

## TENTATIVELY DEDICATED TO OUR TRANSHUMAN DESTINY

### 1

*Now nanotechnology had made nearly anything possible, and so the cultural role in deciding what should be done with it had become far more important than imagining what could be done with it.*

(Neal Stephenson, *The Diamond Age* 31)

The dedication of Arakawa and Gins's 2002 book *Architectural Body* is "To transhumans" (*Architectural Body* ix; henceforth referred to as *AB*). How do we read this? A first reading recalls their theory of "reversible destiny," pursued single-mindedly since 1981, a belief "that through radical forms of architecture mortality itself can be undone" (*AB* 101). The first lines of the full dedication read: "To those who have wanted to go on/living and been unable to" (*AB* vii). The break after "go on" reinforces the reversal of destiny, not simply living long and healthy but going on even if we cannot go on, beyond life and death. Reversible destiny is easily the most controversial aspect of Arakawa and Gins's work. The quickest reactions find it silly and even wasteful to seek an end to mortality. They cite the existential fact of our being-towards-death and insist on the more pressing need to address social or ecological conditions. Other reactions bide their time, recouping reversible destiny as a critical call to theorize forms of subjectivity and thought appropriate to a newly globalized, posthuman world. Arakawa and Gins welcome this view as a safer, "perhaps less terrifying and more inviting way" (*AB* xvii). The sympathetic readers miss the point but aid the cause. In fact, the claim is quite clear: "What if it turned out that to be mortal was not an essential condition of our species?" (*AB* xviii).

"And so/even more so," the dedication continues, concluding: "To transhumans" (*AB* vii). Second reading: either transhumans already want to go on and are unable to, or transhumans are already going on. Either there already are transhumans (all of us or some of us?); or, we are not yet transhuman, and we humans face a crisis, a need to become transhuman. The alternatives are clear but the answer is not. The cumulative "so" and "even more so" weighs in on these transhumans. Who are they? Possibly all of us, each one, as we follow reversible destiny to undo, loosen, widen, and recast the concept of person (*AB* xi-xii).

But there are already transhumans, or at least so the transhumans claim. In fact, there is even a World Transhumanist Organization. And yes, they want to live forever. Transhumans are fascinated, among other things, with longevity research, which currently combines nutrition and cryogenics with innovative biotechnology. For example: the Advanced Cell Technology company plans to grow transplantable human tissue that would replace aging tissue. The result is "no limit on the life span of human beings by 2099," according

to one scientist (Alexander, "Don't Die, Stay Pretty"). At the same time, NASA-funded research at Stanford creates computer simulations of radical plastic surgery and body restructuring, including tissue replacement. The target is the recasting of the human body required for extended space travel, but the research will be available closer to home, for transhumanist-minded folks wanting a new look. If such speculative claims lead to the label of "science porn," in the words of *Wired* magazine, they are welcomed by the transhumanists as a reasonable emphasis on ends over means, a forcing of method and technique towards the necessary ends of the human race (Alexander). Transhumanism posits a near future of limited resources and ecological disaster, with technology the only solution. Transhumanism is a grab bag of disciplines, mixing a heady cocktail of nanotechnology, VR, mind uploading, complexity theory, ubiquitous computing, and whatever else contributes to the goal of becoming immortal, augmented, or completely uploaded to machines. These goals are seen as ends in themselves—both a right and an imperative.

And so, third reading: Arakawa and Gins dedicate their book to affinities between reversible destiny and the speculative movements in technoscience that come together under the rubric of transhumanism or "transitional humans." As set out in "The Transhumanist Declaration," transhumans believe in the boundless transformative power of technology, including the "feasibility of redesigning the human condition." It is easy to dismiss transhumanism. Critics point to its insistence on controversial technologies and position transhumanism dangerously close the scientific fringe. It belongs to the long history of futurism and extrapolation, to "future shock" theories that too often repeat nostalgic tropes from the present. Transhumanism relies almost entirely on speculative futures rather than the measured pace of normal scientific development, and yet its supporters and fans include respected and highly placed scientists. In fact, transhumanism is at both the periphery and center. Transhumanism is an irritation, a provocation, and a site of tremendous cultural excitement. The boundless optimism in perpetual progress extracts a momentum of questioning and change. By exactly inhabiting the leading edge of scientific possibility, transhumanism gathers and directs, or at least points out, where research should—must—lead us. "There's been nothing like this movement," Ed Regis declared in a *Wired* magazine article on the Extropians, the most well-known branch of the transhumanist movement, "nothing this wild and extravagant—since way back in those bygone ages when people believed in things like progress, knowledge, and—let's all shout it out, now—Growth!". It is all too easy and at the same time not easy at all to dismiss such claims. Transhumanism dreams the hidden and silent dream at the center of all technoscience.

