Architectures of Thought:
Negentropy, Metabolics and the General Ephemeral

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Metaballon anapauetai

Heraclitus[1]

Dramatis concepti: terminological clarifications

Most of the terms that compose the following meditations are either explicitly determined in the text itself, or implicitly elaborated through its logic, so that every new retracing of the text should result in clarifying them further; nonetheless, a brief outline of certain key terms may facilitate a pre-comprehension and thus a smoother first passage.

Bernard Stiegler passes from a pharmacological to an organological and finally a neganthropological phase, as entropy and thermodynamics at large become ever more central to his project. Accordingly, neganthropology can be delineated as a prescriptive philosophical anthropology in the service of claiming negentropic enclaves, constructing spatiotemporal orders, the technologies of which allow for the flourishing of trans-individuation, of individual difference emerging from and for the collective.

Stiegler is thus interested in architecture, not only as the science and discourse of the built environment, but more importantly, as the principal technological structuration of milieus – of noetic life, of networks – noetic life itself being structured on the groundwork of a technologically inscribed network. The notion of the ground thereby comes to the fore, its metaphorical uses shown to be inextricable from its technical uses, as Kant's architectonic of reason is caught up between the enunciation of stability and the transformative demands of the life of reason.

Kant's reflections are pivotal here, as they set the parameters of the discourse to follow, informing, not least, Stiegler's casting of Kantian consciousness as cinematic, that is, as having all its production conditioned by technologically mediated conditions of reproducibility. In turn, the engagement with Marx makes the stakes of technological (re-)production palpable and shows that in the effort to decode the genetics of noetic life, Stiegler neglects its metabolics, consequently reinscribing the animal-human distinction that he critiques in Marx's analogy of the architect and the bee and barely finding himself with more resources than Kant, to account for the transformative instability of the architectonics of reason.

Metabolics is thus introduced as life's principle of becoming. Just like the term architecture, the term 'metabolics' is here assumed in a general sense, reaching beyond the biological model, as the well as the post-war Japanese movement of metabolic architecture. Two terms are employed to thematise the ephemeral, or fleeting character of metabolics: Jacques Derrida's 'maintaining now' (*maintenant*) and Gilles Deleuze and Félix Guattari's haecceity ('thisness'). Coming from distinct models of thought, they both designate the thick moment in which the effervescence of becoming takes place and are thus integral in accounting for all life, and for noetic life in particular.

Setting the stage: the general ephemeral and metabolic thought

The white marble theatres of Greece were built once Aeschylus, Sophocles and Euripides were

dead. The great tragedies were staged there as re-runs. Later, the whole classical world would be restaged: reborn into Renaissance, academised into Classicism. Undoubtedly, the 'whole' here signals a hyperbole: only a handful of fragments, a sparse tangle of surviving inscriptions could be rehearsed anew, infinitely mediated, transposed, inflected. Biology, the discourse of life, or put differently, the science of surviving inscriptions, of survival as inscription and inscription as survival, calls this creative corruption of reproduction 'selection'. Whether through hetero-affection – the interpolation of viral RNA – or through auto-affection – a deficit or excess of the reiterated protein sequences – selection marks each step along the way to phylogenesis.

The genetic code, epigenetic modification of this code, and the technical exosomatic epiphylogenesis, that for Stiegler determine the Promethean destiny of the human, are all shaped by selection; in turn, they stage in unison the drama of selection. The deus ex machina of selection is a devised solution, at once a dramaturgical miracle and a dramaturgical monstrosity that requires a mechanical device to appear. A machine allows the god to resolve a play that conditions the god's appearance. En abyme.

If selection is cultural, technical and biological, it is no less thermodynamic. Ilya Prigogine and Isabelle Stengers understand entropy 'as a selection principle' on the basis of the irreversibility of symmetry breaks at the microscopic level. Such breaks or 'bifurcations' (a term introduced by Poincaré) allow a passage to the macroscopic, establishing a nexus of irreversibility at both levels. Bifurcations, such as those between particles and antiparticles, are in turn conditioned by a thermodynamic disequilibrium.[2]

Stiegler adopts the notion of bifurcation in his late work to think the conjunctive ecology of energy, life and technics. With Whitehead, he understands reason as the bifurcating principle, negotiating the competitive tendencies of slow decay (entropy) and

of seasonal rejuvenation (negentropy). Reason is what tampers the 'anarchic' negentropic origin of life in history.[3] As principle of selection, or arbiter of arbitrary bifurcations, reason has since Plato's method of division (*diairesis*) been the paradigmatic path to the general; yet for Stiegler, this path does not lead to speculation. Aligned with Georges Bataille's general economy and Erich Hörl's general ecology, the generality of the general refers in Stiegler principally to the encompassing of all thought and practice by the entropic principle. Entropy is what makes time homogeneous and translates its passing through and as the flow of energy. As such, entropy says, 'all passes': the general is ephemeral, the ephemeral is general. Yet creative bifurcations are possible within the general ephemeral and are precisely the labour of life and thought.

Such bifurcations constitute the local within the general, or in Hegelian terms, the concrete universal, the space where life unfolds – the life of bodies, minds, cultures. Stiegler requires that negentropic bifurcations determine localisations that resist the self-destructiveness of the anthropic principle.[4] Lévi-Strauss's 'nihilism' is the adversary:

> From the time when he first began to breathe and eat, up to the invention of atomic and thermonuclear devices, by way of the discovery of fire and except when he has been engaged in self-reproduction – man has done nothing other than blithely break down billions of structures and reduce them to a state in which they are no longer capable of integration.[5]

Humanity is here a funnel of entropic disintegration, a funnel enlarged by technological production, in which the grace of biological reproduction ebbs away. For Stiegler, however, the remedy can only be sought in technology's poison. The technological production of new local milieus is an imperative all the way to the ground. Stiegler is willing to return to the question of the land, its possession and distribution, the nomos without which for Carl Schmitt there is no law. Stiegler wants to liberate land from

blood-and-soil ideology in order to rethink it as a condition of a localising bifurcation of life.

