

THE ARCHE-TECHNICS OF LIFE

In a recent essay, I argued that Arakawa and Gins's radical architectural theory was constrained by its "primary focus on the body" ("Wearable Space" 339). In this paper, I would like to nuance, if not effectively correct, that claim by situating their ecological—or, as I shall prefer to put it, *transductive*¹—conception of the "architectural body" in the context of recent theoretical debates concerning life and its correlation with the concept of the human. Doing so will show that Arakawa and Gins's understanding of embodiment is both more sophisticated than I earlier realized and, more consequentially, that it is thoroughly rooted in an integral theory of life.

In their theoretical articulations and practical ventures, both of which remain equally concrete, Arakawa and Gins foreground the originary coupling of embodied human life with what they call the "architectural surround." As the original supplement, a *transductive correlate*, of the human body, architecture constitutes the basis for *any* activity that would inform the "epiphylogenetic" evolution of the human (evolution by means other than life, following the concept of philosopher Bernard Stiegler). Here I shall try to work through the consequences of this radical gesture for our understanding of life, the human, and the status of technics in/as the juncture between them. For if architecture, considered as a primary dimension of the living, forms the basis for the very existence of the human as a being constitutively in excess of itself, then the investment of architecture as a means for the intensification of life can be expected to have important evolutionary consequences. Such, I contend, is the purport of Arakawa and Gins's provocative program for an architecture of "reversible destiny" and for their more recent formulation of a "crisis ethics."

Life

In their recent treatise, *Architectural Body*, Arakawa and Gins position architecture as an activity of life, a means by which life is constituted or constitutes itself:

Architecture occurs as one of many ways life sees fit to conduct and construct itself; a form of life, and all forms of life have, without doubt, as of this date, but a limited and uncertain existence. [...] Life—Bios—would seem to be constituted by interactions between tentative constructings toward a holding in place, with the body, the body-in-action, surely the main fiddler at the fair. Bodily movements that take place within and happen in relation to works of architecture, architectural surrounds, are to some extent formative of them.

¹ Proposed by philosopher Gilbert Simondon, transduction defines a relation whose terms is secondary to the relation itself and has no existence outside the relation. See Simondon, *L'Individu et sa genèse physico-biologique*, the introduction of which has been translated into English as "The Genesis of the Individual," in *Incorporations*, ed. J. Crary and S. Kwinter.

Those living within and reading and making what they can of an architectural surround are instrumental in and crucial to its tentative constructing toward a holding in place. We do not mean to suggest that architecture exists only for the one who beholds or inhabits it, but rather that the body-in-action and the architectural surround should not be defined apart from each other, or apart from bioscleave. [...] What is authoritative in human life: a person's tentativeness—a totally constructed tentativeness—surefooted rightful hesitation, on-the-hesitating-mark. Persons need to be rescued from self-certainty, but they also need to put their tentativeness in precise order in relation to works of architecture. The hypotheses of procedural architecture query how it is possible—what a tentative constructing toward a holding in place entails—to be a knowing body in a bioscleave—the ins and outs of viability. (49-50)

What we are given here is a thoroughly integral conception of embodied life: one in which life is, from the get-go, *bios*, that is, life endowed with a supplementary dimension, as in the supplements of reason or of politics that, from Aristotle onwards, have more or less co-determined the Western philosophical conception of the human being. Yet the supplement at issue in Arakawa and Gins's work—indeed, the supplement at issue in architecture as such—is neither that of reason nor that of politics, but instead the supplement of architecture itself: the originary relation of the body-proper with something outside it, with the architectural surround—the transduction of the architectural body itself. If this originary relation forms the basis for subsequent transductive materializations of the body in/and the biosphere (bioscleave), up to the point of knowledge proper (the *knowing* relation envisioned at the end of the above citation), its bodily origins indicate an affiliation with that other Greek term for life, *zoe*, the root of the very term (zoology) that is held to be supplemented in the species-defining, epiphylogenetic evolution of the human.

How are we to understand this affiliation and the suture of *zoe* and *bios* that it would seem to propose? What are the effects of this crossing-back-over-to-the-domain-of-life that makes architecture (itself the vehicle for a supplementation of life) the transductive correlate of the living body? And what is it about architecture itself, about the transductive operation from which the architectural body arises, that facilitates the realization of such a suturing, such an active in-differentiation between these two concepts of life whose very separability has, in the eyes of philosopher Giorgio Agamben, facilitated the nightmare we call modernity?