Exactly this makes transhumanism unsettling within and against scientific culture. For transhumanism, humans and the world we inhabit are not the background against which science and technology should work but rather the raw material for "overcoming human biological and psychological limits" (More, "Extropian Principles"). Humanity is not the agent but the target of research. Transhumanism jump-starts scientific teleology precisely by displacing epistemological concerns with moral imperatives, by dissolving ends into means. Transhumanism frees up the purpose of science. The message is something like: we must transform ourselves into posthumans, and the seemingly irreducible problems of defining and symbolizing human consciousness, for a start and among other problems, are dissolved by simply being leapt over, the problem solved by a presumed solution to come. In short: we must solve these problems, or else. The "or else" is in this

case the finite prospects of a species on a planet of finite resources and a finite lifespan. We limit ourselves by taking for granted our mortal parameters—death, brain capacity, mobility, and so on—and limit ourselves by focusing on short-term problems such as curing world hunger or AIDS.

Of course, this historical situation, this set of limitations, exactly delimits our scientific institutions, with their cycles of grants and experiments, publications and testing. Transhumanism is no scientific movement but rather a shift in the background assumptions of scientific institutions. By insisting that science must have an end, transhumanism brings this end about. Given the ultimate horizon of the earth's extinction, it becomes rhetorically easier to agree that such problems must be solved. Transhumanism treats the future as if it had already come about, positing a completion and overleaping the present towards it. The future is simply the present worked through to its ends. Transhumanism's extravagant hopes are situated in the future but dictated by the imaginary repertoire of the present. All future materials are built from what is lying around already. One transhumanist declares that "our future bodies will have streamlined muscles in all sorts of interesting shapes," a dream both charmingly narcissistic and dismayingly modest (Alexander). The transhuman future will be like the present but supersized.

Nonetheless, the tremendous conceptual advantage of the transhuman overleaping is the flexibility afforded to think, once again, of humanity in terms of transcendence. If this is a rhetorical act, it nonetheless situates rhetoric as a basic mode of acting for any scientific thought.<sup>1</sup> Can we ask, rhetorically and without sounding ridiculous, what the responsibility of science is? Not the responsibility for rigor and verification, nor the responsibility for continual improvement—making better peanut butter and toothpaste—but a responsibility to the future of humanity, that is, what should we expect from science? To ask this question and insist on our response is the reading of Arakawa and Gins's dedication. I want to insist, beyond all the odds, on the transhuman claim of Arakawa and Gins's work. Moreover, this claim turns out to read and occur in reading at the limits of any possible rhetoric and science. Arakawa and Gins propose a "crisis ethics" as the only mode of action suitable to a culture that can no longer think its relation to the world. They ask, "how to hold onto that which ought not to be allowed to disappear?" (AB 70). In the end, it is the force of this "ought not" that interests me.

Phenomenology remains the background condition for the modern notion of "normal science" and its more radical extensions. In particular, Edmund Husserl's late diagnosis of a "crisis of European Science" offers a precise and problematic departure point. For Husserl, the mathematical and technical processes of science throw a "garb of ideas" over the world, an appearance that takes the place of the "concretely intuited shapes of the life-world" (51). Mastery of phenomena replaces an orientation towards experiencing phenomena themselves. Method delivers the world in the carrying out of its operations, and science comes to understand the world in terms of quanta and physical formulae subject to formalization and calculation. Galileo's claim to read

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<sup>1</sup> Here I follow the "anthropological rhetoric" outline in Hans Blumenberg's "An Anthropological Approach to the Contemporary Significance of Rhetoric."

“the great book of nature” deposits all that perception might offer in the mediacy of mathematical formulae. Husserl writes: “It is through the garb of ideas that we take for *true being* what is actually a *method*” (51).<sup>2</sup>

Husserl’s formulation identifies science as “technoscience,” science in the service of technology, and precisely, for that reason, no longer a science. Turned into method, science no longer means anything specific for humanity, nothing beyond newer and ever more efficient technologies, ever more precise measurements and improvements with no apparent end. The aim of science as technology replaces any possible end for science. Science abdicates any claim of finalizing the knowledge it produces (it turns out that butter is good for you after all.) Scientific knowledge is ever susceptible to revision, re-testing, and refutation. Indeed, this is the purported worldliness of critically-aware scientific practice. The irreducible debates on realism, instrumentalism, and constructivism maintain their freshness by focusing on means towards an end that is always approached and never arrived at. If we attempt to reduce such debates by declaring that the purpose of science is the “modest realism” to “discover (some aspects) of how things really are,” we still cannot declare the end of science (Sokal and Bricmont 183). Culture no longer dreams of a completed scientific purpose (for this reason, it seems both overly fantastic and overly literal when Stephan Wolfram declares that the entire universe can be explained by an as yet undiscovered four lines of computer code. Only four? Which four? He’s not telling.) Thomas Kuhn’s “structure” of development based on revolution rather than teleological progress or Lyotard’s description of “postmodern science” as a language game between competing descriptions of phenomena confirms rather than creates this goal-lessness in the history of science. At the level of epistemologies of scientific practice, the Quinean underdetermination of evidence, forcing an ever renewed and vigilant verification and testing, is countered, or rather shored up, by the strong “research program” of Imre Lakatos. In any case, the emphasis on means rather than ends specifies the logic of experimentation but not the end of all such experiments. The plurality of views announced by Werner Heisenberg builds a physical theory on this open situation: “Science no longer confronts nature as an objective observer, but sees itself as an actor in this interplay between man and nature” (15). We remain disappointed in ever arriving at the final methodological purity of a completed physics as promised in the early modern science of Descartes, just as we remain firmly in the path of the methodological approach to science Descartes set out on the way to this completed science. In fact, we no longer even know what it is science might have offered, what might appear beyond the stand-in mediacy of the “readability” of nature. “Can we live in this world,” asks Husserl, “where historical occurrence is nothing but an unending concatenation of illusory progress and bitter disappointment?” (7).

