

Immediation as process and practice of signalletic mattering

Christoph Brunner^{1,2}*

¹Department of Art & Media, Zurich University of the Arts, Zurich, Switzerland; ²Center for Interdisciplinary Studies in Society and Culture, Concordia University, Montreal, Quebec, Canada

Abstract

How is perception a constitutive force in interactive media environments and how does it effect its cultural and social conditions? This question provides the ground for a conceptual and practical development of the term *immediation*. Immediation describes the immediacy of esthetic sensation and locates the event of immediated experience in everyday life. It highlights the immediacy with which digital processes enhance or delimit perception and affect through directly shaping experience. The immersive and interactive media environment *Panoscope*—a 360° hemispheric and fully immersive projection space—offers ways for developing two main aspects of immediation: (1) immediation underlining the creative role of perception as neither subjective nor objective but relational, embodied, and located in everyday life and (2) the reconsideration of the digital not as pure abstraction but a relational process immanent to perception. By unfolding the concept of *digital* or *signalletic mattering*, the coemergence of material conditions and processes of thinking will be emphasized.



Christoph Brunner is a cultural theorist currently working as research associate at the Institute for Critical Theory at Zurich University of the Arts. He is finishing a PhD thesis on research creation and esthetic politics at Concordia University, Montreal. He recently co-edited the book *Practices of Experimentation: Research and Teaching in the Arts Today* and is part of the editorial collective of *Inflexions: A Journal for Research Creation* (<http://www.inflexions.org>).

Keywords: *digital media; immersion; interaction; signal; embodiment; vision; esthetics; ecology*

Upon entering the *Panoscope* a slight change happens in the way habit wants us to perceive our immediate environment.¹ The usual scanning and ordering are replaced by an immediate attraction for horizontal vision. Seeing 360° video-images of seashores puts vision directly in relation to the vanishing point of the projection's horizon. It seems like feeling the composition of perception in its very immediacy of emergence—as it happens while it happens. A clear differentiation between perceiver and perceived is superseded by a sensation of perception edging into experience.

Such a sensation defines a point of emergence composed by bodily sensation and digital esthetic expression. *How* can we address the relation between contemporary media technologies and human bodies without taking either as predefined entity? *How* can we account for interactive media environments as confined spaces and at the same token as open fields of experimentation? What if we consider such media environments not as “virtual” (as “opposed to ‘real life’”) scenarios but rather as amplifications of digital signalletic processes integral to everyday experiences?

*Correspondence to: Christoph Brunner, Zurich University of the Arts, Zurich, Switzerland. Email: christoph.brunner@zhdk.ch

©2012 C. Brunner. This is an Open Access article distributed under the terms of the Creative Commons Attribution-Noncommercial 3.0 Unported License (<http://creativecommons.org/licenses/by-nc/3.0/>), permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Journal of Aesthetics & Culture, Vol. 4, 2012 <http://dx.doi.org/10.3402/jac.v4i0.18154>

Following the constitution of experience through digitally enhanced experiences inside the *Panoscope* this article addresses the process of a *grasping* in the midst of a perceptual bodily shock as *immediation*. Putting vision on the edge rearranges the habitual order of sensation, as much as its physical and mental environment. Perception as capturing or groping vanishes reappearing as a quality enabling experience. What disrupts the habit of perceiving inside the *Panoscope* is an immediacy of the perception of perception. Immediation offers the potential to consider signals, matter, sensation, and thought operating on the same plane. Under these circumstances the relation between the human and media shifts toward experiences of *immediate bodying* and *signaletic mattering*.

PANOSCOPE AS OPERATIONAL TOOL

The artist and designer Luc Courchesne developed the *Panoscope* in 2000. It consists of a 360° projection space equipped with a custom-built single-channel hemispheric projection system allowing for a fully immersive panoramic view. On entering the *Panoscope*, one is completely enclosed in an airy space limited by the concave projection surface. The invention of a hemispheric projection device and a powerful open source and inclusive digital structure enhance experiments with sound and vision across immersive embodied perception (Figure 1).

