ENACTING THE CONTINGENCY

CATHERINE MALABOU

BEFORE TOMORROW: EPIGENESIS AND RATIONALITY
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This review is an attempt to read the main ideas of Catherine Malabou’s Before Tomorrow: Epigenesis and Rationality, with a particular emphasis made upon the problem of the modifiability of the transcendental one and the rejection of the a priori dimension of subjectivity within scientific and philosophical thought of a materialist orientation. Malabou’s thesis of the epigenesis of pure reason evinces the dynamical dimension of the transcendental one, integrating structural and evolutionary conceptions of reason. Epigenesis secures the stability of the phenomenal world and provides the possibility of a contingent metamorphosis of reason, thereby establishing the economy of the transcendental contingency. Largely, Malabou’s work has many affinities with the recent phenomenological thought, although it makes just a few explicit references to phenomenological philosophers as such.

Key words: Malabou, Kant, transcendental philosophy, epigenesis, contingency, necessity, biology, teleology.
ЭНДАКТИВИСТСКИЙ ПОДХОД К КОНТИНГЕНТНОСТИ

РЕЦЕНЗИЯ НА КНИГУ КАТРИН МАЛАБУ

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В рецензии рассматриваются основные идеи книги Катрин Малабу «Перед завтрашним днем: эпигенез и рациональность». Особый акцент делается на проблеме изменяемости трансцендентального, а также на отказе от него в материалистической научной и философской мысли. Тезис об эпигенезе включает динамическое измерение трансцендентального, совмещающая структурное и эволюционное видение разума. Эпигенез обеспечивает стабильность феноменального мира и дает возможность для контингентных метаморфоз разума, учреждая экономию трансцендентальной контингентности. В целом, работа Малабу разделяет много общих черт с отдельными идеями современной феноменологии, хотя и практически не ссылается на представителей феноменологической философии.

Ключевые слова: Малабу, Кант, трансцендентальная философия, эпигенез, контингентность, необходимость, биология, телеология.

Published in 2014 in French under the title Avant demain. Épigenèse et rationalité, Catherine Malabou’s book sets the task of responding to the challenges faced by contemporary philosophy, thereby revisiting the status, aims and concerns of continental philosophy as such. In this review of the 2016 English translation by Carolyn Shread, I do not intend to give a general outline of this extremely challenging work, but rather will endeavor to present Malabou’s contribution as a possible ally to phenomenological philosophy.

The epigenetic understanding of reason and its relations with nature — issuing from Heidegger’s and Foucault’s rethinking of Kant’s transcendental philosophy — has many affinities with phenomenology, especially with regards to their common enemy, that is, materialism. The latter is reformulated in Avant demain in the guise of neurobiology and speculative realism. The way in which Malabou proposes to conceptualize the relations between reason and nature strikingly resembles certain positions within contemporary phenomenology, as well as phenomenologically-inflected
philosophies of mind. The *a priori* and the transcendental, reciprocally defining each other, become embodied, embedded, extended and enactive in Malabou’s thought, in congruence with the enactivist paradigm of the scientific study of mind.

In what follows below, no attempt to evaluate the historico-philosophical consistency of Malabou’s work is undertaken; what interests me, rather, is her epigenetic thesis and the problem of including Malabou and her recent work into the phenomenological fold, as well as to elucidate the consistency of an epigenetic understanding of reason.

**EPIGENESIS AS NATURALIZATION OF THE TRANSCENDENTAL**

How can contemporary continental philosophy maintain its identity as a foray into the permanent, universal and necessary conditions of possibility of our access to the world? Malabou ties this question to several turns taken by modern thought, extending her purview beyond the limits *strict sensu* of philosophy. Her work conjoins a neurobiological understanding of cerebral subjectivity, the post-Heideggerian notion of subjectivity as determined by its temporal extases, and the critique of correlationism undertaken by the speculative turn. All these moves have a common trait: they endeavor to deduce the *a priori* cognitive faculties of the subject on the basis of an immemorial past that eludes these faculties’ very jurisdiction. Thus the truth of the subject is taken as, respectively, the ontologically primary time of *Dasein*, the natural history of the adaptation of living beings to their environment, or the ancestral time of the *arche-fossil*, devoid of testimonials.

