

**The “Biology” To Come?  
Encounter between Husserl, Nietzsche and Some Contemporaries  
B. Bergo, Université de Montréal**

**Introduction**

This essay addresses two problems whose outcome indicates the site where a dialogue between phenomenology and Nietzsche might begin. The first problem can be posed as a question: What is the “biology” to which Husserl refers in Appendix 23 of the *Crisis* (published 1936), and which is set forth as the “universal ontology?” The second problem concerns embodied consciousness and its life-world. If phenomenology was to serve as the foundation for all scientific endeavors, how then could biology be equated with ontology, and what relationship other than derivative could biology have to phenomenology?

Let us recall the spirit of the *Crisis of European Sciences* in light of Husserl’s overarching project. By the time he published the *Crisis*, transcendental psychology was to lead back to the fundamental science of phenomenology. Not that Husserl had made a psychologistic turn; on the contrary, he was simply asserting the primacy of embodied, constituting consciousness as the foundation from which to derive what he called “regional ontologies.” A number of access routes thus opened to transcendental phenomenology, including the critical-historical, that of a fundamental psychology, and perhaps that of the biology to come, grounded in the *Lebenswelt*. Transcendental phenomenology remained the formal foundation of all other inquiries, subjective or objective. Phenomenological consciousness, as meaning-conferral, remained the dynamic correlation of noetic aiming and noematic donation, out of which other domains of

positive knowledge implicitly arose. Yet by the 1930s, Husserl's investigation into intersubjective *intropathy* [*Einfühlung*], passive syntheses, and association had clearly shown the conundrums of phenomenological consciousness. Thus, consciousness was invariably embodied and tied to bodily movements (*kinestheses*). However, the essential ground of consciousness, as spontaneous self-constitution and as the flow of time, proceeded on the basis of now-moments and their retentions, rooted in neurological processes unavailable to phenomenological description. Thus, the brief arguments for biology, presented in Appendix 23 (left out of the English translation), had to do with Husserl's efforts to situate life, understood as physiological processes in lived bodies, in relation to the consciousness brought to light by transcendental psychology. Nevertheless, if biology was to be universal *ontology*, that meant that the relationship between life and consciousness had come center stage, with life and consciousness, consciousness and the life-world constituting each other dynamically.

[B]iology is certainly also—like all positive science—naïve science and “artwork,” where the word is understood as a higher analogy for craftsmanship. The higher consists in that [biology] carries in itself an obscure meaning, whose true and authentic ontological significance [*Seinssinn*] it seeks to work out as knowledge [*Erkenntnis*], although it can never reach this [knowledge] in its present form. But biology, above all, could never become a concrete theory of the life-world... [although] its proximity to the sources of evidence makes it so near to the depths of things themselves that the way toward transcendental philosophy ought to be easiest for it and with this too, the way to the true a priori... (*Hua* VI, 483)

The argument for a higher level of inquiry in biology rested on a certainty about which Husserl had long been more dogmatic than Heidegger: a *living* being exists coupled at multiple levels with its world. It is never, as transcendental consciousness might be, separable from world or others. Therefore, the biology to come, for Husserl,

had to have as its object, “living,” understood as the correlations of organisms and their life-world. “Biology is, for humans, essentially directed by their actual, originally experienceable humanity, because life alone is original, above all, and given in an authentic way in the self-understanding of the biological [des Biologischen]” (*Hua* VI, 482). Moreover, because living is “subjectivated,” individuated thanks to the interaction of organisms with their life-world, the biology of that world, as experienced by human consciousness “on Earth,” ought to be universal. It should provide concepts for understanding life in *any Lebenswelt*. Rather than overtaking transcendental psychology, the biology to come pointed to a long-standing tension in Husserl’s work between lived experience and its physiological conditions of possibility. This tension accompanied his investigations into affects and drives throughout the 1920’s and it haunted phenomenology in its *formalist* quality as the science of consciousness.

By 1936, a dual tension was obvious in Husserl, between transcendental consciousness and embodiment on the one hand, and between subjective embodiment and life broadly construed as worldly on the other. How could the biology Husserl envisioned as “fundamental” simultaneously elucidate the *living* that qualified the *Lebenswelt* and the “psycho-physics” that underlay the dynamic flow and subjective pull of transcendental consciousness (as inner time and as ownness)? Was it just a thought experiment that led Husserl to argue that “biology is the concrete and authentic psycho-physics” (*Hua* VI, 484)—and this, precisely because it “has the same world generality as physics”? In principle, this was more than an experiment. “Any sense that a biology of Venus could have, if we were to speak of this as a possibility, is thanks to the originary meaning-constitution [*Sinnbildung*] of our life-world, and hence, thanks to the theoretical

elaboration of this meaning-constitution through our biology...this task gives it an infinite horizon” (*Hua* VI, 484). If biology—reconstituted in accord with phenomenology’s approach to experience *before* it is divided into objective versus subjective experience—should rival physics through its direct and universal approach to life, then the biology to come should rival the transcendental psychology Husserl presented in the *Crisis*, because biology encompasses life as the dynamic of living, beyond consciousness as intentionality. Was this Husserl’s response to the vast appeal of *Lebensphilosophie* in the 1930s? Was it a way into the “world” Heidegger had considered in his hermeneutic of *Dasein*? However we answer these questions, Husserl clearly struggled against Heidegger’s approach to animal life, continually refining his conception of *Einfühlung* between 1910 and 1933. As the science of life, then, understood as self-development and self-sensing, biology could alone provide the extra-phenomenological “roots” for embodied processes *even as they enabled and came into consciousness* (as instincts, drives, and sensations). In turn, transcendental phenomenology would elucidate the multiple modes by which drives and sensations were synthesized as the conscious experience of life. This claim was elicited and supported by Husserl’s investigations into the synthesis of time consciousness, and it takes on real urgency in his 1920s studies of passive association. Yet the claim urges some reconciliation of life (understood as self-affection *and* as other living beings) with consciousness reduced to the transcendental flow and to passive syntheses.<sup>1</sup> In his methodological neutrality, Husserl refused both

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<sup>1</sup> In other words, over the twenty years in which he penned his notes on passive synthesis, Husserl recognized that events like “association” and changes in affects, mirrored life processes whose intelligibility alone could buttress a phenomenology extended to affectivity and even drives. Biology would provide this support as psycho-physics (*Crisis*, 400). Does this mean that a different path different from psychology and phenomenology was necessary for attaining a transcendental foundation? I prefer to

dualism and monism, but the task of developing a unified frame of description for bodily and mental events grew more manifest in his “genetic” investigations (i.e., those pertaining to the developmental aspects of consciousness, tied to the body). It is here that Nietzsche’s meditation on forces in bodies suggests a dialogue with phenomenology.