The technological production of bifurcations and the ground of this production thus become integral to the neganthropic project, while architecture, as the practice and theory of creating milieus, becomes its paradigm and vector. This essay aims, accordingly, to enrich the ground of the neganthropological project, by superimposing a metabolic plane upon the genetic plane, the plane of conditioning inscriptions that Stiegler's writings painstakingly outline. Here, 'metabolism' is not understood in the limited sense of a normal or reverse Krebbs cycle, involving the familiar anabolic-catabolic processes, but subspecies of a general metabolics, that is, as the actuality of metastability, as the living of life that preserves and transforms (*meta+ballein*) life at the same stroke. Such a metabolism includes, along the anabolic and catabolic, the symbolic in the specific sense of elements that enter into sym-metric, sympathetic and sym-biotic relations. Accordingly, this essay undertakes to show that a general genetics cannot be thought apart from a general metabolics: the thermodynamic question demands a double answer.

In order to gesture towards a general metabolics, the essay proceeds by examining the relation of architecture to noetic life, which, as life, is always already also non-noetic, and as noesis is always already non-life. At this juncture, the Kantian architectonic of reason is catalytic, as it sums up the history of reason it critiques, but also, through this critique, sets up the parameters of the discourse on noetic life to follow. In sum, Kant's effort to provide solid foundations for the system of human thought is shown to slide into a series of dislocations, which appear as genetically accidental, yet prove to be metabolically vital. This sets the stage for Stiegler's reading of Kantian schematism as founding a cinematic consciousness which lends itself inherently to industrialisation and algorithmisation. At a time when computation and automation (the energetics of Zeus) become faster than thought (the energetics

of neurons) the stake for what Stiegler called the 'reticulated' society is nothing less than a *colossal social disintegration*': techno-capitalism reducing noetic-political communities and individuals to 'purely, simply, exclusively and therefore absolutely computational' objects.[6]

Stiegler laboured throughout his life to create new network architectures that advance contributory, negentropic modes of social hermeneutics, developing the latter with his collective, Ars Industrialis.[7] This effort itself constituted a transformative or metabolic exploration of the modes of production that a cinematic consciousness can support. The relation of production to noetic life and life at large comes to a head in the figures of the architect and the bee, in which Stiegler confronts late Marx. The essay follows this confrontation through a Derridean inflection, which shows a more consistently 'organological' Marx and queries the relation between biological and techno-economic (re-)production. This opens the path towards one of the principal metabolic moments in Derrida's work, the moment of his confrontation with architecture, when the ephemeral is thematised as the 'maintaining now'. The essay closes with a redoubling of the maintaining now, recasting it as a haecceity, a Scholastic term appropriated by Deleuze and Guattari, which in turn informs Rosi Braidotti's employment of metabolism in exploring non-majoritarian modes of individuation.

Kantian dislocations: the life of the architectonic of pure reason

'By an architectonic I understand the art of systems.'[8] Kant's famous opening of 'The Architectonic of Pure Reason' conjoins technics and thought by introducing 'art' in the system as an external force and practice that finds itself always already on the inside. Moreover, as the 'Antinomy of Pure Reason' had already made apparent, both the art of architecture and the system of reason share in the same nature: 'Human reason is by nature architectonic. That is to say, it regards all our knowledge as belonging to

a possible system.'[9] Both architecture and reason have a nature and this nature is the same. Perhaps, just perhaps, Kant seems to suggest, this nature is none other than nature tout court: ecology as the techno-noetic milieu of life.

Kant's understanding of the notion of the architectonic passes, in Daniel Purdy's reading, through the same stages as the modern reception of the story of Babel: just as the sixteenth century hermeneutics of celebration of royal power gives way to the seventeenth century's Protestant catechism against the hubris of all human power, so Kant abandons his early effort to build a metaphysical tower from which God could be perceived and his existence proven, for a modest watchtower to survey human experience, or rather, for a functional bourgeois house, to serve as reason's abode.[10] The equivocation of the metaphor constitutes the first dislocation: Kantian reason seems to dwell in a watchtower.

This reason must confront not only Hölderlin's delirium, in his confinement in the Necker tower, but also measure up against Leibniz's windowless monads. Not least since the monad of monads, God, is also an architect and a geometer. Thus at once architect and architecture, God builds a resplendent cosmos with perfect efficiency and economy. For even though God has no budget – since nothing costs God anything – divine rationality qua rationality, demands economy.[11] For Leibniz, the highest imperative of this economy is the affordance of all that is necessary, whereas for Kant the reason of economy consists in eliminating the unnecessary, justifying the place of every element in the whole.[12] This archi-economic principle informs the Kantian thrift of materials, the modesty of design and the attentiveness to the telos and function (serviceability) of the planned edifice.[13]

No less does it inform Kant's consideration of the economy of forces at play in the edifice of reason. Kant is acutely aware of the potentially devastating effects of gravity, but its pull is one among numerous active forces, rather than 'dead weight'.[14]

The gravity of critique presses against the elevation of speculation, in a dynamism that sustains thought at the precariousness of the joint.[15] This precarious dynamism opens the path to the second dislocation: the apparent inorganic stability of the house of reason gives way to an organic metastability. Not only is it 'vital' that the house of reason stand and withstand, but this vitality is subject to an entropic corruption, decline and 'death'.[16] In the words of the fifteenth-century architect Filarette: 'It is clear that by being killed or by not eating, one dies; so do buildings. You can say, one eats and *even so* one dies. The building also must decline through time just as one dies sooner than another or has better or poorer health.'[17] It is not only violent death or demolition, not only starvation or negligent maintenance, it is the law of entropy that the building, just like life, must measure up against.[18]