This move can be seen as establishing a materialist fissure between mind and nature. Hence, its logical consequence is a relinquishing of the transcendental. After this, philosophy forfeits its right to speak of the necessary and sufficient structures of our cognitive access to the world; moreover, the project of transcendental philosophy culminates in a breach of the deductive solidarity between the order of nature and the transcendental synthesis. The sole remaining task for philosophy is speculation pertaining to a possible world of noumena out there — averred to be the only true objective world philosophy may speak of.

As for Meillassoux, the radicalism of his rejection of the transcendental is far stronger than the neurobiologically-inspired notion of the empirical genesis of subjectivity, because for him *the transcendental is contingent*: we have no reason to suppose that the world will not one day fall into impenetrable darkness. The coherence of the categories of thought with the affordances of the world is simply a fact among other facts, and our inclination to endow this fact with a necessary status is simply
ill-founded. This world is not ours, nature is a closed and homogeneous totality, and we are nothing but the unstable effect of the fluctuations of matter, be it the temporalizing matter of Being, the chiasm of the ‘thinking matter’ of the brain, or the imperceptible dice throw of a sudden change of the laws of nature.

In response to these questions posed to philosophy in the wake of the Copernican turn, Malabou proposes an enquiry into the concept of the epigenesis of pure reason in Kant’s first *Critique*. Epigenesis defines the interrelationship between the architectonics of reason and its capacity for growth and development, comprehending a legitimization of the *a priori* congruence (*Übereinstimmung*) of the categories of thought with the objects of experience. This concept will be the point of departure for the introduction of a developmental dimension into the ontogenesis of subjectivity.

In Malabou’s exposition, Kant introduces epigenesis into the core of transcendental philosophy, situating the autonomous growth of reason in the moment of collision of the categories and experience. Malabou’s understanding of epigenesis can be seen to support a naturalization of the *a priori*, at the same time as overcoming an innatist understanding of the cognitive faculties as pre-given. In fact, epigenesis furnishes the resources for a naturalization of the transcendental, taking the aspirations of transcendental philosophy seriously without rejecting it on naïve naturalist or realist grounds.

The epigenesis of pure reason is defined as a gradual development through the successive growth of parts, affording primacy to becoming, the coevolution of the organism with its ecological niche and the self-differentiation of the categories of thought, refuting a preformationist notion of a pre-established harmony between subject and environment. These biological connotations are by no means contingent, for Meillassoux’s repudiation of correlationism misses this important point already underscored by Kant: the internal coherence of the transcendental synthesis cannot be represented by mathematical or mechanical models. For Kant, Malabou suggests, the transcendental synthesis can only be measured using an organic model, capable of gradual transformation. The question of the epigenesis of pure reason leads to the notion of the generative metamorphosis of the *a priori* elaborated in the third *Critique*. Thus, the notion from §27 of the first *Critique* harbors within it the concept of the possible mutability of the transcendental.

The aim of Malabou’s book as she formulates it is to reconcile Kant’s 18th century understanding of epigenesis with contemporary epigenetics. In particular, it is the mutual growth and development of the living form inside its given individualizing cognitive niche which is intended by her reinterpretation of Kant — not the organism’s passive acquisition of form under the pressure of a reality laying out there.
Hence, what she intends is not a simple equation of Übereinstimmung of the categories of thought and the perceived world with successful biological adaptation, which was already present in mental Darwinist approaches, but the implementation of an adaptive contingency within the mutual development of the individual in (and) the world. However, instead of an interrogation into the reasons why this very adaptation takes place at all, yet without consigning it to the domain of an impenetrable nature devoid of sense, Malabou tries, literally, to localize the transcendental in the brain — a position vulnerable to 4E approaches to consciousness — i.e. embodied, embedded, extended, enactive.

THE CRITIQUE OF NEUROBIOLOGICAL REASON

According to Malabou, there are three approaches to reconciling the transcendental with contingency: evolutionary, historical, and epigenetic. The first can be interpreted as asking whether it is possible to reduce the transcendental structure of reason to the cerebral structure. If Übereinstimmung, the deductive solidarity between categories and objects, is the result of biological adaptation, then the a priori would be reduced to the gradual harmonization of reason and the real, with reason becoming a biological given. Hence, reason is identical to the brain, and the epigenesis of pure reason is synonymous with the development of cerebral tissue.

This position is also known as mental, or neuronal Darwinism, advancing the idea of the epigenesis of neuronal networks by the selective stabilization of synapses. This idea provides a framework for describing the process of the coordination of cognitive categories and experiential objects, implanted into a physiological medium and establishing the systematic concurrence of categories and objects. This process can be understood in Kantian terms as occurring in accordance with the dynamical laws of nature not identical with the laws of thought, where the former become the conditions of possibility of the latter. Evidently, there is a rupture between this biologically reconsidered notion of epigenesis and the strictly Kantian transcendental elucidation of this concept.