### **Husserl’s Phenomenology: An Idealism?**

Before proceeding to Nietzsche, some remarks must be made about Husserl’s idealism. Husserl largely refused the label, especially not by the 1930s, when phenomenology was genetic and critical—of psychologistic consciousness and idealist abstractions, ushered in by the loss of the *Lebenswelt* (through Galileo’s mathematization of physics). The *Crisis* questioned back following a genealogy of the scientific worldview, in search of the *Lebenswelt* still present in Aristotle. It criticized Descartes’ dualist ontology. The upshot of these fundamental philosophical decisions was, as Husserl argued:

The natural science of the modern period, establishing itself as physics, has its roots in the consistent abstraction through which it wants to see, in the life-world, only corporeity [*Körperlichkeit*]. Each “thing” “has” corporeity even though, if it is (say) a human being or a work of art, it is not merely bodily but is “embodied [*verkörpert*],” like everything real. Through such an abstraction, carried out with universal consistency, the world is reduced to abstract-universal nature.... (*Hua* VI, 230)

Following this critical genealogy of modern philosophy, which Husserl carries out with rigor, the very notion of individuation is modified into substantial *rei*, associated with an equivocal, extended *or* a psychological *substance*, and set down as paradigmatic for all subsequent sciences including physics and psychology.

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say that Husserl was neither a monist nor a dualist. However, his increasing concern with life reflects the vaster question of a unified approach to it.

Human beings, concretely, in the space-time of the world, have their abstractly distinguished souls distributed among bodies, which make up, when we adopt the purely naturalistic consideration of bodies, a universe to be considered in itself as a totality. The souls themselves are external to one another...in their own abstract stratum, [but] *they do not make up a parallel total universe.* (*Hua VI*, 231)

As against Idealism, “souls” in Husserl never constitute a universe *eo ipso*. The separation of individual psyches is analogous to the abstraction performed on life, breaking physical objects and topographies into homogeneous units. It is therefore the work of transcendental psychology to open a path to phenomenology, as the deformalization of consciousness without the spatial prejudice implicit in modernist abstraction (homogeneous units). The *Crisis* thus follows a critical-genealogical route back toward what Husserl had adumbrated already in the 1905-10 lectures on internal time-consciousness: consciousness understood in and as its proper medium, consciousness understood as transcendental and synthetic yet open to description. Husserl was seeking consciousness as subjective but not in all cases individuated. Living time consciousness was “absolute subjectivity” and a dynamic flow. Beyond that, Husserl “lacked concepts” in 1905.

On the other hand, by 1936, the *Crisis* has staked out more original positions. It argued clearly that the individuation of “souls” is the result of the individuation of bodies, given the ease with which bodies can be separated and counted. It did not deny the significance of embodiment for consciousness. Yet it intimated the possibility of a totalization of consciousness, at least as Fink understood the project. Thus, while the early Husserl emphasized embodiment in service to the upwelling of now-moments forming consciousness, the genealogical phenomenology proposed reductions to what could be called meta-subjective effectivity, i.e., consciousness as pure act and livingness.

The *Crisis* aligned psychology and biology by lifting biology out of the realm of positivistic abstraction. What gave rise to this strategy?

The absolute subjectivity as flow in the time-consciousness lectures is not alien to the hypothetical “pan-psychism” of the *Crisis*. The “words lacking” for the description of the originary source-point of the now and its resulting temporal flow, also take a new shape in Husserl’s passive synthesis investigations. There, he confronted the problem of the limits of the flow and the multiple forms of association taking place in a given now-moment. He explored association as a process of contrast, similarity and identification, through our passive rapprochement of perceptions. In his notes from the 1920s, he thus moved toward a philosophy of becoming, arguing that “the unity of the thing itself is thinkable only as a unity continuously ordered and extended in time”. The possibility of association, whether as contrast or similarity, “rests...on the most originary continuity of the temporal extension” (*Hua* XI, 141). This most originary continuity presupposes “continuous becoming [*kontinuierlichen Werden*] within the temporal order” (*Hua* XI, 141) and that becoming has its neurological correlate. While many associations appear gratuitous, irrational, or idiosyncratic, this is due to the fact that each sense (sight, hearing, touch, etc.) unfolds around itself a field particular to it, and “the ideal extension to infinity of the fields is a sort of idealization that we can accept...” (*Hua* XI, 148). Of course, *this* idealization is not Idealism, it is just a heuristic about time designed to parallel the dynamic permanence of the body. What, however, made possible the overarching synthesis of these perceptual fields? The answer could only be psychophysical.

A more perplexing problem concerned that curious *non*-field called affectivity. Certain associations must be the result of an “originary affection,” notably contrastive associations. “[W]e must characterize contrast as the most originary condition [*ursprünglichste Bedingung*] of affection” (*Hua XI*, 149). Affection, or what was once called “passions,” opened phenomenological consciousness to the sheer complexity of embodiment and tied consciousness to its complement, forgetting. Affection is also intertwined with sensuous “data,” pleasure and pain—and with drives, the “representatives” in consciousness of the instincts.

