

## Minor architecture: poetic and speculative architectures in public space

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Computer science and software engineering has adopted the term “architecture” to describe the composition of large, complex sets of interoperating code that often contain multiple concurrent operations. “Software programmer”, “software engineer”, and “systems architect” denote an increasing scale of experience and ability to carry out systemic analysis and design. The status accorded to the software architect mimics in some ways the status accorded architects proper. On the lee-side of the tipping point where more media attention is paid to computer media and informatic technologies than to 20c media of cinema, radio, and television, it is easy to forget the enormous capital and power bound up in the industries of our physical built environment, and the intellectual and social prestige worn by its designers, the architects. This issue of *AI & Society* focuses on the encounter between the new potentials for architectural environment, the design of the built environment, and the emerging computational media and built environment. By convention, we can date the contemporary epoch of this encounter between computational technoscience and the art of the built environment back to the origin of the MIT Media Lab in the School of Architecture, now given a global currency with the advent of sensor-equipped “smart” buildings, computationally augmented materials, and everyday nanotechnology. While participant in the creative research into some of these mixtures of new media and architecture, we take this opportunity to lay out a critical and poetic perspective as well.

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We have invited artists and researchers to reflect critically on this recent history, and take stands, or draw attention to alternative approaches.

In the modern and post-modern eras, architects have adopted large conceptual frames to house and motivate large capital projects: Le Corbusier and modern urbanism; Peter Eisenman and deconstruction; Rem Koolhaas and shopping centers; Bernard Cache, Greg Lynn, and the Deleuzian fold, and so forth. One may question the degree to which these architects inhabited the conceptual terrains from which they extracted these notions. And even if they did traverse those territories comfortably, one can ask how the notions they extracted really worked in the material and social operation of the built structures that were justified by appeals to those concepts. Resetting a gemstone on a tiara however lovely, nonetheless leaves behind all the supra-humanly rich, glacial processes of the earth from which it was taken. To take one example, to reduce Gilles Deleuze’s *The Fold* (Deleuze 2006 (1988)) to two-dimensional surfaces in Euclidean three-space seems to be a rather formal interpretation of Deleuze’s concept of the fold, a concept which has an ontological, aesthetic as well as geometric character (and although a geometry, like anything made by us humans, can be interpreted from an esthetic point of view, geometry is as much dynamics and proof theoretic structure as esthetics). Deleuze’s fold has as much to do with a boundless process of ornament, of Baroque excess, as it does with interpenetration between the world of the living and the world of the dead. Even more subtly, as Tirtza Even has observed, things can have variable and varying degrees of existence with respect to one another, and so Deleuze’s fold takes an ontological meaning as well as formal one.<sup>1</sup>

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<sup>1</sup> Tirtza Even, private communication, April 2002.

## 1 Art

Returning to architecture's appeal to rationalizing system builders, perhaps one of the most cogent analyses of the Western "will to architecture" appears in Kojin Karatani's *Architecture As Metaphor* in which he identifies the "irrational choice to establish order and structure within a chaotic and manifold becoming" (Karatani 1995, 17). To take another exterior critical vantage point, as Barbara Hooper put it in her essay, "Urban Space, Modernity, and Masculinist Desire": "Among the knowledges, sciences, and powers producing the geopolitical order of hegemonic modernity, architecture contributes two important elements: the idea that built forms alter human consciousness and behavior, thereby transforming nations and populations; and the provision of a method for materializing this order" (Hooper 2002, 55).

Despite their diversely post-modern status, Lynn, Eisenman, Koolhaas nonetheless represent architecture as a major key: high profile, high touch, and capital-intensive. Even the most well-intentioned urban design can have its imperial inflection. Of course the designerly surface of such architectural discourse, oriented to the photograph and the plan, bears little resemblance to the richly and locally conditioned work of architects of everyday spaces, or to the experiments by artists who play with super-corporeal spatial relations in the built environment. I have in mind artists like Gordon Matta-Clark, Arakawa and Gins, or 10 × 15 but also emerging artists like Anne-Maria Korpi and Flower Lunn, speculative designers like Karmen Frani-novic, and counter-architectural groups like DARE-DARE.

By excising gigantic solids from house, warehouses, and other abandoned buildings, Matta-Clark deconstructed the syntax of domestic and private architectures (Matta-Clark 2007). However, he did more than conduct a semiotic investigation of the formal algebra of modern architecture in industrial and post-industrial spaces. It was also a phenomenological inquiry into the essence of an astrologically oriented space of ritual, transferred to derelict and banal buildings in eidetic variations that he conducted with his own body. But in further gesture, the bravura, the élan with which he cut a multi-story slit in a derelict warehouse to follow the moon casting itself into the waters of the river was an act not merely of analysis, but of poetry.

