ majjhe*, *taṇhā sibbinī*). We may observe how these two elements, name and form, come to constitute a particular dyad that is, in turn, associated with the internal and external dimensions discussed previously.

In sum, all phenomena can be traced back to a fundamental bipolarity and a mediating element between the two poles. The very foundational dynamic of A/B—that is, the thinker and the thought—is described in Snp 4.14 as something to be dismantled. The one who meditates correctly "liberates themselves from the idea 'I am the thinker', which is the root of all judgments and which arises from proliferation" (*mūlaṃ papañcasaṅkhāya*, *mantā asmīti sabbamuparundhe*). This process is aptly defined as "internal cravings" (*taṇhā ajjhattaṃ*).

At this juncture, we may also conceive of an additional semiotic triangle within the Buddhist context, one whose apex is the power of perception-sensation (*saññāvedayita*) mediating between the polarities of A/B (Figure 5).

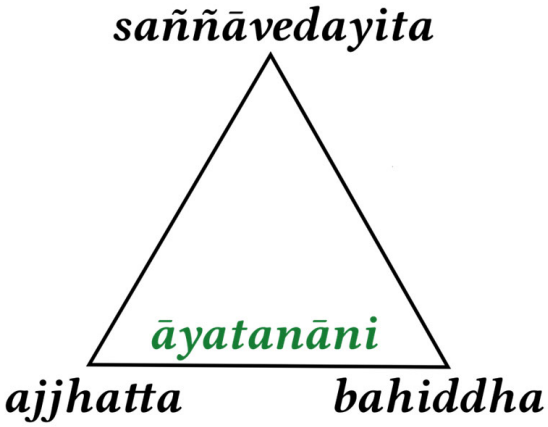

Figure 5. The *saññāvedayita* force as the *Interpretant* of the A/B dynamic.

In all these triangular representations, one notes possible similarities to Peirce's system, as well as differences. One crucial aspect of Peirce's thirdness concerns its capacity to construct meaning through mediation. The base of every semantic relation fundamentally oscillates between two mutually opposed elements: A/B, N/R, signifier/signified.

The third element constitutes the mediation between these oppositions, deriving meaning therefrom. Put differently, the relation of the three unfolds as a progression from a level of variety, possibility, and identity to one of concreteness, action, alterity, and contrast through the constitutive mediation of a pattern, a continuity, and the generation of information. This latter aspect—information as the result of mediation—is also shared by the Buddhist perspective, as demonstrated thus far.

The primary difference between the two systems lies in the Buddhist conception's rejection of what Peirce terms the "dynamical object", since the dualistic system of A/B is understood as a cognitive fiction—a "world" (*loka*) constructed precisely by the sensory spheres that produce meaning and discernment [SN 12.44], but which, just as they can be ceased in their mechanism, can also lead to the cessation of the world itself (*lokassa atthaṅgamo*).

6. Meditation and Sign-Deconstruction: Breaking the Designating/Designated Dynamics

In this paper we have seen how the concept of "sphere" (*āyatana*) is a descriptor employed in numerous contexts within the Pāli canon to indicate an ideal space within which specific relations and the norms that describe such relations prevail. In another sphere or dimension, different ones will prevail.

The spheres may in turn be part of a superior sphere that includes them, and thus be elements of that sphere which may enter into relation with one another according to specific norms. It is a complex of relations and reciprocal interrelations. The most well-known case is that of the complex of the six sensory spheres (*saḷāyatana*), that is, the six sensory channels that a human body possesses [67]. These six spheres are included within the sphere of human sensoriality, and thus are included within the sphere of an *Innenwelt*, to use a term dear to Uexküll [68]. It must, however, be said that, unlike his biosemiotic theory—which nevertheless has numerous points in common with Buddhism—the spheres of the psycho-ecological relation that prevails between a subject and its environment are not monadological. Aside from this difference, however, the points of contact are innumerable.

The sphere of human sensory experience, which includes the six sensory channels, is part of a broader sphere, which Buddhists refer to in various ways, but primarily call *loka*, "world" [69–71]. In this dimension, which is the specific environment inhabited by human animals, the complex relations of the spheres that are part of it prevail—thus not only the relations between the perceptual marks of an effector (*Merk-organ*) and the sensory

channels (*Wirk-organ*), but also those between different spheres of experience: between different human subjects, simply put [23,61,72–74]. The principle that prevails is the same: "our" perceptual marks are equally "signs" that the perceivers of others must interpret in exactly the same way as the effectual marks of any other "thing" in the world. Intraspecific communication among human animals occurs through the emission of a series of "signs" not only conveyed by the arbitrariness of phonetic compositions in strings of discourse endowed with meaning, but also through other communicative conformations such as gestures, expressions, and so forth.

There is no meditation if there is no understanding of this fundamental assumption, and indeed this conception also has very ancient origins; thus, there is likewise no full understanding of contemplation if there is no inquiry into the premises that led certain ascetics to formulate this complex discipline.

The declared intent of Buddhist contemplative practice is the cessation of figural signs. As Squarcini aptly recognizes (my translation),

> Moreover, as further proof that the eliminative gesture and act indicated by Nāgārjuna are primarily of a semiotic nature (i.e., aimed at the erasure of perceptual clutter—on which Dignāga would also reflect—caused by incorporated figural presuppositions, which cease to be an obstacle only after the 'sense' and 'meanings' they evoked have been put in abeyance, cleared, evacuated, rendered vain, emptied, definitively 'extinguished' [*nirodha*]), one should also note the strategic use Nāgārjuna makes of dyadic and 'neutral' topological indicators such as *kaścit/kiṃcit*, whose figural effects are indicated through the further dyad *anya/ananya* (as, for example, in *Mūlamādhyamakakārikā*, 14.1–6). [50] (p. 75)

It is true that Squarcini writes this in relation to Nāgārjuna; however, it can be applied without issue also to Pāli Buddhism. Firstly because Nāgārjuna himself did not conceal his intent to 'return' to a more archaic teaching, and secondly because in actual fact, upon close analysis of the texts, it becomes evident that, even if sometimes couched in different technical terminology, the subject is the same.

> From premises such as these, Nāgārjuna can only proceed to establish a *viaticum* based precisely on the eliminative act of elision: a suspensive and neutralizing *viaticum* entirely devoted to a particular type of 'definitive arrest' (*nirodha*), whose primary feature can only be semiotic-cognitive in nature, given that the only possible elimination is that of the evocative effects generated by discursive figurations. [50] (p. 76)

However, it is necessary to clarify certain lexical matters. We have understood the binomial *nāmarūpa* as a semiosic force and the marking of a sign, with its bifacial nature that oscillates and combines a formal meaning, an effectual "thing", with a nominal and signifying identity, intended by cognitions. Nevertheless, this mechanism is not merely cognitive, but more extensively environmental. That is, it pertains to all things. Cognitions recognize its nominal aspect, but for the Buddhists everything can be considered a *nāmarūpa*, insofar as it is an aggregate of fundamental factors. The term *nāmarūpa* is, in fact, often used as a synonym to denote the aggregates, with an emphasis on their fundamental aspect: they are designated by a nominal entity.