From the sphere of affect [*Gemütssphäre*] we must take into account only those feelings [*Gefühle*] originally tied to sensuous data and say: on the one hand, the affection coming into being is functionally codependent on the relative size of the contrast; on the other hand, it is also dependent on privileged sensuous sentiments [*bevorzugenden sinnlichen Gefühlung*] like a sentiment of sensuous pleasure grounded in its unity by that which detaches [from the flow of consciousness in an associative moment]. We must likewise allow for drive-preferences [*triebmässige Bevorzugungen*], [which are] originally instinctive. (*Hua XI*, 150).

Uniting embodied perception with events in the *Lebenswelt*, along with embodied recollection of “privileged sensuous sentiments” and the surfacing of “drive preferences,” Husserl forges a living consciousness. Only “life” carries the spontaneity, even the disorder of *affective* or *passional* associations. Affects are woven together with sensibility (feelings of pleasure or pain), forming the conditions of possibility of overarching hyletic unities (*Hua XI*, 152). In the investigations into passive association, the phenomenology of consciousness reaches a descriptive level apt that accounts for phenomena of forgetting and “repression.” Essential in the study of associative phenomena is that so-called “forces” in the body have their corollary—*not* their epiphenomena—in consciousness understood as an affectivity-sensibility interweave. What psychoanalysis

had ventured to describe as conscious “repression” of painful or conflictual events, opened to phenomenological description precisely thanks to emotions and affects (*Hua* XI, 152).

As the privileged connection between embodiment and “mental” activity, affection and feelings not only allow Husserl to approach intentionality as a spectrum of intensities, they provide a glimpse into patterns whereby certain sets of ideas are as if held out of the sphere of associative reactivation. The existence of these patterns is not directly demonstrable, but it proves heuristically precious when we study the seemingly illogical memory associations. These “repressions” belong so intimately to intentional consciousness—which implies consciousness *beyond* the projections of an individual psyche—that Husserl could speak of “a phenomenology of this so-called unconscious” (*Hua* XI, 154). With the extension of phenomenological description beyond sense perception *per se* and into sensuous-affective association and recollection, the phenomenological sphere of consciousness came to encompass embodiment in a broad, almost anti-idealistic way. It understood “intentionality” in such a way that critics could no longer object that the formalism intrinsic to Husserl’s phenomenology missed the mark on corporeity, and that it could therefore never grasp the broader destiny of biology—i.e., beyond what biology inherited from modernity.

Let me summarize: starting from the genealogy Husserl proposes in the *Crisis*, I inquired whether phenomenology could offer an alternative biology that provided tools for understanding any life-world, including that in places presently unknown to human enquiry. I noted that this biology could stand as fundamental ontology, encompassing “the concrete world in its entirety [and] implicitly, physics itself” (Merleau-Ponty, *Notes*

*de cours*, p. 387).<sup>2</sup> It also referred to the “concrete psycho-physics” (386) that necessarily accompanied the phenomenological project as its indispensable supplement. Clearly, as the psycho-physics adumbrated in the *Crisis* §66 had already shown, the biology Husserl had in mind was but a corollary to an *a priori* psychology of consciousness. This was radicalized in the Appendix, where biology became “absolutely universal philosophy” (387). How to parse the tension?

As a complementary psycho-physics elucidating the claims of transcendental phenomenology, biology is averred by Fink’s proposed completion of the *Crisis* project. Taking Fink’s proposal to eliminate the mutual exteriority of *Seele* to each other as the legitimate end-point, I traced what I believe is the legitimate link between the time consciousness lectures of 1905 and the *Crisis*; namely, the search for “absolute subjectivity.” Because the works spanning the years 1926-1936 introduced a genetic and historical-critical (or “generative”) element,<sup>3</sup> it is no longer merely absolute subjectivity that is pursued. It is, rather, consciousness understood as the synthesis of life and subjectivation that is at stake. This claim is borne out by many manuscripts, notably those that treat the life of feeling and affectivity. The courage of those notes on passive synthesis, preparing the *Formal and Transcendental Logic*, lies in their extraordinary expansion of the domain of consciousness into the most elusive and ostensibly arbitrary acts from inexplicable forgetting, memory lapses, to equally inexplicable associative connections. On the basis of that expansion, phenomenology could approach even the clinical observations of psychoanalysis. For example, it could understand Freud’s observations that repressed suffering spontaneously “associates” with bodily weaknesses,

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<sup>2</sup> Merleau-Ponty, *Notes de cours, 1959-1961*, ed. Claude Lefort (Paris: Gallimard/NRF, 1996), pp. 383-84.

<sup>3</sup> See Evan Thompson, *Mind in Life: Biology, Phenomenology and the Sciences of Mind* (Cambridge, MA: Harvard University Press, 2010), p. 33.

transforming them into symptoms like paralysis or cutaneous insensitivities. However, when pursued in psychotherapy, these associated psychophysical sufferings thrust roots into a past association of *desire* and *conflict*—of emotions and feelings—that could not come to light without description and dialogue. That would be the farthest phenomenological investigation can reach; i.e., toward the conditions of meaning, of life as lived sensation and affection, and thus as conscious coming into being.

### **Husserl’s Biology to Come, Read with Nietzsche’s Hermeneutics of Bodily Forces**

Nietzsche’s projected completion of Kant’s critical project entailed corporealizing theoretical reason, historicizing practical reason, and weaving together the affective inscription of history into bodies, utilizing concepts of forces. Speculatively, Nietzsche passed behind consciousness to forces in interpretation and conflict. This allowed him to use the body as the red thread of his philosophical project. We know that he read extensively in the materialist physiology of his time. He was familiar with Ernst Haeckel’s reception of Darwin and the agonistic physiology of Wilhelm Roux, for whom struggle for survival was the immanent struggle for ascendancy from which the bodily organs themselves evolved. Above all, Nietzsche extended the notion of forces into a hermeneutics without precedent, such that what forces *did correlationally* probatively defined what they *were* ontologically. The concept of *Wille zur Macht* denoted, in condensed form, the fact of forces as interactions; as Deleuze once put it force or will, “is the *differential* element of force.”<sup>4</sup> I will return to this when I discuss Nietzsche’s hermeneutics. If, for Nietzsche, consciousness was the epiphenomenon of forces within