Madeline Gins is also a poet, with a more literary imagination, who has toyed with architectural discourse by haunting it with aspirations to philosophy (Gins and Arakawa 2002). But by calling for a crisis ethics repudiating the universal belief in mortality, is Gins and Arakawa proposing a program or simulacrum of a program? Their concepts encoded as thought experiments encoded as koan's: snail house, perceptual landing spot, and most evocatively: organism that persons, encapsulate a wealth of

related notions poetically derived (and here I intend to pun on the Situationists) from Humberto Maturana and Francisco Varela, Maurice Merleau-Ponty, Martin Heidegger, and many other erased sources.

## 2 Minor architecture

What this Special Issue's contributions propose here is a radical, "minor" architecture closer to the work of fiber artists or the playful architectural and urban inventions by Roche, DSV & SIE.P/B:L (Eclats 1999). By minor, I am referring explicitly to Deleuze and Guattari's notion of a minor science opposed and alternative to the major science that feeds the state's war machine (Deleuze and Guattari 1987 (1980)). Some qualities of the alternative architectural practice that we are posing are: playful, critical, an-exact, ephemeral, invisible, situated, touching, haptic, and above all, light. A given example may not share all of these qualities, but as a group, they form a set of examples bearing family resemblances.

This issue may be regarded as a cluster of tentative approaches to architecture in the register of experiment rather than purely positive or positivistic and abstract developments of concept. Or when they are statements, then they are conceptual way-stations, landing spots for processes more or less delicately exploring the condition of inhabiting a built space with multiple poetic valences. As such these installation events at the scale of architecture constitute what we can regard as art as a vehicle in architectural practice.

What does architectural scale mean? In the simplest sense, this means built structures that are large enough to accommodate one or many humans. Typical media art installations require a lot of comparatively fragile equipment and human attention, and last for a few days or weeks at most. Architecturally designed structures are durable human-made configurations of matter, capital, and energetic processes built to last years, and centuries. Architectural constructions carry explicit and implicit presumption that they can endure, survive, and persist in the bumpy flow of everyday living. And the largest consideration is that, while architectural sketches can be as lightweight and provisional as any graphic design sketches, the built structures can commit some of the largest amounts of capital concentrations outside of military capital: billions of dollars and up. The condensation of capital around architected buildings dwarfs the money spent on flat art or media art. Moreover, this capital is highly complexly patterned as infrastructure. As Jane Jacobs has pointed out in detail, the experiments carried out in a massive scale in the world economy since World War II have largely failed to escape quasi-periodic catastrophes due to systemic complexity and

brittleness (Jacobs 1985). Can we do otherwise with architecture today?

### 3 What is an experiment and what is speculation in the built environment?

Some of our essays started from practical problems such as the brittleness of complex computational systems, or the homogenization of materials and the homogenization of practice or even of everyday life. What the essays do not share, to their credit, is any one methodological approach to their problems. Some of them content themselves with raising problems, and attempting to make strategic comments in situ. All of them do respect the value of experiment and improvisatory practice. Some of these experiments begin with questions, but most start from positions prior to a well-formed question. A scientific investigation begins with a well-formed question, but a philosophical investigation ends with one. Therefore, in this sense, many of our speculative architectural installations resemble philosophical investigation. Nonetheless, some of these investigations have proceeded long enough to yield questions that can serve as temporary landing spots (to “detourne” Gins and Arakawa’s term) for our investigation.

How can a space be transformed into a question about the experience of inhabiting that space? How can the experience of space, which is infinitely thicker than any linguistic description of that experience, be made more marvelous by material poetry?

How can matter infused with responsive media, be used poetically in built space, rigorously, radically, yet lightly? By matter I mean symbolic matter, which fuses physical matter with metaphor and value.

How can we shape matter if it is not only physical substance but metaphor and media as well?

### 4 Ethico-esthetic approaches from the world rather than ego

To paraphrase Maturana and Varela from their book, *The Tree of Knowledge*: What is said is always said by someone. In other words, it is a conceit to make so-called objective statements like: “This tree is green”, or “This man is schizophrenic”. This insight inherits from phenomenology’s way of treating experience as an undissociable complex of subjective consciousness, plus an act of conscious regard, plus an object of regard. The key adjective here is undissociable: no object can stand on its own, owning observable predicates that are well defined in splendid isolation. What this implies is that the qualities of

symbolic matter are not just predicates of an atomic object, but a joint function of an observer, the object of regard, and the situation. There can be no separation of the object from its context or from the contingency of how, and from what perspective it is regarded.

