

# THE LOCUS OF AFFECTION

## INTERSUBJECTIVE LIFE FROM ENACTION TO EPIGENESIS

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*Abstract*

How is it possible for me to engage in an intersubjective world? In enactivism, cognition is defined as the living system's interaction with the meaningful world. What is missing, here, is the conceptualization of intersubjectivity. In this paper, I try to reconstruct the enactivist view of interrelationships between intersubjectivity, teleology, and enaction within the living system's life cycle. I draw on the enactivist intuitions on teleology and foundations of autonomy with the appeal to the intersubjective view of

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science as practice. Next, I proceed to the idea of epigenetic development of mind as the instantiation of the bio-phenomenological intertwinement of two living systems. I show that it is the affective interaction of two epigenetically developing systems, involved in an “originary relationality,” which is the true subject of transformation.

*Keywords:* enactivism, intersubjectivity, epigenesis, auto-hetero-affection, originary relationality.

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### **Kraj afekcije. Intersubjektivno življenje od udejanjenja do epigeneze**

#### *Povzetek*

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Kako lahko sodelujem v intersubjektivnem svetu? Enaktivizem kognicijo opredeljuje kot interakcijo živečega sistema s pomenljivim svetom. Pri tem umanjka konceptualizacija intersubjektivnosti. V prispevku skušam rekonstruirati enaktivističen pogled na medsebojne odnose med intersubjektivnostjo, teleologijo in udejanjenjem znotraj življenjskega cikla živečega sistema. Pri sklicevanju na intersubjektivni pogled na znanost kot prakso se nanašam na enaktivistične uvide glede teleologije in temeljev avtonomije. V nadaljevanju obravnavam idejo epigenetičnega razvoja uma kot oposameznjenja bio-fenomenološkega sprepleta dveh živečih sistemov. Pokažem, da je afektivna interakcija dveh epigenetično razvijajočih se sistemov, vključenih v »originarno odnosnost«, resnični subjekt transformacije.

*Ključne besede:* enaktivizem, intersubjektivnost, epigeneza, avto-hetero-afekcija, originarna odnosnost.

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## 1. Introduction: Enactivism's missing element

How do I attain the possibility to share a common world? Are the conditions of my cognitive access to reality individual or intersubjective? The enactive view of cognition sees it as the dynamical process of interaction between the embodied living being and its environment. In contrast to more traditional views in cognitive science and neurobiology, it is not the case that the subject represents the objective world in some endogenously produced mental pictures mirroring or modelling the world, but rather it is the process of mutual constitution of the agent in the world and the world surrounding it. Hence, cognition for enactivism is defined as perceptually guided action (Varela, Thompson, & Rosch 1991, 172–173), which means that it is an interaction with the world as the source of significance. Instead of preconscious neurologically mediated computations that project the predictive models of reality, it is the system's bodily mediated activity that constitutes the world of perceptual experience.

This implies the expanded view of cognition as inherent to life itself: life and cognition are co-extensive (see, for instance, Froese & Di Paolo 2011, Kirchoff & Froese 2017). The bacterial chemotaxis is a frequently used example of a living system's meaningful agency. Chemical reactions within bacteria produce molecules that catalyze these reactions, enacting the individuation of the system through the production of a semi-permeable membrane delineating it. With this, the organism receives the resources for reproducing its structure through the metabolic exchange with its environment. The system implanted into the environment turns the world from neutral milieu to a phenomenologically experienced world replete with meaning: in chemotaxis, these are the sucrose elements disseminated in the chemical medium. It means that even the most elementary life forms embedded in the environment are capable of making meaningful distinctions within their lifeworld and engaging with its affordances (see Khachouf, Poletti, & Pagnoni 2013). The living system knows itself and its

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environment by maintaining its homeostasis via the set of meaningful actions and interactions, impregnating the world with significance.