If architecture in-divides *zoe* and *bios*, if it constitutes “a form of life that is wholly exhausted in bare life and a *bios* that is only its own *zoe*” (Agamben, *Homo Sacer* 187), it is precisely because it distills culture (*bios*) down to a point of origin prior to the division between the purely zoological and the supplementary (epiphylogenetic evolution). Can it really be a surprise, then, to discover that, approached from another angle, Arakawa and Gins's work comprises a thorough assault on culture itself? For them, everything begins with the insufficiency of our current experience of culture, of the embodied habits responsible for destining us to die, or, what amounts to the same thing, to live a life of mere survival, life as temporary resistance to the inevitability of death. In essence, what is wrong with culture is that it has lost touch with the transductive correlation linking person and bioscleave:

The totally mad and relentless wasting away of life—bodies-proper and their extended or architectural bodies alike—is a consequence of a fundamental procedural insufficiency of bioscleave; that is, bioscleave, if looked at from the perspective of those who want to live and are even so routinely denied life, should be taken as being [...] half-baked [read insufficiently procedural]. (95)

Informed by a thorough-going functionalist determination, culture does not challenge our bodies to explore and discover what they can do, but furnishes a static set of habits that allow us simply to get by.

In opposition to such an architecture of function and to such a static concept of culture, Arakawa and Gins propose a procedural architecture; one that deploys tactically posed architectural surrounds to stimulate the body (or more precisely: the “organism that persons”) to extend its power, to intensify its own proper vitality. Given our cultural addiction to mortality, they contend, the path toward a procedurally sufficient concept of culture can be trod only if we submit *bios* to *zoe*, or, more exactly, only if we invest the body—that site of intersection between the zoological and the supplementary—with the task of taking us beyond what we might call the “possibility barrier.” Just as embodiment “trickles up” to impact higher-order conceptual demarcations on the model of cognitive linguists like George Lakoff and Mark Johnson,² so too does the embodied response to a challenging architectural surround stimulate new sensations and, with them, new questions. Once again, the operative distinction separates a functionalist deployment of architecture from a procedural one:

An architectural surround that is functional, such as a space capsule, and such as the greater part of the built world of our day, facilitates an organism that persons in its actions, extending the senses no questions asked, whereas an architectural surround that is procedural, a tactically posed surround, fills an organism that persons with questions by enabling it to move within and between its own modes of sensing. (Arakawa and Gins 58)

As a vehicle for redefining life, the body forms a concrete mode of processing and answering questions. As a vehicle for reconfiguring the body, architecture forms a concrete mode of posing questions. Put together, body and architecture allow for a rich exploration of ourselves, of the human species, that remains situated in the concrete, and thus responsive to what’s really going on. Once again, the rationale here is the demands posed by the topic of life:

Questions about the nature and purpose of our species cannot be answered through reflection alone. Questions and answers are always handled body-wide [...]. Depending on reflection alone represents too drastic a reduction, one that unnecessarily distorts the picture, when it is the body that is being queried as to itself. [...] The body can yield answers through that which it subsists as, through the whole of itself, inclusive of its sequences of actions and the surroundings into which, in a variety of ways, it extends itself. The investigative work that can yield answers cannot be done in the abstract; it must, on the contrary, be done on-site where living happens. (xv)

Defined as the experimental deployment of the environment (the architectural surround) in order to open new intensities of life, architecture allows the embodied organism to explore its own sensory potentiality. It opens possibilities for sensation that remain “between” its actualized modes of sensing and “between” its actualized experience as particular “persons” or “behavioral subsets of the organism” (2). Architecture, in short, opens a domain of excess—excess of the organism over itself, that is, over its own actual capacity for sensation and expe-

² See George Lakoff and Mark Johnson, *Metaphors We Live By*, and, especially, Johnson, *The Body in the Mind*.

rience. In this sense, it might be said to tap into the wisdom of the body, to open a modality of radically impersonal embodiment that quite simply remains inaccessible to reflection alone. Because this modality is co-constitutive of the experience of life that defines the human, architecture must be accorded a role as transductive complement of the body. But this means that the architectural body must be granted priority over the body proper and the architectural surround, considered separately. The architectural body: emergence of bodily sense and environmental extension beyond or beneath the actual experience comprising an organism that persons.

One can discern in this program for architectural embodiment echoes of Gilles Deleuze's neo-Spinozist ethics of affect. For Deleuze as for Arakawa and Gins, it is a question of discovering what one is capable of, a question of moving beyond or before the possibility barrier. Thus Deleuze writes:

[...] no one knows ahead of time the affects one is capable of; it is a long affair of experimentation, requiring a lasting prudence, a Spinozan wisdom that implies the construction of a plane of immanence or consistency. Spinoza's ethics [is conceived as] an ethology, that is, as a composition of fast and slow speeds, of capacities for affecting and being affected on this plane of immanence. That is why Spinoza calls out to us in the way he does: you do not know beforehand what a body or a mind can do, in a given encounter, a given arrangement, a given combination. (Spinoza 125)

If there is a crucial difference between Deleuze's neo-Spinozist ethics of affect and Arakawa and Gins's "crisis ethics," that is because they determine affective capacity at fundamentally different scales. Whereas Deleuze (modifying, but in essence following, Spinoza's monism of substance) determines affect against the backdrop of a plane of immanence and thus in a manner wholly indifferent to any organizational logic that might characterize one form of being as against another, Arakawa and Gins specifically invest the form of structural coupling that defines the human being (i.e., the transductive operation responsible for generating the architectural body). Because Deleuze defines the human body as a body like any other, through the conjunction of molecular relations that define its individuality, he renders it a virtual entity whose potentiality is disjoined from its specific organization as a living organism. For Arakawa and Gins, by contrast, the potentiality of the human is rooted in its concrete embodiment, and can only be experimentally actualized as a function of the organism considered as an integral, that is, organizationally closed, but structurally-plastic, whole.