So, any architecture that purports to make a statement about space and inhabitation of space should be posed in a different way that accounts for this relational approach to being together. Pushed to a more social logic, ultimately we are not relationally together in a space, but a place, a distinction with which Heidegger was concerned in his essay “Building Dwelling Thinking”: “The bridge gathers the earth as landscape around the stream... [I]t gathers the fourfold in such a way that it allows a site for it. But only something that is itself a location can make space for a site. The location is not already there before the bridge is.... The bridge does not first come to a location to stand in it; rather a location comes into existence only by virtue of the bridge.... Raum means a place cleared or freed for settlement and lodging.... The location admits the fourfold and it installs the fourfold” (Heidegger 1951, 150–152).

The materials with which we make our poetic installations necessarily are also tissues of value, or in particular, tissues of affect. And when we evaluate a work as being light or heavy, we are simultaneously making judgments of visual/aural/sensorial qualities, as well as, of the effects on the organisms that partly coincide with, or to use a more familiar Heideggerian verb, dwell in a place.

I do not say that matter thinks, or that the Earth thinks; that would be a naive and worse, an anthropocentric way of conceiving the world, unless one very carefully re-interprets several terms. Nor am I speaking of higher or lower forms of consciousness. And in fact, it may be much more fruitful to speak of experience without going into the thicket of defining who is conscious of what. And this would require relinquishing altogether the scientific as well as humanistic concentrations on the Subject that we have borne since Descartes.

### 5 Poetry versus design

Seeing something as something else. One of poetry’s powers is to indicate that which we cannot explicitly capture in language. Poetry can direct our attention to or project us into a perspective or a position that not be readily attained by deductive method.

One problem with design as it is practiced in the academy is that it can seem heartless, that its conception of the social seems to have little connection with felt experience or historical archive. It demands first a problem, a specification that conceptually bounds the process of making and reflecting even before it begins. Even “open-ended”

design processes seem to do this by not questioning the frame of the investigation. For example, a procedure found in the design process is to throw up by a random association words and phrases and then sift them into categories or a network of relations. Such a net kills the fish. More sophisticated techniques include borrowings of terminology detached from their ethical, esthetic, or historical connotations or implications, and with insufficient sensitivity to the implied critique of the positivism embedded in design's will to build or to architect. To be fair, to question the framing of a question is a philosopher's work, and to question historical or social frames a historian's or anthropologist's work. This special issue provides a forum for questioning some of these frames.

## 6 Size, scale

Something about the epic seems to be quite the opposite of what I am trying to point to. One of the pleasures of poetry whose form derives from oral culture is the condensation of thought, aspiration, emotion into a compact form, a bundle of words that can be savored durationally with only the technologies of memory constituted by poetic form.<sup>2</sup> So if we wish to savor a built structure durationally, we must construe it as an event, an entity saturated with time. But perhaps the product of its duration and its spatial commitments is less fruitfully described as geometry than as articulating a metaphor.

On the other hand, I do not wish to suggest that poetic architecture is reducible simply to the miniature, with its hint of preciousness. Condensing semiotic extent into a compact form can amplify its symbolic value, but compactness can take many modes, certainly not merely spatio-temporal scale. A simple mode of compactness could be the breath—the corporeal energy—needed to recite the piece, but this is by no means the only bound on a poetic form. Another is the casting of signs into a repeated pattern of stress and release, which may or may not last a short time in recitation.

An essential aspect of poetry is its power to suggest what words do not depict and to sustain a multiplicity of symbolic interpretations at the same time. As with accounts of dreams, there is no requirement of rational consistency, nor certainly any functional utility. Although speech act theory (Austin 1975; Searle 1980) could provide a gloss for how poetry works in a functionalist way, aligning poetry with speech acts puts “I dub thee knight (and make a material change in the world by conferring land and serfs to you and your heirs)” in the same category of statements as

“Good men, the last wave by, crying how bright/Their frail deeds might have danced in a green bay”. Yet these two statements have such different effects in the world—one has a directly illocutionary force, and the other a passionate but non-interventionist description of a state of the world—that it is hard to see how they could be aligned. In fact, they need not be aligned.

This same non-necessity, this absence of a homology between poetic and functional expression provides the opening for proposing a poetic architecture on its own terms. The question then arises: What do we get when we transpose the poetic to the architectural, when we make material interventions in our built environment at the architectural scale, as defined above?

