Transmateriality: Presence Aesthetics and the Media Arts

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In Rafael Lozano Hemmer's *Pulse Room* is a space filled with hundreds of incandescent light bulbs, hanging in a flickering array. A participant grips a pair of electrodes, causing the closest bulb to pulse in time with their own heartbeat; for a moment the room goes dark, then this new pulse moves into the multitude of the array. The room is full of human pulses, all characteristic double-beats, faster and slower, brighter and duller; but palpably re-embodied in glass and glowing wire. *Pulse Room* is one example of what I will argue is a significant turn within recent media arts emphasising the materiality of media and computation: a materiality that we are implicated in, as this work shows so directly. Through Hans Ulrich Gumbrecht's work, this paper proposes a "presence aesthetics" in the media arts, and argues that media technologies can elicit moments of intensified being-in-the-world, despite their more familiar role in distancing that world from us.

After making a specific theoretical argument in its first half, this chapter goes on to consider some wider implications of an aesthetics of presence in the media arts. This practice posits media technologies as concrete, material, and present-with-us, rather than transparent conduits for immaterial content; yet at the same time works like *Pulse Room* show how patterns can traverse material substrates, as the embodied is dynamically re-embodied. This is transmateriality: a view of media and computation as always and everywhere embodied, but constantly propagating or transducing patterns through specific material instantiations. Among other things, it offers a way to rethink ubiquitous computing and media without, or against, information technology.

Presence Culture

In *Production of Presence* Gumbrecht's project centres on the humanities as an academic discipline; a discipline he understands as dominated by a cluster of concepts grouped around "meaning culture":

> "Metaphysics" refers to an attitude, both an everyday attitude and an academic

> perspective, that gives a higher value to the meaning of phenomena than to their material presence; the word thus points to a worldview that always wants to go "beyond" (or "below") that which is "physical." ... "Metaphysics" shares [the role of] scapegoat ... with other concepts and names, such as "hermeneutics," "Cartesian worldview," "subject/object paradigm" and, above all, "interpretation" (xiv).

In this paradigm the exclusive role of the humanities is to interpret the meaning of the world. Meaning here is clustered with concepts such as essence, truth, mind, spirit and the immaterial. The human mind, in this dominant paradigm, is *in* the world, but not *of* it. Gumbrecht argues that this is a relatively modern state. In presence cultures, by comparison, humans understand themselves as bodies within a material cosmology. Rather than being produced through interpretation, and located beyond material things, knowledge in a presence culture is revealed; it occurs in "events of self-unconcealment of the world" or moments of revelation that "just happen" (81). Through Heidegger's notion of Being, Gumbrecht asks us to imagine a form of knowledge that is "not exclusively conceptual," is prior to, or not dependent on, interpretation.

For Gumbrecht the meaning/presence binary is not a simple opposition, and his argument does not attempt to posit one over the other. Instead the relationship between the two is exclusive but dynamic: "What this book ultimately argues for is a relation to the things of the world that could oscillate between presence effects and meaning effects" (xv). "Presence and meaning always appear together ... and are always in tension. There is no way of making them compatible or of bringing them together in one 'well-balanced' phenomenal structure" (105). "Presence phenomena" become "effects of" presence, "because we can only encounter them within a culture that is predominantly a meaning culture. ... [T]hey are necessarily surrounded by, wrapped into, and perhaps even mediated by clouds and cushions of meaning" (106).

Aesthetic experience plays a significant role here, as a source for exemplary instances of presence. For Gumbrecht aesthetic experience is about "epiphanies" or moments of intensity; fleeting, visceral instants of being that might be triggered by good food as much as great art. Interestingly he writes, "there is nothing edifying in such moments, no message, nothing that we could really learn from them" (98). What we desire here is "the state of being lost in focused intensity"; we desire it, Gumbrecht suggests, because we are overfed with meaning culture (104). Quoting Jean-Luc Nancy: "there is nothing we find more tiresome today than the production of yet another nuance of meaning, of 'just a little more sense'" (Gumbrecht 105, Nancy 5). The effect of getting lost in this state of intensity, is to "prevent us from completely losing a feeling

or a remembrance of the physical dimension in our lives" - to remind us of our being "part of the world of things" (116-117). Gumbrecht links this to a state of extreme serenity or composure, of "being in sync with the world", which is not to say in harmony or accord, more an embodied feeling of being in, with, and of, the world (117).