This difference appears in all its starkness when it is a question of accounting for the relation between life and the person. For Deleuze, and for Agamben following him, life is, in its essence, radically impersonal: *a* life, life in the indefinite. It is to Charles Dickens that Deleuze turns to exemplify his claim, citing the character of Riderhood, a despicable man, held in universal contempt, who nonetheless and unexpectedly comes to inspire respect, even love, at the moment when life seems to be passing from him.³ "Between his life and his death," writes Deleuze,

³ Riderhood is a character in *Our Mutual Friend*. Agamben cites the relevant passage: "See! A token of life! An indubitable token of life! The spark may smoulder and go out, or it may glow and expand, but see! The four rough fellows seeing, shed tears. Neither Riderhood in this world, nor Riderhood in the other, could draw tears from them; but a striking human soul between the two can do it easily. He is struggling to come back. Now he is almost here, now he is far away again."

[t]here is a moment that is only that of a life playing with death. The life of the individual gives way to an impersonal and yet singular life that releases a pure event freed from the accidents of internal and external life, that is, from the subjectivity and objectivity of what happens: a “Homo tantum” with whom everyone empathizes and who attains a sort of beatitude. It is a haecceity no longer of individuation but of singularization: a life of pure immanence, neutral, beyond good and evil, for it was only the subject that incarnated it in the midst of things that made it good or bad. (Pure Immanence 28-29)

This impersonal life can be said to double *the* life of the person, and yet, in contrast to the accidents that make up the latter, it comprises life’s essence, the “singularities and the events” that constitute life. Like the molecular composition of the human being, impersonal life is pure immanence, that which lies behind yet outside the individual, the person—a kind of pure virtuality, a virtual field unbound to the concrete organization of the living (human) organism.

For Arakawa and Gins, by contrast, the impersonal *is* the organism, or organismic life, and personal life happens only when the “organism persons”:

Each organism that persons finds the new territory that is itself, and, having found it, adjusts. [...] The organism we are speaking of persons the world [...]. Various instances of an organism’s having behaved as a person, many in succession, sum up as a person. It may seem that an organism has a person with which it is associated, but rather than actually having a person, an organism has a long-term association only with behaving as a person. Who has been accepted as a person by other persons is really nothing more than the set of ways an organism that persons behaves. (1)

In this account, the organism is the source of life, and personhood is the form in which the (human) organism engages the world. In contrast to Deleuze’s concept of doubling, where life is split along parallel lines, one indefinite, the other definite, what is at issue here is an intimate correlation or co-functioning of person and organism, personal and impersonal life. For just as the organism comprises the source for the life of the person, so too is personing the activity that allows the organism to deploy its life. This is why personing concerns, first and foremost, the positioning of the organism’s body, and it is also why the organism is sensitive to—why it can be impacted by—the architectural surround: “The momentum an organism is able to gain on being a person, or rather, on behaving as one—that set of conditions, born of actions taken, that makes person-formation possible—depends directly on how it positions its body. Surroundings invite, provoke, and entice persons to perform actions” (1). As the trigger for personing, the architectural organization of space instigates modifications in the configuration of an organism’s sense organs:

[...] the enacting motions of these actions [provoked by surroundings] not only serve up alternate vantage points but also inevitably shift sense organs about. The shifting about of the sense organs naturally affects how

Now he is struggling harder to get back. And yet—like us all, when we swoon—like us all, every day of our life, when we wake—he is instinctively unwilling to be restored to the consciousness of his existence, and would be left dormant, if he could” (cited in Agamben, “Absolute Immanence” 229).

a person fields her surroundings and has much to do with what of the surroundings ends up standing for or approximating the surroundings. (1-2)

What is at stake in the architectural body is, accordingly, not a body-without-organs but an organism with flexible, reconfigurable organs. Whatever margin of indetermination characterizes the human, it is one constrained by the integral organization of the organism.

When they suggest the heuristic value of keeping the boundary between the organism and the person indeterminate, Arakawa and Gins underscore the integral picture they accord life: refraining from specifying where exactly the division between impersonal and personal life lies maintains an optimal degree of “tentativeness,” the very condition for that form of experimentation called the architectural body. This, indeed, is the key to architecture’s role as an aid to reflection:

An integrally intelligent whole, always capable of bringing conscious reflection into the mix, the organism-person feels and thinks its (way through an) environment. Upon its being granted that each person acts within her environment as a thinking body—nerve tissue can be found throughout the body, the neuromuscular system can coordinate itself to act thoughtfully, and each organ acts “knowledgeably” within its own domain—architecture then looms large as a great aid to critical thinking. Architecture’s task is to mete out the world in such a way that it might be reflected on bodywide. (3)

If architecture can stimulate the evolution of the human species—if it forms the first supplement to genetic epigenesis—that is precisely because it couples life, organismic life, *human* organismic potentiality, with the activity of personing, with actualization in concrete architectural situations.