What it is not: although it may be spectacular, poetry is not spectacle in Guy Debord's sense of the word (Debord 1994 (1967)). That is, poetry articulates thought in certain modes of metaphor; it does not stop thought the way that spectacle does, but provokes, enables, articulates thought.<sup>3</sup> Nor does poetry necessarily present a problem to be solved by the poet or the reader in order to articulate an affective experience.

## 7 The problem with methodology

Although poetry is experimental and rigorous, it is not methodological. Knowing how one poem works syntactically or structurally does not yield a deterministic way to systematically generate a set of poems of equivalent symbolic or affective power. I believe the same can be said of architecture. Of Christopher Alexander's 15 principles for life-giving form in built-space and nature (Alexander 2002–2004), Helga Wild observed that although these constitute plausible dimensions along which to array retrospective analysis, they are not prescriptions for success.<sup>4</sup> These principles include such formal patterns as: “strong centers”, “interlocking pattern”, “no two alike”, and, quasi-transcendentally, “good shape”. That is, while these

<sup>2</sup> I use compact mindful of its topological meaning: closed and bounded in a complete topological space.

<sup>3</sup> Poetry versus spectacle? As an exercise for the reader, consider the following two examples of architectural scale public installation events: Rafael Lozano-Hammer and Brian Massumi's HUMO: Huge and Mobile, exhibited at the Ars Electronica festival in Linz, Austria, February 3–7, 2003; and Elizabeth Diller and Ricardo Scofidio's Blur built for the Swiss Expo in 2002. HUMO, mounted what was then the world's most powerful projector on the back of a pick-up truck, to project 60 × 60 m images onto buildings, malls, advertising billboards, etc. in unannounced and unregulated fashion. In a different scale of ephemerality and visibility, Diller and Scofidio's Blur was a varying cloud 300 feet wide by 200 feet deep by 75 feet high formed out of mist shaped from 31,500 high pressure hoses drawing water from Lake Neuchatel. (Diller and Scofidio 2002) How do these work as poetry or spectacle?

<sup>4</sup> Helga Wild, private communication, March 1997.

formal principles can be used by a designer to articulate why a design works, they cannot be applied in any systematic way guaranteed to create a place infused with the unnamable quality of life that Alexander sought (Alexander 1979).

The problem with methodology lies exactly in this: that it must always look back to antecedent cases, and generalize from precedent a stable form within which new practice is supposed to take place. However, it is quite hard to resolve the tension between precedent form and fresh expression, which is why I adjoin a second term to poetry: speculation. In speculative practice, the ambition is not to replicate existing form but to extend expressions into fresh meaning. At the same time, these extensions stem from a trellis of forms generated from past practices, forms that seem attractive according to contemporary norms.

## 8 Propositional, performative, poetic, and *poietic*

If we interpret architecture according not only to its archive but also to its generative practices and processes, we have to consider who or what is doing these practices and who or what are engaged in these processes. In other words, we must be concerned with the performative aspect of the co-construction of the event in a work of architecture. How can architectural process generate fresh material conditions and systems from antecedent structure and material? To explore this question leads us to consider two kinds of questions. The first is the degree to which architects and the composers of events design their material work as speculation or proposition about how some range of potential events may be conditioned by a built structure. The second is the extent to which the experience of the work emerges by connotation or suggestion rather than denotation or deterministic function. A speculative work proposes a fresh set of potential, relations between people and their environment in a range of potential events. In this sense, speculative architecture is *poietic* as well as poetic.

## 9 In this issue

This special issue of AI & Society concerns the implications for the built environment posed by emerging technologies from computational media, mechatronics, sensors, ubiquitous and pervasive computing and sensate or active materials, combined with techniques from more conventional technologies of architecture and theater. While a lot of contemporary architecture is focused on capital-intensive applications with special emphasis on security, utility, and work, we propose to take a different tack and speculate

on alternative opportunities for poetry, poesis, and, to deliberately recuperate a term from Weber, enchantment. Contemporary conceptual architecture often exudes relentlessly modernist or post-modernist form. We propose alternative modes of architecture in minor key that enact modes of dwelling and becoming rather than illustrate non-living, unlivable concepts. We do this by a combination of means: artist's descriptions of their own architectural experiments, historical context, conceptual argument, and socio-technical critique.

This special issue contains two artist statements and eight essays. Some of the essays are written by practitioners. The contributors are Ron Broglio on dwelling and phenomenology of habitation; Christoph Brunner on Parkour as a mode of "personing" through movement in the city after Arakawa and Gins; Erik Conrad on the implications for artificial intelligence (AI), raised by computationally augmented environments, regarding the body and animate space after Lefebvre; Flower Lunn on the wild, and the possibility of the sublime not centered on the human-subject; Karmen Franinovic on playful augmentations of social space; Jean-François Prost on critical interventions realized in ephemeral and marginal spaces of the city; Elena Frantova, Lisa Solomonova, Tim Sutton, and Tore Nielsen<sup>5</sup> on the sense of felt presence in an animated space; and Harry Smoak on the critical potential for practices of explanation versus practices of experimentation after Morse Peckham.