However, what is the basis for such signification, transforming the environment into meaningful reality? Supposedly, this necessity stems from the living systems' desire to overcome the *lack*, the characteristic inherent to the organisms' worldly experience that something is missing in its immediate perspective. The insufficiency of the "here" and "now" perspective for the viability of the system forces it to project it into the immediate future. This projection works at the level of the system's kinesthetic capacity to navigate in the environment, and at the level of projecting from the present to the future, where the trajectories of the individual development are unfolding. For the enactivists, who base on the phenomenologically interpreted idea of artificial life, the situational "here" and "now" constituted by the system's embodied orientation in the world provide the context, "from within" which the environment is perceived as the set of meanings (see Varela 1991, Di Paolo 2005, Di Paolo 2009, Froese, Virgo, & Ikegami 2014). The obvious problem is that this system is frequently seen as if it exists alone in its world, unobstructedly observed by the (human or non-human) subject "from outside."

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Hence, phenomenologically speaking, for enactivism, life is creative by definition. Cognition, considered as filling in the missing element, is identical to establishing something new, and at the same time leaving everything the way it is. It is not the transformation of the environment by the system, but the change of patterns of interaction between the inhabitants and their worlds. At the same time, for the observer, the transformation of the "neutral" environment into the lived-in meaningful world does not introduce any objective changes into the observable environment.

In what follows, I show that it is the interaction of the two systems with each other and with the affordances which is the true subject of transformation. Still, this "view from the outside" of the system's standpoint goes against the more intuitive empathic attitude towards living systems taking into account that their enactions radically change their experiential world. What initially was a neutral chemical process, becomes the meaningful part of a metabolic economy, wherein any element of the environment attains its value in response to the living system's activity. Concerning the immune system, it is remarked by

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the enactivists that it is one of the multiple ways of enaction performed by the coordinated cognitive network, in which the organism *knows* its boundaries:

The molecular world we inhabit, thus, is not pre-given, and then inhabited *post facto* by our immune systems through some optimal adaptation. It is rather laid down as we walk in it, it is a world brought forth. (Varela, Coutinho, Dupire. & Vaz 1988, 373)

The question is, who lays down this stream of experience? Does it belong to me, being given as the mode of “what-is-it-like-for-me-ness”? Or, the enactive world is by definition inhabited by us, that is, the collective of living beings, experiencing the world as “what-is-is-like-for-me-and-you”? My point, in this paper, is that what misses in enactivism is the appropriate conceptualization of the key element of phenomenology, i.e., intersubjectivity. One can refer to a variety of mentions of social, cultural, and even political contexts of conscious life in the positions close or at least sympathetic to enactivism and/or embodied cognition (see Froese & Di Paolo 2009, Froese & Di Paolo 2011, Maiese & Hanna 2019, Maturana & Verden-Zöller 2012). Yet, the intersubjective dimension of enaction in a groundless world is still underdeveloped.

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Due to these reasons, I propose a risky interpretation, which aims to reconstruct the enactivist view of interrelationships between intersubjectivity, teleology, and enaction within the living system’s life cycle. To proceed with this interpretation, I draw on the late 1990s enactivist intuitions on teleology and foundations of autonomy, strengthened with the appeal to the phenomenological take on science as the realization of intersubjective practice. With this, I use the idea of epigenetic development of mind as the instantiation of the bio-phenomenological intertwining of two mutually transforming living systems. Before becoming the subject of scientific knowledge, the living system must maintain constant bodily-mediated meaningful contact with its environment. Yet, it is because the system’s individuality and autonomy are always already validated with the co-presence of another system, the originary subject of knowing, or its unit, is the dyad of two interrelated systems. Interactions within it take place as the processes of mutual triggering and perturbations, actualizing the capability for the epigenetic transformation

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of both systems' cognitive structure. Consequently, the individual cognitive processes presuppose initial collectivity which, in turn, emerges as the characteristic of metabolism.

I base my further work on the idea of epigenesis, which, along with enactivism, emphasizes the embodied and affective character of conscious life possessing its specific temporality. Despite the fact that the idea of epigenesis inherits the deconstructive hostility towards phenomenology as developing "metaphysics of presence," based on the idea of the self-transparent rational image of the human, I see it relevant to develop the common intuitions of enactivism and epigenesis. Both positions seek to combine the static picture of self-evident consciousness with the dynamical view of cognition as a bodily mediated agency involving the co-presence of the other.

## **2. "Originary relationality" and the intersubjective sources of scientific observation**

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Before proceeding, I refer to the recent phenomenological attempt at reconciliation of biological determinants of cognition and transcendental genesis of the intentional givenness with the help of the concepts of empathy and intersubjective coordination.