Given their broadly “naturalistic” understanding of life, what exactly are we to make of Arakawa and Gins’s celebration of a reversible destiny architecture? How can they defend an integral conception of life rooted in the organism and at the same time claim that architecture can suspend the condition of mortality? As I understand it, their concept of “reversible destiny” and the “crisis ethics” to which it points call on us to resist embracing human mortality as a foregone conclusion. By resisting the urge to set mortality apart as a special category of event, Arakawa and Gins suggest, we will find ourselves in a position to explore the potentiality of the human organism beyond the possibility barrier. Thus, the immortality they champion is something of a regulative ideal: by intensifying the life that we enjoy as organisms that person, reversible destiny architecture opens future possibility—a certain margin of immortality—without abandoning the organic basis of life.

We would do well then to listen carefully to the injunction Arakawa and Gins pose to us:

What if it turned out that to be mortal was not an essential condition of our species? [...] What if it turned out that members of our species were not forever slated to be mortal? [Isn’t] reversible destiny [...] an open challenge to our species to reinvent itself and to desist from foreclosing on any possibility, even those our contemporaries judge to be impossible [?] (xviii)

To be immortal, on this understanding, does not necessarily mean to escape from mortality. Rather, it designates the potentiality—a potentiality characteristic, for Arakawa and Gins, of the human being as such—to resist the foreclosure of the impossible, the identification of the real with the possible, that is always operated from the present static state of the human organism. The immortality enjoyed by the human species comes from its capaci-

ty to interrupt, to think and act beyond, the program of life that dictates its genetic evolution: immortality is what allows the human organism to be more than merely organismic without in any way ceasing to be organismic.⁴

Thus, in contrast to the impersonality of life celebrated by Deleuze as fundamentally a-human (since the human is merely a molar configuration of more primary molecular forces), the experience of immortality championed by Arakawa and Gins informs what is, in the end, a most forceful affirmation of the human, understood as a flexible organismic condition. Without needing to draw any discrete dividing line between human animality and animality as such, Arakawa and Gins are thus able to demarcate the human in a way that resolutely refuses to jettison its organismic, living basis.

On this score, crisis ethics could not differ more markedly from the ethics of philosopher Alain Badiou, who sees in immortality nothing less than a break from the mere “animal substructure” we all necessarily possess as sentient beings. Badiou’s denunciation of animality is part and parcel of his critique of Western conceptions of ethics, all of which allegedly define the human being as a victim, or better as “the being who is capable of recognizing itself as a victim” (10). By so defining the human, ethics equates it with the animal, reducing the human being “to the level of a living organism pure and simple.” Although it is, incontestably, an animal species, neither its mortality nor its predatory nature can “distinguish humanity within the world of the living” (11). That requires the experience of the immortal understood precisely as a break from life: the determination to remain “something other than a mortal being” (12). Not insignificantly, the possibility for such experience comes only in situations that challenge human complacency, the complacency of the living, in the most radical way:

An immortal: this is what the worst situations that can be inflicted upon Man show him to be, in so far as he distinguishes himself within the varied and rapacious flux of life. In order to think any aspect of Man, we must begin from this principle. So if “rights of man” exist, they are surely not rights of life against death, or rights of survival against misery. They are the rights of the Immortal, affirmed in their own right, or the rights of the Infinite, exercised over the contingency of suffering and death. The fact that in the end we all die, that only dust remains, in no way alters Man’s identity as immortal at the instant in which he affirms himself as someone who runs counter to the temptation of wanting-to-be-an-animal to which circumstances may expose him. And we know that every human being is capable of being this immortal—unpredictably, be it in circumstances great or small, for truths important or secondary. In each case, subjectivation is immortal, and makes Man. (12)

Leaving aside the dubious elitism inherent in this conception, we can discern in Badiou’s ethics *the precise inversion* of the correlation of organism and person that Arakawa and Gins develop: for Badiou, the experience of

⁴ This, incidentally, is why Arakawa and Gins can celebrate the quantum leap promised by genetic technologies. Far from facilitating the end of the human species, such technologies have the capacity to contribute toward the intensification of human life: “Within the life sciences, [defeatists] try to cure the human body or figure it out such as they find it to be, never attempting to reconfigure it altogether, never thinking to reorder the body radically so that it might elude mortality. Because most life scientists have, along with everyone else, dismissed out of hand any thought of a possible fundamental reordering of the body, they are at a loss as to how to judge the import of human cloning, for example, as method through which the body could conceivably be reconfigured for the better” (xvii).

the immortal, and the birth of the human, occurs precisely at those moments where the person—what he calls the subject—transcends its animal basis. Badiou explains:

There is only a particular kind of animal, convoked by certain circumstances to become a subject—or rather, to enter into the composing of a subject. This is to say that at a given moment, everything he is—his body, his abilities—is called upon to enable the passing of a truth along its path. This is when the human animal is convoked [requis] to be the immortal that he was not yet. (40)

The composition of the subject thus requires “something extra,” something external to a situation.