In the course of preparing this volume, we discovered with pleasure, many critical and conceptual resonances between the contributions, so let me surface some of those resonances by closing with a thematic introduction to the essays.

We speculate on the potential for poetic architecture afforded by the emerging technologies of what we call "soft architecture", though of course, we will discuss what one could mean by "softness", "responsivity", and "soft architecture". As a beginning point, soft architecture refers to built environments that respond flexibly and pliantly in three scales of energy: the micro-scale of small moments of sensor data or textures of sound or light or air and other physical materials, the meso-scale of bodies in motion, and the macro-scale of social movements and urban plans. This initial phrase, whose content has been speculative, has called forth a rich set of responses clustered around the following themes: the body's relation to space; the experience of dwelling and presence; movement and play; the turn away from anthropocentrism to the machinic and the material; expressive, critical, political, experimental

<sup>5</sup> Thanks to Tore Nielsen, Ph.D., Director, Dream and Nightmare Laboratory, Hopital Sacre-Coeur; Professeur titulaire, Département de psychiatrie, Université de Montréal, Montreal, Canada.



practices; technology; and the minor. So it makes sense that the most appropriate title for the volume, given these essays' critical and ethico-political stances, is indeed *Minor Architecture*.

## 10 The body's relation to space

By convention, architecture may be said to be concerned with proportional relations between human bodies and their material surroundings. Of course, these relations are inflected by historical and cultural processes, but three contributors focus in particular on the body's relation to space from phenomenological and post-phenomenological approaches. As Ron Broglio put it, in addition to the explicit concern with building and place, we can attend to the "unspoken awareness of surroundings and unconscious attentiveness to environmental and cultural situatedness". Broglio lucidly traces the corporeally mediated experience of space, drawing from Merleau-Ponty, and more contemporary theorists of corporeal experience, but radically departing from the metaphysics of subjects and objects, mind, and body. Broglio cites David Seamon's example of a man who, while driving in a familiar neighborhood, turns left from habit instead of going straight in a particular novel instance. This example, to which we can each add examples from our own ordinary life experiences, draws attention to how our experience of space conditions the body's habits, and conversely, how our body's habits, or in Broglio's provocative formulation, our incarnate mind, conditions the experience of space. In so doing, Broglio avoids the uneasy and ultimately reductionist portmanteau "embodied cognition" by taking the bold step of extending the category of that which thinks to matter. We will return to this. Taking a different critical response to our cognitivist inheritance materialized as the computer science of artificial intelligence and as the engineering of "interactive" environments, Erik Conrad draws attention to how "user interaction" design essentially reduces the human organism to a finger and an eye. In its stead, Conrad draws from Lefebvre's triads of corporeal experience and spatial practice. For Lefebvre, corporeal experience is a triad: perceived, conceived, lived; and the experience of space is another: spatial practice, representations of space, representational space. Constructing a set of relations linking pairs of corporeal and spatial experience, Conrad arrives at a concept of space that is alive. Just as Broglio's essay warrants a non-anthropocentric reinterpretation of thinking that can extend to stuff, Conrad's essay analogously warrants an extension of the quality of liveness. To be clear, neither author is appealing to a vitalism that naively attributes cognitive or biotic qualities to matter or space. To take familiar example, in English, we can say that a hall is

acoustically "live" or "dead" or anything in between. And, extending from the acoustic, the liveness of a built space was an essential ingredient in what architect Christopher Alexander called the quality without a name.

Given that living bodies are also temporal entities and living spaces site events, we are led to consider bodies changing their relations in space, most canonically in movement. Christoph Brunner addresses this most directly and provocatively by looking at "Parkour" or "free-running" as a set of corporeal practices in urban space that produces both new kinds of dynamical spaces and, drawing from Arakawa and Gins, new kinds of bodies as well: contingently formed "organism-persons".