For Natalie Depraz, the synchrony of transcendental genesis and biological conditioning in the individual system's life cycle can be reconstructed as proportional relations between the stages of the development of cognitive science and the levels of transcendental-historical reflection (see Depraz 1999). Consequently, she sees the parallelism between the gradual sophistication of the reflective basis of cognitive scientific empirical research discovering the mutual dependence between the way we see ourselves in the world and our natural scientific exploration of ourselves, and the deepening of phenomenological reflection beginning from the static intentional analysis of the givenness towards the dynamical genetic/generative analysis of the pre-individual determinations of consciousness.

Who is the subject of natural scientific knowledge? For Depraz, it is obvious that science is a social institution, which implies the reconsideration of the relations between scientific knowledge, collectivity, and mutuality. Natural science, itself being social and cultural practice, is the intersubjective institution involving empathy and mutual understanding:

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More than a mere central condition of possibility of the science of consciousness, empathy corresponds to an actual practice which articulates from within the scientific research. In the same way as the Husserlian concept of *Einfühlung* requires to be adapted to the practical experimental framework, the latter also results enlightened by the phenomenological intersubjective method. (Depraz 2012, 454)

This means that, in the case of cognitive science aiming at explaining intersubjectivity, the very fact that scientific exploration is based on what it intends to explain, acquires transcendental relevance. The scientific pursuit of causal explanation of the world is enacted by the community of embodied subjects involved in symbolic practices of which natural science is an integral part.

Organization and design of the experiments, data collection and analysis, interpretation of the achieved results, and the institutional dissemination of theoretical knowledge—all these practices are generatively based on the dynamics of recurrent process of interchange of positions between self and other, me and you. Hence, it is relevant to claim that the traditional metaphysical dichotomy between “subject” and “object” inherited by cognitive science is suspended, being reconsidered as rather the intermediate outcome of the process of historical intersubjective cultivation of collective experience enacted by co-living beings bodily coupled *from the outset*. This process of intersubjective determination of minds as living-in the concordant experiences is based upon what Depraz names “symmetry” and “mutuality.”

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The situation she outlines can be used to introduce intersubjectivity into the naturalist research of consciousness. It is obvious that, before providing the objectivist disengaged description of the natural world and placing experience within it, the living system must be incarnated into the world with its body. Hence, intersubjectivity should be considered phenomenologically as the initial bodily co-presence. This co-presence has nothing to do with theoretical self-explanation developing the folk-psychological framework; rather, it is the pre-conceptual immediate experience of grounding in the world by the preconscious somatic operations. These preconscious operations can be thematized in terms of the initial situation of the encounter between self and

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others, seen as the instance of the affective, emotional, and somatic process constituting the *intercorporeality*, which, in its turn, initiates the mutual perturbations within the encountering systems.

This leads to gradual awareness within the systems of their common possession of horizontal experience to be agreed upon. Regardless of the specifics of the experience lived-in by the other, our common ability to understand each other as possessing the horizon saturated with common meanings becomes the determining factor and the constitutive condition of possibility of natural science. This general structure of self/other relationships illustrates the idea of “originary relationality” of the individual (Depraz 2008, 240), realized as the upgrowth of the self/other-fold generatively preceding their differentiation.

40 However, is it possible to develop the enactivist counterpart to this embodied view of intersubjectivity, dynamically linking together conscious life, mutual alteration, and metabolic processes? For Depraz, it is the intertwinement of individual’s affective responses and instinctive attractions or repulsions towards the other which lays the foundation for intersubjectivity. While developing this view, she attests to the idea of affection considered as the subject’s capability to undergo the environmental and social influence, a specific lability, which always already polarizes the embodiment of the living system as ready for interaction.

The temporal regime of everlasting readiness for external influence, in Depraz, develops its dynamics possessing a specific rhythmic concurrent with the generative dimension of the vegetative processes within the initial intercorporeality. Hence, the “originary” intercorporeal relationality is realized as the dynamical constitution of structural coupling between communicating systems. In the theory of autopoiesis, the structural coupling shows the correspondence between the living system’s behavior and environmental conditions it interacts with. It is a process of co-existence of the living system and its environment during which they interact as the sources of mutual perturbations (Maturana & Varela 1980, 134). Depraz redefines structural coupling, applying it to the interaction of two living systems and adding the affective dimension of this interaction. She claims that the *affect* is immanent to the coupling process both at the elementary level of the

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living system's "implantation" to its environment, *acomplamiento*, and at the phenomenological level of pairing, *Paarung*.