Presence Aesthetics and the Media Arts

Telefunken, by Noto (Carsten Nicolai) is an audio CD containing thirty short tracks of harsh, synthetic tones; this sound - or rather signal - is designed to be routed to the video-input of a standard television set. What results is a startling audiovisual performance, enacted by standard consumer media equipment. The television set and the CD player enter a new formation; their former content - the well-formed images of broadcast television, and the acoustic reproductions of the compact disc - is scoured away by an apprehension of something more intense and immediate. The monochrome flickers of the (cathode ray) screen hint at the materiality of its mechanism; we see disintegrating scanlines, traces of the electron beam playing against the glass. The tracks work methodically through a range of clicks, tones and pulses. These are arranged less as elements in a composition than as points of calibration; demonstrations of a gradient of possibilities.

In *Telefunken* the television and the CD player - generally conduits of meaningful media content - are pulled across, temporarily, into presence. The point of intensity that *Telefunken* can induce is precisely a sense of presence, of a circuit of materials being with us; and it can strike us, much as Gumbrecht describes being struck by the California sunshine, with "imposed upon relevance" (103). Of course, the work is entirely open to a different reading: we can discuss minimalism, the TV manipulations of Nam Jun Paik; we could read it as a form of artistic intervention in mass media technologies, as Tom Moody does. Such interpretive approaches may be inextricable from the work's immediacy, for presence effects come to us on "clouds and cushions of meaning" (106). Yet if we accept Gumbrecht's formulation, these interpretations do not "bracket" or erase the dimension of presence (108); and I would argue that an aesthetics of presence is central to this work, and many others.

One characteristic of "presence culture" is that "legitimate knowledge is typically revealed knowledge. It is knowledge revealed by (the) god(s) or by ... what one might describe as 'events of self-unconcealment of the world'" (80). And this is an unconventional form of knowledge: it "presents itself to us ... without requiring interpretation as its transformation into meaning" (81).

Gumbrecht positions this mode of knowledge in a pre-modern cosmology and the relation of the body to the surrounding world; but it seems to be echoed in some contemporary practices.

In the past decade media arts practice has seen the appearance of data as a material of choice. Elsewhere I have argued that this work often operates against information, where information is a sense of meaningful message (Whitelaw, "Art Against Information"). Data, as distinct from information, are abstract, blank, meaningless; prior to interpretation. Many artists foreground these properties. In Lisa Jevbratt's work *1:1* (1999) the artist created software that sampled the entire range of internet IP addresses, testing each address to discover web servers. The resulting dataset is in the artist's words a "snapshot or portrait of the Web" - a real, if partial, trace of that system at that time (Jevbratt, "1:1"). Jevbratt presents the resulting data in images that "have a direct correlation to to the reality they are mapping," where every data element corresponds to an image element ("1:1"). The images are abstract, densely patterned, visually striking, but again they offer nothing familiar by way of meaning, or content. Jevbratt writes:

> the images are not realistic representations; they are real, objects for interpretation, not interpretations. They should be experienced, not viewed as dialogue about experience. ... [I]t allows the image to teach us something about the data by letting the complexity and information in the data itself emerge. It allows us to use our vision to think ("Infome" 7).

This practice and others like it seek out what we might call "events of self-unconcealment of data," a form of knowledge more like revelation than interpretation. Data are often figured as immaterial or ideal, belonging to a separate sphere (as in "cyberspace"); here data are manifest, made present-with-us. Of course this manifestation is shaped (in-formed) by any number of mediating processes, conventions and decisions; and here context, interpretation, information, and the meaning pole of the binary inevitably return. So while data art can never render the data themselves, it often pushes towards presence as a mode of experience for the digital, even if only to swing back, as new information and meaning emerges.

We can find a similar turn towards presence in digital generative art, where the primary materials are most often algorithmic processes: systems of elements, relations and transformations that give rise to form, image and movement. I have previously argued for the importance of understanding the artifacts of this practice as traces of their generative systems (Whitelaw, "System Stories"). We can then regard the generated form or image as a manifestation or making-present of that system. Once again there is a simultaneity or oscillation along presence /

meaning lines, for we can equally treat the underlying system as a text - a model world - rich with interpretive potential. Yet the formal tendencies of the work push towards the presence pole: the visual language tends towards geometric abstraction, stripped of access points for interpretation. As in data art, the aesthetic tends towards overwhelming multiplicity: swarms, fields, grids and constellations too dense, too numerous for the *cogito*. This practice has recently moved away from the screen, into manifestations ranging from digitally-fabricated objects to architectural projections and what Offenhuber, in this volume, terms "invisible displays," again emphasizing the concrete presence of the generative form.