## 11 Dwelling and presence

Attending to such corporeal and spatial practices gives purchase on a set of their effects clustering around dwelling and presence. Ron Broglio first presents Heidegger's sense of dwelling as the essential reflexive comportment of human inhabiting a place: "Buildings bring together what Heidegger calls the fourfold of earth, sky, divinities, and mortals...[R]ecall Heidegger's... examples of a dam and a bridge. The dam changes water levels and flora and fauna while the bridge changes relationships between stuff on the two sides by making passage easier... Each era shepherds different things into the open... In the contemporary era with rockets, jets, and... global warming, human building (from missiles to skyscrapers) reveals the sky differently from former eras. How we build both dictates and furthers the grounding by which we dwell. An inquiry into dwelling provides a look at the fundamental means by which we comport ourselves and construct". Broglio refracts this concept of dwelling through a Whiteheadian lens: "to dwell is to build and move objects to set up new relations which establish new configurations of entities. Broglio subtly shifts the emphasis from how a human subject inhabits a space of objects, to Whiteheadian entities continuously "prehending" one another. Hugh Crawford, working from a sympathetic philosophical perspective, draws attention to the invisibility and "hapticity" of the "dynamic, unfolding process" by which Thoreau comes to site, and build with his hands and tools the hut on Walden Pond.

Complementing reflexive accounts of dwelling and presence, Liza Solomonova, Elena Frantova, Timothy Sutton, and Dr. Tore Nielsen (Director, Dream and Nightmare Laboratory, Université du Montréal) report on their experimental investigations of what they call "felt presence"—the sense of a being in the same space as you, but who is not there in the flesh. Their pair of essays present three intertwined investigations: a survey of related

phenomena in literature and folklore, controlled observational experiments of felt presence in sleep paralysis, and responsive environments inducing a sense of felt presence. Perhaps, the most interesting feature of this collaboration between a group of sleep researchers and media artists is the supplementary approaches to the phenomenon, and the contrasting designs of the respective experiments. The sleep researchers filtered out most of the world by placing the subject in as reduced an artificial environment as possible, and varied a sharply limited stimulus, in order to observe the “natural” emergence of the phenomenon. The media artists, by contrast, tried to build the richest possible facsimile of an everyday interior space in all its messiness and staged a rich array of media effects in order to induce the phenomenon.

Flower Lunn complements these accounts of dwelling and presence with a careful, artistic reconsideration of landscape and its relation to particular modes of subjectivity that used to be labeled as the sublime. Lunn makes two profound moves, from site to landscape, and from scale of the humanly surveyable to the scale of the super-individual industrial and post-industrial wilderness. Whereas many of the examples cited in the related discussions of dwelling and presence, from Thoreau’s hut to the room of *The Other* experiment, is bounded by a compact locus of event and object, in other words, a site, everything the perspective Lunn transports the discussion to the surround, i.e. landscape. This brings an associate mode of subjectivity rather distinct from the Romantic experience of landscape. Lunn characterizes the post-industrial sublime as “an aesthetic that does not herald, as Trig writes, ‘the halo of ascent, but the flickering resonance of descent and gravity’”.

In light of these reflections and experiments, an engineer, architect or artist can ask: what expressive or experimental approaches to co-constructing and inhabiting an environment could make sense under the conditions that obtain today? We will return to Lunn’s own response later, but turn to a third cluster of themes addressing this question.

## 12 Play

The body in motion, especially movement that generates an event not fully determined by a priori conditions, if that were possible, could be said to be in a state of play. Rather than start from a notion of play predicated on a priori syntax and goals, however, the contributors in this volume, in particular Karmen Franinovic, study technological and urban settings that permit open, conditioned but improvisational play. Broglio prepares the ground theoretically with a general discussion of Merleau-Ponty and David Seamon’s environmental and phenomenological approach

to how a body in movement inhabits and makes its place from a physical space via “body-ballet”, “time-space routines”, and, moving away from focusing just on the body as an a priori ground, “place-ballet”. Taking inspiration from Deleuze and Guattari’s distinct appeal to “geological” and aschematic modes of articulation, Christoph Brunner examines Parkour, or free-running, against Arakawa and Gins’ example of an “architectural body” being formed as the result of a fleshy body-in-motion continually placing or fitting itself into its environment by passing attention over a set of perceptual landing sites. Whereas Brunner attends to the expressive, rehearsed folk practices that work with the physical urban surfaces as built, Franinovic looks to the computationally augmented “responsive environment” as an alternative spaces of architecturally conditioned improvisational play. Franinovic considers a series of examples ranging from Gordon Pask’s cybernetic systems through the TGarden responsive environments built by Sponge and FoAM, to outdoors public spaces, augmented by electronic sonic devices invented by Zeroth (Franinovic and Yon Visell).