Another way to understand a sign, which is generally referred to in its appearance as something marked and recognizable, is the term *nimitta*. Harvey [16] lists various possible uses of *nimitta*, but they are all united by being something determined and distinguishable—whether as signs understood as omens (e.g., Iti 83), or as an atmospheric sign that "marks" a meteorological condition, or as a written sign, or again as a mental sign evoked in contemplative practice to serve as a stable point of concentration. In these meditative exercises, the

nimitta is deconstructed into its fundamental components, a veritable phenomenological ἐποχή [50] (p. 77), until its relational connections—now well recognized at the expense of the aggregative factor that gave the impression of an autonomous and isolated thing—lead the meditator to detachment from the sign, from the *nimitta*, as an impermanent or intrinsically unsubstantial, vacuous factor. This condition is precisely defined as *animitta* [SN 40.9].

But even more important than the cessation of the sign—which in itself does not explain the procedural aspect—is the emphasis on the cessation of synthetic semiosis (*saññā*) or of discerning semiosis (*viññāṇa*), on which, in fact, signs concretely depend. Let us momentarily refrain from translating *saññā* as "perception" (even though there is no principled objection to that translation) and instead speak of "sign" in this case as well, since *saññā* is that semiosis which "puts together" (*saṃ-* + *ñā*) in all respects the two fundamental parts of the sign, as a synthetic force of semantic association.

> *saññā, bhikkhave, veditabbā, saññānaṃ nidānasambhavo veditabbo, saññānaṃ vemattatā veditabbā, saññānaṃ vipāko veditabbo, saññānirodho veditabbo, saññānirodhagāminī paṭipadā veditabbā.*
>
> O mendicants, signs must be known, and their primary cause, their mutual differences, their consequences, [the means for] their cessation, and the path that leads to their cessation must all be known. [AN 6.63]

The cessation of consciousness (*viññāṇanirodha*), on the other hand, is more frequently associated with discourses on the five aggregates, where it therefore appears together with perception/sign (an example in which it appears alone is SN 33.55, where it is also held responsible for the arising of misconceptions in the world: *anekavihitāni diṭṭhigatāni loke uppajjanti*). For instance, in SN 22.56 each aggregate is enumerated, and the necessity of *nirodha*, that is, of cessation, is declared, as well as the negative consequences for human life associated with them. In SN 22.57 we are confirmed that synthetic-associative semiosis always functions in relation to something; more specifically, it refers to elaborated sensory data, and thus there is an associative-synthetic process for each of them: *rūpasaññā*, *saddasaññā*, *gandhasaññā*, *rasasaññā*, *phoṭṭhabbasaññā*, *dhammasaññā*.

In Snp 4.2 we read that the symbolic act of crossing over a flood (*oghaṃ*), which should be understood as a metaphor for *nibbāna* as a crossing beyond the world into the condition of being beyond the world [75], is something that goes together with the total understanding of perceptions, that is, of synthetic semiosis (*saññaṃ pariññā vitareyya oghaṃ*). This idea of crossing over is further reinforced by the condition of cessation in regard to hoping for a world, or for another world (*nāsīsatī lokamimaṃ parañcāti*). The synthetic-associative semiosis is thus of such invasive power that its cessation signifies liberation from the worldly dimension. This condition is the same described later, in Snp 4.13, as that of the "true brahman" who, having known all possible opinions and doctrines, adopts none of them, since they are all partial. He is thus "freed from opinions" (*vippamutto diṭṭhigatehi dhīro*), and therefore, in other terms, from the world.

An opinion is also the belief in being a thinking subject distinct from a thought object. In Snp 4.14 this very perspective is attacked: to overcome the attachment to everything in the world (*anupādiyāno lokasmiṃ kiñci*), meditators suspend the idea "I am the thinker" (*mūlaṃ papañcasaṅkhāya*, *mantā asmīti sabbamuparundhe*). Furthermore, this dichotomous thinking also pertains to the dualism between internal and external:

> *yaṃ kiñci dhammamabhijaññā,*
> *ajjhattaṃ atha vāpi bahiddhā;*
> *na tena thāmaṃ kubbetha,*
> *na hi sā nibbuti sataṃ vuttā.*

> Regardless of what they know,
> whether "internal" or "external",
> they will not stubbornly cling to it,
> for the just ones say that it does not lead to quenching.

Another notable mention is found in Snp 5.2, where the percepts that flow in the world are compared to streams (*yāni sotāni lokasmiṃ*) that can be blocked by mindfulness (*sati tesaṃ nivāraṇaṃ*). This blockage of the streams corresponds to the cessation of name and form: "where name and form cease, without leaving anything behind, there comes the cessation of discernment" (*yattha nāmañca rūpañca*, *asesaṃ uparujjhati*; *viññāṇassa nirodhena*,). What is at stake here is precisely the correlation between fundamental semiosis and divisive semiosis, and that the cessation of the one corresponds to the cessation of the other. What the ascetic does, through contemplation, is to enact a strategy that, through meditation, is an authentic cognitive strategy. The Buddhist strategy aims to counter the habituations of semiosis through a practice that deconstructs its force.

If we free ourselves from the outdated notion of language as an artifice opposed to an idealized nature, we realize that everything in the world utilizes semiosis in a relational manner. Semiosis is the value of the relationship between different entities. As Rosenthal also states, meaning "should be understood as relational structures that emerge from patterns of behavior" [76] (p. 107). Thus, it is quite interesting to note that this does not apply solely to animals and warrants further study.

Signs are properties, and semiosis is their emergent expression under conditions of relationality. We can cite numerous examples, but one particularly effective one is that of iron and a magnet. A magnet possesses inherent properties that interact differently depending on the entities it encounters, such as wood or iron. This tells us something about the nature of both entities through relational communication. In the animal world, the perceptual mark is a meaning conveyed by its effective value and is inherent in the entity that emanates it.

Naturally, the perceptual mark is one with the entity or animal that produces it. In languages of arbitrary order, such as human or certain animal languages like those of dolphins, there is simply a more complex level of articulation and a communal organization of values at the historical, cultural, and social levels. Semiosic emanation is the intention to perform the efficacy of a sign in a particular way through the word and the authority of the speaker. Other levels are also maintained; for example, the historical-cultural value of a king implies that the one embodying the signs of royalty also serves as a vehicle of emanation, and its efficacy is validated by the somatic response of those who receive it—like bowing or deference. Thus, the body responds and conforms directly in relation to another body, that of the king, who carries perceptual marks, i.e., different historical-cultural values, which I can interpret, and in doing so, transform my behavior. From this, we understand the dual Buddhist critique of both social roles and hierarchies, as well as language itself. The two must necessarily be viewed together.

Another example of this process is given by Mandoki:

> We have the case of the medical institution. To exercise the power of prescribing medicines and treatments or performing surgery, a subject had to be positioned in particular places within the institution, and follow a pre-established itinerary. Each movement and location were semiotically credited certifying that the subject successfully occupied a certain place and proved discursive and practical competence. [77] (p. 102)

The semiosic study of contemplative practice and of Buddhist thought on language has the potential to be the first fruitful application of a new total semiotics, a scientific discipline in which the study of signs and their role in human cognition can be deepened beginning

with qualitatively studied practical experiences (I am thinking of the ethnographies of meditation [78–80]), as well as the Buddhist considerations on the subject expressed in ancient texts. The intent, in these latter two cases, would be to observe how semioses are weakened by contemplative practice, which would tell us much about how these forces function in the first place.