Kant does not wish to know of the natural death of buildings, even as he speaks of their ruins. Yet the effort to accommodate elements of proto-metastability (a proto-negentropy) within a traditional architectonics of stability is unmistakable. The Kantian house of reason, just like Goethe's figure of the subject, is interminably under renovation. Tellingly, the penultimate chapter of the first Critique outlining the 'architectonics' of pure reason, is succeeded by pure reason's 'history': a story of 'ruins', which lays upon Kant the demand 'to designate a place that is left open in the system and must be filled in the future.'[19] The art of systems is thus supplemented in a single stroke by the advent of the unforeseen event. Moreover, in order to rebuild, it is not enough, as Descartes admonishes, to gather provisions of materials, architectural knowledge, and planning, but one must, before demolishing a house, provide oneself with a temporary dwelling. It is then hardly surprising that the 'empirical' history of the house-tower of 'transcendental a priori' rationality turns out to be a history of dislocations, a perennial 'living elsewhere', at once a life and a heterotopia – supplementary through and through and only thus foundational.[20]

The passage from inert stable materiality to entropic metastable living matter proceeds for Kant from the ground. Designating reason as the foundation of foundation, the word 'ground' is for Kant 'merely a symbol of reflection', rather than 'the proper schema of a concept'. This 'symbolical hypotyposis' or 'expression' of the non-concept of ground, underscores the architectonic as an art of systems, as much as the metabolics of this art.[21] Tellingly, Kant limits himself to 'merely outlining the *architectonic* of all cognition from *pure reason*,' and beginning 'only at the point where the general root of our cognitive power divides and branches out into two stems, one of which is *reason*.'[22] The architectonic of reason is thus ultimately cast as an 'outline' or sketch of a plant that grows from the ground, this ground in turn being reason itself as the architectonic foundation of the plant.

The ground gradually emerges as a symbol in the metabolic sense. Whereas in the first part of the *Critique of Pure Reason* Kant aligns the ground with the empirical by making sense-perception the foundation of all valid knowledge, in the second part, the ground appears to refer to 'the Idea of the whole, the schema that pulls together perceptions,' a plane of organisation or development in Deleuze and Guattari's terms, a hidden principle inferred only from its empirical effects.[23] It is only with the *Critique of the Power of Judgment* that the ground stops being a schema turning into its opposite, namely a symbol, that is, a metabolic life-function of the system.

This architectonics of a sprouting reason runs up to Heidegger, who, in opening his seminal analysis on Kant writes: 'laying the ground for metaphysics can mean to lay a foundation [*Fundament*] under this natural metaphysics'.[24] Heidegger's 'natural' architectonics does not quite announce a terra-forming project, but in fidelity to the Kantian desire for the art of systems expounds 'ground-laying' as the 'projecting [*Entwerfen*] of the building plan', a projecting design which delineates the 'inner possibility of metaphysics, that is, the concrete

determination of its essence.'[25] In passages such as this, Heidegger wishes to align the construct of metaphysics with the ground it occupies, as if the former grew in perfect harmony out of the latter.

The architectonic of reason thus emerges as the practice of making what is already there, constructing the natural, or rather, of tracing the line between construction and nature. Ultimately, the task of construction will be handed over to technology, knowledge of nature to science, and philosophy will maintain the line between the two. As Kant admits to Herder, it is 'truth' that composes the building of metaphysics, while he merely sketches this building at different times, from different perspectives.[26] The architectonic of reason is the art of systems insofar as it is the art of the line. Perhaps Kant is sketching a self-portrait when summing up Wolff as 'a speculative and not an architectonic philosopher and leader of reason. Actually, he was not a philosopher, but rather a great artist of the human desire for knowledge, as so many people still are.'[27]

Indeed, Kant projects the Critique as 'a treatise on the method, not a system of the science itself; but it catalogs the entire outline [*Umriß*] of the science of metaphysics, both in respect of its boundaries and in respect of its entire internal structure.'[28] Marking and drawing the line, tracing and following (*meth*) the path (*hodos*), Kant visualises the discursiveness, the walking of reason, in order to accommodate the knowledge to come (history as a future).[29] Specific provisions have to be made for such an accommodation, a specific ecology must be furnished.

If for Vitruvius the sum of an author's writing was conceived of as a corpus or body of knowledge, if for Michelangelo 'architectural members [should] reflect the members of Man', and if for Alberti, 'a wall that wandered like a worm' could only be due universal reprimand, it is unsurprising that Kant should show 'a preference for self-conscious ordering, an aversion to the serpentine flow of the arabesque, and a blindness to the charms of haphazard accumulation, be they medieval or

baroque.'[30] A 'body without organs' such as Greg Lynn's regenerating flatworm, capable of proliferating variations of itself beyond mere replication, is anathema to Kant, who time and again privileges articulation (muscles, tissues, organs) over aggregation. This is the very accusation that Kant levels against his predecessors, whose systems were such in name only, 'formed, like maggots [*Gewürme*], by a *generatio aequivoca* from the mere confluence of aggregated concepts'.[31] And yet, this spontaneous generation, this equivocation of life, is according to Kant able, despite its garbled beginnings, to fashion complete systems out of 'the original seed' from which the 'self-development of reason' proceeded.[32] Lacking an external architectonic idea, the internal life of reason, its metabolism, is enough to bring it to maturity, even if its investment into maggot-like systems could never produce more than fertilising ruins for the next metaphysical Babel.