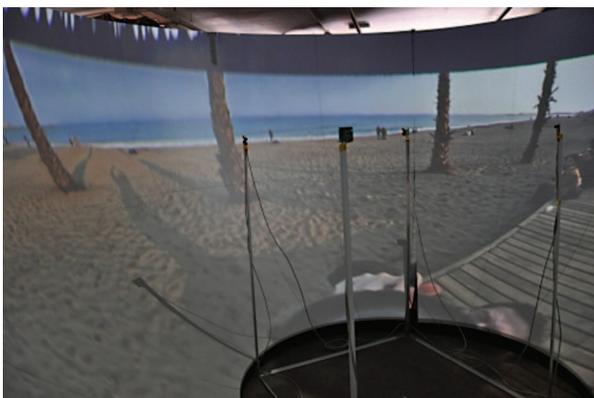


Figure 1. Luc Courchesne: *Panoscope*, “Where are you?” (2010). 360° video-projection, hemispheric projection space and lens, real-time processing through SPIN-framework, motion-capture cameras. Photo: Christoph Brunner.

The *Panoscope*'s dimensions are a diameter of 2 m on the ground and 5.5 m top level with a 360° enveloping wall of 2.9 m:

A hemispheric projector is placed above a downwardly flaring hemispheric screen; it projects an anamorphic disc image composed so the full horizon is placed at about 4/5th of the image radius. From within the installation, visitors see the horizon at eye level all around them, and are immersed in a distortion free projected space.²

Visual scenarios used in the *Panoscope* are of various kinds, such as “Where are you?” (2010), a navigable space along *x*-, *y*-, and *z*-axes filled with images and life details consisting of private imagery from Courchesne's own life and important archival material in relation to his biography; “You are here” (2010), a 3D remodeling of a gallery space in Toronto from which one can explore the city; “Immersion, setting sun (after Monet)” (2010), a 360° immersive video experience of different seashores recorded by the artist around the globe; and “Posture Paris/Montréal” (2011), a *Posture Platform* for immersive telepresence. The navigation happens wirelessly through an iPhone-app called “posture pad.” The open source software structure allows for real-time rendering of several users' positions, their motion capture through cameras, and the possibility for telepresence encounters inside the projected scenarios.

Each scenario (or content) has its very own modes of expression and accordingly alters the style of embodied experience. Expression defines the qualitative aspect of an experience that comes to be felt through the experience's actualization. Expression is therefore not to be confused with self-expression attached to a human creative being. Expression is indeed self-expressive but precisely not as volitional human act but as the “affective tone” of an experience itself.³

From this point of view, it is remarkable how much the same technological device is able to evoke diverging experiences of embodied perception. In other words, each scenario has its very own means of expression coupled with the subject's real-time encounter, both producing new kinds of experience. To consider interactive media environments as open-ended assemblages—compositions of varying material, social, and mental forces and tendencies—provides a way of thinking and working with such technologies on the

level of emergent perception and nascent experience. Immediation allows for investigating interactive media environments at the level of their perceptual emergence when the potential for non-habitualized modes of perceiving is most palpably present.

On first sight, the *Panoscope* seems like one of many interactive media artworks steeped in discourses on Virtual Reality (VR) remodeling “real-life” experiences. Hence, as Andrew Murphie has argued, VR might be used as a concept instead of a metaphor, enabling experimentations with perception beyond representational models.⁴ According to Murphie’s proposition, the visitor of an installation such as the *Panoscope* does not experience “another” world outside of the real. On the contrary “VR creates a totality which (potentially) both overwhelms present perceptive thresholds and creates, rather than represents, a ‘total enough world’ within the world(s) at large.”⁵ The problem we face through panoscopic experiences concerns the question of experimenting with the constitution of worlds or events of perception through digital media technologies.

What the *Panoscope* does is to allow for experimentations with perception through its emphasis on the horizon as a limit space of sensation. To arrive at the conception of immediation as a relational process, one has to consider the particular kind of experiences the *Panoscope* produces in conjunction with bodily capacities for experiencing. As a consequence, if the *Panoscope* facilitates experimentations with the constitution of perceptual events, then it might also change the ways we habitually conceive of perception. Accordingly, altering modes of perceiving opens up situated constitutions of perception with the *Panoscope* reworking the more general role of perception in cultural discursive orders. From this point of view, I conceive of the *Panoscope* as a confined and yet open space that is always entangled in a cultural discursive politics of perception through different techniques and technologies.⁶ What counts is the mode of engagement with such techniques and technologies enabling alternative modes of perceiving and, therefore, potentially new modes of thinking and living with our technologically enhanced environments. Visual perception is a relational process giving birth to objects and subjects through experience.⁷ Relational means to account for perceptual emergence across multiple modes of

existence, without predetermining how these modes operate as part of a particular experience.