Nevertheless, Malabou endeavors to reconcile this epigenetic notion with the 18th century understanding of the growth of form. In particular, she compares the logic of epigenetic modifications in the phenotype with the multiplication of the transcendental forms in the third Critique. Thus, there are two types of reason which effect epigenetic variations: internal, or structural (including physico-chemical processes relevant to RNA, nucleosome, and methylation), and environmental (the saturation
of genetic material through the organism’s reaction to the evolution of environmental conditions).

The fundamental problem of evolutionary developmental biology is, then, to define whether the genetic program (the architectonics of pure reason) includes all the information sufficient to form the embryo and mature organism (the proliferation of the transcendental forms of living beings). This problem is approached from the perspective of the system constituted by the organism and its environment as an evolving unit. This ability to evolve by adapting to the environment is followed by the transformation of innate forms, movements, and directions of activity. However, this notion, understood by Malabou as an exemplification of the a posteriori as the formative drive of epigenesis, can be successfully combined with a non-adaptationist understanding of evolution, involving the indirect effects of exaptation and a non-selective vision of evolution, as developed by S. J. Gould and R. Lewontin (Gould & Lewontin, 1979). Hence, epigenesis is of no relevance to adaptation, or at least has no necessary relation to adaptive activity as understood in a reductionist adaptive view of evolution.

These biological connotations lead Malabou to the reunion of the transcendental epigenesis with the concept of self-organization within Kant’s critical philosophy, implying the emergence of a continuous interrelationship of the categories of thought with the objects of experience. This reunion discloses a dimension where the becoming of subjectivity articulates itself as the intersection of the epigenesis of reason, the autonomy of the practical subject, and the creativity of life. For Malabou, epigenesis as a concept begins at the intersection of knowledge, freedom and life, and initiates the process of historical becoming.

**HISTORY, SEDIMENTATION, AND BECOMING**

What is becoming? Here Malabou refers to Foucault and his understanding of the transcendental as residuum — historical sedimentation — which cannot be presented in a distilled state. Phenomenologically speaking, for Foucault as interpreted by Malabou, the transcendental as residuum is similar to the historical becoming of sense and its stratifications, which determine the historically transforming contingent residue of the immutable. For phenomenology, these sedimentations are evinced in enactively thought flesh, intersubjectivity, and the cultural milieu. Possessing a transcendental status, they cannot be conceptualized in a Kantian vein as purely formal conditions of possibility, disconnected from the perceived world and logically anterior to that which they underlie.
Malabou suggests that this concept of residuum is incompatible with epigenesis, for it resists immediate givenness and conceptualization; it is without foundation, non-deducible and is therefore foreclosed to philosophical analysis. But is this the real problem? For Foucault, the historicity of the transcendental, given that it is compatible with the phenomenological concept of the sedimentation of sense, implies that this residuum retains its transcendental status, even though it cannot be unfolded exhaustively within a conceptual framework of givenness due to its filiation with the domain of phenomenological passivity. With such an understanding of the transcendental we break with the Kantian notion of the *a priori* as formal unconditional, thereby rejecting the dualism between the conditions of possibility and the conditioned, which haunts the post-Kantian transcendental project. Phenomenologically reconsidered, the transcendental is defined by its inclination to historical transformation and the differentiation of the instances of its (non)givenness. Thus, the living body, temporality and intersubjectivity disclose themselves within heterogeneous cultures in different ways, depending on historically assumed and cultivated attitudes towards them.

Nevertheless, Malabou assesses the historical/evolutionary expansion of the *a priori* in Foucault and neurobiology to be far less intractable than the challenge posed by speculative realism. The concepts of historical becoming and the evolutionary mutability of the transcendental remain fully compatible with the correlationism vehemently rejected by Meillassoux. For Malabou, the speculative realist position — a dismissal of the fundamental correlation between thinking and being — is considerably more difficult to overcome. This correlation is of a factual nature and is inherently precarious. The speculative realist argument of ancestrality pictures a world which does not belong to us, a radically different world in which no correlation, and hence no thought, has ever emerged. In order to overcome this situation, we need a rediscovery of the *a priori* that would assimilate the very possibility of the disappearance of the transcendental from the world! A world without us, without synthesis or Übereinstimmung, in which contingency is the only necessity.