Architecture and schema: Stiegler's reading of the Kantian cinematic consciousness

The preceding dislocations that cast the architectonics of reason (both house and tower) as botany or zoology and, at the moment of summative reflection, as the line that separates and aligns the two in a double techno-physical helix, offer the ground of Stiegler's reading of Kantian schematism.

From the outset, the definition of a schema within the 'Architectonic of Pure Reason' presents all the marks of the above tensions. A schema is here 'an essential manifoldness and order of the parts determined *a priori* from the principle of the end', possessing either technical unity, when its aims are grounded in contingent experience, or architectonic unity, when its ends are grounded in a necessary Idea of reason.[33] Kant's attempt to separate architecture from technics runs counter not only to the prima facie definition of architectonics as the *art* (*Kunst*) of systems, but also to the necessary understanding of this art as techne, that is, as the empirical know-how that the Third Critique opposes to theoretical knowledge (*Wissen*).[34]

The untenability of the technical-architectonic distinction is already sealed at the outset of the first Critique, where the (transcendental) schema is introduced as a mediator, a third (*ein Drittes*), which homogenises the category and the intuition. A schema is thus an 'intellectual' and 'sensible' hybrid, a thick line that unites sense and reason as its internal and external limits, in irreducible difference.[35] However, sustaining the line requires Kant to postulate a further 'transcendental affinity' between, on the one hand, the unity of consciousness and, on the other, the unity of objects and ultimately of the world at large. As Stiegler observes, this 'transcendental affinity' becomes operative by reproducing what is essential and necessary in the empirical domain, in the act of producing it.[36] The transcendental deduction of categories is built on the ground of this affinity, upon which is established the triple synthesis 'found in all cognition': 'the *apprehension* of the representations, as modifications of the mind in intuition; of the *reproduction* of them in the imagination; and of their *recognition* in the concept.'[37]

The three syntheses correspond, according to Stiegler, to the three retentional types, even if, in making reproduction a condition of apprehension, Kant commits the same mistake that Husserl attributed to Brentano, namely, confusing primary with secondary retention. For even if primary retention is a condition of apprehension, secondary retention is not; at least not directly. As Stiegler observes, Kant does not claim that secondary retention provides selection criteria for the operation of primary retention; rather, he elides the distinction of the two in the constitution of apprehension.[38] This obscures the function of the three syntheses, which as retentional forms weave together consciousness, making schematism possible.[39]

As link between sensibility and understanding, imagination constitutes the very actuality of schematisation. Understood thus as *schema schemans*, imagination becomes the principal activity of the subject, the activity through which the subject constitutes itself as noetic actuality. In Stiegler's reading

of Horkheimer and Adorno, the industrialisation of imagination through appropriation and manipulation by the culture industry, and principally cinema, amounts to the elimination of the distance of imagination from perception and the substitution of the former by the latter. This substitution effects an 'alienating reification' of consciousness, dissolving subjectivity.[40] For Stiegler, however, Kantian consciousness is always already 'cinematic'. The composition of temporal objects (and their correlate subject) by the interweaving of primary and secondary retentions is always overdetermined by the technical and epochal characteristics of tertiary retention, which 'in the most general sense' is 'the prosthesis of consciousness without which there could be no mind, no recall, no memory of a past that one has not personally lived, no culture.'[41] This means that the culture industry is 'merely' updating and systematising the technology of this overdetermination through selection and manipulation criteria determined by the logic of the 'marketplace' – which is now precisely the place without place.[42] But for Stiegler, 'industrial schematism' is possible only because 'schematics are originarily, in their very structure, industrilizable'.[43]

Thus, for Stiegler, what is first and principally industrilisable is not imagination, but the concept, which Kant designates as 'recognition': the function of thought that implements 'the a priori law of the temporal flux in which the categories are constituted'.[44] This activity amounts to a production of the a-temporal law of temporality in which re-production can take place, and for Stiegler it is here, rather than in the imagination, that processes of subjectivation begin. Of course, production is only possible on the basis of the materiality of reproduction and in turn, on the apprehension of the manifold of sensibility, meaning that production is only possible insofar as the flux of consciousness itself is reproducible; but it is production as the activity of the concept that renders compatible and unites primary and secondary retentions into the flux of consciousness.[45]

For Stiegler this flux composes the Kantian cinema of consciousness. According to Kant, consciousness is informed by an a-temporal reason that provides the principles according to which the rules of understanding are employed, and the laws according to which subjectivity as the unity of apperception is made possible. For Stiegler however, the casting of the triple synthesis as the retentional threefold shows reason as a historically and technically conditioned condition of consciousness; a condition that can thus be industrialised, and today, algorithmised. Stiegler accordingly diagnoses in Kant the effort to preclude entropy though 'a denial of the organological conditions of the formation of reason as well as of understanding.'[46] And yet, Kant recognises metaphysics as the effect of an *epimytheia*, which, even though it is called to discover the absolute origin of subjectivity in its affinity with the world, also constitutes the metabolic residue of noetic life.[47] At the same time, Kant recognises the demand to provide a *prometheia* for the thought to come, to leave a place in the system for history, for a metabolics which might destabilise the genetics of the system.

The task of a neganthropology today is to show not only that reproduction conditions production, an idea that is operative in the Kantian text, but that production, in the form of tertiary retention, determines the totality of noetic life, and further, to imagine new forms of tertiary retention, to produce negentropic modes of production.