Such a science should also be something new with respect to Saussurean semiology, which "despite its attractiveness", unfortunately remains "a paradigm that studies non-human signs must contend with genuine limitations" [81] (p. 136).

This also compels us to radically reconsider the reality of the sign as a real phenomenon, albeit not necessarily in the epiphenomenal forms in which we are accustomed to experiencing and considering them. Moreover, that something real, which we interpret as a "sign" and which possesses such performative characteristics, exists is difficult to refute [81] (p. 143).

The coincidence between language and world (*loka*) that we expressed in the paper must not be understood in the same way Lacan conceives the unconscious as "structured like" a language. The identity between language and world is not a structural one, but rather a systemic-functional identity: it is cognitions that act as an organizing force of a semiosic type, which determines a functional unity of name and form, subsequently arranged in a network of particular relations. Without such a network of relations, consciousness does not subsist because, as Husserl reminds us, consciousness is always "of something" [55] (p. 69), and this something is the name-form.

The morphonominal sign lives in the same systemic world as the Saussurean one, a world in which "the sign function lives on the dialectic of presence and absence" [48] (p. 17). Of its two "components", it should be noted that *nāma* is always understood as the conventional designator, thus analogous to the ὀνομάζειν of Parmenides, always used "to give an arbitrary name, considering it true, while it does not correspond to the truth" [48] (p. 23).

It is important to keep in mind that the Buddhists have provided multiple terms to indicate the sign, but the most relevant concerns the fundamental unity of sign and semiosis. These two things are in fact not distinct: entity and function are expressed by a single term which, depending on the context, must be understood either as the sign itself or as the force by which signs are organized and acquire value. The most important term, and therefore the one we consider first, is *nāmarūpa*. In a previous work [15], I indicated *fundamental semiosis* as N/Rσ, and here I intend to reuse some of those technical notations for practical reasons. The term *nāmarūpa* likely predates Buddhism, but even in pre-Buddhist contexts it is used to indicate the fundamental act of organization through cognitive partition.

From a functional point of view, N/Rσ is the *fundamental semiosis*, on which two others depend, in a mutually interdependent relationship. These are not functions that could produce any effect if they acted alone.

As a sign, a N/R is "any *recognizable* determinate". Both these aspects are crucial. If it is not recognizable it is not a sign. Analogously, a sign needs to be determinate by something that makes it recognizable.

At this point, it is appropriate to analyze the role and function of fundamental semiosis. The semiosic function N/Rσ is well described in the Pāli texts as possessing certain specific capacities.

Capacity 1. Semiosis is a predictive factor; it anticipates immediate cognition and coordinates it according to specific values. In other words, all three semioses are functions that act retroactively, in the sense that when they are operative, they act as obstructive forces that precede immediate perception, mediating its experience. In addition to being

predictive, semiosis is also totalizing. Specifically, the force of N/Rσ conditions the cognitive experience of subjects in an organized manner.

Semiosis N/Rσ is likewise part of the system of a functional circuit, whose two poles (name and form) constitute the two fundamental aspects between which the subject's experience oscillates in relation to their environment-world (*Umwelt/loka*). In this, semiosic action constitutes what we will define as the "perceptual field".

The semiosic sign N/R is far more than a simple bifacial entity with arbitrary values; it reflects and conditions cognitions. AN 3.61 connects it with embryonic development itself (*gabbhassāvakkanti*). This latter develops "supported" by six basic elements (*channaṃ dhātūnaṃ*). But with the very conception—or rather "conception"—of the embryo, N/R also arises, and from N/R the six sensory spheres arise automatically: *okkantiyā sati nāmarūpaṃ*, *nāmarūpapaccayā saḷāyatanaṃ*. There is thus a direct implication between N/R and the sensory spheres, and from them, obviously, everything that ensues and arises from the contact of these with the effective organs (*saḷāyatanapaccayā phasso*, *phassapaccayā vedanā*...).

In *Itivuttaka* 41, the power of N/R is brought back to the worldly dimension (*passa lokaṃ*...) in which such a force is "established" (*niviṭṭhaṃ nāmarūpasmiṃ*), and persuades people that it is the truth (*idaṃ saccanti maññati*). Similar discourses are found in MN 11 and 38.

Having made the necessary considerations regarding the perceptual field, the proposal we adopt is to consider signs and systems of signs as part of all living organisms, and not only as a human prerogative [81] (p. 135). The full scientific implications of taking this direction have not yet been grasped, but I believe that in the study of semiosis in Buddhist thought there is enormous potential—especially because their theoretical consequences are embedded in the practical, insofar as the declared aim of meditative practice is the cessation of the semiosic function itself, and thus of the proliferation of signs [9,50,82].

Regarding the predictive power of N/R, it is appropriate to mention a very important passage from Snp 4.13. The context is a critique of dogmatic views and convictions. Much of Snp 4 is dedicated to countering those who believe they possess the "ultimate truth", while in reality they are unaware that they hold only "opinions"—a claim that is here justified starting from the action of semiosis. How, in fact, can one claim to possess the truth of the world, if the world itself is the product of semiosis? How can one access ultimate truth when in reality we do not know that our experience of the world is mediated by fundamental semiosis? Hence the statement:

> *jānāmi passāmi tatheva etaṃ,*
> *diṭṭhiyā eke paccenti suddhiṃ;*
> *addakkhi ce kiñhi tumassa tena,*
> *atisitvā aññena vadanti suddhiṃ;*
> *passaṃ naro dakkhati nāmarūpaṃ,*
> *disvāna vā ñassati tānimeva.*
> By asserting "I know, I see, thus are things",
> Certain individuals maintain that purity derives from what they see;
> But if these individuals truly saw, what use would they have for vision?
> Surpassing what matters, they claim that purity comes from something else.
> [And yet,] when a person sees, they see nothing but name-form,
> And having seen this, they will know in function of it.

The passage involving *dakkhati/ñassati* is of great importance, as is the expression *tānimeva*, "in that very way". Let us reanalyze it more carefully: since when someone sees, they see only through N/R, that person will come to know everything solely in relation to N/R. This is a remarkable passage that reveals the significance of N/R already in early Buddhist thought, and how it is fundamentally anchored in the cognitive problem: "they

will know in function of it [of N/R]". The ultimate aim is to be freed from semiosis, so that one may truly know.

Capacity 2. N/Rσ is in a reciprocal relationship with two other semiotic functions that are bound by mutable dependency: N/Rσ co-depends on Vσ, and Vσ co-depends on Sσ: (N/Rσ ↔ Vσ ↔ Sσ). That Vσ and Sσ operate "in close contact" has been noted by several scholars [83] (p. 691).