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<sup>4</sup> Gilles Deleuze, “Philosophie de la volonté” in *Nietzsche et la philosophie* (Paris: PUF, 1962), p. 7. My translation.

bodies, it nevertheless maintained a temporary dignity as sovereign awareness. Yet, consciousness mirrored patterns already occurring in the nervous system, in tissues, or between cells. Nietzsche's "agnostic monism" of forces, even when translated as "wills to power," was not concerned with mere material things. Force was one term among many with which Nietzsche sought to explain the fundamental production of value at all levels of embodied existence. He spoke of "judgment," "spiritual event," even "mind," recognizing clearly that these concepts had come to denote what was intelligible to consciousness even though their power to conjoin or dissociate, to intensify or pacify, ameliorate or degrade was *not* limited to the activities of conscious life alone. They were better than metaphors; they were "catachreses," denoting events for which "names are lacking us." Stated otherwise, a trope—judiciously employed for an event, movement, or temporary entity that has no proper name—is not a fiction but a heuristic designed to expand the intelligibility of the things.

Up to now both explanations of organic life have *failed* to work out; neither that from mechanics, *nor that from mind* [aus dem Geiste]. I would stress *the latter*. Mind is more superficial than one suspects. The governance of organisms occurs in such a way that the mechanical world, *just as much as the spiritual one*, can only be used symbolically as explanation (KSA, 1884, 26, [68]).

Though he rejected mechanistic thought in the triumphalist form it assumed in his day,<sup>5</sup> Nietzsche urged that the more pernicious error lay in the direction of Idealism. "The body

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<sup>5</sup> Cf. Nietzsche, KSA XIII, 14 (79), Spring 1888. In a late outline for his project on the *Wille zur Macht*, Nietzsche wrote, of mechanistic philosophy: "Quanta of power [*Machtquanta*]. *Critique of Mechanism*. Let us set aside [from our project] two popular concepts: 'necessity' and 'law' [*Gesetz*]: the first posits a false compulsion [*Zwang*], the second [inserts] a false freedom into the world. 'Things' do not behave [*betragen sich*] in a regular fashion, not according to a *Rule*: there are no things (-- that is our fiction) [and] they behave even less under a compulsion of necessity."

[*der Leib*] as teacher: A moral sign language [*Zeichensprache*] of the affects.”<sup>6</sup> In the following year, he noted:

—All movements are to be grasped as behaviors, as a kind of language [*eine Art Sprache*], through which the forces understand each other.... Problem of the possibility of “error?” The opposition is not “false,” and “true,” but rather the “*abbreviations of signs*” in contrast with the signs themselves. The essential [thing for us] is: the construction of forms that *represent* many movements [*welche viele Bewegungen repräsentieren*], the invention of signs [*Zeichen*] for whole types of signs...<sup>7</sup>

Nietzsche interpreted the interactions of forces “semiotically” as the multiple interactions of partial meanings, expressed by “abbreviations of signs” at every level of existence. That was Nietzsche’s perspectivalism and his agnostic monism, and we must recall that the term “semiotics,” as the technique of communication and its interpretation, denoted in his time that branch of medicine concerned with interpreting *bodily* symptoms—an *eidetics*. In this way, the distance between thought and bodily processes could be diminished without introducing an idealistic interpretation of “mind” *or* a merely mechanistic approach to the body.

Thought is not yet the internal event itself, but rather only a language of signs [*Zeichensprache*] for power adjustments [*Machtausgleich*] among affects.<sup>8</sup>

There is neither a positivistic biology nor a mechanics of forces in Nietzsche. The figure of forces unfolds through two basic stages: the critiques of mechanics and idealism, followed by the reconceptualization of communication as sign-interactions and the generalization of force as behavior and “language.” Since human language is

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<sup>6</sup> KSA XI, 15 (113), Winter 1884.

<sup>7</sup> KSA XI, I (28), Fall 1885-Winter 1886.

<sup>8</sup> KSA XI, I (28), Fall 1885-Winter 1886. Hereafter abbreviated in the text.

fundamentally metaphorical, “meaning” depends on the flexibility that tropes introduce into expression. Thus, the second stage entails a search for connections between operative signs in bodies and those “abbreviations of signs” that explain the former and “sum up whole types of signs.” This requires reading beneath the description of the contents of consciousness, because “thought is not yet the internal event itself, but rather only a language of signs [*Zeichensprache*], a semiotics of power adjustments.” Semiotics notwithstanding, the most effective way past the mechanistic reduction of forces would be through a phenomenology of affectivity, as epiphenomena of forces, and through the extension of the interpretive strategy *beyond* human languages to as broad a domain of codes as possible. Here, “codes” simply denote momentary stabilizations of force, “meta-stabilizations.” The first step in this paradoxical naturalization of hermeneutics—which Nietzsche calls “humanization...according to us” (KSA XI, I, 28)—turns on acknowledging that interpretation is locally purposive. That is, what we call “value-judgments [*Werthschätzungen*] abide in all sense-activities [*Sinnes-Thätigkeiten*]” (KSA, XI, 26, [72]).<sup>9</sup> The concept of judgment must be extended past discursive construction.<sup>10</sup>

The ground of an investigation of life is therefore twofold for Nietzsche: it is essentially interpretive dynamics in view of an operational good or growth (for tissues, for an organism, for a species, for a community), and it is the heuristic “unit” of exchange called

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<sup>9</sup> Note also KSA XI, 25 (401), Winter 1884: “There must be an *abundance of consciousnesses* and wills in each complex organic being: our uppermost consciousness takes it as habitual [that] the others are closed [*geschlossen*]. The smallest organic creature [*Geschöpf*] must have consciousness and will.” As if by implication, value judgments, like needs, had to be sought in “Life.” What is life for Nietzsche? It is a dynamics of encounters, interpretations, and “judgments,” creating fragile equilibriums. Clearly, the Kantian project, centered on the meaning and possibility of judgment, is “biologized” and extended to a multilayered nature.