The bee and the architect: (re-)production after Marx

In the first part of *Capital*, Marx sets the bee and the architect apart in a manner with particular significance for the neganthropological project. Marx writes: 'what distinguishes the worst architect from the best of bees is this, that the architect raises his structure in imagination before he erects it in reality'.[48] For Stiegler, this constitutes a 'regression' from the vanguard positions of *The German Ideology*, which dismissed consciousness as the distinctive trait of

humanity, turning rather to the production of the means of subsistence on the basis of the human 'physical organisation' as the mark of this distinction.[49] Importantly, *The German Ideology* does not breach the human-animal barrier, but rather locates its foundation elsewhere, namely, in the 'physical organisation', or rather perhaps the 'life-process' that precedes and conditions consciousness.[50] So, when Stiegler derides late Marx's 'disarming classicism', which subjects the development of the 'potentialities slumbering within nature' to the 'sovereign power' of the human head, and attributes this 'regression' to Marx's 'profound ignorance of the question of tertiary retention', this gesture is not meant to destabilise the barrier sustained by Marx.[51] It is meant to reform its architectonics.

For Stiegler, an architect's work is only possible from within a 'preindividual milieu, supersaturated with potentials', a milieu of tertiary retentions which facilitates the transindividuation of dreams and enables their realisation. Noesis functions precisely as an 'arche-cinema' constituted by such a milieu through a '*montage* of retentions and protentions', the projections of which transform, or metabolise this milieu in turn.[52] As such, noesis presupposes the same speculative powers that the architectonic plan, as much as investment capitalism, calls for: proletarianisation and the tower of Babel are projections of the same, human arche-cinema.[53]

It is perhaps no coincidence, and it is certainly of great consequence, that Derrida in his 1975–76 seminar *Life Death* comments on the same passages from Marx, albeit at greater length. His principal intention is to problematise the function and interrelation of production-reproduction for techno-economic, biological and epistemic discourses. Derrida sees the notion of 'production' filling in the voids of these discourses and becoming, in the face of the obsolescence of all other values, 'the surrogate for the determination of being'.[54] In place of metaphysical or ideological verbs such 'create', 'engender', 'express' or 'think', one uses the verb 'produce'. According to Derrida, this obsession with production re-produces a Marxist discourse, for which production is 'a fundamental operator'; even if Marx insists that there is no 'general' production, he employs the term with a generality that makes the whole theory of historical materialism a theory of production and bases on its materiality the production of ideas and consciousness at large.[55] Ultimately, all of human and non-human life is subsumed under a theory of (re-)production.

In *The German Ideology* it is the production of the means of subsistence (*Lebensmittel*) that produces material life in general and provides the decisive distinction between man and animal, from which other distinctions, such as consciousness and religion, seem to follow. Although the production of the means of subsistence depends on the nature of those means that are already in existence and must be reproduced, it does not amount to mere reproduction of physical human existence, but constitutes a 'definite form of activity' and a 'definite form' of life expression (*Äusserung*). Accordingly, the totality of human life is premised on the mode of production and the nature of the product, which sets apart biological reproduction from the exteriorisation of the self in technological reproduction.[56]

This reading of *The German Ideology* is closer to Stiegler's own thought than he is prepared to admit; even the distance from the regressive 'classicism' of *Capital* appears diminished. For one thing, *Capital* reproduces the principle of *The German Ideology*, which Stiegler also deduced from the Kantian cinematic consciousness, namely, that there is no production without reproduction, and that, in fact, the conditions of the two coincide.[57] Moreover, *Capital* does re-mark the technological conditioning of life and calls attention to the 'productive organs of man in society', those 'organs that are the material basis of every particular organization of society', an attention equal to that lavished by Darwin on the 'natural technology' of animal and plant organs and their function in the production of life.[58] The (later Simondonian) technical exosomatisation that is pivotal to Stiegler's organology is already at

work here, while the idea of a 'natural technology' seems to bring the bee and the architect closer than Stiegler himself allows.

Both Stiegler and Derrida recognise that Marx's evocation of the bee is not accidental. The bee is acclaimed by Aristotle as a 'political animal', yet with a 'politics' that Hobbes, drawing on Aristotle, disparages as lacking the exosomatisation of a language to select and establish a principle of general transformation, beyond the metabolics of particular judgement and desire: bee politics is peaceful, yet stale.[59] Aristotle attributes this to the bee's inability to pass from sensation to memory and from memory to experience; the bee is accordingly an intelligent animal that lacks the ability to learn.[60] Although Stiegler does not regard such inability as innate, he underwrites it on the basis of the lack of tertiary technological retentions.

Interestingly, neither Stiegler nor Derrida refer to Kant's invocation of bee architectonics at the precise moment of the third *Critique* when the work and working of art is distinguished from nature's general production. For Kant, as for Marx, the difference is a capital one, a difference of the head, that is of reason, which for Kant means a difference of freedom: 'although people are fond of describing the product of the bees (the regularly constructed honeycombs) as a work of art, this is done only on account of the analogy with the latter.'[61] In truth, only humanity is free for productive architecture; the bee is 'captive' in merely re-productive life, as it is 'captive' in its environment (*Umwelt*) for Heidegger, lacking access to a world (*Welt*).[62] Stiegler is less interested in liberating the animal from 'captivity' than he is in showing the technological conditioning of biological and noetic human life. In pollination, Stiegler diagnoses both entropic and negentropic tendencies, with the latter taking effect when pollination fertilises not merely the flower, but the potential for diversification. Negentropy accordingly becomes neganthropy through the 'mutual fertilization of noetic souls', feasible only within conditions of care that potentialise individuations from preindividual

funds.[63] Such individuation processes are, however, always on the verge of relapsing into an entropic, algorithmic Leviathan which manipulates humans like insects, whose pheromones 'trigger behavioural sequences controlled by the genetic sequences encoded in their *soma* and reproduced by their *germen*, which evolve only under the influence of the combined effects of environmental variations and the pressure of selection.'[64]

In this 'selection' lies Stiegler's own classicism. For while biological selection selects the animal through sex and death, insofar as there would be no selection for a perfectly replicating, perfectly reproducing animal, technological selection can also be selected by the human, albeit through the technological, preindividual mediation of the milieu of tertiary inscriptions, a mediation which must be felicitous and benevolent for the human to be able to select. Ultimately however, Stiegler is in line here with Aristotle, Hobbes, Kant and Marx, in marking human (re-)production as (the potential of) an activity opposed to the foreclosed passivity of animal (re-)production.