No doubt the critical response to such aggressive technoscience is clear. The almost mythic status of “embodiment” in critical and philosophical science studies arrives to highlight the disembodiment of information and technology. Having exorcised that well-known ghost from the machine, both technoscience and its constructivist critics describe the mutual embedding of subjectivities and technologies. N. Katherine Hayles, for example, employs embodiment to describe the specific material and historical “instantiations” (one of her favo-

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<sup>2</sup> Here I am indebted to Hans Blumenberg’s discussion of Husserl and Galileo in *The Genesis of the Copernican World* (402-5).

rite words) articulating the concreteness of a cognizing subject and the “messy” complexity of contexts (*How We Became Posthuman* 12-13).<sup>3</sup> Similarly, Francisco Varela, Evan Thompson, and Eleanor Rosch’s *The Embodied Mind* offers a theory of “enaction” or “embodied cognition” rooted in the assumption of “a body with various sensorimotor capacities” and, secondly, the embedding of these individual capacities in “a more encompassing biological, psychological, and cultural context” (173). Embodiment is a kind of destabilizing event that tremors through all subsequent cognitive activity.

But do you have a thing even if you identify it structurally? Embodiment is a series of effects that are presumed and described, mobilized and built upon, but embodiment itself is quite delimited and prohibited, in precise and theoretically rigorous terms; that is, embodiment is an event, a destabilization, an articulation, and so on. The loss of interest in the ends of science does not come simply through giving up the interminable phenomenological task of reducing to the things themselves but rather through displacing the unsolvability of this question onto the irreducibility of embodiment. Through the enabling myth of embodiment, both technoscience and its critics end up describing the same epistemological problematic of the methodological construction of the world. True enough, the descriptions move in opposite directions: one away from embodiment towards smoothly functioning systems, the other again returning to the narrative of embodiment. Reinserting the body means foregrounding the methodological linkages and quantifications technoscience achieved. This reverse achievement leaves in place the notion of embodiment as the disruptive departure point. In either case, the differentiating momentum of embodiment is an irreducible ground articulating subjectivities and technologies. (The neologism “techniques of embodiment” is something like the theoretical compromise involved).

Consider *ubiquitous computing*. In a 1991 *Scientific American*, Mark Weiser of Xerox PARC declared that “the most profound technologies are those that disappear. They weave themselves into the fabric of everyday life until they are indistinguishable from it” (94). Unlike the theatrical showings of virtual reality, which “focuses an enormous apparatus on simulating the world,” Weiser proposes “invisibly enhancing the world that already exists” through an “embodied virtuality” making use of hidden telematics communicating with prosthetic body-attachments via microwave (98). Offering the example of writing (“perhaps the first information technology”) as a disappearing technology, Weiser adds that such a “disappearance is a fundamental consequence not of technology but of human psychology,” and cites the example of the phenomenological “horizon,” which says, “in essence,” according to Weiser, “that only when things disappear in this way are we freed to use them without thinking and so to focus beyond them on new goals” (97). The automatically cited horizon-reference cannot conceal its translation: no longer a shared precondition of appearances but now a topology for disappearances as the basis of preprogrammed environments.