Affect, valence, and emotional responses are the markers of the consciously lived output of the micro-phenomenological "growth" of intersubjectivity from the sub-personal neurovegetative system, i.e., the most "archaic" operational mode of the human body, articulated in the automatic responses of attraction and repulsion, polarizing the affective modalities of the body. Depraz refers to the opposition between attractor (*Reiz*) and disappointment (*Enttäuschung*) as implementing the continual relations between neurovegetative dispositions and sensory perception. The feedback system involving the dispositions (openness to affection) and the stimuli (environmental pressures) is affective and provides the economy of mutual constraints between the experientially lived and pre-consciously processed somatic regulation.

I suppose that the self/other-relationship between two coupled living systems, hence, can be schematized with the model of these systems' coordinated movement within the phase space. The attractors in this space are affectively charged valences within the spectrum of possible emotional responses. The living system's movement within such space is always already existentially driven, for in enactivism, even the most primitive lifeforms perceive their world as full of meaning. A living being is considered as the physiological system regulating the endogenous processes of interaction with the environmental energy flows, allowing it to participate in higher-order intersubjective processes. In a long-term perspective, one can observe the recurrent crystallization or actualization of some behavioral patterns, leading to the formation of meaningful layouts in the environment, that is, the *horizon*. Hence, the horizontal awareness of the common meaningful world implies some kind of inter-ipseity.

The problem with Depraz's approach is that she still fails to give an account of the generative aspect of intersubjectivity: the individual remains to be physiologically distinct from the other, while phenomenologically being initially tied to her meaningful presence. Consequently, it would be correct to claim that, when trying to reconcile system-theoretical, phenomenological, and biological approaches to intersubjectivity (the latter seen as the condition for the emergence of science itself), Depraz's approach remains philosophically

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underdeveloped. To be structurally coupled to each other, two systems should be coupled to their environment first—but how does the “originary relationality” emerge from this initial situation?

In what follows, I provide a preliminary answer to the question of intersubjectivity in enactivism, basing on its elaboration of the problem of teleology, and the principle “life can be known by life” borrowed from Hans Jonas’s existential interpretation of biological facts (see Jonas 2001). To develop this interpretation, I use the understanding of epigenesis and affect as the foundation of the solidarity between consciousness and the enacted world.

### 3. Generative affection and the body of the other

Who is affected while experiencing the affection? Is it me, affected by the other, or I become split into two sides, i.e., myself as the affected other, and the other as the affecting self? The affect reveals the living system’s *domain of receptivity*, and further I interpret this revelation as the process of transformation caused by the bodily co-presence of the other.

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Based on Antonio Damasio’s theory of affects as somatic markers, Catherine Malabou argues that there is an inner relation between the organism’s neuronal metabolism and the dynamics of affective/emotional states (see Malabou 2012, 4). The latter not only involves the mechanisms of inner regulation and homeostatic sustainability of the embodied system, but is also supported by the work of the unconscious drive (attraction or repulsion) possessing the affective character and happening across the intertwining of the brain and the body. Thereby, affects as the regulators of the living system’s homeostasis play a major role in its viability and maintenance.

The activity of the neurovegetative system, that lays the foundation for cognition and consciousness, is itself based on the affective, sensational, and sexual drives. These drives constitute the neuronal system as the auto-affective system interacting with the exogenous and endogenous processes and events. On their part, these processes and events, including the initial event of the encounter with the other, can be seen as the attractors in the system’s phase space. These attractors trigger the affective reactions in the system, which in their turn predetermine its further behavior. Thus, the affection is always an

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*auto-affection*, informing the neurovegetative system about the dynamics of interaction between the brain, body, and environment. Hence, the “originary” relationality here is the dynamic interrelation between the self and the events which modify it.