Yet paradoxically, this something extra, even as it marks the break with animality, does not cease to find its support in “the animal of the human species”: “Let us say that a *subject*, which goes beyond the animal (although the animal remains its sole foundation [*support*]) needs something to have happened, something that cannot be reduced to its ordinary inscription in ‘what there is’” (41). If the subject, in becoming subject, does not cease to be the very animal from which it would mark the most radical break, it is precisely because its advent marks a doubling constitutive of the human. Not entirely unlike the parallelism obtained between the plane of immanence and the plane of organization on Deleuze’s ontology, a relation of “consistency” holds the animal and the immortal together in a vaguely tenuous correlation. Badiou defines consistency as the superimposition of the “composition of the subject of truth” onto “the simple perseverance-of-self [Spinoza’s *conatus*]” (46): “consistency is the engagement of one’s singularity (the animal ‘some-one’) in the continuation of a subject of truth. Or again: it is to submit the perseverance of what is known to a duration [*durée*] peculiar to the not known” (47). Still, whereas Deleuze’s ethics of affect remains naturalistic through and through, Badiou’s ethics of subjectivization, in the very process of occupying the troubled split between animal interest and immortal fidelity to a singular truth, would appear to want it both ways: for if “the ‘myself’ engaged in the subjective composition is identical to the one that pursues his interest,” then the subjectivization that occurs by transcending the animal substructure can only be driven by animal interest (54). As Badiou sees it, the paradoxical duality informing the relation of consistency is made good by the production of an excess external to the animal some-one, an excess that comes from the singularity of the event:

The “some-one” thus caught up in what attests that he belongs to the truth-process as one of its foundation-points is simultaneously himself, nothing other than himself, a multiple singularity recognizable among all others, and in excess of himself, because the uncertain course [tracé aléatoire] of fidelity passes through him, transfixes his singular body and inscribes him, from within time, in an instant of eternity. (45)

This event-derived excess is sufficient to reconfigure the situation in a way that, by provoking fidelity, necessarily calls the animal beyond itself.

We are now in a position to specify the radical gambit pursued by Arakawa and Gins: put bluntly, they seek the excess of the human being over itself not in a contingent encounter with the truth *but in the very animal condition that characterizes it* as an organism that persons. For them, it is not a question of directing the body toward a fidelity beyond itself, but rather one of extending, through the encounter with architecture, that of which the body is capable. If the human organism is necessarily in excess over the person, that is because its embodiment brings a flexibility that lets it reconfigure itself so as to maximize life.

Consider Arakawa and Gins's *Gaze Brace*, designed as a "means of showing how changes in bodily position alter the shape of awareness" (Arakawa and Gins 85). *Gaze Brace* is the name given to a room constructed from a bird's eye view and placed contiguous to the same room viewed straight on (literally, it was intended to form a brace, a "prosthetic augmentation," for "all modes of perception"). As the artists explain, the effect of this experimentation with the architectural surround was to facilitate the "disperse-to-contrast procedure," that procedure whereby landing sites are dispersed under contrastive conditions to make them more palpable:

People moving back and forth between the room and its bird's-eye-view twin—the two exactly the same but precisely different—would be able to track with some ease the landing sites they would be obliged to disperse in the course of noticing room features repeated in identical locations, but from radically different vantage points. (86)

Like many of Arakawa and Gins's architectural ventures, *Gaze Brace* facilitates reflective awareness of the process whereby bodily flexibility can be drawn upon. It is designed to make salient the choice continuously faced by the body and, with it, the fact that the body has this choice to make in the first place: "The body must either escape or 'reenter' habitual patterns of action—habitual actions that have customized life into only a few standard patterns. Upon the body's mastering new patterns of action, bioscleave emerges reconfigured" (62).