The *Panoscope*’s horizontal perspective can be considered as a space in which new conditions of perception become palpable. Immediation takes on the role of a relational operation activating the potentiality for perception through the immediacy of experience rather than through connecting a perceiving subject to a perceived object. Media environments as much as human bodies are not fixed entities with clearly defined capacities. On the contrary immediation enables both media and bodies to differentiate themselves relationally from their prior existence through situated constitutions of perception. The *Panoscope* underlies certain constraints due to its composition (as the human body does as well), but its potential for immediation depends always anew on the situation it engages with (Figure 2).

Immediation delineates the cusp of experience edging into a recognizable perception event. The *Panoscope*’s horizontal edge puts the visitor constantly in the situation of not being able to entirely differentiate between something seen and recognized and something felt but not actualized. Its operations across digitally produced perceptual situations are in between an *affective sensing* and an *emotional recognition*. The assertion that a subject perceives and orders its objectified environment as different from the “self” is challenged by the immediated suspense of a straightforward perceptual order. Immediation outlines a way of coping with different expressive forces of humans and



Figure 2. Luc Courchesne: *Panoscope*, “Where are you?” (2010). Close-up of another user in telepresence mode, hemispheric projection space and lens, real-time processing through SPIN-framework, motion-capture cameras. Photo: Christoph Brunner.

more-than-humans as copopulating actual events of perception.

AN OUTLINE FOR THOUGHT AND MATTER THROUGH THE DIGITAL

An active embodied engagement with the *Panoscope* by means of immediation and perception foregrounds a domain of digital esthetics beyond human-machine binaries. To understand the relation between matter and thought as a central relay for a conceptualization of immediation, one has to detach the concept of perception from a mere phenomenological (i.e. human-centered) perspective. *Perception* is not of a human nature as such but part of a “worlding”; the unfolding of relational events constituting subjects and objects of perception.⁸

Anna Munster underlines this aspect of perception in relation to digital technologies: “Digital media are quite capable of registering affectively; we underestimate our corporeal capacities if we suggest that the speed and geographical fragmentation wrought by these media lead to dematerialization, indifference or destabilization.”⁹ On this point, Munster is aligning with Brian Massumi’s assertion that perception as the mingling sphere of quasi-subjects and quasi-objects is happening on the level of matter and not cognition. According to Massumi, the empirical makes its presence not as an already formed world, but the capacitation of matter to account for experience. The human body memorizes, navigates, and distributes relationally with its environment through the flesh.¹⁰ Hence, mental and cognitive procedures often confined to an abstracting function of the brain put the brain back into the immediate perceptual operations of the flesh. One could say that there was never a body-mind split in the Cartesian sense but only fleshy capacities of differentiating multiple nuances of experience.

The relation between body and machine for Munster reconsiders the digital not as an abstract dematerialization per se but as a *differential*. Munster writes: “To take the differential into account in an analysis of information culture is to reinsert the value of those intervals of non-capture, malfunction and chance fluctuating immanent to materiality *back* into the series of perfect replica” (i.e. the digital code).¹¹ As a differential, the digital is not a mere code anymore

but itself produces ruptures, breaks, and contingencies related to “vibrant matter” underlining all “digital/analog” processes.¹²

The *Panoscope*’s mode of expression operates on a horizontal level. Different from VR models working with goggles or helmets to provide an all-enveloping sense of immersion the *Panoscope*’s particularity resides in its constraint being a hemisphere. Vision moves from the floor up to the level of the horizon at approximately 90°. Two axis of continuity of vision exist: one is 360°, taking the user as rotating axis. The other is 180° moving from the top-edge along the hemispheric wall across the floor and up again to the other edge of the hemisphere. The top-edge of the projection surface defining the horizon at 90° opens up the actual dimension of emergent perception. It is the horizontality of potential vision that composes its own singular mode of experiencing. Navigating with a full body sensation through multi-dimensional space and entering a hemispheric video of a seashore creates a semblance of an actual perception event and at the same time suspends the habitual ordering capture of everyday object perception. Herein lies another crucial aspect of immediation: it cuts across the habitual constitutions of everyday experiences through perception. The horizon as the limit of visual perception extends and recedes according to the scenario encountered inside the *Panoscope*—and thus extending the confined experience impinging the discursive order of everyday habitualized perception. In the case of the hemispheric videos, a sensation of an enveloping edge of vision arises folding the body right into the projected space without having to enter it. The digitally enhanced perception creates a haptic experience as result of the differential operating across the entire perceptual *ecology*. Immediation defines the ambulatory perceptual emergence of an experience without foreclosing it. From that point of view an ecology is not a system but a relational set in excess of the actualized experience. What passes as effectively perceived is just a fraction of the excessive potential immediate to the embodied engagement with the *Panoscope*.