In order to advance the neganthropological project one must account for and draw on metabolics: the active actuality that forms secondary, epigenetic inscriptions as much as tertiary, technological ones. Before turning to the temporality of the 'now' that maintains metabolics, it is worth raising one last time to the question of production. The above makes clear that within a Marxist framework the question 'what is production?' becomes synonymous with 'what is?' For Derrida, neither can receive an answer, since neither constitutes, in truth, a question. The formula 'what is?' is rather 'a contract with the self whereby the self divides and augments itself at the same time, produces-reproduces itself in dividing itself. Like bacteria.'[65] Between thought guided by the re-productive force of technological code and principal life guided by the biological code, there is neither identity, nor opposition, but *différance*.[66]

The unproductive in architecture: the metabolic now

Neither for Derrida nor for Stiegler is there an individuated self before architecture; rather, the self is constituted 'through an experience of spacing that is already marked by architecture.' The subject is mastered by architecture before mastering it. The question then becomes not how to reverse the order of mastery, but how to break with it, with the passive-active polarity of selection, how to sustain the present of architecture, the maintaining now (*maintenant*), in which the taking place of an event – not least the event of the self – becomes possible.[67] How to let architecture inhabit us, as we inhabit it – 'now'.

The challenge of maintaining the ephemeral in architecture comes from its 'ground', which folds architecture upon itself and which as an 'architecture of architecture' effects, just like the law of law, a paramount tension. On the one hand, it shows 'architecture' as a construct, even when it appears naturalised (as an offshoot of the human noetic ground), synonymous with 'good sense' or sense in general, thus, with 'meaning' as much as with 'direction' or 'orientation'.[68] On the other hand, it dictates that this sense be the unshakeable, quasi-absolute principle or finality, the ground or foundation, the logic of the totality of structure. As such the double genitive of the architecture *of* architecture places architecture '*in service*, and *at the service of*' a '*teleology* of dwelling' inscribed within the 'archi-hieratic order' that architecture itself establishes.[69]

In tandem with and as a result of this tension, the logic of a 'general architectonics' (or a general architectonics of logic) that for Derrida governs the totality of Western culture, also designates a specific practice, the solid consistency of which becomes the 'most powerful metonymy' of this logic. 'Consistency' refers here not only to logical coherence, the implication of all human experience in the same matrix, but also to 'duration, hardness, the monumental, mineral or ligneous subsistence,

the hyletics of tradition'. Hence it refers to the material and noetic resistance that establishes architecture as 'the last fortress of metaphysics'.[70]

The task of deconstruction is thus to begin at the place of 'greatest resistance', to show the internal limit of formalisation and the vital incompleteness of the structure.[71] The story of the tower of Babel offers a deconstructive narrative, showcasing the impossibility of totalisation, as well as the irreducibility of idioms, which can procure the joy of multilingualism as much as the maddening frustration of incomprehension. Derrida discovers something of this madness in Tschumi's follies, which he sees as dislocating traditional architectonic meaning and advancing a new semantics, an affirmation beyond the 'nihilistic repetition of metaphysical architecture'.[72] They maintain, renew, and reinscribe architecture; 'they awaken, perhaps, an energy in it that was infinitely anaesthetized, walled-in, buried in a common sepulcher or sepulchral nostalgia': thus they enter the now (*maintenant*).[73]

The now offers the possibility of a singular gathering beyond a synthetic-syntactic ordering. It engages with and advances the dis-jointure of the living trace and prevents it from being homogenised; it prevents the abstract trait from being poured 'into concrete'. The now shows that the architectonic, as an art of the system, is merely one epoch, one determined possibility, one *Gestell*, of the potentiality of being-together.[74] In sum, then, this is 'the task and the wager, the concern of the impossible: to give dissociation its due, but [also] to put it to work *as such* in the space of a gathering.'[75]

Practicing and inhabiting such an architecture may appear a hyperbolic task. Apart from Tschumi's follies, Derrida indicates the temple of Ise in Japan, one of most remarkable shrines of Shintoism, as a case in point: 'the temple has been dismantled and rebuilt with new materials every twenty years for one thousand five hundred years. The next time will be in 2033.'[76] But there are many more quotidian practices; metabolism is everywhere.

Upsetting the stage: returning by the way of a becoming

One may pursue the metabolics that animate life, both noetic and architectural, down countless alleyways. The prosaic act of walking is a metabolic practice through and through, animating the prose of Walter Benjamin, Guy Debord and Michel De Certeau and shaping countless figures in the work of Derrida and Stiegler. Walking ensures that the metabolic now does not settle in a 'proper' place, that it continues becoming. Thus, what situationism calls '*dérive*' within an urban-political context, the life sciences discover as 'genetic drift' within a biological-evolutionary frame of reference; what is at stake in both is the metabolic becoming of the genetic.