<sup>10</sup> See, for example, KSA XII, 2 (84), Fall 1885-Fall 1886: “The [act of] judging is our oldest belief, our habitual taking-for-true or for-untrue.”

*Kräfte* [forces]. These are fundamentally the same, approached from different perspectives. That is why “the humanization of nature” is unique in Nietzsche and depends on a multi-leveled dynamics using combinatorics called *Zeichen* (signs).

Now, that is not to say that psycho-physics can be phenomenology; at least, given the analytic constituents of the phenomenological project: noematic aiming, noetic objects, and beneath these a “flowing field of lived experiences, in the midst of which there is continuously a field of originary impressions...and...the ego that is affected by [that field] and motivated to action.”<sup>11</sup> Yet, again, Nietzsche himself is not so much proposing a psycho-physics as he is seeking imbricated languages or signs for what conditions the phenomena but is not phenomenalizable: *Kräfte, Triebe*. But then, what is psycho-physics if not a search for the dynamic accompaniment and conditions of possibility of what we call “psychic” life?

A certain conundrum arises: What Husserl knew of Nietzsche likely came to him through Heidegger’s ongoing interpretation of the latter, yet nothing leads us to believe that Husserl grasped the radicality of Nietzsche’s revaluation of psycho-physics. However, if a crucial dimension of Husserl’s expanded phenomenology to come was to be biology, as he indicated, then could psycho-physics expand, rather than displace, transcendental psychology; say, by recognizing that the material and the laws of the psycho-physics operate alongside, but independently of, the phenomenological reduction of consciousness? It is clear that, in psycho-physics, mechanistic causality, as well as higher-level distinctions between thought, memory, and fantasy invariably stand under the subjective-objective dichotomy rather than under the phenomenological *epochē* that

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<sup>11</sup> Husserl, Manuscript C 7 I, p. 18; cited by Didier Franck, *Dramatique des Phénomènes* (Paris : Presses universitaires de France, 2001, p. 112.

provides us “experience” *before* subjects and objects are parsed out. Could the dichotomy flowing from the *world thesis* intrinsic to positive science be used *critically*, rather than being imposed on a phenomenology of fundamental conscious activity? Certainly, and Nietzsche’s (de-)humanization of forces opened toward models of self-regulating processes, with some stasis, but not substantification, and the rejection of linear causality. Nietzsche’s agnostic monism “materializes” and historicizes Kant’s conception of “judgment,” using what Klossowski aptly translated as “semiotics” without one single interpretive code. If the problem of a “hermeneutic biology”—one similarly close to what Merleau-Ponty sought in thinking Husserl’s *Ineinander* (in-each-other) of phenomena, as the *entrelacs*—is how to overcome the dualism between living (self-affecting) beings and beings observed as alive, then Nietzsche’s was the most radical such overcoming in the 19<sup>th</sup> century.

As a perspectival monism, Nietzsche’s use of forces as his “common currency” is not uncommon in the history of science, in which force was necessarily something imperceptible, and its “effects” reconstructive. In Nietzsche, however, a dynamics of signs opens ultimately to a good—virtually “moral”—albeit expanded beyond any ethics of “good and evil.” This dimension of his project is pre-Modern, prior to the regionalization of reason, or to types of substances. We ought not to take it, however, as foreign to the phenomenological monism Merleau-Ponty was seeking. Merleau-Ponty’s philosophy of nature explored an expanded sense of the interpretation of information in cybernetic models, arguing critically about the latter in light of self-conscious beings.

“...the positive value of cybernetics [lies in that] it invites us to discover an animality in the subject, an apparatus for organizing perspectives....”<sup>12</sup>

### **Bridging forces and the flesh: from Nietzsche to Merleau-Ponty**

It is neither possible nor ultimately desirable to synthesize Nietzsche and Husserl. However, something like their “dialogue” is worked out implicitly in subsequent developments of phenomenology. Working from Husserl’s explorations of intersubjective constitution, *Einfühlung*, and the flesh [*der Leib*],<sup>13</sup> Merleau-Ponty first extended Husserl’s investigations of the “flesh” of language and body into perception very broadly conceived.<sup>14</sup> The tension between *biology* as “universal ontology” and *psychology* as the ladder toward Husserl’s final, transcendental philosophy in the *Crisis* could thus be approached as two pillars of phenomenology, not as vacillation on Husserl’s part. To be sure, the problem of psycho-physics was rather late in coming to Husserl, with, among other things, the phenomenological constitution of “a universal drive-intentionality.”<sup>15</sup> There again, hermeneutic biology represented the indispensable supplement, the heuristic ladder leading from a comprehensive psychology to phenomenology itself.

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<sup>12</sup> Merleau-Ponty, *La nature. Notes de cours du Collège de France*, ed. Dominique Séglaard (Paris: Seuil, 1995), pp. 214-19.

<sup>13</sup> See, for example, Husserl’s notes “Flesh—Thing—Intropathy: Relation of the Body (*Leib*) and the Soul, 1921, in *Sur l’intersubjectivité*, I, tr. Natalie Depraz (Paris: Presses Universitaires de France, 2001), pp. 71-96, notably, §§6 and 7 “The Connection of the body (*Leib*) and the Soul” and “Regulations in the Constitution of the Thing: The Flesh as Index of Psychic Normality and Abnormality.” Also see his 1932 notes on “absolute perception” as apperception and association, in the same collection, pp. 188-98.

<sup>14</sup> Husserl, *Ideen I*, §124. Also see *La phénoménologie de la perception* (Paris: Gallimard, 1945), Part I and Part II, chapters 3 and 4.

<sup>15</sup> “Universale Teleologie,” in *Zur Phänomenologie der Intersubjectivität*, *Hua XV*, pp. 594-95. Compare Husserl’s notes on individuation from 1922, § 2 where he argues: “The system of appearances has a double normativity, on the one hand that of the causality of things among themselves; on the other hand...that of the conditional psychophysical possibility *which we make our constant hypothesis....*” (*Hua XIV*, 252).