For Malabou, the affect is any modification or difference from the environment that introduces the dynamical aspect into the subject’s life (see Malabou 2009, 113). To use enactivist vocabulary, it is the event witnessing the tracing of the experience, marking the change of the individual’s cognitive trajectory during the ontogenetic development. I am always already affected, whether by my coupling with the world, or with others, or by some particular event, which radically transforms me, leaving nothing common between me previously and me now. Such understanding of the affect is close to the post-phenomenological approach to affection where the affect refers to the immanent agency revealing the subject’s domain of receptivity. This implies that the affect does not refer to the action someone performs on me, but rather means the event which takes place with me experiencing something. As applied to the issue of self/other-interaction, it means that before I actually participate in the interaction with the other, I must be *generatively affected* by her co-presence.

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Consequently, this position does not assume the individualistic view of cognition maintained in the mainstream of social cognitive science. It is not the case in which there is an individual living system that has to fulfil some set of cognitive criteria to engage with the other. Rather, the individual’s existence in the world implies the initial coupling with others. The affective dimension of conscious life intertwines self and others, wherein no self is possible independently from others, for the self is always already affected by the other.

In contrast to the received view in phenomenology, according to which the affectivity is considered as the condition of possibility for life’s self-revelation, Malabou develops the position much closer to Derrida’s. The self cannot cognize itself as possessing some substantial existence, as a thinking substance, for it knows itself only through affecting its “inner sense,” i.e., “auto-affection” (Johnston & Malabou 2013, 19–21). As Malabou correctly interprets Derrida’s critique of Husserlian phenomenology, no pure auto-affection is possible: even when my left hand touches my right hand—the paradigmatic case of auto-

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affection for classical phenomenology—, it is rather my self-alteration, even alienation, which makes this self-affection possible.

Hence, the system capable of auto-affection is not a phenomenologically transparent consciousness, even considered from an enactivist standpoint as the emergent self, constituted by sub-systemic processes (but see Roden 2005). It is rather some kind of invisible “presence” accompanying any mental act and tying them to consistent subjectivity. Auto-affection, therefore, is the transcendental structure of presence ensuring the living system’s experiential “inner sense.” Yet, for Malabou, this structure reveals the system’s dynamical inequality to itself:

The subject can only represent itself as affected—altered—by itself. The self has access to itself through its *own* otherness or alterity. The self-representation of the subject is thus always an *autoaffection*. [...] Autoaffection is thus the temporal difference between the self and itself. (Johnston & Malabou 2013, 6)

44        Considering the auto-affection as the witnessing of the hidden presence of some “shadow” subjectivity behind my mental acts, the enactivist would claim the following. In the process of observation, there is a living system embedded in its environment and structurally coupled to it. An external observer is required to distinguish the system from the environment, and her judgment would be the measure of all things. The observer herself is transcendent from the system and its perceptual world, being an unattainable abstraction.

The enactivist view of this situation would be initiated by saying that the observer is not a hidden, substantial, transcendent presence unattainable experientially, but a living system perceiving itself in the environment and observed by another system in accordance with the principle “life can be known by life.” What is required here, is the transition from hierarchical relations between the system and the observer towards the network of living systems observing each other. That is why the post-phenomenological appeal to the auto-affection does not take into account that the affect should be seen dynamically, as the component of the initial encounter between self and other as the two living systems knowing each other—which stipulates empathy, intersubjectivity, and sociality.

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It is possible to introduce the concept of hetero-affection, which is defined by Malabou in a dual way. (1) The one who is affected in me is always the “other” in me, but not me as I am; similarly, for enactivism, the socially recognizable self is an embodied chemically mediated network of living subsystems coordinated to realize the individual’s intentions. It is the global integration of local somatic processes—the “others”—, which constitutes my “self” as the emergent effect of their interaction. The “low-level” somatic and vegetative, and “high-level” social-cultural cognitive processes equally contribute to my emergence as the recognizable subject distinct from other subjects. Each of these “selves” is constituted by the mutually overlapping somatic and cognitive processes, i.e., the “selfless” pre-reflective events (see Locke 2016, Varela 1991, Varela, Coutinho, Dupire, & Vaz 1998). (2) The “other” affected in me and the “other” who affects me are not identical (see Malabou 2009, 113–114). Hence, the affect is an event that takes place “within” me as the other to myself, while the other who affects this other in me enacts the coupling of the two living systems—the “other” and the “other’s other.” Thus, the primary source of affectivity is the encounter of self and other, which shows me my fundamental dependence from the other. This immanent otherness reveals that the initial condition of the self is the dynamical process of *auto-hetero-affection*, which, I guess, is inherent to the developmental trajectory of the living system. The affective self, then, is determined by the fluctuation between the endogenous openness for being affected (auto-affection) and experiencing the exogenous pressure of an affect (hetero-affection). This implies that the living system’s subjectivity, or its phenomenological self, is an open possibility for dynamical transformation in response to the contingent events in the lifeworld, in which the ontologically primary event is the encounter with the “other”—which, in its turn, reveals the relational nature of the intercorporeal “self.”