Although it is never stated explicitly that N/Rσ ↔ Sσ, we know that according to a standard logical law, if indeed $[(a \leftrightarrow b) \wedge (b \leftrightarrow c)] \rightarrow (a \leftrightarrow c)$, then $(N/R\sigma \leftrightarrow V\sigma) \wedge (V\sigma \leftrightarrow S\sigma) \rightarrow (N/R\sigma \leftrightarrow S\sigma)$.

In many respects, the concept of N/R is a formidable one; it anticipates Peirce's idea of semiosis and likewise formulates a claim that holds linguistic, sociocultural, and psychological value, while uniting these three aspects in the necessity of its functions.

We know that for Peirce, semiosis is an action or influence that involves the cooperation of a sign, an object, and an interpretant. We ask ourselves whether equivalents can be found in Buddhism, given that we have been speaking of semiosis since the beginning of this paper. To some extent, such equivalents can be identified, even if they do not perfectly coincide with the definitions offered by Peirce. One might speak of a Buddhist semiotic triangle involving the themes of intentionality (of attachment) and of the relation to an actual world. If we take the two components of the N/R dyad and consider the semiotic force they represent as an oscillation between the two poles composing it, we have the first two vertices of the triangle. More specifically, the nominal world (*nāma*) is that which involves the mechanisms of graspability and usability of the thing through the attribution of a label, a nominal identity that renders the thing knowable and intentionable [84], as is well explained in DN 15, which traces N/R to the origin of contact (*nāmarūpapaccayā phasso*). DN 15 is also the sutta that famously states that consciousness is the condition for the name-form dyad (*viññāṇapaccayā nāmarūpa*) and vice versa (*nāmarūpapaccayā viññāṇa*), thereby emphasizing the mutual dependence between the two, while MN 9 describes precisely what is meant by "name" and "form" separately. The name, which is of interest to us here, consists of a series of intentional processes directed at knowing the object.

The two semioses must necessarily imply one another: in the world of object-things isolated from the context and from their mutual relations by consciousness, in order to become effectively usable and manipulable, thus "available" to cognitions, they must be invested with values (what can I do with them, how should I use them) and with an identity. This is the task of the fundamental semiosis N/Rσ which, as the name itself suggests, is an entity with two associated faces: one is the nominal aspect, the effective identity, what the recognized thing is called, and the other is its ideal form, the prototypical morphological aspect that allows for systematic organization. Without the ideal form, in fact, I would only see the differences in the manifestative continuum of reality. The extraordinary power of language lies in the capacity to organize divided forms starting from prototypical models: the ideal form of the object "chair" is a set of fundamental data that must be associated with all the possible chairs that I will see (in the sensor-effector "contact" between the sensory organ of the eye and the effectual one of the presumed "chair"). So that I may associate all possible "chairs" with a single name that groups them all. This mechanism is not faithful to reality, but is merely an organizing force directed upon it.

That the nature of the linguistic sign N/R was substantially the result of arbitrariness was a well-known fact to the Buddhists, already in these texts we are examining.

nāma⇆ *(vedanā, saññā, cetanā, phassa, manasikāra)*

name ⇆ (sensation, perception, volition, contact, intention)

This is thus one of the polarities of our triangle. At another vertex, *rūpa* represents nothing other than the actual world. MN 9 tells us that form corresponds to the four

great elements, that is, the continuous manifestative possibilities from which to derive prototypical forms. Peirce would speak of the "immediate object", but in Buddhism there is no truly objective external reality that is independent of the subjective one. Any dualism, including the internal/external dyad, is rejected. There exists a single reality, which does not partake in a system of oppositions, but necessarily includes all oppositional constructs, which are a *micchādiṭṭhī*, a wrong view.

At the final point of the triangle, I would indicate the only Buddhist factor that can vaguely describe the standpoint of an experiencing subject, though not understood as a psychosocial construct, such as *attā* or any other "sense of self" (*ahaṃkāra*). But since we know that fundamental semiosis, the oscillation between the nominal-designative and the morphological-prototypical component, does not act on its own but is co-dependent with the other two semioses, I have decided to include the other two in our triangle as well (see Figure 4).

The importance of the relationship between Vσ and Sσ should not be underestimated: these two semioses complement one another. There cannot exist only an isolating and divisive mode of thought, a focus that is an end in itself, a fragmentation of the world into mechanisms; an associative-synthetic force is also necessary, one that intervenes afterward to unite certain things, certain names with certain forms, to enable the perception of identities. For this reason, in previous works I have referred to Sσ as a force that is "semantic" in its operation. Perception is already a semantic event, because it enables the appearing of the identity-bearing sign, holding together name and form. The oscillation (V/S)σ is therefore the analytic-synthetic force that allows for the cohesion of this world "understood" by cognitions. Herein lies the rationale behind the wordplay intended in expressing the alternation (V/S)σ as split/splice [63]. We may understand this alternation as an analytic-synthetic semiosic function. According to Del Toso,

> if *saññā* can distinguish between two colors (red and yellow), *viññāṇa* could be able to grasp the—as it were—subjective differences existing between those two colors (the agreeable red of the leaves in autumn and the annoying yellow of a neon light). Such a value-assigning activity *saññā* would never be able to elaborate—and the reference to a *saññā* that recognizes "what is wrong in food" does not in itself entail the ability of judging whether what is wrong (be it a taste or whatever else) is also pleasant or not, painful or not. [83] (p. 702)

The definition that results from Figure 2, which is based on Buddhist texts, is that of semiosis as "any process of cognitive determination effected through the establishment of values that are then received as signs by the cognitive system". From another perspective, semiosis can be understood as a "series of coordinated cognitive processes". All semiosic acts are therefore fundamental to cognition, but also interrelated. The semiosic function of division (Vσ) has no meaning if it does not operate in concert with synthetic semiosis (Sσ).

We also partially accept Morris's definition, according to which semiosis is a sign-product in which "something is a sign to some organism" [85] (p. 426), although such a definition gives prominence to the role of the interpreter (*citta* in our case), a point which even Pelc, who cites Morris, accepts with reservation.

Capacity 3. Semioses, and in particular N/Rσ, are responsible for a whole series of "proliferations" in the "conceptual" and "eidetic" domain; in other words, concepts, ideas, and beliefs are "dependent" on semiosic activity.

According to AN 9.14, N/R is also responsible for intentional thoughts (*saṅkappavitakkā*), which "arise" (*uppajjanti*) as a function of fundamental semiosis (*nāmarūpārammaṇā*). However, there are other characteristics of intentional thoughts that are worth analyzing.

The importance of intention/volition for the functioning of semioses is not secondary. Intentionality should not be understood as mere desire, but rather as a force that directs its

attention toward a given object (conveniently isolated, and therefore made "available" by consciousness). The object, invested with intention, becomes "usable" by human volition, which can "conceive" it through cognition: the object is "*x*" (endowed with its recognizable nominal identity) and serves to do *y*, it possesses the values z_1, z_2, z_3... and so forth, and based on all this available data, the subject who "grasps" the thing can do what they want with it, can use it.