Arguably the boldest conceptual move shared by many of the contributors is to set out from the familiar waters of the Cartesian subject into new materialities. In considering the wild, Lunn is not so much concerned with the boundary of the human or the social, but with the wild, the inhuman non-human that colonizes the industrial and now post-industrial “wastelands” that lie beyond the scale of an individual human organism’s experiential capacity, or that courses in and constitutes plant-directed processes, a vegetal wild as implacable as the matter of Antonin Artaud’s “theater of cruelty”. This venture away from human-centered and social-centric concepts of the built environment also requires a reconceptualization of technology and its materialization: the machine. For this, we have a substantial theoretical resource in Felix Guattari and Gilles Deleuze. As Harry Smoak put it, for Guattari, “machines are never merely expressions of technology or technique (know-how)... [but rather] expressions of something processual and axiological... [T]he machinic is something very different from what normally comes to mind when we think of something as mechanical.... [T]he machinic [apparatus] spans the physical, the biological, the affective, the symbolic, the social, and the institutional producing specific enunciative effects that are reproducible but are not themselves representational”. This last point is essential, and in fact characterizes an entire genre of research around what one might call the technologies of performance, expression, and enunciation, as opposed to technologies of representation. The deep point is that such apparatuses can condition a built environment for not just one program but for multiple kinds of event: a performance, a scientific experiment, a logistical exercise, or an explanatory panel.

Erik Conrad takes on most directly the dematerialized and disembodied design of “interactive” environments as inflected by artificial intelligence research and cognitive science. Conrad adapts Lefebvre’s elaboration of the corporeal and spatial structure of the everyday an alternative reading of space inhabited by body. Thus, computational media as the media of “space alive” replaces “intelligence” supposedly designed into computational infrastructure.

### 13 Practice

Given such approaches to corporeal and spatial practices, dwelling and presence, movement and play, and given the emerging techniques and technical apparatuses for conditioning events in the built environment, we can adopt a diverse set of attitudes with respect to the design of the built environment: experimental, critical, expressive, practical (political). Frantova, Solomonova, Sutton, and Nielsen demonstrated a range of experimental designs. With Dr. Nielsen’s Dream and Nightmare Laboratory, Solomonova and colleagues conducted scientific experiments under “controlled” conditions and as sharply defined phenomena as could be arranged with their apparatus. With the Topological Media Lab, Frantova and colleagues built a simulacrum of a living room with old furniture and reproductions of Renaissance and 19c paintings, augmented subtly by finely graduated sound and controlled lighting. The visitors were led through carefully prepared, timed sequences, with questionnaires before and after the event. Jean-François Prost and Harry Smoak approach events more as critical interventions using “one-off” constructions—technical apparatuses that are built to be used only once. Prost’s Adaptive Actions project essentially called for individual actions using relatively ephemeral props: a set of stairs built to scale a low wall, a set of ordinary lamps carried by participants into the night streets on long extension cables, for example. What these share is a strong performative element, although they are not pieces of theater in the conventional frame. Nor are they performance art in the sense of problematizing the artist’s body or psycho-social subject, being more actions that problematize aspects of public or urban space. Brunner’s study of Parkour (free-running) exemplifies a parallel critical turn from being concerned with questions of identity to more critically mobile interventions, symmetrized between human subjects, explicit objects like buildings or props, and infrastructures such as street lighting and zoning code. Speaking of zoning brings us to legal versus political framings of public space, a principal critical concern underlying Hugh Crawford’s essay about the Mad Housers, drawing critically from both from the inheritance of the US

civil rights movement and from Gilles Deleuze and Felix Guattari’s notion of the minor. Crawford links the quality of invisibility of Thoreau’s literally hands-on craft of building a rustic hideaway with the work of the Mad Housers who build temporary, un-sanctioned shelters, and deposit them in the hidden spaces of the city where homeless camp. These are wild spaces even if they may be regulated by the state. Moreover, the homeless and the Mad Housers temporarily and tactically inhabit improvised situations in unregulated ways that are always external to the economy and to the program for which the infrastructure—property, lighting, roadways, ventilation, sewage—is designed. This tactical quality of the Mad Housers’ work and the homeless tailoring and dwelling marks them as exemplars of de Certeau’s, and Deleuze and Guattari’s unruly modes of habitation.