The short-term success of ubicomp is evident in the current “pervasive computing” of handheld and mobile technologies. In fact, these devices still require a level of action and attention that makes the invisible strata

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<sup>3</sup> I am not considering more recent work by Hayles that suggests a differently nuanced reading of the materiality. For example, see the shift away from *How We Became Posthuman* in “Flesh and Metal: Reconfiguring the Mindbody in Virtual Environments.”

of technology all too visible. We should rather dream of the ubiquity of wearables or embedded circuitry, like the chip currently in cyberneticist Kevin Warwick's arm, triggering and responding to data streams beyond the speed and awareness of our consciousness ("Cyborg 1.0."). A better example than the PDAs we lug uncomfortably around are the advanced "augmented cognition" programs of the military's DARPA research agency. The DARPA "Exoskeletons for Human Performance Augmentation" program announcement declares that funded projects will extend "the information management capacity of the human-computer warfighting integral by developing and demonstrating quantifiable enhancements to human cognitive ability in diverse, stressful, operational environments" (DARPA, EHPA 1). Ongoing projects in "body augmentation" seek to create exoskeletal devices with a range of haptic and sensory augmentation, and such useful abilities as increased speed, increased strength, and the ability to "leap extraordinary heights and/or distances." The targeted "anthropomorphic architecture" augments all motor and sensory interactions into a "combat environment" for a time measured by "military significance" (DARPA, EHPA 2).<sup>4</sup> These formulas nicely capture theorization of space and time and subsequent disappearance into a new military space of appearance. Thought and action become purely tactical issues.

Ubiquitous computing takes advantage of embodied practices, building on our haptic, proprioceptive, sensorimotor habitus. Embodiment is differentiated into series of effects that can be systematized and programmed. Weiser's insistence that "profound technologies are those that disappear" is significant. Ubicomp builds on embodied practices and takes them for granted. Habit is systematized, while "disappearance" takes on a specific, strategic meaning: the takeover and programming of the visible world as a computational result. Appearances are the profound result of ubicomp's disappearance. Ubicomp is a method that succeeds precisely by turning method into habit, by producing *faux* plausibility and prefab coarticulation. Indeed, this is the correlate of profound disappearance. Weiser's goal of offloading our habituation of things into technology is predicated on a kind of actualization of context, where everydayness is delimited, made visible in its invisibility, no different but renewed in precisely this. Appearances must gain a profile, be made subject to variables and programs. Technology is woven into and disappears into everyday life only as the systematicity of what appears for the aggregate of the "human-computer warfighting integral." At the same time, it no longer matters what is thought or acted out where all cognition is already spoken for in the formality of a system of quanta and programming. Said otherwise: prefabricated environments disaggregate and functionalize action and intention precisely because they are systematically built on precisely the distinction between action and intention. In systematizing immediacy, method grasps only systematicity. Ubicomp and augmented cognition do not build on the immediacy of perception but on a systematicity that remains a metaphor for this immediacy.

Science means nothing more than new technologies. The inevitability of this end within the means of scientific method results in something that offers a shape in time, a consistent schema of technoscientific progress and its resulting critique. Technoscience and its critical analysis fall within the same schema. The ethical "know-how" of Varela's enacted cognition turns on the shared realization of the simultaneous groundlessness

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<sup>4</sup> Compare the DARPA "augmented cognition" program or AUGCOG.

and mindfulness of cognition (17-19). Hayles's discussion of embodiment invokes but can never present the background "fragility of a material world that cannot be replaced" (*How We Became Posthuman* 49). The resulting awareness is a self-reflection on the way cognition arises from embodied experience. In the more comprehensive claim of Niklas Luhmann's systems theory, such self-reflexivity forms the blind spot and basis of all systems, whether selves or nations, micro-organisms or computer networks (*Social Systems* 437-77). There is no questioning the critical worth of showing the disembodiment of technoscience, and Hayles and Varela stand in here for an entire paradigm of critical science studies. I have no wish to debate the importance of this paradigm. My goal is simply to underline the difference made by Arakawa and Gins's architectural body, a difference, however slight, that makes all the difference. Indeed, both the cover and preface of *Architectural Body* announce affinities but important differences from "fields of self-organization, autopoiesis, artificial life, and consciousness studies" (I will return to this point below). Crucially, Arakawa and Gins show that it is not that we are embodied first and then situated in a world, a world oriented around our embodiment. It is not that embodiment enables experience, but rather that embodiment presupposes an immediacy of experience, a minimum of perception.<sup>5</sup> We are "organisms that person" (*AB* 1). This minimum or *punctum* is the object of Arakawa and Gins's architecture.<sup>6</sup> By building the paradoxical object of experience itself, they offer the almost transcendental evidence of a world that remains contingent but always immediate to the body. Rather than the schematic means-end relation of "techniques of embodiment," architectural body is a pure medium that jams any immediate ends. In doing so, Arakawa and Gins once again can ask after the ends of science—not after any specific end but after the question of "ends" in itself. The pure medium of the body posits an absolute and transcendental end, against which presupposed background schemes such as techniques of embodiment can appear.

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<sup>5</sup> Here I am indebted to the metaphorological analysis of scientific paradigms in Anselm Haverkamp's "Chaos by Design."

<sup>6</sup> Here I assume Roland Barthes's *Camera Lucida* as the best account of such a paradoxical perceptual point.