The heuristic nature of Arakawa and Gins's work attests to their effort to construct a culture that would emerge from and remain in close resonance with the needs and capacities of the human organism. Their hope is that, by being made aware of the body's "margin of immortality," we humans might be in a better position to construct the world as a transductive correlate of our embodiment. That such a venture is necessarily a collective one forms yet another point of divergence from Badiou: for whereas Badiou's ethics of subjectivization is individualistic with a vengeance (consider the heroic tendency of his examples: Galileo's creation of physics, Haydn's invention of the classical music style, a personal amorous passion, etc.), Arakawa and Gins's crisis ethics aims to make the world a richer place for all. Indeed, the concept of the architectural body is necessarily, essentially collective: "In cooperation with other organisms, not only synchronically but also in some respects diachronically, the architectural body mediates the body proper and the architectural surround, and it therefore ought to be viewed as communal" (70-71). What this passage alludes to is the incontestable fact of architecture's public dimension: because any given architectural surround—be it a private dwelling or an office park—necessarily perturbs or entices more than one organism, architecture itself forms a privileged procedure for reconfiguring human community as an outgrowth of organic life, and the architectural body ceases being the strict correlate of one body-proper in order to be a collective embodiment in which many bodies can participate, albeit in variant ways. The architectural body, accordingly, comprises a form of what Gilbert Simondon calls collective individuation: an individuation of a group, and at the limit of the human species itself, that is not simply the sum of individual individuations, but that draws on the excess of the organism over itself, what Simondon calls its participation in the "preindividual" domain, that is, the impersonality of life itself (*L'Individuation psychique et collective*). In fact, the architectural body transductively correlates two terms that are themselves collective by nature: the body understood as the impersonal life of the organism and the architectural surround as the organization of an environment, that is, the delimitation of a world for a group of organisms.

At the limit, this transductive correlation of collective body and architectural surround gives rise to a total recursivity, a literal coevolution, of organisms and urban space:

Because issues of viability are everyone's concern [...], procedural architecture, a populist architecture of hypothesis, should be approached as a community-wide collaborative initiative. Together, the members of our species will exponentially increase the tremendous amount of forethought that is needed for town planning. Exhorted and cajoled by their town, by virtue of being gently constrained by its features and elements, to perform architectural procedures, people work and play at figuring out what in the world they could possibly be. Hypotheses put forward through built form will be predictive of built hypothesizing to come. [...] a closely argued built-discourse can foster fundamental reconfigurings of bioscience that will continue or lead to a restructuring of viability, to be translated immediately into life on new terms. (61)

Thought of in this way, urban formations differ from simpler architectural surrounds, from the first environmental scaffold onward, precisely because they animate a more complex architectural body. For example, the flow of people into and out of cities not only places continually changing demands on the environment, but also taps the creativity of the body that is unleashed through the procedure of disperse-to-contrast. Put simply, each body brings with itself a history of experience that informs its own margin of immortality: "The town has been prepped to recognize and expand on, affirm or negate, in part or in full, what other towns have led her to be able to feel and know. At issue always: what the body can come to know on its own behalf and what the body comes to be able to say to itself" (61). The architectural body generated by a town is, accordingly, a complex, evolving construction informed equally by the set of bodies that variably enter into its scope and by the particular kinds of challenges posed to these bodies by the town's architectural surround. For this reason, we can speak of the urban experience itself as a continuously evolving architectural body: bodies and surrounds grow to fit one another in ways that resemble organic genesis or individuation far more than mere fabrication.

Arche-technics

For Arakawa and Gins, the stakes of crisis ethics concern life itself, or more exactly, that form of life we call the human. Thus they see architecture—the reflective formation of an architectural body—as the ultimate human project, the very construction of the human as such:

Activating an architectural procedure, a person comes alive to her own tacit knowing; body-wide and wider, occurrent tacit knowing goes explicit. A built world, designed with foresight peering through forethought, and that will have been, with great deliberation, arrayed as a communal project, will frame the formation of "the human." (60)

With this understanding, we are returned to our starting point: to the question of architecture as the first or originary supplement that, precisely by opening an extragenetic component of evolution, marks the advent of the human.

It is philosopher Bernard Stiegler, following on the heels of paleontologist André Leroi-Gourhan, who has theorized the "différance of the human" as "epiphylogenesis" or "the pursuit of the evolution of the living by

means other than life” (Stiegler, *Technics and Time* 135). For Stiegler, the human is that being constitutively in correlation with the domain of technics, which is to say, with culture, as a precondition for its own proper evolution. Stiegler seeks to push the logic of technical invention to its extreme point, the point at which the distinction between a “who” (who invents?) and a “what” (what is invented?) is not simply inverted, but indeed dissolved, such that it must be said to be both the human and the technical domain together that drives the evolution of the human (or, more precisely, the coevolution of the human *and* technics). To do so, he begins at the beginning, as it were, at that moment when the cortex found itself doubled by the flint:

[...]we shall focus on the passage into the human leading from the Zinjanthropian to the Neanthropian. This ground breaking [frayage], which is that of corticalization, is also effected in stone, in the course of the slow evolution of techniques of stonecutting. And evolution so slow—it still occurs at the rhythm of “genetic drift”—that one can hardly imagine the human as its operator, that is, as its inventor; rather, one much more readily imagines the human as what is invented. The emergence of this being—producer, constructor, if not conceiver—begins then in a process of neurological evolution. However, on the one hand, it is no longer strictly a matter of a zoological phenomenon: the most archaic technical evolution is already no longer “genetically programmed;” on the other hand, beyond the Neanthropian, this process continues as pure technological evolution, the organization of the cortex being genetically stabilized. [...] One must first ask what mirage of the cortex is experienced [s'éprouve], as pathbreaking, in the hardness of the flint; what plasticity of gray matter corresponds to the flake of mineral matter; what proto-stage of the mirror is thus installed. One must then ask what the closure of the cortical evolution of the human implies from the vantage of a general history of life, the closure of the cortical evolution of the human, and therefore the pursuit of the evolution of the living by other means than life—which is what the history of technics consists in, from the first flaked pebbles to today, a history that is also the history of humanity—a statement that will lead us to the unusual concept of “epiphylogenesis.” (134-135)