Experimenting creatively with the excessive potential of emergent perception requires an extension of the material, sensory-motor linkage of perception. Infra-material aspects, such as time and thought, are immanent to perception

and enable practices of being “attentive to the unknown.”¹³

On mattering

I borrow the term mattering partly from Karen Barad and partly from Isabelle Stengers. For Barad, “matter(ing) is a dynamic articulation/configuration of the world,” whereas for Stengers mattering describes “an idea [that] always exists engaged into a matter.”¹⁴ In either case, a relation nexus can be traced across the domains of thought and matter. Mattering similar to the relationality of perception figures as the activating force for both poles, thought and matter. This conception of matter and thought appears in Deleuze’s reading of cinematic images as movement-image and time-image. Whereas the “movement-image is matter itself, the time-image enabling a perception of time itself relates to thought.”¹⁵

The *Panoscope* composed of different matter (material, immaterial, and digital) becomes part of a *machinic phylum*. “The *machinic phylum* is materiality, natural or artificial, and both simultaneously; it is matter in movement, in flux, in variation, matter as a conveyor of singularities and traits of expression.”¹⁶ As a machinic phylum, digital media are traces of matter flows producing singularities of experience and expression through perception. In other words, not only perception is subject to expression’s flux, but also material strata co-constituting embodied experiences change from situation to situation. *How* experience comes to pass differentiates the *Panoscope* in its relational potential across all of its constituent levels of mattering. Harking back into Anna Munster’s conception of the digital as differential and interstitial, the mattering aspect of digital media’s machinic phylum moves in and out concrete and abstract mattering, always in relation to the human body and technology but never entirely *of* either of them. Under these circumstances the conception of a human body becomes malleable. In the constitutive process of mattering, it is immediation that accounts for the immediacy of the elements relationally composing an experience. The human body in itself consists of manifold immediating processes. What happens in the event of an immediating experience might therefore be better described as *bodying*.

The reason for underlining matter and perception in their techno-conceptual configurations lies in the fact that the *Panoscope* experiments with what an embodying perceptual experience can do or might become. The *Panoscope* is deeply entangled in digital processes of circulations of signals between numerical encodings and their decodings in actual expressive events of perception. Anna Munster describes digital media as not being dematerializing but of a different quality than analog media:

In exploring the possibilities of machine perception—the alien representation of the digital image, the different speeds of information itself, where instantaneity is coupled with interminable arrests, crashes and system failures—we can begin to see the aesthesia of the digital operate. Digital aesthesia provides a set of conditions for machine perception. But in the new media artwork itself the intensive speeds of embodied interaction and engagement also enter the fray.¹⁷

The *knot* constructed in this case lies in the close relation between a material notion of matter and an immaterial notion of the term, both depending on and producing each other. The conception of such an emergent constructivism of experience through interactive media defines the core concern of immediation. The constructivism underlying the process of mattering is as material as it is abstract. *Abstract* because there is always more to an experience than we are able to conceive in its perceptual effects. It is experience that coalesces these two streams of mattering, tying them together in relational events of perception.

Perception as modulation

What defines embodied engagements with the digital is not an abstraction of the “real” into binary code. The digital as always related to matter does not abstract in a conventional sense of the term. It rather modulates *molds* of perception into potential extensions of reality.¹⁸ What constitutes the relation between analog and digital realms is the process of perception as modulation: “For modulation is the operation of the Real.”¹⁹ Modulation constantly reworks the relation between perceiver and perceived and creates relational events of experience. Experience takes on an extended meaning in this context, which

William James' describes as *pure* experience. Pure experience is a plain unqualified actuality. It defines the moment before experience bifurcates into "thing and thought."²⁰ At this very point of an emergent event, the relational bond between thought and matter is most affectively felt. In other words, its potential for actualization is an expression as a "shock to thought," which "strikes the body first."²¹ The digital becomes material through its processual nature and force for expression. In itself, it does not exist but through movements of expression it becomes present in the instance of real-time computation.