Nevertheless, the phenomenological grounding of all sciences may constitute a debate that resists closure, since the relationship between phenomenologically reduced experience and experience objectified by sciences like biology remains to be clarified. The difficulty that emerges from Husserl's search for a reconfigured biology in Appendix XXIII was that it had to elucidate psychology as "psycho-physics"<sup>16</sup> and form the ground from which one could describe other life-worlds, including those of animals and of worlds foreign to us. This projected biology opened toward *ontologies* presently unknown [*unbekannte Ontologie*], and all of this indicates a quest for a dualism at least sublated or circumscribed by a *hypothetical* monism.

If we return to the ultimate sources of evidence...it appears that biology is not a contingent discipline in relation to an insignificant planet... [but that] a general biology has the same world-commonality [*Weltallgemeinheit*] as physics. The entire meaning that a biology of Venus might have, of whose possibility we might speak, is owed to the originary construction of our lived world.<sup>17</sup>

Although Appendix XXIII was a thought-experiment, it was utterly representative of the direction Husserl was striving to take. Its precise place in the version we have of the *Crisis* is unclear, and may be contested by Fink's proposed completion of the work. However, what is important is that the radicalized approach to life, understood as the *Ineinander* of living beings in humans, runs parallel with the correlation structure of organisms and their worlds, as well as the *a priori* correlation of noesis and noema. Merleau-Ponty's comments on the Appendix suggest that Husserl is rethinking

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<sup>16</sup> Husserl argues, on the first page of the short Appendix, that "We have naturally, first, a biological *a priori* for man: the *a priori* of the bodily instincts, the originary drives (*Urtriebe*), whose fulfillment (eating, coupling) contains, internally, this *a priori*. Naturally too, we have a biological *a priori* of animals to the entire degree to which animality is grasped in a real experience through *Einfühlung* [intropathy]. We thus have a generative *a priori*." See Merleau-Ponty's translation of Appendix XXIII, in *Notes de cours, 1959-1961*, pp. 383-84.

<sup>17</sup> Merleau-Ponty, *Notes de cours, 1959-1961*, p. 386.

Heidegger: “Organism: *Ineinander* of subjectivity, I (and finally I, reflecting) and corporeal machines. The organism [as] a variant of *Einfühlung*. I know the [other] organism because I am it [*parce que je le suis*]. Relation Being man cf. Heidegger (All things in man, but because man is all things).”<sup>18</sup> We know that Merleau-Ponty is more indebted to Husserl than it seemed at the time of his death, in 1961. It was Husserl who, by the mid-1930s, had first pondering a multi-dimensional ontology: world of life, “life of consciousness,” and animal and alien life-worlds. It could well be argued that, as universal ontology and as psycho-physics, biology momentarily gave Husserl more than a path toward transcendental phenomenology. Indeed, the hermeneutic biology, or “universal ontology” set forth in Appendix XXIII could even clarify Fink’s outline for the completion of the *Crisis* (cf. Appendix XXIX) through the adumbration of a “world-consciousness”, in which “the *appearance of the mutual externality of souls* [*Aussereinander der Seelen*]” is decisively contested (*Hua* XI, Appendix XXIX, 514-16).

If we ponder this extension, then Fink’s Husserl is opening a path not readily inferred from his pre-1920s writings; that toward a world-consciousness approached simultaneously from transcendental psychology and from a “biology [become] truly universal.”<sup>19</sup> That would agree with his investigations into the universal drive-intentionality proper to all living beings. While it does not resolve the problem of life as self-affection *versus* life as the observed, living alterity of other beings in the world, it does rethink the best elements in the vitalist biology of his time.

### ***Ineinander*: Nietzsche and (Neuro-)phenomenology**

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<sup>18</sup> Merleau-Ponty, *Notes de cours, 1959-1961*, p. 387. I follow the punctuation, or lack of it, in the *Notes*.

<sup>19</sup> *Notes de cours, 1959-1961*, p. 387.

Recent neuro-phenomenology, indebted to Merleau-Ponty, is developing a dynamic materialism that is hypothetically monist, but does not reduce consciousness to mere brain activity. If we acknowledge the impossibility of constructing a bridge between the immanence of pure self-affection and objective, living beings, we do not have to abandon Husserl's *Ineinander* or Merleau-Ponty's *entrelacs* or chiasm. We should hold fast—as we examine neuro-phenomenology—the need for a concept that joins perception and world. And indeed, Merleau-Ponty's great merit was to have approached conscious life from both directions: from lived experience (interpretation) *and* from a philosophy of nature (biology and aspects of *Lebensphilosophie*). That said, Merleau-Ponty had already ventured past Husserl's approach to consciousness by exploiting resources in the psychoanalysis of pathology, by examining “perception” in neuroses (Freud's *Dora*) and “perception” in the delirium staged in Jensen's novel, *Gradiva*.<sup>20</sup> Moreover, he proposed what he called an “aesthesiology” of the lived body, contrasting the vitalism of Hans Driesch (1921) with the animal behaviorism of von Uexküll.