This originary supplementation of the genetic program of the human yields a dialectic of sorts that will drive the process of history precisely by making the evolution of the human dependent on the sedimentation of human epigenesis in exteriorized forms of memorial support: “epigenetic sedimentation, a memorization of what has come to pass, is what is called the past, what we shall name the *epiphylogenesis* of man, meaning the conservation, accumulation, and sedimentation of successive epigeneses [...]” (140). More simply put: the human is that living being who can pass on its experience not merely through its genes, but through the conservation and dissemination of cultural knowledge.

One of the fundamental consequences of Stiegler’s conceptualization of *différance* as life is the necessity to specify *différance* historically, by means of the concrete technical conditions or stage of technical evolution, that allows it to come into play. While this aspect of Stiegler’s work is largely beyond the scope of our current discussion, one of its elements will prove particularly important here: for by placing the impact of technical evolution exclusively on the side of culture understood as a departure from the living, by restricting it to the storage of the past in various forms of technical memory supports, Stiegler effectively drives a wedge between the human being and its technical supplement. This restriction has at least two important consequences. First, it insures that whatever impact it may ultimately have on human evolution, technics must be mediated through memory: technics, we might say, can only impact the human being indirectly, by altering the conditions for the reactivation of the past in

the present. Second, this restriction has the effect of keeping the evolution of technics and the evolution of the human separate from one another, despite the originary recursivity that once interlinked cortex and flint. As we shall see, the direct consequence of this separation is a certain passivity of the human, or, put another way, the priority of the technical as the driving element in the differential synthesis of life.

Turning to our contemporary techno culture, Stiegler contends that today's global, real time televisual network has the effect of programming consciousness at the collective level. What happens when all the world watches televised images of a global event in real time (that is, at the same time) is something unprecedented, at least from the standpoint of its technical dimension: it is a collective programming of the rhythm of consciousness that, according to Stiegler, threatens to homogenize subjectivity. The agent of this programming, if there is one, is Hollywood or America which, by way of taking control over the flux of consciousness itself, has literally transformed life itself:

[...] today, the world lives to the beat of televisions, no event can be produced (can produce its effects, be inscribed in "world consciousness") without having been selected, seized, filtered, deconstructed, reassembled, produced, co-produced and post-produced by the universal synchronizing production center. [...] Cinema qua "reproduction" of life transforms life just as writing qua "reproduction" of speech, far from simply describing language, writes it, precisely. Which is to say that it invents life. This invention is by nature a geopolitical struggle. The "macdonaldization" of the world is the American pursuit of the extension of the extended Latin grammar and the major rupture with its properly European episode. However [and this is the crucial point], the possibility of such a global adoption of a way of life through cinema and television was only realizable [...] owing to the systematic exploitation of the persuasive force proper to cinematographic coincidences in so far as they induce quasi-irresistible processes of adoption, adhesion and belief. ("The Time of Cinema" 111-112)

The very possibility for a technical programming of consciousness at the collective level hangs upon the identification of consciousness, life, and cinema. The global, realtime televisual network can captivate consciousness, and induce a collective homogenization, precisely because—which is also to say *only insofar as*—consciousness requires a temporal object for its constitution. Stiegler bases his analysis here on Husserl's concept of the temporal object. According to Husserl, time-consciousness, that is, consciousness of the self existing in time, can only occur indirectly, through the mediation of a special kind of technical object, what Husserl calls a temporal object. A temporal object—Husserl's preferred example is a melody—is an object that does not simply exist in time but that is constituted *from* time itself. Focusing on the technical conditions of the contemporary temporal object allows Stiegler to complicate Husserl's analysis of time-consciousness by introducing technicity—what he calls "tertiary memory"—into the heart of primary retention. Tertiary memory, meaning the storage of the past not lived by present consciousness in forms that nonetheless allow it to be revived or assumed by consciousness in the present, becomes the very condition for consciousness as such, which is why Stiegler can claim that consciousness *is* cinematographic. It is only because a subject has the capacity to assume a collective past *that has not been lived by it* that it can assume and re-present its own past (secondary retention or remembrance) and that it experiences the present "now" as a thickness comprised of protentions and retentions. For Stiegler, in sum, consciousness is essentially technical since it can only experience itself through its consciousness of a temporal object.