> In a person's normal state, it is often the case that consciousness runs after, follows, clings to and is tied to "signs," that is, to "external" sensory objects that are taken as more than simple phenomena, but as indicating "people" and "things" in the world that are experienced as entrancing. The mind experiences them as "signs" with pleasant, sensuous, annoying, or dear associations. It also misperceives them so as to see permanence, happiness and I-ness where there is none. In this way, the "signs" or characteristics of attachment, hatred and delusion arise in the mind, and these "signs" give rise to more visible behavioural "signs" indicating the nature of the person.
>
> The way beyond this trapped state of consciousness involves the practice of "guarding the senses": of mindfully monitoring the input of the senses so that there is no seizing on such misleading troublesome sensory indications, but a viewing of sense-objects as simply sense-objects. [16] (p. 46)

Without the availability that is opened by the semiosic process, none of this would be possible. It is the same process by which a bird dives toward prey and grasps it to bring it back to the nest [86,87]. If the bird did not possess the ability to focus, and thus to isolate the prey from the context and concentrate on it, aiming at the object intended by its volition, it would not even be able to descend to "grasp" it.

According to AN 9.14, intentional thoughts possess the following characteristics which are interesting to analyze:

1. they are based on N/R;
2. they diversify/multiply (*nānatta*) in the elements (*dhātūsu*);
3. they originate (*samudaya*) from contact (*phassa*).

Already in these first three points, we find confirmation of the functional processes described in the A/B circuit, of which fundamental semiosis is an integral part. What is fascinating is the multiplication or diversification of concepts from the elements. I believe this refers to their association with immediate objects and is therefore always an associative product of fundamental semiosis.

4. intentional thoughts converge, connect (*samosaraṇa*) through sensation (*vedanā*);

In this case, it is sensation that re-coordinates what was diversified by semiosis. Sensation has the task of elaborating the perceptual-effectual markers of immediate objects in order to refer them back to their respective identities. Thereafter, the text focuses on overcoming this mechanism, attempting to transcend intentional thoughts, which:

5. have contemplative absorption (*samādhippamukhā*) as their leader;
6. have mindfulness (*sati*) as their dominator (*adhipatteyya*);
7. their transcendence (*uttarā*) is gnosis (*paññā*);
8. their essence (*sāra*) is liberation (*vimutti*);
9. their culmination (*ogadhā*) is the deathless (*amata*).

These are indeed very sophisticated passages, as they involve the theme of intentionality, which I have already addressed in previous works to which I refer for further exploration of how it is treated in Buddhist thought.

This correlation between semiosis and intentionality is also present in the Dhp. For example, in Dhp 221, it is attachment to N/R that generates suffering and negative bonds (*saṃyojana*). Whereas in Dhp 367, "every N/R" (*sabbaso nāmarūpasmiṃ*) is connected to "the domain within which a person develops their sense of possession", the "sense of mine" (*mamāyitaṃ*). Since a true Buddhist mendicant has not (*yassa natthi*) the *mamāyitaṃ*, we must infer that Buddhist practice focuses on the annulment of semiosic functions.

The morphonominal associative process (or nomino-morphological, if we wish to follow the same order of the elements of the compound *nāma-rūpa*) is part of the valorization process but presupposes at least two phases: the phase of cognitive isolation of the form, subtracted from the formal continuum, from the "phenomenological background", and the subsequent phase of semantic-perceptual association to the name. Once morphonominal identities are established, the process proceeds in reverse, retroactively, such that what is described in Snp 4.13 occurs: *passaṃ naro dakkhati nāmarūpaṃ, disvāna vā ñassati tānimeva.* The N/R semiosis is an obstructive element to direct perception: it anticipates perception itself, and in conformity with this semiosis, people "see" (*dakkhati*) and "know" (*ñassati*).

Vσ → (recognition) → N/Rσ → determination

What is described in AN 9.14 is nothing other than the process of semiosic complexification within a given historical-cultural context. This dimension is the conceptual aspect of *saṅkappavitakkā*, the possible intentionalities that potentially apply to the multiple concepts that "multiply" (*nānatta*) in their application to immediate objects.

The subsequent phases do not concern us here, as they pertain to the liberation from concepts. Given their convergence in sensations, which are in the second position in the chain of the five aggregates, we can understand the normal process of semiosic complexification as a detail on the theme of the five aggregates. Moreover, the intentional nature of these concepts dependent on N/R should not be forgotten.

All semioses are "yoking" (*saṃyojana*) forces, which constrain reality to specific "perceptual fields", within which the things that appear to us appear in a certain way mediated by these semioses. Thus, not only does reality appear to us as mediated—hence illusorily—but also as limited to the boundaries of the specific perceptual-sensorial field that create the illusion of the A/B circuit.

Cunningham also shares the same initial hypothesis, according to which cognition "is not an internal, individual, representational process, but rather one which is distributed throughout physical, social, cultural, historical and institutional contexts" [88] (p. 830). We will need to keep this aspect of historical-cultural and cognitive unity in mind. Indeed, anthropological aspects will further help us to deepen our understanding of this issue, and for that reason, we will also refer to certain elements of a historical-cultural theory of cognition, which serves as an excellent complement to what we are about to discuss.

Cunningham also informs us that

> Cognition is always dialogic, connected to another; either directly as in some communicative action or indirectly via some form of semiotic mediation—signs and/or tools appropriated from the sociocultural context. [88] (p. 830)

To justify these statements, Cunningham refers to a discipline that has effectively managed to take semiotics beyond the mere psycholinguistic level and adapt it to the broader aspects of life and organism: namely, the biosemiotics of the Prussian biologist von Uexküll [19,20,22–25,89,90]. The core of his theory is the *Umwelt*, a unity of organism and environment [88] (p. 831). These two "actors" are not two distinct and separate things, but rather two poles in relation to each other. This relationship is an oscillation of signs, a very particular kind of semiotic exchange. For example, the environmental polarity communicates through a series of perceptual cues, which are specific signs interpretable by the subject's sensors, and they are so in a specific worldly relationship. Each organism lives

within its own environment, in which the perceptual cues it receives are "*for* it" and have a specific value "*for* it", which differs from the value they may have for another organism, since the latter lives in a different environment. For instance, a flower emits perceptual cues that have specific values "*for* the bee" and hold a certain importance for the bee that they do not hold for the cat.

Human beings speak by emitting strings of sounds, organized in a specific way that can be interpreted within a sociocultural context adopting a given linguistic system, where certain sounds are selected as ideal models to form minimal units, which are then organized into higher-order units, and these in turn are arranged into speech (phonemes, lexemes and morphemes, utterances). All of this has "value" for us, but it would have a very different value for others. For those who speak a different language, for instance, the phonetic utterance has no meaning—it is a series of incomprehensible sounds, just as it would be for a bee, which would hardly understand human verbal language.

The environment, therefore, hosts semioses, but they do not only enable simple communication between organisms; they also enable the cognitive relationship between organisms and what we call the "world"—that is, their particular experience of reality: the *Lebenswelt* [88] (p. 832). This idea of world-languages should be understood in an extended sense: semioses organize "networks of signs" not only in the relationships between organisms and their environment, but also in the relationships between organisms themselves, or between organisms and sociocultural organizations—which are simply another form of environment.

We embrace Saussure's assertion in this context as well, though we adapt it to the needs of the environmental dimension: signs are not all arbitrary, but all are established at the tip of necessity. It is the value aspect that is conventional, established by private or, more often, collective agreement.