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This immanent presence of the other within the organization of the self can be witnessed in a variety of individual and collective processes conceptualized by the enactivists: the work of the immune system, somatic identity, social self, and other “selfless” enactive processes reveal the derivative status of the introspective self. Describing his experience of organ transplantation, which exemplified the elusiveness of the transparent self, Varela understood that

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The boundaries of the self undulate, extend and contract, and reach sometimes far into the environment, into the presence of multiple others, sharing a self-defining boundary with bacteria and parasites. Such fluid boundaries are a constitutive habit we share with all forms of life: microorganisms exchange body parts so often and so fast that trying to establish body boundaries is not only absurd, but runs counter to the very phenomenon of that form of life. (Varela 2001, 263)

46 The fragility of the borders of the human body acquires the existential meaning, for the constitution of the lived body presupposes the passage through the pre-given other as the horizon, wherein the boundaries between self and other become semi-permeable and semi-transparent. However, is it applicable to the boundaries of the individual's self and its immediate environment only? In agreement with Depraz's opinion that the self presupposes the corporeal, affective co-presence of the other, and with Malabou's redefinition of the self in terms of auto-hetero-affectation, it can be said that the self's "locus of intimacy" needs the initial coupling with the other, that is, the other living system. This "other life" cannot be defined neither as the other lonely subject of enaction nor as the transcendent observer, even though for enactivism everything said is said by an observer. The "other life" is always the life co-present with me in our lifeworld, orienting among the sedimentations and institutions of sense, and performing teleological behavior. At the same time, this living system is other to me, i.e., it is one more living system, and our mutually constitutive relation cannot be reduced to the coordinated interaction between two mechanisms in a neutrally described objective milieu.

The other living system can engage in interaction with me, which is possible due to our common openness to the experienced influence. This openness reveals the living system's existence as the always already altered self, self as other. To use Jean-Luc Nancy's words, "bodies are first and always other—just as others are first and always bodies" (see Nancy 2008, 30–31). The emotional and affective valences disseminated in the living system's phase space can point this system to its emergent status upon not only the multiplicity of selfless processes which constitute it, but also regarding the other living system both as the co-habitant of the same meaningful world and the transcendent observer.

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Being the living system means being open to the revelation of self's otherness inherent to it. This, I guess, is what constitutes the basic structure of enactive affectivity.

To know itself as the emergent process of synchronization of a variety of selfless processes, the individual system must be structurally coupled to another living system. What is important here, is the shift from an epistemological understanding of the structural coupling as the cognitive relationship between the system and its environment, defined by the repertoire of the system's enactions, to an ethically engaged understanding of this relation as enacting the very fact of the inter-systemic connectedness.

This self-knowledge of the system as the other's other, accompanied by the discovery of the other system as the other self, *affects* both interacting systems. In what follows, I develop this notion of the living system's affective transformation with the help of the idea of epigenesis revealing the intercorporeal affect as the primary source of living subjectivity.

#### **4. Life can be known by life: From enaction to epigenesis**

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In this section, I will try to illustrate my interpretation of Jonas's thesis "life can be known by life" with the affective encounter between two coupled systems, which initiates the epigenetic metamorphosis of both systems radically changing their patterns of behavior. However, as it is considered in the post-phenomenological understanding of affection, the system must be open to experience metamorphosis. It is important to note, here, that metamorphosis should not be seen as the instance of ontogenetic transformation expanding the structural plasticity of the system, phylogenetically spread as the contingent play of natural forms. The naturalist view maintained by enactivism does not see the collective of living systems as the population realizing the genetic algorithms. It is my point that this community should be redefined intersubjectively, in the light of its systems' capability for epigenetic development.