Music and sound play significant roles here. In Oval's 1994 album *Systemisch*, skipping and stuttering CDs were sampled and assembled into ambient musical textures with a gritty rhythmic punctuation; widely described as the sound of error, it is more significantly, I would argue, the sound of a material system. Oval were influential in a proliferation of experimental electronic music in the late 1990s, where glitches, crackles and other "inframedia" signatures were prominent, and musical "content" was set aside for a feeling-out of audio media as material systems (Whitelaw, "Inframedia"). Fused audiovisuals such as *Telefunken*, and the work of Australian artists Robin Fox and Andrew Gadow, extend this materialization across modalities, and with an insular intensity that Schmidt (in this volume) characterises as "haptic." The dynamic visualization of sound and music is a recurring theme in generative art and design; in work such as Robert Hodgin's audio is algorithmically re-materialized; in projects such as Marius Watz' exhibition *Frozen: Sound As Space* this tendency is literalized through digital fabrication.

These examples are a tiny sampling of a significant turn towards presence in the media arts over the past decade. It spans forms, genres and modalities, and tends to move fluidly between music, sound and the visual arts. Its hallmarks are abstraction, and an associated sense of the concrete over the representational: work as object or system, rather than sign or index. It tends towards either minimalism, and a heightened attention to a limited sensory field, or overwhelming maximalism, an excess that is literally un-thinkable. In sound and music it operates at parallel extremes, from quietness to the point of hyperacuity (as in the Japanese Onkyo scene), to loudness that physically saturates the body and overloads the senses. In general this field is preoccupied with something like transsubstantiation: of sound to image, image to sound, and data - sourced live from the environment, data to form - data to anything, in fact. This tendency has been characterized as "XYZ Art": a formulaic approach where translation is a clever but ultimately arbitrary performance by the artist (Moody, "VVork"). This critique is valid, but seems to be applying an interpretive approach to work that seeks, successfully or not, to manifest or

"presence" the flows of digital media and computation in various ways. In the context of an overwhelming excess of media content - Nancy's "sense" (7) - this practice seems to react, as Gumbrecht does, with a desire for presence.

Presence and Technology

The notion of presence aesthetics in the media arts meets some resistance in the work of Gumbrecht himself, in particular his ambivalent stance on media technology. "I am trying to neither condemn nor give a mysterious aura to our media environment," he writes in *Production of Presence*. "It has alienated us from the things of the world and their present - but at the same time, it has the potential for bringing back some of the things of the world to us" (140). Gumbrecht links this alienation with a "Cartesian" desire for omnipresence - the decoupling of experience from the body. But while these tendencies of communications media may serve to drive us back towards a consciousness of, and a desire for "presence" (139), for Gumbrecht they seem incapable of providing that experience themselves.

In a more recent paper on "Aesthetic Experience in Everyday Worlds," technology reappears, however, as Gumbrecht considers how presence-type experiences can manifest themselves outside what he characterizes as the exhausted institution of Art, and perhaps bring about a "re-enchantment of the world." Gumbrecht proposes that:

> at the intersection between some possibilities offered by contemporary technology with that longing for re-enchantment (doubtless provoked and produced mainly by the same contemporary technology) we have a chance of discovering the potential for a much more dispersed and decentralized map of aesthetic pleasures, and of a much less "autonomous," stale and heavy-handed style and gesture of Art (315).

However after warning against any new "program," Gumbrecht seems to square off against the media arts:

> For I am not talking of the complicated merits of new art forms like "video art" or "digital installations" here but ... of straightforward pleasures like driving a high-powered car, riding on a speed train, writing with an old fountain pen or, for some of us at least, running a new software program on the computer - pleasures that do certainly not require the institutional status of aesthetic autonomy" (316).