The devastating limitation of Stiegler's identification of consciousness with cinema—its fundamental neglect of embodiment—appears clearly in his own celebration of digital image technology as a means to intervene in the cinematic programming of consciousness.⁵ For Stiegler, the digital image holds forth the promise of a “more knowing belief,” of new forms of “objective analysis” and of “subjective synthesis” of the visible precisely because it allows us unprecedented flexibility to intervene in the technical synthesis that, as we have just seen, conditions consciousness itself. With its capacity to interrupt the machinic flow of the real time broadcast, digital technology promises to expose the determining role of the technical synthesis, and, more importantly still, to open it up to unprecedented forms of experimentation. The basic notion informing the hope Stiegler places in digital image technology is that the capacity it offers to “decompose” the image into discrete units will allow human beings to take back some control over the technical conditions of consciousness. If we can intervene, slow down, and manipulate the machined flux of images that comprise today's global televisual temporal object, we will be able to create different technical conditions for the spectatorial synthesis that is consciousness. The ultimate payoff of digital image technology will be nothing less than a transformation of the spectatorial synthesis that is catalyzed by a manipulation of the technical synthesis:

*Because synthesis is double, the gain in new analytic capacities is also a gain in new synthetic capacities. [...] [N]ew image-objects are going to engender new mental images, as well as another intelligence of movement, for it is essentially a question of animated images. The intelligence I'm talking about here is not the intelligence of what I called the new knowledges of the image. It designates techno-intuitive knowledges—intentions in the Barthesian sense—of a new kind. (Stiegler, *Echographies* 159, 162)*

This capacity to alter the technical conditions for the subjective synthesis does nothing to question the priority accorded the technical synthesis; neither does it escape the reduction of life to consciousness understood, effectively, as a purely visual experience. Indeed, by transformatively appropriating Husserl's concept of the temporal object, Stiegler actually trades in a richly and multiply embodied perceptual experience (the acoustic perception of a melody) for the most abstract sense (the visual perception of cinematic images). What is more, he gives priority to the pre-selection that the cinematic temporal object has always already operated on retention over the selection that occurs in the actual rehearing of a recorded musical memory (or, for that matter, the re-viewing of a film) where it is the entirety of bodily response that drives the selection. If Stiegler's concept of consciousness thus remains woefully disembodied, that is because he effectively views it as an epiphenomenon of the technical synthesis: the subjective synthesis cannot contribute anything from itself, but can only follow the dictates of its technical conditioning. That, moreover, is why Stiegler's program for a resistance to the reign of real time televisual media puts all its effort into modifying the technical synthesis.

Understood as an alternative to this account of epiphylogenesis, Arakawa and Gins's concept of the architectural body—as the transduction of body and architectural surround—furnishes a better model of originary (technical) supplementary for the precise reason that it invests in the creativity of embodiment. Thus, rather than assuming that technical and human evolution confront one another extrinsically, Arakawa and Gins wager every-

⁵ For a more detailed critical account of Stiegler's project, see my paper, “The Time of Affect, or Bearing Witness to Life.”

thing on the intrinsic correlation of the two: architectural surroundings can become triggers for creative evolution precisely because they are at issue in embodied life, and embodied life can induce modifications of architectural surroundings precisely as a means to intensify itself, to exercise its margin of immortality. In actual fact, if body and surround are transductive correlates, they cannot be considered apart from one another, which means that Arakawa and Gins's concept of the architectural body—taken as a model for the epiphylogenesis of the human—sketches a return to the originary condition of human technogenesis: the recursivity linking cortex and flint. And, from this originary condition, Arakawa and Gins propose to reconstruct a different culture, one that, unlike Stiegler's culture of technically-supported (tertiary) memory, never cuts its ties to embodiment as the hinge connecting body and environment, the zoological and the technical. No matter how complex culture becomes, it will always harbor, at its very center, the architectural transduction of life prior to any subsequent division. That is why an architectural revolution is necessary:

Only subsequent to their having been an architectural revolution, a thorough re-visioning of architecture, will difficult questions [...] call forth answers in the bodies of our contemporaries. [...] The wish and will to [counter mortality] must be in the air we breathe, having been built into the places within which we live and breathe. Architecture must be made to fit the body as a second, third, fourth, and, when necessary, ninth (and counting) skin. (Arakawa and Gins xv)

Faced with a world in which the technical domain seems to confront us from the outside—whether this be envisioned as Stiegler's technical programming of consciousness or Badiou's denunciation of the situation—we must find a way to rediscover the recursivity that is contained, *in potentia*, in our own embodiment. That is our only hope to gain agency over the extra-genetic dimension—but also the extra-genetic *capacity*—that makes us human. Whereas Stiegler's program for a digital decomposition of the image leaves us abjectly passive in the face of a technical outside, and whereas Badiou's ethics of subjectivation turns its back on the living body as such, Arakawa and Gins's crisis ethics urges an investment in architecture (culture) that would necessarily be an investment in life itself. Such an investment comprises a chance for us to redirect our epiphylogenetic supplement toward the furtherance of the life of our species: “We ask only that enormous sums of money be spent on constructing the world as tactically posed surrounding for the benefit of the body. A procedural constructing of the world will constitute a way for our species to take evolution into its own hands” (xix).

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