In such a becoming, the element of chance, of the incalculable and unexpected, becomes constitutive. Everything, nearly everything, is possible; the maintaining now flourishes. Perhaps then, it will be conducive to cast this maintaining now that informs the general ephemeral in one last, and initially unlikely, figure, as a way of retracing the path of this exploration, in a repetition without repetition, a repetition in difference, what one may call a return, capable of carrying the neganthropological project forward. Deleuze and Guattari call this figure 'haecceity':

> a season, a winter, a summer, an hour, a date have a perfect individuality lacking nothing, even though this individuality is different from that of a thing or a subject. They are haecceities in the sense that they consist entirely of relations of movement and rest between molecules or particles, capacities to affect and be affected.[77]

Haecceities are unique combinatorial possibilities of rest and movement (longitude) and affective power (latitude) and as such the general, as much as ephemeral, compositional elements of bodies. The 'animal-stalks-at-five-o'clock' is thus a haecceity, which precedes and composes the animal's genetic programme. It is in the maintaining now of its haecceity that the animal metabolises its genetic architecture, makes its architecture live.[78]

It is clear that although it does not endure, the maintaining now is not instantaneous; it dilates in order to accommodate, it breathes in order to metabolise. Deleuze and Guattari repeat Virginia Woolf's account of Mrs Dalloway:

> She felt very young; at the same time unspeakably aged. She sliced like a knife through everything; at the same time was outside, looking on. ... She always had the feeling that it was very, very dangerous to live even one day.'[79]

Each day is a maintaining now, on the cusp of age and youth, on the sharp edge of life.

Each day repeats, accordingly, the maintaining now, and in this repetition creates difference. This is precisely how Rosi Braidotti, advancing Deleuze and Guattari, understands 'metabolism': as the general ephemeral 'consumption of the old that can engender the new'.[80] What for Stiegler constitutes the task of the trans-individuation of noetic life, for Braidotti presents itself in the cipher 'woman'. Braidotti thus refutes the assumption that any kind of volition can decide in advance the psychic reality of this cipher. 'Woman' must be metabolised, for 'woman' designates a non-majoritarian programme that claims for itself the general ephemeral. Mrs Dalloway is a 'woman' because she becomes one each day in the maintaining now of a haecceity.

Architecture in general, and the architecture of noetic life specifically, stands to gain much in pursuing these lines of metabolic transformation that exist in Kant's critical project, in Marx's communist project and in Stiegler's negathropological project. For each of these projects is first and foremost a pro-gramme, and thus, despite its profound desire for futurity, entropically foreclosed. Metabolism is both the fulfilment and the immanent disruption of the programme, and thus what safeguards the programme by allowing it to be other than itself.

Notes

1. Heraclitus, *Fragment B84*: 'It rests in change' (my translation).

2. Ilya Prigogine and Isabelle Stengers, *Order out of Chaos: Man's Dialogue with Nature* (London: Bantam Books, 1984), 285–86.

3. Bernard Stiegler, 'General Ecology, Economy, and Organology', trans. Daniel Ross, in *General Ecology: The New Ecological Paradigm*, ed. Erich Hörl (London: Bloomsbury, 2017), 144.

4. Bernard Stiegler, 'Five Theses', in *The Neganthropocene*, trans. Daniel Ross (London: Open Humanities Press, 2018), 131.

5. Bernard Stiegler, *Automatic Society I: The Future of Work*, trans. Daniel Ross (Cambridge: Polity Press, 2016), 242.

6. Bernard Stiegler, *The Age of Disruption: Technology and Madness in Computational Capitalism* trans. Daniel Ross (Cambridge: Polity Press, 2016), 7; Stiegler, 'What is Called Caring?, Thinking Beyond the Anthropocene,' in *The Neganthropocene*, 253, emphasis in the original.

7. Stiegler, 'General Ecology,' 147–48; 149.

8. Immanuel Kant, *Critique of Pure Reason*, trans. Paul Guyer and Allen W. Wood (Cambridge: Cambridge University Press, 1998), 691 [A832/B860].

9. Ibid., 502 [A474/B502].

10. Ibid., 627 [A707/B735]; Daniel L. Purdy, *On the Ruins of Babel: Architectural Metaphor in German Thought* (Cornell University Press, 2011), 53–55.

11. Gottfried Wilhelm Leibniz, *Discourse on Metaphysics,* trans. Gonzalo Rodriquez-Pereyra (Oxford: Oxford University Press, 2020), 10–11.

12. Purdy, *On the Ruins of Babel*, 121.

13. Ibid., 56–59.

14. Ibid., 60–61.

15. Ibid., 74.

16. Ibid., 64.

17. Filarete, *Treatise on Architecture*, trans. John R. Spencer (London: Yale University Press, 1965), 14, emphasis added.

18. For her record 'Songs of Solitude' (2021), the violist Hiyoli Togawa solicited contemporary solo viola compositions to reflect on the pandemic isolation and brought them into dialogue with Bach, whom she considers her 'daily bread' – 'nourishment' and 'grounding' at once. And yet she explains in the accompanying booklet, 'it just takes a momentary lack of attention to the bow pressure and the flow of the music is interrupted – and with it the natural course of [Bach's] sublime harmonic progressions. The musical architecture becomes unsteady.' This is the metabolics of architecture at its most ephemeral, at the edge of the 'maintaining now'.

19. Immanuel Kant, *Critique of Pure Reason* , 702 [A852/B880].

20. René Descartes, *A Discourse on the Method* trans. Ian Maclean (Oxford: Oxford University Press, 2006), 21.

21. Immanuel Kant, *Critique of the Power of Judgment* trans. Paul Guyer and Eric Matthews (Cambridge: Cambridge University Press, 2000), 226 [5:352].

22. Immanuel Kant, *Critique of Pure Reason*, 693 [A835/B863], emphasis in the orginal.

23. Purdy, *On the Ruins of Babel*, 83; Gilles Deleuze and Felix Guattari, trans. Brian Massumi, *A Thousand Plateaus: Capitalism and Schizophrenia* (Minneapolis: Minnesota University Press, 2005), 266.

24. Martin Heidegger, *Kant and the Problem of Metaphysics* trans. Richard Taft (Indianapolis: Indiana University Press, 1997), 1–2.