Let us now turn to the specific definition of semiosis. It must be said that many authors have given different definitions, and I too will need to propose my own definition, given the comparison I will make with the same process documented in the Pāli Canon, which will require adapting the idea of "semiosis" to new considerations.

As per Cunningham's definition concerning this matter,

> Semiosis, or the action of signs, is the process of applying signs to understand some phenomena (induction), reasoning from sign to sign (deduction), and/or using signs to make sense of some new experience (abduction). [88] (p. 833)

This is a definition that, for the most part, aligns with the study of sign processes in Pāli texts, and we will therefore take it into account when presenting our own proposal.

The theory of semiosis is inextricably linked to Peirce's theory of the sign, and in fact, it is from Peirce's work that the aforementioned reflections on semiosis have spread throughout semiotic studies. Ultimately, it is important to clarify at this stage that the A/B circuit (Figure 5) does not establish a perfect correspondence with the N/R circuit (Figure 1), nor with Peirce's semiotic theory and the semiosis circuit (Figure 2). What this article proposes is that there exists a functional circuit of perception—namely, the A/B circuit—that underlies another, non-superimposable circuit: the semiosic circuit N/R. Although there are points of contact—since the dimension of form can be seen as partially corresponding to that of the so-called "external"—it must nonetheless be emphasized that the two circuits are not equivalent. From the perspective of comparability with Peirce, there are indeed similarities, but not equivalences. This paper primarily compares Peirce's semiosic circuit (Figure 2) with the Buddhist circuit (Figure 1), identifying significant parallels, but also highlighting specific features of the Buddhist theory that are absent from Peircean semiotics—most notably, the concept of the *Dynamical Object*. Furthermore, it is especially Peirce's theory of Thirdness that appears most comparable to Buddhist thought:

with form corresponding in some way to Firstness, and the name aligning with a level of Secondness.

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Abbreviations

Snp	*Suttanipāta*, Andersen, Dines, and Smith, Helmer (1913) (eds.), *Sutta-Nipāta* (Oxford: Oxford University Press).
Dhp	*Dhammapada*, Ānandajoti Bhikkhu (2020), *A Comparatve Edition of the Dhammapada.with Parallels from Sanskritised Prakrit Edited Together with a Study of the Dhammapada Collection* (4th edn., Colombo: University of Peredeniya).
Iti	*Itivuttaka*, Kashyap, Bhikkhu (1959) (ed.), *The Khuddakapāṭha-Dhammapada-Udāna-Itivuttaka-Suttanipāta* (Bihar: Pāli Publication Board). Other reference edition: Mahāsaṅgīti Tipiṭaka Buddhavasse 2500.
Ud	*Udāna*, The Buddhist Era 2500 Great International Council Pāḷi Tipiṭaka (*Mahāsaṅgīti Tipiṭaka Buddhavasse* 2500).
DN	*Dīghanikāya*, Davids, T. W. Rhys, and Carpenter, J. Estlin (1890–1911) (eds.), *The Dīgha Nikāya* (London: Henry Frowde for the Pali Text Society).
MN	*Majjhimanikāya*, Trenckner, Vilhelm, and Chalmers, Robert (1888–1925), *TheMajjhima-nikāya* (Pali Text Society Text Series, 60; London: Published for the Pali Text Society, by H. Frowde).
SN	*Saṃyuttanikāya*, Feer, Léon (1884–1904) (ed.), *Saṃyutta-nikāya*, 6 vols (London:Henry Frowde for the Pali Text Society).
AN	*Aṅguttaranikāya*, Morris, Richard, Hardy, E., Hunt, Mabel, and Davids, C. A. F. Rhys (1885–1910) (eds.), *The Aṅguttara-Nikâya*, v, 6 vols (London: Pali Text Society).
Ds	*Dhammasaṅgaṇī*, Mahāsaṅgīti Tipiṭaka Buddhavasse 2500.
Vb	*Vibhaṅga*, Mahāsaṅgīti Tipiṭaka Buddhavasse 2500.
Dt	*Dhātukathā*, Mahāsaṅgīti Tipiṭaka Buddhavasse 2500.
Kv	*Kathāvatthu*, Mahāsaṅgīti Tipiṭaka Buddhavasse 2500.

References

1. Peirce, C.S. *Collected Papers of Charles Sanders Peirce*; Harvard University Press: Cambridge, MA, USA, 1958; Volumes 1–8.
2. D'Amato, M. The semiotics of signlessness: A Buddhist doctrine of signs. *Semiotica* **2003**, *2003*, 185–207. [CrossRef]
3. Westerhoff, J. Nāgārjuna and the Philosophy of Language. *J. Indian Philos.* **2019**, *47*, 779–793. [CrossRef]
4. Lysenko, V. The Buddhist Philosophy of Language in India: An Overview. In *Buddhism and Linguistics*; Herat, M., Ed.; Springer International Publishing: Cham, Switzerland, 2018; pp. 19–33. [CrossRef]
5. Westerhoff, J. Some remarks on a problem in Madhyamaka philosophy of language. *Ratio* **2018**, *31*, 415–423. [CrossRef]
6. Waldron, W. Yogācāra Buddhist views on the causal relation between language, cognition and the evolution of worlds. In *Origins of Religion, Cognition and Culture*; Geertz, A., Ed.; Routledge: London, UK, 2014; Chapter 14; pp. 285–300. [CrossRef]
7. Blomberg, J.; Żywiczyński, P. Language and Its Limits: Meaning, Reference and the Ineffable in Buddhist Philosophy. *Topoi* **2022**, *41*, 483–496. [CrossRef]
8. Bronkhorst, J. *Language and Reality: On an Episode in Indian Thought*; BRILL: Leiden, The Netherlands, 2011. [CrossRef]
9. Divino, F. Language and Consciousness in Early Buddhist Thought: On the Early Reflections on the Theme of Language and the Perception of Reality in the Pāli Canon. *Philosophies* **2025**, *10*, 31. [CrossRef]
10. Polak, G. Language, Conscious Experience and the Self in Early Buddhism A Cross-cultural Interdisciplinary Study. *J. Oxf. Cent. Buddh. Stud.* **2018**, *14*, 37–76.
11. Genjun, S. *Linguistic Approach to Buddhist Thought*; Motilal Banarsidass: Delhi, India, 1986.
12. Rambelli, F. *A Buddhist Theory of Semiotics: Signs, Ontology, and Salvation in Japanese Esoteric Buddhism*; Bloomsbury: London, UK, 2013.
13. Greene, E.M. Confirmatory Visions and the Semiotics of Meditative Experience. In *Chan Before Chan*; University of Hawaii Press: Honolulu, HI, USA, 2021; Chapter 2; pp. 57–109. [CrossRef]
14. Divino, F. Gates of Consciousness: Buddhist Phenomenology of Cognition in the Abhidhamma. *Philosophies* **2025**, *10*, 68. [CrossRef]