There is a curious disjunction here between the "complicated merits" of media arts and the "straightforward pleasure" of "running ... new software." Read in conjunction with the previous quote, this suggests that technology itself is not the obstacle, but rather the participation of video and installation art in an institutionally sanctioned "program" (into which technology is often drafted for rhetorical support). In fact much of the practice outlined above fits the more optimistic description of the first quote: it is typically "dispersed and decentralized," operating marginally in an art context but traversing design, electronic music and performance; it operates both inside and outside galleries, festivals and universities but also often in a networked environment where it is literally dispersed into the melee of everyday experience; and where, in many cases, it is exactly a matter of "running a new software program" - an encounter with a moment of (technological) performance.

The turn to presence in the media arts also makes use of one of the central formal devices Gumbrecht describes in this paper. He argues that in everyday events such as a sporting event or a restaurant meal, we can experience a "frame shift," where the established or authorised context is overtaken momentarily by an intensified aesthetic experience (311). Gumbrecht commends the dispersed (non-Art) proliferation of these framing moments in Japanese culture; but we can find the same proliferation in the media art practice considered here. Its myriad translations or transfigurations - what I will describe below as *transductions* - are exactly frame shifts. In the same way as a view framed by a bough in a Japanese garden intensifies the existing landscape by drawing our attention to specific relations within it, these translations - such as the manifestation of sound as form in *Frozen*, or Jevbratt's pixel-map of internet addresses - intensify their subject matter by making it available in an altered form. In the process, like the Japanese bough, these transformations reach outwards, suggesting that the aesthetic intensity they present is immanent and ubiquitous, rather than (as in the model of Art) exceptional and transcendent. These strategies seem exactly aligned with the utopian project Gumbrecht refers to - an expanded field for aesthetic experience - and the overarching desire for presence, a moment of connection with the material world.

Materialising Information Technology

If there is a tendency or desire at work here to materialise media technologies, emphasising their presence-with-us, it runs against a view of media and technoculture that has become dominant in the past few decades. It comes to us in figurative language, as when Nicholas Negroponte

compares bits to atoms: "the information superhighway is about the global movement of weightless bits at the speed of light" (Negroponte 12). George Gilder is more direct, declaring that "the central event of the twentieth century is the overthrow of matter" by way of the computer revolution (Gilder 17). Though his language is hyperbolic, Gilder reflects everyday attitudes to media technologies that bracket their materiality and focus on their informational or mediated content.

Several critiques of this drive for dematerialisation have developed in tandem with it. Simon Penny's 1992 "Virtual Reality as the End of the Enlightenment Project" is one early instance. Felix Stalder writes in 2000 of the "ideology of immateriality" underpinning the so-called "new economy." In *How We Became Posthuman* Katherine Hayles asks "how information lost its body," considering this tension in greater detail. She introduces a conceptual pair - inscription and incorporation - that offer a way to think about information as simultaneously abstract and material (Hayles 198-199).

More recently Matthew Kirschenbaum has borrowed the methods of computational forensics, moving us from the screen to the hard drive, and showing in detail how data are embodied in the hardware of the computer. Kirschenbaum's "forensic materiality" refers to the material residues or byproducts that mark out one digital instantiation as different from another (Kirschenbaum 9); for example the physical instantiation of copies of a file on two different hard drives will be different due to the material specificities of the drives - as when a misaligned write head again leaves traces of overwritten data. Yet these files are, for the computers concerned, formally identical. As Kirschenbaum writes, "computers ... are material machines dedicated to propagating a behavioral illusion, or call it a working model, of immateriality"(10).

Kirschenbaum turns this insight into a new methodology for studying digital texts; but we can read his analysis more expansively. This illusion of immateriality is instantly familar to us; it encompasses the paradigm of "information technology," and most of our interactions with digital media. But what if, following Kirschenbaum, we bracket the informational or immaterial illusion, in favour of the material? We could methodically trace every keystroke: a movement, a switch, a change of electrical charge in a semiconductor, then another, in video memory, then a change of state in the picture-elements of the screen; then, in a moment, a burst of network traffic, over cables, through routers, under the sea, to a server in a rack somewhere; then a tiny change in the states of the server's memory, and the polarity of the magnetic material on its hard drive platters. It is unsurprising that we abstract these chains away; but if we think instead of

media technologies as material from end to end, we can frame them readily as in- and of-the-world, with us; and if so, they can touch us or strike us with moments of intensity, as much as the Californian sun can.