In what follows, I will consider Malabou's concept of plasticity as referring to the subject's capability for metamorphosis initiated by the contingent event taking place in its encounter with the other—the event which affects the system's cognitive organization. As was noted above, during the ontogenesis,

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the system traces the individual developmental trajectory. For Malabou, this is seen as the system itself becoming the surface for imprints and trails caused by the experience. This does not mean, however, that the subject is a *tabula rasa*, but, on the contrary, points to the affective dimension of life as primary. The plastic subject is what receives, maintains, and conveys form given from the outside, at the same time jointly participating in the very process of receiving this form. Hence, the environmental pressures experienced by the system are themselves the results of the subject's activity, which means that the system's phase space is purely immanent, enacted by it as if it would refer to the transcendent being.

48 The example can be given with the plasticity of the brain. During the long-term potentiation or depression of the synaptic connections, the individual—the “neuronal self” among many other selves of this individualizing system—literally becomes different by acquiring new skills, by gaining new experience, or by surviving brain damage (Malabou 2008, 21–29). The embodiment of the system's cognitive organization is unavoidable, for it does not represent any kind of program predetermined in advance—be it the genetic program, or the formal transcendental architectonics of subjectivity in a Kantian sense. The living system's ontogenetic trajectory drifts *epigenetically*, i.e., it involves both the endogenous and exogenous processes on the individual's becoming while gradually developing its inherent capabilities.

Developmentally speaking, plasticity is realized epigenetically through the growth and maturation of differentiating parts of the whole organism. A living system should be understood here as an instance of emergent processes. Its development cannot be divided into elementary cognitive sub-operations implementing some functional roles. Rather, it emerges from the non-linear feedback loops between the system's body (in particular, the semi-permeable boundaries), brain (not as a processing unit, but as one of the components of the distributed cognitive system), and environment (consisting of the affordances and other living beings).

Since the environment is an open space of contingencies, which deviate the system's developmental trajectory, the latter should be reconsidered in the light of its mutual dependence with the environmental conditions, laying the foundations of their parallel individuation constituting the non-linear

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dynamics of “adaptive contingency.” This adaptive-transformative response to the environmental changes helps the system to maintain its structural coupling with its meaningful reality, at the same time still being the main source of significance.

This requires new and creative ways of enaction, which might not be predictable from the observer’s standpoint. Life lives by its own rules, which do not have to be in accordance with the laws and regularities that are habitual and necessary for the disengaged observer. When I see another living system, in knowing this life, I cannot begin with the abstract principles regulating my image of the world. The living system I am coupled to is not a mechanism, and my openness for mutuality is not identical to taking the position of the observer. I am the living system inhabiting the world together with other systems, some of which can discriminate the various invariants from our common flow of experience, which, under some instrumental and symbolic processing, give us the scientific truths about the world as an “objective reality.” This view implies that we, the living systems, are always already placed in epigenetic development, both as individual growth and transformation, and as collective emancipation. This process is teleological, for it is immanent to creative, contingent life itself, irreducible to mechanistic causality and necessity.

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In enactivism, the formative force of the living system’s self-propagation is exemplified with its enaction of the surplus of significance within the experiential world. Starting with the simplest forms of metabolic activity of the unicellular organism onwards to the most complexly organized levels, life is an open-ended process of enaction of the common world. This implies that life is seen in a dual perspective: biologically speaking, these are the living organisms, but phenomenologically speaking, these organisms are the living subjectivities. It is the organism, or the living body embedded in the environment, which can be seen as the duality of biological processes and lived experience.

The organism here is the whole, which is more than the sum of its compartments, where the parts mutually produce each other being both causes and reasons of each other. It emerges from the local interactions between its constituting parts (somatic, immune, neuronal, and other) subordinated to the goal of realization of the system as a whole, and unthinkable apart from this process of individuation.