15. Divino, F. Beyond semiosis: Early Buddhist phenomenology and theory of consciousness. *Cogent Arts Humanit.* **2025**, *12*, 2529679. [CrossRef]
16. Harvey, P. 'Signless' Meditations in Pāli Buddhism. *J. Int. Assoc. Buddh. Stud.* **1986**, *9*, 25–52.
17. Bellucci, F. Inferences from Signs: Peirce and the Recovery of the σημεῖον. *Trans. Charles S. Peirce Soc.* **2016**, *52*, 259–284. [CrossRef]
18. Ellis, G. Āyatana, the Buddha's forgotten teaching. *Acad. Lett.* **2021**, *2*, 1–4. [CrossRef]
19. Velmezova, E.; Kull, K.; Cowley, S.J. (Eds.) *Biosemiotic Perspectives on Language and Linguistics*; Springer International Publishing: Cham, Switzerland, 2015. [CrossRef]
20. Alter, J. Biosemiotics and Religion: Theoretical Perspectives on Language, Society and the Supernatural. *Theory Cult. Soc.* **2022**, *39*, 101–121. [CrossRef]
21. Brier, S. Biosemiotics. In *Encyclopedia of Language & Linguistics*; Elsevier: Amsterdam, The Netherlands, 2006; pp. 31–40. [CrossRef]
22. Maran, T.; Kleisner, K. Towards an Evolutionary Biosemiotics: Semiotic Selection and Semiotic Co-Option. *Biosemiotics* **2010**, *3*, 189–200. [CrossRef]
23. Augustyn, P. Uexküll, Peirce, and Other Affinities Between Biosemiotics and Biolinguistics. *Biosemiotics* **2009**, *2*, 1–17. [CrossRef]
24. Favareau, D.; Kull, K. *On Biosemiotics and Its Possible Relevance to Linguistics*; Springer International Publishing: Cham, Switzerland, 2015; pp. 13–28. [CrossRef]
25. Barbieri, M. Three Types of Semiosis. *Biosemiotics* **2009**, *2*, 19–30. [CrossRef]
26. Forest, M. Peirce and Semiotic Foundationalism. *Trans. Charles S. Peirce Soc.* **2007**, *43*, 728–744.
27. Rosensohn, W. *The Phenomenology of Charles S. Peirce: From the Doctrine of Categories to Phaneroscopy*; Grüner: Amsterdam, The Netherlands, 1974.
28. Karunadasa, Y. *The Dhamma Theory*; Buddhist Publication Society: Kandy, Sri Lanka, 1996.
29. Bronkhorst, J. Dharma and Abhidharma. *Bull. Sch. Orient. Afr. Stud.* **1985**, *48*, 305–320. [CrossRef]
30. Karunadasa, Y. *The Theravāda Abhidhamma: Inquiry into the Nature of Conditioned Reality*; Wisdom Publications: Somerville, MA, USA, 2019.
31. Williams, P.M. On the Abhidharma ontology. *J. Indian Philos.* **1981**, *9*, 227–257. [CrossRef]
32. Bronkhorst, J. Abhidharma and Indian thinking. In *Text, History, and Philosophy*; BRILL: Leiden, The Netherlands, 2016; pp. 29–46. [CrossRef]
33. McDaniel, K. Abhidharma Metaphysics and the Two Truths. *Philos. East West* **2019**, *69*, 439–463. [CrossRef]
34. Dewey, J. Peirce's Theory of Linguistic Signs, Thought, and Meaning. *J. Philos.* **1946**, *43*, 85–95. [CrossRef]
35. de Saussure, F. *Cours de Linguistique Générale*; Payot & Rivages: Paris, Grance, 2016.
36. Colapietro, V. Is Peirce's Theory of Signs Truly General. *Trans. Charles S. Peirce Soc.* **1987**, *23*, 205–234.
37. Short, T.L. Interpreting Peirce's Interpretant: A Response To Lalor, Liszka, and Meyers. *Trans. Charles S. Peirce Soc.* **1996**, *32*, 488–541.
38. Cruse, D.A. Prototype theory and lexical semantics . In *Meanings and Prototypes (RLE Linguistics B: Grammar) Studies in Linguistic Categorization*; Tsohatzidis, S.L., Ed.; Routledge: London, UK, 2014; pp. 382–402. [CrossRef]
39. Geeraerts, D. Prototypes, stereotypes, and semantic norms. In *Cognitive Sociolinguistics*; Kristiansen, G., Dirven, R., Eds.; Mouton de Gruyter: Berlin, Germany, 2008; pp. 21–40. [CrossRef]
40. Zhu, B.; Hedman, A.; Feng, S.; Li, H.; Osika, W. Designing, Prototyping and Evaluating Digital Mindfulness Applications: A Case Study of Mindful Breathing for Stress Reduction. *J. Med. Internet Res.* **2017**, *19*, e197. [CrossRef] [PubMed]
41. Rosch, E. Cognitive representations of semantic categories. *J. Exp. Psychol. Gen.* **1975**, *104*, 192–233. [CrossRef]
42. Eco, U. Peirce's Notion of Interpretant. *MLN* **1976**, *91*, 1457–1472. [CrossRef]
43. Knight, T. *Charles Peirce*; Twayne Publishers: New York, NY, USA, 1965.
44. Bellucci, F. 'Logic, considered as Semeiotic': On Peirce's Philosophy of Logic. *Trans. Charles S. Peirce Soc.* **2014**, *50*, 523–547. [CrossRef]
45. Liszka, J.J. Peirce's Interpretant. *Trans. Charles S. Peirce Soc.* **1990**, *26*, 17–62.
46. Lin, Q. How to Contemplate 'Internally' and 'Externally' in the Satipaṭṭhāna Meditation: A Philological Investigation. *J. Int. Assoc. Buddh. Stud.* **2019**, *41*, 315–360. [CrossRef]
47. Ditrich, T. Interpretations of the Terms ajjhattaṃ and bahiddhā: From the Pāli Nikāyas to the Abhidhamma. In *Text, History, and Philosophy*; BRILL: Leiden, The Netherlands, 2016; Chapter 3; pp. 108–145. [CrossRef]
48. Eco, U. *Semiotica e Filosofia del Linguaggio*; Einaudi: Turin, Italy, 1986.
49. Kilstrup, M. Naturalizing semiotics: The triadic sign of Charles Sanders Peirce as a systems property. *Prog. Biophys. Mol. Biol.* **2015**, *119*, 563–575. [CrossRef]
50. Squarcini, F. La cimosa e il 'nichilista'. Fra ontologia, evacuazione e neutralizzazione dei segni figurali in Nāgārjuna. *Consonanze* **2020**, *11*, 69–86. [CrossRef]
51. Lettner, A.T. Peirce's Semiotic Pragmaticism and Buddhist Soteriology: Steps Towards Modelling 'Thought Forms' of Signlessness. In *Pragmatism, Spirituality and Society*; Springer: Singapore, 2021; pp. 187–219. [CrossRef]