But why a world without correlation? What can we say about it? Is it possible to imagine the world without being given to someone? It is this ideal of scientific objectivity — the view from nowhere — the failure of which provides the impetus for phenomenology’s rejection of naïve realism, naturalism and materialism. Phenomenology’s answer to speculative realism would be based upon simple reference to the absurdity of ‘pure’ objectivity, which itself derives from the intersubjectively perceived common world of human beings. Our own possible contingency, even the possibility of our total extinction from Earth, is a matter of indifference, for the contingency of the emergence of reason in nature by no means entails the contingency of our per-
ceptual and cognitive access to the world. The point at which speculative philosophy closes its question is the very point of departure for the phenomenological elucidation of this transcendental contingency.

**RELINQUISHING THE TRANSCENDENTAL**

However critical her attitude to reductionist neurobiological approaches to human reason may be, Malabou still believes that only biology can provide resources sufficient for our comprehension of the contingency of the laws of nature. She emphasizes Meillassoux’s interest in mathematics and mechanistic physics to the exclusion of contemporary biology. For Malabou, it is biology that furnishes us with an idea of the variability and modifiability of the laws of nature, as developed in both its ontogenetic and phylogenetic theories of heritage.

Thus, instead of relinquishing the transcendental, we can preserve it in the distinction between *hyper-normative* and *hypo-normative* readings of the *a priori*. The hyper-normative sees the transcendental as a rigid structure, delimiting the realm of possible experience and prohibiting that which deviates from this system, thereby determining the what-is-it-like-ness of human experience. The hypo-normative casts the transcendental as constraint, the symbolic lattice of experience, open to growth and development during this very experiential flow.

An epigenetic reading of Kant would privilege the latter position, unwillingly associating itself with the non-adaptationist view of biology, which views evolution as following a proscriptive logic in providing space for non-adaptational possibilities of growth and development (Varela, Thompson, & Rosch, 1991). This position, coming close to the phenomenological understanding of the modifiability of categories (according to which the categories of experience can be modified as the flow of experience unfolds), is congruous with what Malabou recognizes in the theory of heritage: that biologically considered contingency stems from the constitution of the *a priori* through experience and learning — what she calls the empirical derivation of the *a priori*.

Malabou elucidates that from the physical point of view, the reality of the neuronal substrate is defined as liability to epigenetic modifications. The consistency of mental objects for cognitive neuroscience emerges from the stabilization of neuronal structures of this substrate rather than from its stabilized condition. For the neurological medium, contingency is defined as the metastability of neuronal tissue: contingency plays a major role in selectively determining the physical realization (i.e. compartmentalization, stabilization, and polarization) of the neuronal structure. So it
is the epigenetic contingency of the brain that determines the natural historical contingency of the world, and not vice versa. What Malabou posits is the relevance of the epigenetic structure of reality without the dice throw, the play of nature's adaptivity and metamorphoses plotted upon the surface of a transcendental/neurobiological reason.

**EPIGENESIS AS TRANSCENDENTAL CONTINGENCY**

The book’s concluding chapter presents the general outline of what Malabou designates as the “epigenetic paradigm of rationality”. The task of this project is to reconcile a transcendental-philosophical universalism with an epigenetic understanding of reason as dependent upon endogenous and exogenous factors, anticipating the retroactive transformation of the Kantian transcendentalism of the first *Critique* in the third. Epigenesis is anchored, defined as the growth of organic form, and established within an economy of interrelated code (architectonics), interpretation (ontogeny/phylogeny) and transformation (epigenesis).

The point of departure for this is the notion that the architectonics of pure reason introduced in the *Critique of Pure Reason* turns out to be a mere moment in the gradual growth and development of subjective life. Until reason confronts that which eludes its habitual ways of conceptualizing experience, we cannot speak of the fully-fledged constitution of reason. The opportunity for such an engagement of the subject and its transformative experiencing is laid out in §27 of the first *Critique* under the “epigenesis of pure reason,” though its concrete realization is reserved for §81 of the *Critique of the Power of Judgment*, in Kant’s elucidation of the teleology of living beings.

In particular, Malabou is interested in the Kantian distinction between mechanistic causality and the teleology of living beings, which are capable of becoming the causes of their own movement. When reason faces the living being and tries to say something (make a predicative judgment) about it, its habitual categorical framework fails: the meeting of the categories of thought and a novel experience initiates a process of transformation of the very system of categories (including the category of necessity). This process, according to Malabou, begins at this encounter between categories and experience.