25. Ibid., 2.

26. Kant in a letter to Herder, 9 May 1767, in Purdy, *On the Ruins of Babel*, 72.

27. In Purdy, *On the Ruins of Babel*, 98.

28. Kant, *Critique of Pure Reason*, 113 [Bxxiii].

29. Purdy, *On the Ruins of Babel*, 100–2.

30. Indra Kagis McEwen, *Vitruvius: Writing the Body of Architecture* (Cambridge, MA: MIT Press, 2003), 7–10; Michelangelo, Letter of 1560, in James Ackerman, 'Architectural Practice in the Italian Renaissance', *Journal of the Society of Architectural Historians* 13, no. 3 (October 1954): 3; Leon Battista Alberti, *The Ten Books of Architecture* trans. Morris Hicky Morgan (New York: Dover Publications, 1986), 202 [Book IX, Ch. VIII]; Purdy, *On the Ruins of Babel*, 123.

31. Greg Lynn, 'Multiplicities and Inorganic Bodies', in *Folds, Bodies, and Blobs: Collected Essays* (Brussels: La Lettre Volée, 2004), 44–45; Kant, *Critique of Pure Reason*, 692 [A835/B863].

32. Ibid.

33. Ibid., 691–92 [A833/B861].

34. Kant, *Critique of the Power of Judgment*, 182 [5:303]. The fact that art is in turn distinguished into 'mechanical' and 'free' does not constitute a resolution, but a further dislocation of the tension of art and science, this time within art.

35. Kant, *Critique of Pure Reason*, 272 [A138/B177].

36. Bernard Stiegler, *Technics and Time, 3: Cinematic Time and the Question of Malaise,* trans. George Collins and Richard Beardsworth (Stanford: Stanford University Press, 2011), 5.

37. Kant, *Critique of Pure Reason*, 227–28 [A97], emphasis in the original.

38. Stiegler, *Technics and Time, 3*, 42–43.

39. In the second edition of the *Critique of Pure Reason*, Kant replaces the triple synthesis with a double figurative [*speciosa*] and intellectual [*intellectualis*] synthesis, and subsumes imagination together with sensibility under the figurative synthesis (B151). Although Kant systematically underplays the significance of the change, for Stiegler this elision compromises the resources to account for the temporality of consciousness. See Stiegler, *Technics and Time, 3*, 47.

40. Ibid., 37–38.

41. Ibid., 39.

42. Ibid.

43. Ibid., 41.

44. Ibid., 45.

45. Ibid.

46. Bernard Stiegler, 'Thermodynamics, Gestell and Neganthropology', in *Nanjing Lectures 2016–2019,* trans. Daniel Ross (London: Open Humanities Press, 2020), 41.

47. 'Hence human reason has never been able to dispense with a metaphysics as long as it has thought, or rather reflected [*nachgedacht*]'. Kant, *Critique of Pure Reason*, 696 [A842/B870].

48. Karl Marx and Friedrich Engels, *Capital I, Collected Works XXXV,* trans. Samuel Moore and Edward Aveling (London: Lawrence & Wishart, 2010 [1867]), 188.

49. Karl Marx and Friedrich Engels, *The German Ideology, Collected Works V,* trans. Clemens Dutt, W. Lough and C. P. Magil (London: Lawrence & Wishart, 1976 [1832]), 31.

50. Ibid., 36.

51. Stiegler, *Automatic Society I*, 227–28; Stiegler, 'Capitalism as Epistēmē and Entropocene', in *The Neganthropocene*, 150.

52. Stiegler, *Automatic Society I*, 228, emphasis in the original.

53. Ibid.

54. Jacques Derrida, *Life Death* trans. Pascale-Anne Brault and Michael Naas (Chicago: The University of Chicago Press, 2020), 99.

55. Idem., 100.

56. Ibid., 102–3.

57. Ibid., 103.

58. Ibid., 100–1.

59. Thomas Hobbes, *Leviathan* (Oxford: Oxford University Press, 1998 [1651]), 113 (Chapter 17:6).

60. Aristotle, *Metaphysics, Book 1,* 980b (standard pagination).

61. Kant, *Critique of the Power of Judgment*, 182 [5:303].

62. Martin Heidegger, *Fundamental Concepts of Metaphysics: World, Finitude, Solitude,* trans. William McNeill and Nicholas Walker (Indianapolis: Indiana University Press, 1995), 269.

63. Stiegler, *Automatic Society I*, 232.

64. Ibid., 233.

65. Derrida, *Life Death*, 105.

66. Ibid., 105-6.

67. Jacques Derrida, 'No (Point of) Madness— Maintaining Architecture', trans. Kate Linker, in *Psyche, Inventions of the Other II* (Stanford: Stanford University Press, 2007), 88.

68. Ibid., 90.

69. Ibid., 92, emphasis in the original.

70. Ibid.

71. Ibid., 97–98; Derrida, 'Des tour de Babel', trans.

Joseph F. Graham, in *Psyche*, *Inventions of the Other I* (Stanford: Stanford University Press, 2008), 191.

72. Derrida, *'No (Point of) Madness',* 90.

73. Ibid., 93.

74. Ibid., 99.

75. Ibid., 99–100, emphasis in the original.

76. Francesco Vitale, *The Last Fortress of Metaphysics: Jacques Derrida and the Deconstruction of Architecture* (New York: SUNY Press, 2018), 42.

77. Deleuze and Guattari, *A Thousand Plateaus*, 261.

78. Ibid., 263.

79. Ibid.

80. Rosi Braidotti, 'Towards a New Nomadism, Feminist Deleuzian Tracks, or: Metaphysics and Metabolism', in *Gilles Deleuze and the Theatre of Philosophy*, ed. Constantin V. Boundas and Dorothea Olkowski (London: Routledge, 1994), 182.

Biography

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