52. Beekes, R. *Etymological Dictionary of Greek (2 vols.)*; BRILL: Leiden, The Netherlands, 2010.
53. Divino, F. Seers and Ascetics: Analyzing the Vedic Theory of Cognition and Contemplative Practice in the Development of Early Buddhist Meditation and Imaginary. *Religions* **2025**, *16*, 378. [CrossRef]
54. Cousins, L. *Meditations of the Pali Tradition: Illuminating Buddhist Doctrine, History, and Practice*; Shambhala Publications: Boulder, NA, USA, 2022.
55. Husserl, E. *Ideen zu einer reinen Phänomenologie und phänomenologischen Philosophie—Erstes Buch (Gesammelte Werke Band III/1)*; Martinus Nijhoff: Den Haag, The Netherlands, 1976. [CrossRef]
56. Husserl, E. *Ideen zu Einer Reinen Phänomenologie und Phänomenologischen Philosophie—Zweites Buch (Gesammelte Werke Band IV)*; Martinus Nijhoff: Den Haag, The Netherlands; Springer: Dordrecht, The Netherlands, 1952. [CrossRef]
57. Husserl, E. *Ideen zu Einer Reinen Phänomenologie und Phänomenologischen Philosophie—Drittes Buch (Gesammelte Werke Band V)*; Martinus Nijhoff: Den Haag, The Netherlands, 1971. [CrossRef]
58. Husserl, E. *Ideen zu Einer Reinen Phänomenologie und Phänomenologischen Philosophie—Erstes Buch (Gesammelte Werke Band III/2)*; Martinus Nijhoff: Den Haag, The Netherlands, 1976. [CrossRef]
59. Dennison, P. *Jhāna Consciousness: Buddhist Meditation in the Age of Neuroscience*; Shambhala Publications: Boulder, NA, USA, 2022.
60. Bucknell, R. Reinterpreting the Jhānas. *J. Int. Assoc. Buddh. Stud.* **1993**, *16*, 375–409. Available online: http://nbn-resolving.de/urn:nbn:de:bsz:16-jiabs-88180 (accessed on 28 March 2025).
61. Gentili, A. La Umweltlehre tra Uexküll e Husserl. *Discip. Filos.* **2023**, *33*, 67–92.
62. Wynne, A. Early Buddhist Teaching as Proto-śūnyavāda. *J. Oxf. Cent. Buddh. Stud.* **2015**, *11*, 213–241.
63. Divino, F. Dualism and Psychosemantics: Holography and Pansematism in Early Buddhist Philosophy. *Comp. Philos.* **2023**, *14*, 4. [CrossRef]
64. Greenlee, D. Peirce's Concept of Sign: Further Reflections. *Trans. Charles S. Peirce Soc.* **1976**, *12*, 135–147.
65. Lettner, A.T. Semiotic Roots and Buddhist Routes in Phenomenology and Intercultural Philosophy: A Peircean Study of Abhidharma Buddhist Theories of Consciousness and Perception. In *Roots, Routes and a New Awakening*; Springer: Singapore, 2021; pp. 47–74. [CrossRef]
66. Fisch, M.; Turquette, A. Peirce's Triadic Logic. *Trans. Charles S. Peirce Soc.* **1966**, *2*, 71–85.
67. Giustarini, G. A Note on Saḷāyatanas in Pāli Nikāyas. *Ann. Dell'università Degli Studi Napoli* **2005**, *65*, 153–178.
68. Campion, Y. L'Umweltraum de Jakob von Uexküll. Le signe, l'espace, le temps et les philosophes. *Cah. François Viète* **2020**, *3*, 155–181. [CrossRef]
69. Hamilton, S. The 'External World': Its Status and Relevance in the Pali Nikāyas. *Religion* **1999**, *29*, 73–90. [CrossRef]
70. Katz, N. Does the 'Cessation of the World' Entail the Cessation of Emotions? *Buddh. Stud. Rev.* **1980**, *4*, 53–65. [CrossRef]
71. Metzner, R. The Buddhist Six-Worlds Model of Consciousness and Reality. *J. Transpers. Psychol.* **1996**, *28*, 155–166.
72. Cimatti, F. Con Uexküll, oltre Uexküll. Per un'ontologia relazionale. *Discip. Filos.* **2023**, *33*, 45–66.
73. Marra, E. Andar tastando con lo sguardo: La scienza impossibile di von Uexküll. *Discip. Filos.* **2023**, *33*, 163–177.
74. Rasini, V. L'osservatore e l'osservato. Difficoltà teoretiche nella biologia di Jakob von Uexküll. *Discip. Filos.* **2023**, *33*, 209–226.
75. Divino, F. The Shores beyond the World: Fire and Ocean as Founding Metaphors of Early Buddhist Poetic Philosophy. *Indian Int. J. Buddh. Stud.* **2024**, *24*, 51–88.
76. Queiroz, J.; El-Hani, C.N. Semiosis as an Emergent Process. *Trans. Charles S. Peirce Soc.* **2006**, *42*, 78–116. [CrossRef]
77. Mandoki, K. Power and semiosis. *Semiotica* **2004**, *1/4*, 97–114. [CrossRef]
78. Orellana, M.E.F. *Mindful Ethnography*; Routledge: London, UK, 2019. [CrossRef]
79. Divino, F. The dawn of division: For an anthropological theory of consciousness through contemplative ethnography. *Anthropol. Conscious.* **2025**, *36*, e12246. [CrossRef]
80. Kordeš, U.; Oblak, A.; Smrdu, M.; Demsar, E. Ethnography of Meditation: An Account of Pursuing Meditative Practice as a Tool for Researching Consciousness. *J. Conscious. Stud.* **2019**, *26*, 184–237.
81. Champagne, M. Reality and Semiosis. In *Bloomsbury Semiotics—Volume 1*; Pelkey, J., Ed.; Bloomsbury: London, UK, 2022; Chapter 6; pp. 129–147.
82. Squarcini, F. Le colombe e gli avvoltoi Sull'economia politica delle 'ecologie religiose' del passato, in India e non solo. *Ann. Ca' Foscari. Ser. Orient.* **2018**, *54*, 205–238. [CrossRef]
83. Del Toso, K. The Function of Saññā in the Perceptual Process according to the Suttapiṭaka: An Appraisal. *Philos. East West* **2015**, *65*, 690–716. [CrossRef]
84. De Giovanni, L. Husserl on Intentionality and Attention: From the Logical Investigations to Genetic Phenomenology. *Phänomenologische Forschungen* **2018**, *2*, 81–98.
85. Pelc, J. Semiosis and semiosics vs. semiotics. *Semiotica* **2000**, *128*, 425–434. [CrossRef]
86. Spezio, M. McGilchrist and hemisphere lateralization: A neuroscientific and metaanalytic assessment. *Religion Brain Behav.* **2019**, *9*, 387–399. [CrossRef]

87. McGilchrist, I. *The Matter with Things: Our Brains, Our Delusions, and the Unmaking of the World*; Perpectiva Press: London, UK, 2021.
88. Cunningham, D.J. Cognition as Semiosis. *Theory Psychol.* **1998**, *8*, 827–840. [CrossRef]
89. Rama, T. Biosemiotics at the bridge between Eco-Devo and representational theories of mind. *Riv. Ital. Filos. Linguaggio* **2021**, *15*, 59–92. [CrossRef]
90. von Uexküll, J. *A Foray into the Worlds of Animals and Humans*; University of Minnesota Press: London, MN, USA, 2010.