## 2

[...] [T]he problems of knowing what is the subject of the State, of war, etc., are exactly of the same type as the problems of knowing what is the subject of perception: one will not clear up the philosophy of history except by working out the problem of perception.

(Maurice Merleau-Ponty, *The Visible and the Invisible* 196)

Much of what passes for transhumanism remains within the closure described by Husserl. Take as a contrast the living room of Arakawa and Gins's *Critical Resemblance House*,<sup>7</sup> filled with bars and layers, a labyrinth impeding any possible movement where "it could take several hours to go from the living room to the kitchen" (Arakawa and Gins, *Architecture* 99). What appears as a result is a sheer swarm of perception. The imposing labyrinth images "immediate and direct response to a probably existent" (*AB* 7). Perception is a labyrinth. The probable existent remains quasi-visible, translucent within the architecture of "perceptual landing sites," suspended within masses of response, aggregates of irritation. The possible resemblance of this house to perception is the construction of an almost transcendental object. If life receives its "plausibility" through the "co-articulations" of body and environment (*AB* 64), Arakawa and Gins give us a paradoxical appearance whose plausibility remains suspended. It must be negotiated, fallen into, dis-habituated and un-comforted. It is "tentative."<sup>8</sup>

Do we see an image of the world or an image produced by the world? The exaggerated, over-supply of perception made evident in this work is the emblem and extension of the body as "architectural body." Arakawa and Gins state that architectural body signals the inseparability of body proper and architectural surround (*AB* 2). The crucial notion of "contingency" describes the "linking and re-linking of the body and world to one another" (*AB* xiv). The *Critical Resemblance House* is the outside of the inside of the cognitive apparatus of the body itself. The body is no ground of perception but the contingent partner of the world. Or rather: no cognition within a body (no ghost in the machine) but through a body as a medium for the dance of the world. In the immediacy of this medium we experience the contingent relation of body and world.

"Landing sites" are the basis of Arakawa and Gins's theory of the architectural body's kinesthetic and proprioceptive cognition. A "landing site configuration," defined as "every instance of the world," always involves all three ways of landing as a site (*AB* 7). Landing sites explain how persons form a world through "thinking-feeling." This schema offers an abstract throughput for how cognition arises through a body sited in the world. The movement is from perceptual, to imaging, and finally to dimensionalizing landing sites. This

<sup>7</sup> See Baldwin, fig. a (GIFU1.jpg).

<sup>8</sup> For a different account of Arakawa and Gins's landing sites, see Hansen (330-342).

schema seems familiar enough, moving from direct perception to imaging or imitative perception, to the composite structure or dimensions. Through landing sites we are situated, embodied. But also, *through and through* the landing site runs a trembling, a perception that is neither embodied nor disembodied.

The first landing site is named “perceptual” but is more simply defined as “any immediate and direct response to a probable existent” (AB 7). The basic model is the concept of “pure sensation,” as described in Maurice Merleau-Ponty’s *The Phenomenology of Perception*: “the experience of an undifferentiated, instantaneous, dotlike impact” (3). Perceptual landing sites are hazy swarms of impact.

The image in our thinking-feeling is abstracted from the swarm (AB 7). The image is noticeably “wide” and “un-pinpointed.” The image is not the point of sensation but a filling in of the gaps in perception. Since perceptual landing sites are nothing but immediacy and gaps, the resulting image is not an image of perception but its result—this is no mimetic image but a trigger following the initial trembling. Imaging landing site creates an image in place of perception, “dancing attendance” and “aping” the perceptual landing site’s direct response” (AB 7). The image is a “stand-in,” an “amorphous according of more information than is actually supplied” (AB 12). The mechanism of perception works perfectly without anything at all to perceive. The image is always too much or too little. The image fills in the world, generalizes it.<sup>9</sup>

The medial schema of landing sites insists both on the fact of cognition and the gap-like non-occurrence of this fact.<sup>10</sup> Sensation is both the precondition and the content of the architectural body. By emphasizing the fact of kinesthetic and proprioceptive interaction with a world, and by foregrounding the architectural schema or figuration involved, Arakawa and Gins show the non-conceptual folding that both contains and excludes sensation within the concept of architectural body. The concept of architectural body offers an explanation that works beyond the paradox of perception. The paradox is suspended in the mediality of the architectural body.

The image produced by the irritation of perception is described graphically: it involves a kind of “quasi-registering” (AB 12). This theory of registering is the correlate of the folded, paradoxical structure of the body. The registration is a medial mark of perceptual throughput. “Quasi” allows neither the appearance of mental images (*imagines*) nor the semiotic conventionality of a code of images. The registered mark trembles, both part of the “schematic domain of *landing sites*” and an experience of our thinking-feeling the world.