Transmateriality

In the space remaining I will quickly sketch this view of media and computation as always and everywhere material while maintaining, as Kirschenbaum puts it, the behavioural illusion of immateriality. In *transmateriality* concepts like "data" are functional abstractions for describing the propagation of material patterns through material substrates. But at the same time these material patterns - from optical pulses to hard disk field polarities, luminous screens and speakers pushing air - are conditioned by data *acting as if they were* symbolic and immaterial. Transmateriality is elaborated here through another pair of concepts: specificity and transduction.

The digital is premised on generality; the ability to shift (or transduce) a pattern of relations from one instantiation to another, such that the pattern is functionally independent of its substrate. The email I send is the same as the one you receive, but only in the sense that its pattern has been accurately propagated across a whole chain of material substrates. As Kirschenbaum points out, computing machinery works hard to support this generality, with the precise engineering of tolerances and threshholds, and the active interventions of error correction. Without these mechanisms a million entropic, material variations would creep in; dust motes, temperature variations, mechanical wear. These are potential incursions of specificity into the digital: local accidents, conditions of this or that substrate. Generality here is another name for that illusion of immateriality; for in fact the digital is always specific, always subject to the local conditions of its instantiation.

Recent media art has seen an outbreak of specificity, where the local manifestation of the digital is emphasised over its functional generality. The audiovisual aesthetics of the glitch are a clear example; from the crackle of Stefan Betke's damaged effects processor, to the visual artefacts of Integral Lens' malfunctioning digital camera, artists treasure local, material breakdowns in the industrial paradigm of the digital not only for their aesthetic residues but also, I would argue, for their affective demonstration of the materiality of media technologies.

The screen is literally the face of generality in media technology and practice; a homogeneous, uniform, dense, self-effacing surface that can contain anything at all. It's notable that a wave of recent practice has expanded this structure, creating physical arrays that can be read as anti- or post-screens. These special-purpose displays not only acknowledge the materiality of their substrate, but exploit its specificities. In his 1999 *Wooden Mirror* Daniel Rozin creates reactive, low-resolution displays made from wooden tiles; the "pixels" here are mobile physical elements. While Rozin's work mimics the planar, pictorial form of the screen, arrays such as Troika's *Cloud* (2008), Art+Com's kinetic array for the BMW Museum, or Robert Henke and Christopher Bauder's *Atom* experiment with sculptural, three-dimensional arrays. In all of these cases specificity and generality interweave; the patterns that play across these arrays - low-res imitations of our everyday media experience - are transmaterial, moving across and through, but always in, a material substrate.

Transduction, in its engineering definition, is the conversion of energy from one form to another: a light bulb transduces voltage into light and heat; a loudspeaker transduces fluctuations in voltage into physical vibrations that we perceive as sound. In analog media, transduction is often overt (*"put the needle on the record..."*); in digital media it is less apparent, but no less significant. The keyboard transduces motion into voltage; the screen transforms voltage into light; the hard drive mediates between voltage and magnetic fields. A printer takes in patterns of voltage and emits patterns of ink on a page. Here I want to extend transduction to talk about the propagating patterns of matter and energy within something like a computer, as well as those between that system and the rest of the world. This expansive interpretation approaches Gilbert Simondon's transduction, but confines itself to technological materials and leaves its wider implications aside for the moment. As Steven Shaviro's reading shows, Simondon's transduction offers another path to medium-dependence – here, specificity - and materialised information .

If a transmaterial view of computing seems unfamiliar, it is only a matter of historical accident. Mechanical computers, where these patterns are physically perceptible, predate electrical (let alone digital) ones, by centuries. Our current computers. however, are more or less closed, black box systems. Their transductions come as a largely preconfigured bundle or network, a set of familiar relations constructed by mixtures of hard- and software, protocols, standards: generalising frameworks. However currently, across the media arts and other fields, the computer is undergoing a rich and productive decomposition. Hardware hacking, embodied interfaces, homebrew electronics, physical computing; these practices literally and figuratively crack the computer open, hooking it up to new inputs and outputs, extending and expanding its

connections with the environment. Tiny, cheap computers such as the Arduino have no screen, no mouse, no keyboard: they present us with nothing but a row of bare input and output connectors. These systems beg the question of what can, or should, go in, and what should come out of the computer: of transduction.