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Structural coupling is a “happy coincidence” which attains the *a priori* status, for, despite being a contingent event, it becomes necessary for the emergence of a meaningful reality brought forth by the life’s activity. Even though the emergence of consciousness in nature is a contingent event, the primary fact of the experientially lived givenness of the world for me and for us makes this metaphysically contingent fact necessary and unavoidable:

Experience is irreducible not because it possesses metaphysically peculiar “properties” that can’t be squeezed into some reified, physicalist model of the universe, after the fashion of contemporary property dualism. It’s irreducible because of its ineliminable transcendental character: lived experience is always already presupposed by any statement, model, or theory, and the lived body is an *a priori* invariant of lived experience. Experience is *die Unhintergebarkeit* – the “ungobehindable.” (Thompson 2004, 394)

50 Teleology attains the primary status compared to causality, for the observer knows the observed living system, beginning with understanding that she is a living being too, possessing common, or at least compatible, organization with the observed systems. My ability to perceive the living body as living presupposes that I am a living being myself. The interchange of perspectives between me and the other is based on our common bodily enaction of significant reality. As Merleau-Ponty says, “I cannot understand the function of the living body except by enacting it myself, and except insofar as I am a body which rises towards the world” (Merleau-Ponty 2005, 87). Teleological character of the observed system’s behavior is neither the interior property of the system nor the projection of the observer’s abstractions, it is the effect of its structural coupling with the environment. The life cycle, then, is the enaction of the fulfilment of lack, ranging from elementary metabolic lack of nutrients to the most complicated existential deficit in human cultures. What I want to add here, is the notion that teleology is a relational property that elucidates the originary relationality of the individual living being.

Intersubjectivity preserves its generative transcendental status here, reconsidered as the encounter between two living beings coupled with each

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other and experiencing mutual transformation. This intercorporeal mutuality of auto-hetero-affecting systems presupposes the epigenetic transformation of both participants of this contact: while encountering another life, I cannot remain unchanged. My ontogenetic trajectory implies that, when trying to understand another life, I have to relinquish my received views, and can neither enforce the observer's position nor become observed by it. For phenomenology, genesis refers to the dynamics of the constitution of the intentional correlate—be it the thing, the other, or the institution. Epigenesis, by contrast, is what goes beyond the habitual ways of enaction. It is the mark of the living beings' "needful freedom."

Accordingly, it is the engagement of two living systems, self and other, which shows the auto-hetero-affective play of the initial relationality of individual life. This is what introduces the dynamics in the flow of individual experience, revealing the contingent readiness for affection and transformation:

Epigenesis can thus be thought as a process of temporalization within which ontological horizon and biological maturation, coming into presence and natural growth, are no longer distinguished from one another. Epigenetic temporality is transcendental without being primordial, natural without being derived. It is impossible to separate epigenetic temporality from the biological process it refers to, from organic growth, from the future of the living being. However, insofar as its movement is *also* the movement of the reason that thinks it, insofar as there is no rationality without epigenesis, without self-adjustment, without the modification of the old by the new, the natural and objective time of epigenesis may also be considered to be the subjective and pure time of the formation of horizon by and for thought. (Malabou 2016, 175–176)

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It is the other, initially perceived as an alien with the unpredictable behavior, which does not fit the habitual ways of interpretation received through maintenance of the auto-affecting activity of consciousness. However, this encounter with alterity is required for me to recognize that I am a contingent

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being: it is the affect caused by another living system in me, which initiates the process of the transformation of my subjectivity—hetero-affectation which provokes the epigenetic redevelopment of my repertoire of enactions.

This leads to the transformation of the perceptual world ceasing to be the correlate of my mind and becoming an intersubjective reality. Hence, epigenesis is the paradigm of experience. Prior to being the dynamical process of interaction between the brain, the body, and the environment, I, the living creature, am always intertwined with another living being. It is this somatic “locus of intimacy” wherein the self is always situated among the others in a meaningful world.

## 5. Conclusion

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In this paper, I tried to show how enactivism, with its insistence on the continuity of metabolic and cognitive processes, can expand its scope with the help of the idea of intersubjectivity. It is the epigenetic development of the system that implies the emergence of the mutual bodily mediated interaction with the other system which (auto-hetero-)affects the individual’s patterns of enaction.

Contingency is inherent to life not in the sense of its natural historical determinations, but rather as the capability to transform its ways of enaction, including breaking the cognitive metabolic cycle and experiencing the change of itself and the surrounding world. It is me, the living being, who is immanently open to alterity, primordially facing the corporeally mediated encounter with the other, that is, with another living being whose behavior is inexplicable in terms of the observational causal predictability. The scientific causal explanation of the observed system’s behavior is initially performed within the community of living systems, which means that the transcendent observer’s “self-portrait” as a disengaged witness of objective processes descends from the embodied, affective existence and the interaction between selves and others on a variety of organizational levels.

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