It would be easy to turn to a convenient semiotics and pin down this image. Rather, I wish to defend the paradoxical crux of perception involved. Refusing either the conventionality of the sign or the relative motivation of other forms of marking, quasi-registering is the singularity of the imaging landing site. The crucial point here is the mediality of the mark formed through quasi-registering. We are told that landing sites form “when symbolizing is put on hold”; instead, the particular “on hold” mark is described as a “muted symbol” (AB 22).

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<sup>9</sup> Aristotle writes: “The soul never thinks without an image.”

<sup>10</sup> In another context, Derrida writes: “Writing supplements perception before perception even appears to itself [is conscious of itself]” (224).

The muteness of perception within our imaging of thinking-feeling forces an abstract, schematic account. The quasi-registering of perception requires an architectural body. Only in this way can the paradoxicality of perception be addressed.

We are offered a partial answer: what the muted symbol captures is time, the “split second of muting whose instantaneous time span lasts only long enough for basic positionings to be registered” (AB 22). This time difference is an openness to an environment that is always present with and through the architectural body. Time may be a metaphor for what is contained in the muted symbol, perhaps the best and oldest metaphor available. Arakawa and Gins describe this relation as “tentative,” a word that pivots on time. The notion of hesitancy and care it invokes is oriented to a past as yet unresolved, not worked out, and a future that must equally remain cared for and in balance. Here, with all this invocation of time and of contingent proximity to the world, we are close to the Heideggerian thematic of care (*Sorge*). But Arakawa and Gins’s tentativeness means the world is contained *and* excluded in the architectural body. If the Husserlian “crisis” departs from the dominance of technoscientific method over intuited immediacy, what Arakawa and Gins offer as a corrective is a tentative non-departure suspended between method and intuition. There is no return to a pure origin of direct intuition, nor a lapsarian acceptance of the constructability of intuition from method, but a singular exposure of the fundamental phenomenological crux.

Maurice Merleau-Ponty’s unfinished work on *The Visible and the Invisible* elaborates a paradoxical phenomenology of *nothing*, a limit-phenomenology of “the imaginary and the hidden” (229). Let me argue, all too briefly, that this work remains the final phenomenological knot tying theory to perception, and, for that reason, provides the proper reference for Arakawa and Gins’s architecture *qua* technoscience and embodiment. In its most pointed formulation, Merleau-Ponty arrived at a central crux of the *punctum caecum*, a blind spot within consciousness that enables rather than excludes the invisible within the visible. To see “is always to see more than one sees” (247), but also, as already set out in the earlier *Phenomenology of Perception*: “It is not seen in itself, but causes us to see the rest” (309). The point here is not the internal dynamics of theoretical blind spots and subsequent recursive self-reflection. Such a focus remains within the closure of the visible and the constraints of theoretical reflection, that is, within the problematic of technoscience departing from Husserl. To the contrary: Merleau-Ponty’s point is the implied absolutely invisible that forces into profile the amount of perception contained within any theory.<sup>11</sup> The result is a phenomenology of theory rather than a theory of phenomenology. The notion of “hyperreflection” describes a reflection on the unavailable and excluded transcendental of perception as the basis for all reflection. The limit and failure of reflection is the starting point for architectural body. For Arakawa and Gins, “reflection alone represents too drastic a reduction, one that unnecessarily distorts the picture” (AB xv). In short, hyperreflection is the phenomenological take-down Arakawa and Gins apply to technoscience.

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<sup>11</sup> Merleau-Ponty writes: “The invisible is *there* without being an *object*, it is pure transcendence, without an ontic mask” (*Visible and Invisible* 229).

Architectural body unsettles and unbalances the too easy assimilation of perception to image. When Arakawa and Gins describe a house made of NASA-designed synthetic materials (“flexible, durable, and, to our delight, it happens to provide great insulation as well”), a house that “floats the Sited Awareness Hypothesis,” the goal is not awareness of the putative outside of the structure but awareness of the way the body “lands” on the structure. The house is a “procedural tool” that “reorders the sensorium.”<sup>12</sup> This is a meta-medial rather than metaphysical explanation. The evidence offered up in the “architectural body” is no longer technoscientific know-how, not even ethical know-how (in Varela’s sense of an awareness of my own and others’ mindfulness and groundlessness). The ethical importance of architectural body is not because of the knowledge that others, too, enact and construct their cognitive surrounds, and thus produce descriptions of systems just as we produce similar descriptions, as Niklas Luhmann ultimately concludes, following Varela (*Theories of Distinction* 33-75). By contrast, and pointedly so, the crisis ethical demand of architectural body comes from the inaccessible yet insistent perception within cognition. The almost transcendental proof offered by their architecture is nothing else.