Digital fabrication is part of the same shift: an expansion and extension of the computer's range of transductions. From digital pattern, to lasercutter instructions, to a new specificity: a physical form. With fabrication the specificity of digital media emerges at human scale; the material patterns of computation congeal into objects we can wear, touch, or inhabit. This practice has often presented itself through a narrative of materialisation, translating bits into atoms - Marius Watz' Generator.x 2.0 symposium was subtitled "Beyond the Screen". Not so: because of course the screen was always material; as Sean Cubitt shows in this volume, the situated specificity of the screen is crucial to its operation. Rather than supplanting the screen then, current digital fabrication demonstrates the same point; the specific significance of the material substrate. Expanding the range of substrates links computation to new contexts and practices, as well as new sensations.

Ubiquity

Information technology is to transmateriality as meaning culture is to presence culture. "Information technology" describes the dominant paradigm focused on communication and informational content. It inherits the attributes of Gumbrecht's meaning culture; here information aligns with the Cartesian mind, in but not of the world; material mechanisms and substrates act as its carriers. Transmateriality is a sketch of an alternative view in which both media technologies and their content are in the world with us. Undoubtedly, as in Gumbrecht's formulation, transmateriality and information technology mingle, operating simultaneously but always in tension. The turn towards immediacy and material intensity in the media arts is inextricable, for example, from the informational, content-focused paradigm of the web in which it is documented and disseminated. Like presence, then, transmateriality is not intended as a critical program, but something already in tense coexistence with the status quo.

For all that, given our complete immersion in the paradigm of information technology, the transmaterial view has significant implications. The most far-reaching is the dissolution of the digital as ontological and technological category. Grounded analyses such as Kirschenbaum's show that the digital is simply the analog, physical world operating within certain limits and

threshholds. As the black box of the personal computer is breached, we can see a continuity between the patterns inside the system, and those outside it. In the work of Kristoffer Myskja, simple computational logics are embodied in custom electromechanical systems. In *Ouroubos* (2008) Myskja constructs a loop of large solenoid switches, each triggering the next; the performance of the work hinges on the physical specificities of these components - their sound, and mechanical slowness - rather than their nominal logical states. In Thomas Traxler's *The Idea of a Tree* (2008) a solar-powered system fabricates objects from epoxy, dye and string, by turning a spindle. Although the system is informed by digital practices such as visualisation, the digital itself is rendered completely obsolete, replaced by an elegant circuit of continuous material relations and energetic flows. To go a step further, consider Tim Knowles' Tree Drawings (2005-2006), where the artist attaches pens to a tree's limbs, making drawings that transduce the tree's specific physical dynamics onto paper. A transmaterial view emphasises the continuity of these approaches.

This expansive dissolution suggests a reframing of "ubiquity" in relation to digital media. Ubiquity here is not a question of more computation, or even more pervasive computation; at least not if this means "information technology." Instead it implies heterogeneous specificities; sensors, effectors, and propagating patterns, arranged in multifarious networks, loops and chains. A reconfigurable network of material flows, rather than a communication system; a patchwork of local contexts, rather than a universal access grid. The transmaterial view recognises the specificity of each instantiation, its local conditions and constraints, as well as its lateral affordances or byproducts.

In a transmaterial ubiquity, frame shifts and transductions proliferate. Media art is currently preoccupied with drawing data or live input from anywhere, and manifesting it as anything else: seeking out the intensifying moment of the frame shift. As in Gumbrecht's Japanese garden, however, these shifts are momentary and immanent; instead of a reified aesthetic object we experience a (selective) view of a wider outside, and in the process that outside is itself activated, the intensity disperses. This is literalised in a work such as HeHe's *Nuage Vert* (2008), where electricity consumption is mapped onto a laser-drawn "cloud" drawn on the plume from a power-station smokestack. Power consumption is "presenced", and in the process recast, but also literally altered; transduction here forms a distributed loop that not only reframes its source domain but intervenes in it by augmenting or altering its specificity.

In a transmaterial ubiquity such frame shifts are ever more possible, across every scale and context - local, global, private, public - in modes from the poetic to the prosaic. They are increasingly distributed and decentralised in their creation, supported by open hardware and software platforms (such as Haque Design + Research's Pachube). The promise, or the hope, is that the result will be a proliferation of diverse moments of intensity, of being struck; of a being-in-the-world that is heightened, rather than attenuated, by media and computation. Art has a role to play here, at least for the moment; but this is a far wider project, and far more than aesthetic experience is at stake.

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