Influenced by Merleau-Ponty, Bernard Andrieu moves in a similarly monist direction. Although he does not mention him, Andrieu's monism strikingly recalls Nietzsche's experiments. For Andrieu, the neuro-philosophical question is less one of finding common units or forces at work in living bodies, than one of consolidating an informational model, with its accompanying sign language, with a programming model that takes into account the ongoing influence of exchanges between world, body, and thought. This is clearly one of the recent extensions of Husserl's *Ineinander*. Andrieu's project of a *matérialisme dynamique* is thus based neither on electrical nor hydraulic

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<sup>20</sup> Merleau-Ponty, *L'institution/ la passivité : Notes de cours au Collège de France, 1954-1955* (Paris: Belin, 2002).

metaphors, as was traditionally proposed. He argues, instead, for a “flesh of the brain,” integrating Merleau-Ponty’s subjectivations through, and as, perception with Nietzsche’s operative forces. On Andrieu’s account, the brain proves to be the “progressive incarnation of incorporations [taken from without].”<sup>21</sup> If phenomenology sought to complexify subjectivity, understood as something static, then Andrieu will argue, following Merleau-Ponty and Nietzsche, that “subjectivity is a result of a continuous movement of adaptation and regulation” (CP, 560). He means that subjectivity is firstly a body which, itself, is, above all, a variable locus of interactions. He reminds us that “nothing entirely objective can be known...” (CP, 560), arguing that something absolutely objective would be open to no “perception,” to no possible interaction with living bodies. This allows Andrieu to conclude that “the knowledge of the world [is] relative to each human body. [Moreover, the] relativity of each one in no way forbids the establishment...of a provisional truth about the human body within the scientific attitude” (CP, 560). Following a model of dynamic subjectivation, animal consciousness broadly construed can be defined as adaptive interactions and as a structure of self-interruption (*viz.*, as the possibility or inaugural hesitation intrinsic to reflection). Consistent with Merleau-Ponty’s notion of the flesh, Andrieu argues for the body as an interface, in which the brain produces consciousness indirectly as surplus activity. This is thanks to the multiplicity of interactions between environments and bodies, even between tissues. Hence the programming model mentioned above, which operates like an in-forming, at multiple levels, in regard to “information” in continuous exchange. The resemblance to Nietzsche is striking.

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<sup>21</sup> Bernard Andrieu, *Le corps pensant: mouvement épistémologique de la philosophie dans la biologie 1950-2000*, in *Revue internationale de philosophie*, IV, 2002, p. 559. All translations mine.

Like Merleau-Ponty, Andrieu also argues for an aesthesiology that presupposes biology but does not start with it:

Sensation is felt by means of the nervous structure in the body, such that two human bodies can never experience the same intensity with regard to the same object. Psychometry, modernized by electro-physiology, quantifies the quality of lived experiences of the body. This method establishes an objective knowledge by measuring reaction times and perceptual thresholds. *But the visualization of electrical exchanges will never say anything about the way in which the body feels these in itself* (CP, 560).

Because he is approaching body, consciousness, and thought as part of a single interactive model, Andrieu proposes what I would call an *epochē* of quantity. He holds temporarily out of consideration quantificational models, without denying their significance to particular contexts of explanation, much the way Husserl bracketed the positive sciences without ever denying their applicability. If experienced sensations and affects are continuously transformed from qualities into quantities, then quality must be considered primordial; the first lived *transitivity*. The primacy of bio-hermeneutics is thus only supplemented by a physico-chemical reduction. Aesthesiology points in the direction of a body in the process of (qualitative) subjectivation. As Andrieu emphasizes, “Two human bodies can never feel the same intensity with regard to the same object. This impossible intersubjectivity *keeps bodies outside of themselves and each body in itself*, thereby making difficult any linguistic expression of aesthesiological lived experience” (CP, 560, emphasis added). Approached from the perspective of psychophysics, Andrieu’s aesthesiology well describes the transitivity of life, understood as the movements of bodies outside themselves, *toward...* Recent phenomenology (Renaud Barbaras drawing from Levinas and Deleuze) has characterized this as “transcendental

desire.”<sup>22</sup> A body outside-itself is a body “toward-the-other,” whether this “other” is the world or another person or entity. The advantage of the model proposed here lies in its ability to explain individuation, interaction without reductionism, and a certain “autonomy” of conscious thought relative to neurological activity. “Autonomy” need not mean “independence”; however, the nature of the contents of thoughts—sentences, images—creates the *illusion* of independence. Indeed, in this project, which borrows extensively from Gilbert Simondon’s “resolute monism” (CP, 561), the organization of the body, and with it mental activity, proceeds ongoingly in interactive connections (CP, 563). “Psychological individuation comes down to that of the central nervous system in interactive communication with its genetic programming” (CP, 563). This programming—in the development of brain-consciousness—takes place at multiple levels, as it did in Nietzsche. One of these is REM sleep, wherein interactions are laid down and stabilized temporarily.

Another possible way through our conundrum is via the enactive approach to consciousness, proposed by the late neuro-phenomenologist Francisco Varela, and expanded in Evan Thompson’s *Mind in Life*.<sup>23</sup> The enactive approach “uses phenomenology to explicate mind science and mind science to explicate phenomenology” as reciprocally elucidating (ML, 265). According to their account, indebted both to dynamical systems theory and to Merleau-Ponty, an organism and its primitive milieu (*Urwelt*) cannot be separated, including on a conceptual level, without doing violence to their dynamic coupling. The enactive approach proposes that “living is sense-making” (ML, 158): The meaning of an “environment,” the information that is

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<sup>22</sup> Barbaras, *Introduction à une phénoménologie de la vie* (Paris: Vrin, 2008), p. 368ff.

<sup>23</sup> Evan Thompson, *Mind in Life: Biology, Phenomenology, and the Sciences of the Mind*. Hereafter ML.

available *for* an organism about its milieu, is not simply “out there.” Rather, the organism, as an autonomous and autopoietic system, along with its *Urwelt* to which it is structurally coupled, form a dynamical system in which the organizational and operational closure<sup>24</sup> of the organism confers to it a stable identity, while simultaneously giving meaning (i.e., “valence,” or value in an almost Nietzschean sense) to its surroundings. This argument is reminiscent of Nietzsche’s account of forces that co-determine each other dynamically. It complements the approach to the notion of autonomy that Andrieu proposed, taking it in a mathematical, informational direction.