Arakawa and Gins’s work is finally not about a particular scientific aim. It invokes no particular future—these are always banal, in any case, like some fantasy world of well-muscled and tanned transhumans. Architectural body works on the mythic residue of technoscience and embodiment to extract the claims of myth *itself*, extracting the singularity of this claim only. Reversible destiny does mean that some part of us, held tentatively, can only be accounted for in terms of this claim. Only by thinking the beyond already in the here and now can we assess the claims and demands of science (*AB* xvi). Going beyond the rhetoric of technoscience, Arakawa and Gins operate at the border of what rhetoric can say. The muted symbol contains within perception an extra perception beyond all perception, a perception of the imperceptible and a saying of the mute, an experience we all share without being able to say or show.

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<sup>12</sup> Arakawa and Gins write: “Tactically posed surrounds should be designed for the purpose of making landing-site dispersal (disposition/placement of sited awareness) readily noticeable,” and “Tactically posed surrounds should be designed for the purpose of altering the proportions in which different types of landing sites are dispersed,” with the conclusion that “How the body gets, how it disperses, and how it replenishes its energy – these are all questions with enormous crisis ethical import” (*AB* 96).

## 3

*Unreadability of this/world. All things doubled.*

(Paul Celan, *Schneepart* 332; translation modified)

No doubt, the insistence on this crisis call—the insistence that we all hear the demand of the architectural body—is the burden of proof for reversible destiny. I will not try to adjudicate the critics or proponents of theories of reversible destiny. My aim has been to respect and not resolve the paradox involved, that is, to read the theory of architectural body. It is important, however, to show how Arakawa and Gins themselves explain such a reading; that is, given the paradox of embodied perception, and given the impossibility of experiencing the mediality of the architectural body, how is a theory of reversible destiny possible? In conclusion, let me note that the medial, non-self-reflexivity of the architectural body still requires some reflection.

The cover of *Architectural Body* presents stark lines of text that declare the “connection between what we do and work being done in the fields of self-organization, autopoiesis, artificial life, and consciousness studies.” The text is all in quotations, a dialogue, with the reply: “The direction is the same. We’re on the same avenue. Even so, we’re doing something quite different.” Offered in lieu of a cover image, simply white text against a black background, these paragraphs are repeated again as the “Preface” to the volume. Here they are dated “New York 2002” (*AB ix*). A particular moment of conversation then, a final debate on the title of the book—this is what starts the dialogue—catalyzed in a moment of decision. What is dated gains the specificity of an event, an epiphany, made evident in the text at hand. And yet, having acknowledged the connection of reversible destiny to a range of constructivist scientific approaches to epistemology and life, this dated preface continues: “Should we spell out the differences?” Reply: “Not this time around” (*AB ix*). Both cover and preface, wrapping the text doubly tight as it were, “signal” connections only to conceal differences. The preface falls under the rubric of “not this time around.”

The differences from technoscience are not spelled out but read. The text is dated, but also remains indifferent to its dating, an indifference to the event of titling and publishing, a muteness of the text that acknowledges differences but refuses to spell them out. The text gestures to another event, another time and place where differences may be spelled out. Instead, Arakawa and Gins declare that the “whole of this text” will be proof of their claim (*AB xxi*). At various points, they suggest the equivalence of the architectural surround to a discourse, the equation of buildings to an aggregate of words into readable sentences. The reading of the text is the exact negotiation of the built discourse of architecture, and exactly this is the spelling out of the differences between their work and technoscientific embodiment. Reading is the best experience and explanation of the architectural body. At the same time, but not in contradiction, this reading is understood only as “blockage” (*AB 86*). Reading architectural body is a reading of unreadability. The built sentences vanish, like “poems that have ever eluded poets” (*AB 57*). They conclude, about their own book: “The device we will construct here with you will not do what we say it will do” (87). This is a text that disappears as we read it.

In suspending direct symbolization and in enforcing the paradoxical foldedness of the architectural body, in short, by enforcing an immediacy beyond any theory of embodiment or technoscientific method, Arakawa and Gins arrive at a need for reading. The mediality of the architectural body is like a graphical and linguistic system, but precisely its mutedness requires that it be read elsewhere. The text *Architectural Body* is the architectural body's "mode of disappearance," as Jean Baudrillard puts it about poetry (213). The nonliteral, figural hyperreflection on the almost transcendent mediality of architectural body is the still rhetorical requirement of our posthuman destiny.