### 14 Technology

If architecture is the material configuration of a physical environment conditioning the potential events that may occur, technology is the means by which we modify the material configuration in systematic ways. In this sense, every essay in this issue critically engages technology, but several authors are particularly explicit. Conrad zeroes in on serial (i.e. uni-dimensional) processing, or perhaps more to the point, if—then logical, linguistic, or semantic programming, as opposed to signal level, audio or visual processing, or texture processing. With respect to computationally augmenting the corporeal experience of space, Conrad writes: “The problem here is grafting a computing problem onto a spatial problem. Designing spaces is a problem of creating experience, not intelligence. Experience, much like space, is thick—it is not merely a void when not filled with prefabricated or pre-existing objects of attention. To thoughtfully (critically) embed computational media into the environment, we need an understanding of the environment that does not reduce it to a meaningless void (or the information that a computer can extract from it)”. Taking a designer’s perspective complementing the computer scientist’s perspective, Franinovic surveys technologies sustaining playful activity in public space, ranging from Cedric Price and Gordon Pask’s cybernetically inflected systems, to the TGarden responsive play spaces, and sound devices inserted into public space. However, what needs further discussion, perhaps in an associate volume, are the significant gulfs between the DIY (Do-It-Yourself), ad hoc, creation of technologies for esthetic and social speculations created as one-of-a-kind interventions in public space; the engineering research which is not oriented toward making robust tools, toolkits or finished apparatuses for particular esthetic or social creative



projects but to generate publications in technical journals or “demos” in technical conferences; and creating an apparatus to professional production standards but adapted to host philosophical, ethico-esthetic experiments (Topological Media Lab).

## 15 Minor architecture

The essays challenge along many directions what Broglio called the “architectural ground” of “cognition, visibility and presence”. They challenge the restriction of experience to cognition, the cognitive agent as solely a human agent, the separation of space from body or event, the conceit that a space has only one program, the alignment of architecture with the rationalization of space, and more fundamentally the teleological design of the built environment. On the other hand, these essays suggest many positive alternative concepts, attitudes, and practices that may collectively be characterized as practices of the minor, performing “aikido” with some of what Foucault called the instruments of governmentality. These alternatives include: the wild (Lunn), infestation (Lunn), deterritorialization (Broglio, Crawford), and the invisible, ephemeral, haptic (i.e. hands-on), and tailoring or structured improvisation by the inhabitant. As Crawford writes: “[m]inor architectures as events in smooth space do not partake of traditional architectural visibilities. The minor is not meant to be seen, or at least, its perspective is subordinated to haptic and affective practices. Therefore, there can be no consistent style in any traditional sense of the word.... This loss of visibility... raises the importance of the affective.... Dwellers of smooth space feel their way through processes invisible to state planners, and experience both dwelling and self in a potentially profoundly different fashion”.

However, positive the propositions, they are made without the self-certainty of design or psychology or cognitive science, or even positivistic user-centered design. As Isabelle Stengers wrote in her essay “Beyond conversation” (Stengers 2002) this approach would “refuse any kind of settlement, conversational or otherwise, which excludes those who are already excluded, even if this exclusion appears to be an inclusion. As Deleuze said, to think (or create) is to think ‘in front of’ or ‘for’ ‘analphabets, dying away rats or alcoholics.’ This does not mean addressing them, or helping them, or sharing hope or faith with them, but not insulting them with our power to justify everything. Thinking with them ‘in front of’ us means thinking with the feeling and constraint that we are not free to speak in their name or side with them.” Instead, these speculative propositions take definite esthetic and ethical positions, but “stammered” to borrow from Stengers.

The neologism inspiring the discussions that generated the essays in this special issue was “soft architecture”, connoting both the computational and the supple or pliant. Although the essays found more substantial footing in the critical, ethico-esthetic, and technical earths of minor, smooth, baroque practice, it is perhaps fitting to close this introduction with Flower Lunn’s reflection on the original term: “Soft Architecture is just that—a product of softness. It is not so much the material nor the environment that makes it soft, but the process of creating it, whether a surface, space, environment, or experiment. Softness is a lightness, a sensitive receptivity to ecologies: to materials, to social dynamics, to the feel of spaces surrounding us. Letting these guide and teach us, we, as creators, have a patient trust in the cycles of time and events that lead a process to fruition...[S]oftness connotes a way of working that is a reintegration, that includes the whole of the self—space for pain and joy to speak, quotidian experiences and fears and playfulness alike guide a project. The project then becomes a seed for a variety of experiences to result in the viewer, as the poetic is the power to evoke. The conditions for this blooming are soft: flexible and attentive. Instead of the making of a statement, there is an attending to. This is a service of self to the process of creating a negative space; a room, a chamber, a pod that is a space to be, to play, to experience, to realign, to connect, to fly, to molt, to open up, to escape evade the syntax of hard architectural design and accompanying ideas of self, to come back.... It is very recent in our collective history that we do not experience, at least ritualistically, an architecture that evokes that of the womb. Beginning with tents and caves, hollows and forts, artists working within the... field of soft architecture...[are exploring]... other ways of treading upon this earth” (Lunn 2008).

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