In both these neuro-phenomenological models, subjectivity is never a fixed result but an ongoing process. Individuation is similarly not an outcome but a term ingredient to the definition of any *milieu*, any environment (CP, 564). Finally, the life of an animal unfolds progressively, through fragile stabilizations generally open to degrees of modification. As Andrieu puts it, ““We are thus in the presence of a system of progressive nestings [*emboîtements*] of representations and levels of reality, from the genome to the brain, passing through the body’. In re-evaluating the role of the body in the physiological representation that the brain [develops] of its own genome, thought [broadly construed] becomes the site of the living body” (CP, 565, citing Prochiantz).<sup>25</sup>

The spirit of aesthesiology is faithful to phenomenology, notably the late phenomenology that reached toward biology as a psycho-physics and the authentic

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<sup>24</sup>“*Organizational closure* refers to the self-referential (circular and recursive) network of relations that define the system as a unity, and *operational closure* to the re-entrant and recurrent dynamics of such a system. An autonomous system is always structurally coupled with its environment.... ‘Structural coupling’ refers to the history of recurrent interactions between two or more systems that leads to a structural congruence between them. Thus state changes of an autonomous system result from its operational closure and structural coupling” (ML, 45).

<sup>25</sup> Alain Prochiantz, *La biologie dans le boudoir* (Paris: Odile Jacob, 1995).

ontology. This concern was both Husserl's own, late in life, and that of Merleau-Ponty. The paradox of the dual approach I noted, is precisely that, to reach anything like a hypothetical monism of living being, requires a concerted dual path. Nietzsche understood this, elaborating a poetics of living (*Zarathustra*) and a poetics of forces drawn from his reading of 19<sup>th</sup> century physiology. The *epochē* Andrieu seems to have placed on quantity has, as its goal, to dispense us with "meta-physical" units, imported into arguments to measure *quanta* of excitations. Nietzsche, for his part, had long since demonstrated the necessity of deconstructing such units, whether *Reiz*, atoms, or souls. In light of recent work in neuroscience, Andrieu adds:

Reasoning on pathology has been able to show the connection...between this [bodily] matter and these mental forms [sentences, images]. When destroyed or injured, the physico-chemical matter of our sensibility can no longer furnish matter for thinking; or rather, there is a proportional relationship between the quality of sensations and the qualities of mental activities. The body furnishes matter for thinking *even if the way in which thought represents its mental states is perceived by it as if independent* (CP, 565).

To insist on autonomy, but not independence, reopens the thinking of the body-mind imbrications and in so doing, invites us to reconceive thought as "a surplus of brain activity," or better, as the body thinking itself *through* mental representations. This further implies a necessary "complementarity between the brain and the unconscious and poses the problem of continuity between the two" (CP, 567).

As we know, it was Nietzsche's project to reconceptualize Kant's "judgment." His choice of force managed to elude the problem of units of quantity, opting instead for an early dynamics. Nietzsche's dynamics introduced interpretation, accommodation, and domination into the biological model of his time, emphasizing structures of obedience

and command in order to preserve the hierarchy intrinsic to value judgments. This simply means that certain organizations of cells, tissues, even living beings “work” better for their growth and flourishing than do others. The problem we noted of a common currency is temporarily suspended with the *epochē* on quantity—displacing for heuristic ends the primacy of quantity and its metaphysical recourse to units of measure. As a number of Husserl’s commentators have asked (Paul Ricoeur, among them): What are we to make of conscious life when we *remove* the phenomenological brackets? Could not a similar question be posed of the neuro-phenomenology flowing simultaneously out of Gilbert Simondon and Maurice Merleau-Ponty? To be sure. But what we would have, upon removing the brackets, simply breaks into the objects of psychology and biology, or again, comes down to human experience as the object of multiple sciences or regional ontologies.

Gilbert Simondon, like Andrieu and others since the publication of his work in the 1960s, attempted to demonstrate the possibility of a monism based on energetic interactions. His work resists summary because of its complexity and the plethora of new concepts he created. Some of these were the direct result of advances in chemistry and geophysics. The formation of crystalline structures provided one image of what he called “systems of potentials,” on the basis of which elementary schemas constitute “meta-stable fields.”<sup>26</sup> The meta-stable field comes from the dynamics of liquids but should not be restricted to that domain. It could well be argued that the Nietzschean contribution to a psycho-physics lies in its similar refusal of statics and individual substances. And this strikingly anticipates the structural coupling and dynamic co-determination of organism

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<sup>26</sup> Gilbert Simondon, *L’individuation psychique et collective : à la lumière des notions de forme, informations, potentiel et métastabilité* (Paris : Aubier, 1964, 1989), p. 57.

and *Urwelt* in Thompson and von Uexküll. Without denying that beings “individuate” in transitional and ongoing ways, Nietzsche strove to keep his forces within a framework wherein becoming was *not* opposed to being. He might have found a real interest in the innovations of Simondon, Andrieu, Thompson, and Varella.

That does not mean that we can, or should, speak poetically of qualities, as though no difficulties arose in the absence of some theory of energy or energetics. But most of these theories shared the fate of socio-political environments through whose lens they were read and adjusted to the ideals of a given cultural politics. Those readings are, of course, as hazardous as Hans Driesch’s 1930’s vitalism in which the concept of organic totality and a governing principle slid deplorably into an aestheticized, politicized *Führerprinzip*.<sup>27</sup> Such slippages may be unavoidable and an entire history of 19th and early 20th century misappropriations of vitalism and *Lebensphilosophie* could be written. Nevertheless, the imperative of bridging body-world and mind-body dualisms must be taken up by a biology in continuous dialogue with psychology and, today, with neuro-philosophy. I have argued throughout that that was the direction in which Husserl’s biology as the universal ontology was moving.

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<sup>27</sup> Georges Canguilhem, *La connaissance de la vie* (Paris : Vrin, 2003), p. 123; 97 in earlier editions. Canguilhem discusses Driesch’s work, *Die Überwindung des Materialismus [The Overcoming of Materialism]* (Zürich: Ernst Harms, 1947), p. 59, in which Driesch argues: “...a machine as the instrument [*Werkzeug*] for the *Führer*—but the *Führer* is the main thing [*Hauptsache*].” To this Canguilhem adds: “It is certain that Driesch’s thought offers for our consideration a typical case of the transplantation of the biological concept of organic totality onto political grounds.”