How can we make a judgement about the living, recognize something as living? The capacity to take measure of the living being and its irreducibility to simple causal relations implies a gradual adjustment of the transcendental coordinates (i.e. categories) to the experience the subject attempts to conceptualize. What is required is of no concern for an ultimate deductive foundation: our ability to recognize the non-causal
agency of living beings presupposes the opening of this original capacity to distinguish the living from the non-living, neglected in the architectonics of the subject of the first *Critique*. It allows Malabou to introduce the epigenetic development into the project of critical philosophy, underscoring this ability to distinguish living teleology as that which opens out the transcendental beyond the factual, deductive solidarity of sensory experience and the categories. This is why she claims that it is the encounter of thinking and life than can be said to be the *immanent outside* of transcendental philosophy, not hypothetical, nonsensical hyper-chaos.

Life lives in accordance with its own laws, not necessarily compatible with those laws familiar to our experience. Even for Kant himself, the transcendental, the *Übereinstimmung* of categories and sensory experience, was illustrated by an utterly non-transcendental thing. In fact, Kant uncovered *the transcendental relevance of the factuality of life*. When reason fails to recognize something as autonomous living being, it is reason itself which is forced to initiate a difference within the category of necessity; the distinction between mechanistic causality and the teleology of living beings is established retroactively. Given this factual structure of correlation, we possess the possibility to move beyond its limits (to the contingent ‘other alterity’), where the sequenced feedback loops of reason and its environment compel the former’s architectonics to differentiate and compartmentalize itself.

**THE FUTURE OF KANT?**

This interpretative transformation is what Malabou tries to incorporate into the very project of transcendental philosophy, focusing upon the retroactive impact of the third *Critique* upon the first, eventually coming to defend the transcendental from the point of its relinquishment. For the purposefulness in nature permits for an opening out of the multiplicity of the *a priori*, including even the very possibility of its own evanescence. Life’s self-organization, according to Kant, develops according to its own laws and can have no use for reason’s judgment on it. In point of fact, nature is decorrelated, for a great many organisms can constitute their own worlds, alien for us humans — worlds saturated with meanings that elude our faculty of judgement. This faculty is forced to dissemble its own attitudes, epigenetically transforming itself in order to co-intend these alien life forms’ meanings. This is why Malabou evaluates Meillassoux’s accusation of Kant as wrong, with reference to Kant’s understanding of the factually contingent status of reason in nature, the former proving itself to be impotent against its own contingency or factuality. This is exactly what Kant does when he brings reason to collision with life.
Therefore, Meillassoux is mistaken when he pits necessity — defined as mechanistic causality — against contingency. This opposition does not exhaust all the possibilities that extend beyond the mechanistic worldview. There is a necessity which cannot be reduced to mechanistic determination, providing a space for developing a multiplicity of necessities, of which causal necessity is but one kind. When we face the phenomenon of life, we are forced to transform our categories in order to retain the stability of correlation by juxtaposing the factual structure of our reason with the outside of natural history. It follows that within our correlation there is an immanent possibility of its own overcoming, the emergence of a decorrelated nature given in radically different categories and modes of givenness.

The epigenesis of pure reason discloses the dynamical dimension of the transcendent, combining both structural and evolutionary views of reason; an outright choice between these two polarities is unwarranted. The system of the epigenesis secures the stability of the phenomenal world and allows for the possibility of the structural transformation of reason, establishing an *economy of transcendental contingency*. Thematizing the encounter of thought and life, Malabou’s contribution gives an account of a new transcendental philosophy, possessing its restored rights to pursue the *hypo-normatively* understood invariants of our cognitive access to the world. This new approach to the transcendental implants the capacity for metamorphosis within the subject and opens a new page in the history of “the future of Kant,” yet to be explored.

REFERENCES

Gould, S. J., & Lewontin, R. C. (1979). The Spandrels of San Marco and the Panglossian Paradigm: A Critique of the Adaptationist Programme. *Proceedings of the Royal Society of London*, 205, 581–598.

Malabou, C. (2014). *Avant demain. Épigenèse et rationalité*. Paris: P. U. F.

Malabou, C. (2016). *Before Tomorrow: Epigenesis and Rationality*. Malden, Cambridge: Polity Press.

Varela, F., Thompson, E., & Rosch, E. (1991). *The Embodied Mind: Cognitive Science and Human Experience*. Cambridge, Massachussets, London, England: The MIT Press.