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## WORKS CITED

- ALEXANDER, Bruce. "Don't Die, Stay Pretty: Introducing the Ultrahuman Makeover." *Wired*. 8.01 (2000). <http://www.wired.com/wired/archive/8.01/forever.html>. Accessed September 19, 2003.
- ARAKAWA, and Madeline GINS. *Architectural Body*. Tuscaloosa: University of Alabama Press, 2002.
- . *Architecture: Sites of Reversible Destiny (Architectural Experiments after Auschwitz-Hiroshima)*. London: Academy Editions, 1994.
- ARISTOTLE. "On the Soul (De Anima)." *MIT Internet Classics*. <http://classics.mit.edu/Aristotle/soul.3.iii.html>. Accessed September 19, 2003.
- BARTHES, Roland. *Camera Lucida*. Trans. Richard Howard. New York: Farrar, Strauss, and Giroux, 1981.
- BAUDRILLARD, Jean. *Symbolic Exchange and Death*. Trans. Iain Hamilton Grant. London: Sage Publications, 1993.
- BLUMENBERG, Hans. "An Anthropological Approach to the Contemporary Significance of Rhetoric." Trans. Robert Wallace. *After Philosophy: End or Transformation*. Ed. Kenneth Baynes, James Bohman, and Thomas McCarthy. Cambridge, MA: The MIT Press, 1994. 429-458.
- . *The Genesis of the Copernican World*. Trans. Robert Wallace. Cambridge, MA: MIT Press, 1987.
- CELAN, Paul. *Selected Poems and Prose of Paul Celan*. Trans. John Felstiner. New York: Norton, 2000.
- DARPA. "Augmented Cognition." *Information Processing Technologies Office*. <http://www.darpa.mil/ipto/Programs/augcog/index.htm>. Accessed September 19, 2003.
- DARPA, "Exoskeletons for Human Performance Augmentation" (EHPA 1). *Defense Sciences Office*. <http://www.darpa.mil/dso/thrust/matdev/ehpa.htm>. Accessed September 19, 2003.
- DARPA, "Exoskeletons for Human Performance Augmentation" (EHPA 2). *The Defense Advanced Research Projects Agency*. <http://www.darpa.mil/baa/baa00-34.htm>. Accessed September 19, 2003.
- DERRIDA, Jacques. *Writing and Difference*. Trans. Alan Bass. Chicago: University of Chicago Press, 1978.
- HANSEN, Mark. "Wearable Space." *Configurations: A Journal of Literature, Science, and Technology* 10.2 (2002): 321-370.
- HAVERKAMP, Anselm. "Chaos by Design: The Light-Sound Constellation." Trans. Kirk Wetters. *Modern Language Notes* 118.3 (2003): 688-703.
- HAYLES, N. Katherine. *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature and Informatics*. Chicago: University of Chicago Press, 1999.

- . “Flesh and Metal: Reconfiguring the Mindbody in Virtual Environments.” *Configurations: A Journal of Literature, Science, and Technology* 10.2 (2002): 297-320.
- HEISENBERG, Werner. *The Physicist's Conception of Nature*. Trans. Arnold J. Pomerans. New York: Greenwood, 1970.
- HUSSERL, Edmund. *The Crisis of European Science and Transcendent Phenomenology*. Trans. David Carr. Evanston, IL: Northwestern University Press, 1970.
- LUHMANN, Niklas. *Social Systems*. Trans. John Bednarz, with Dirk Baecker. Stanford, CA: Stanford University Press, 1995.
- . *Theories of Distinction: Redescribing the Descriptions of Modernity*. Trans. Joseph O'Neil, Elliott Schrieber, Kerstin Behnke, and William Whobrey. Stanford, CA: Stanford University Press, 2002.
- MERLEAU-PONTY, Maurice. *The Phenomenology of Perception*. Trans. Colin Smith. London: Routledge, 1962.
- . *The Visible and the Invisible*. Trans. Alphonso Lingis. Evanston, IL: Northwestern University Press, 1968.
- MORE, Max. “Extropian Principles 3.1.” *The Extropy Institute*. <http://www.extropy.org/principles.htm>. Accessed September 19, 2003.
- REGIS, (Ed.). “Meet the Extropians.” *Wired* 2.10 (1994). <http://www.wired.com/wired/archive/2.10/extropians.html>. Accessed September 19, 2003.
- SOKAL, Alan, and Alain BRICMONT. “Science and Sociology of Science: Beyond War and Peace.” *The One Culture? A Conversation About Science*. Ed. Jay A. Labinger and Harry Collins. Chicago: University of Chicago Press, 2001. 179-183.
- STEPHENSON, Neal. *The Diamond Age*. New York: Bantam Books, 1995.
- “The Transhumanist Declaration.” *The World Transhumanist Organization*. <http://www.transhumanism.org/declaration.htm>. Accessed September 19, 2003.
- VARELA, Francisco J., Evan THOMPSON, and Eleanor ROSCH. *The Embodied Mind*. Cambridge, MA: MIT Press, 1993.
- VARELA, Francisco J. *Ethical Know-How: Action, Wisdom, and Cognition*. Stanford, CA: Stanford University Press, 1999.
- WARWICK, Kevin. “Cyborg 1.0.” *Wired*. 8.02 (2000). <http://www.wired.com/wired/archive/8.02/warwick.html>. Accessed September 19, 2003.
- WEISER, Mark. “The Computer for the 21<sup>st</sup> century.” *Scientific American*. September 1991: 94-98.