Interaction as a human-machine relation falls short of the complex relation between a matter flow of affective expression and its relation to thought as a collective event interlacing bodies and code. Bodies in this context are compounds, things made of other things that are "material, specific, non-self-identical, and semiotically active."²² Immediation renders bodies into processes of a bodying. In digital media, the production and relation of bodies by means of code and differentiation challenges what a body can do or might become, "it opens up forms of experimentation."²³ The operation of immediation in such processes takes on a double function: on the one hand the challenging aspect requires continuation, that is the seeking of future experiences at the horizon of perception's worlding. On the other hand the continuous experiential meandering depends on envelopes to be part of a process. According to Gilbert Simondon the double process of continuity and enveloping is called *transduction*. For Simondon, transduction is the driving motor of a general process of becoming, which he calls *individuation*.²⁴ He writes, "by transduction we come to understand a physical, biological, mental, and social operation through which an activity successively propagates inside a given domain, with the help of this propagation through a structuration of the domain over which it operates continuously."²⁵ Engaging with interactive media art outlines not a mere encounter between defined parts but becomes an individuation in its own right. Such an individuation, operating by means of transduction, cuts across a prior disparity of the physical, biological, mental, and social. This is an "affective engagement"²⁶ with media as "contractions of forces and through forces bodies are born. Rather than

being solids, such bodies are processes and defined by their internal and external milieus in which they resonate."²⁷ The birth of such bodies through immediation defines a collective process of experience unfolding transductively.

Like a thought

Thought never separates from matter, and yet it is different from knowledge and matter. "Knowledge concerns formed matters (substance) and formalized functions, divided up segment by segment according to the two great formal conditions of seeing and speaking, light and language: it is therefor stratified, archivized, and endowed with a relatively rigid segmentarity."²⁸ Knowledge, the way Deleuze describes it, would consider digital processes of recording and reproducing as endless chains of segmentation, whereas, as demonstrated through Munster, digital matter as differential always comprises intervals of the non-stratified. When the *Panoscope's* horizon puts habitual perception in limbo, heightening the unstable conditions of an emergence of recognized perception, thought alters as integral part of this experience. Thought as practice of immediation is not producing knowledge but edges at the verge of perceptual actuality into *unknown* potentialities of the future. It enables creative abstraction, as a way of being attentive to the unknown. Abstraction not in the sense of a transcendentalizing tendency (such would be closer to knowledge) but rather a technique:

that would go to the limit of what life can do. ... A thought that would *affirm* life instead of a knowledge that is opposed to life. Life would be the active force of thought, but thought would be the affirmative power of life ... Thinking would then mean *discovering, inventing, new possibilities of life*.²⁹

Thought and life are intrinsically tied to matter flows. The digital in this configuration functions as a lure of perception actualizing potentials through expression, as a shock to thought. Thought as the edging into virtuality of the actual remodulates the modulation of perception into a potential difference to be felt in a future actualization; it is a modulation of modulation.³⁰ Thought as part of creative practices is not tied to a subject but is always collective, emerging through its capacity to include unrealized potentials into

actual expressions in and through matter. One could also say that thought is immediate to the process of perception and vice versa.

PANOSCOPIC IMMEDIATION

At the point of entering the *Panoscope*, an individuation takes off immediately, the enclosure fills the air between the user and the screen; it is charged with relational potential—an activation of thought apprehending potentiality. It is the horizon of human vision that extends or modulates by the multiplication of directions, disallowing gravitation-based navigation in space.³¹ While immersed in the *Panoscope*, perception enters a relation with the visual appearances vibrating through the air. Simultaneously, four (in the future eight) cameras capture bodily movements, turning physical movements of the body into digitized flows of matter. The air between camera, body, and screen emerges as the modulating interface, creating an interactive loop by means of a digital mattering. The worlding of perception, while immersed in a seashore landscape, ties in the physical, biological, mental, and social layers of experience, all of them being part of the productive force of digital matter. The control usually attributed to the perceiver ordering the world according to her habit shifts by folding the image onto the surface of the body from the fringes of the “strange horizon.” In the center of an immersive seashore, a time-image occurs making time itself perceptible in its pure mattering effects. The experience of the image opens up a sensation of time moving through matter becoming thought, in other words, perception opening up potential becomings of future sensations in tandem with thought:

The image contains a virtual dynamic, more temporal . . . than spatial in nature. All this adds up to an experience . . . Experiences do not connect geometrically in three dimensions. They connect processually, in many dimensions, including dimensions of felt intensity that inhabit the sight seen, but do not show.³²

In the projection scenario “Where Are You,” one starts from a 3D grid providing not only Euclidian dimensions but also portals offering other dimensions, infinite in number. On a timeline, one navigates through different moments in Courchesne’s

life from childhood memories back to seventeenth century perspectival painting. The confinement of a human life cycle is broken up and juxtaposed, ready for remix. Here, one can glimpse a major shift in the relation to time through digital media: digital media are able to foreground the disjunctive and conjunctive interplays between a “sequential and non-sequential variation (chronological and non-linear time)” of signals over time, reworking the experience of time itself through a *digital mattering*.³³ The digital materializes in the perception of time disjunctively, weaving experience into a conjunctive singularity. The same accounts for the real-time telepresence option the system provides. The possibility to jointly venture through timelines, images, and immersive animated places defines not a mere audio-visual-mediated environment. The sensation of space and time changes throughout the entire continuum of the assemblage. Such an assemblage layers the local embodied space in each *Panoscope* working with a processual human body, with the digitized co-inhabited spaces. The layering of spaces happens through a direct perception of time, tweaking visceral sensations of space toward new potentials of perception moving across and along processes of digital mattering. The lines and paths throughout the “virtual” environment produce traces, felt traces, and traces or traits inscribed through alternations of code.

FROM SIGN TO SIGNAL: SIGNALLETIC MATTERING

What we engage with through processes of digital or abstract mattering might also be termed *signalletic mattering*. Immediation in this context delineates the immediacy of real-time signal processes across digital media, fostering the immediacy of “liveness” of interactive media engagements. With a turn toward the signal and away from the sign, we cross the threshold between signifying regimes of signs and enter the realm of digital processes as pulses of signals and signalletic mattering.

In *A Thousand Plateaus*, Gilles Deleuze and Félix Guattari develop a critique of regimes of signs, where signs refer to other signs through endless signifying chains. A similar argument could be made for digital functions of codes, as endless chains of signs referring to each other. The circulation of signs in this case adheres to a *logic*

of representation which is opposed to the emergent quality of immediation. Deleuze and Guattari's major argument for overcoming pure chains of signification lies in the role of *matter* and *function* as opposed to *substance* and *form*: "Functions are not yet 'semiotically' formed, and matters are not yet 'physically' formed."³⁴ The authors propose a re-investigation of the problematic role of the sign as signifier developing systems of order and capture. Their attempt is not to abandon the sign but to open it up as always relationally intertwined in an ecology, where matter and function precede substance and form. The problem lies in the over-coding of time and the priority given to space in conventional accounts of the sign as referent to a perceptible real: "It is only when the sign opens directly to time, when time provides the signaletic material itself."³⁵ In relation to digital media a shift from sign to signal enables us to account for the non-representational yet effective quality lodged in immediating processes. Signaletic material for Deleuze defines, as mentioned in the introductory article by Bodil Marie Stavning Thomsen, "a plastic mass, an a-signifying and a-syntactic material" neither to be understood as a "carrier" of "enunciations" nor "utterances"; "It is an *utterable*."³⁶ The utterable of the signaletic material is not a sign, but the pure potentiality of an utterance or enunciation. This potentiality in relation to matter and function is what Deleuze and Guattari name *diagrammatic* and which here will be considered as "diagrammatic practices."³⁷ The relation between the signal and matter is a diagrammatic movement, where movement exists in time but does not constitute time: "The diagrammatic . . . does not function to represent, even something real, but rather constructs a real that is yet to come, a new type of reality."³⁸ The diagram is the immanent field of potential moving through matter, to become expressive in perception. Thought becomes the primary catalyst for diagrammatic tendencies to repotentialize an actual occasion of experience. Time comes up again as the underlying force of signaletic matter, felt in the immediacy of its potential for becoming. A diagrammatic practice is a "pragmatism of the multiple" where felt-thought in the immediacy of action becomes attentive to the unrealized potentials of a machinic phylum in its mattering presence.³⁹ Diagrammatic practices, to become effective, aim at techniques for perception altering *how* feeling

cuts across all matter of experience, abstract (virtual) as much as physical, biological, or social.

Accordingly, the *Panoscope* is not just an interesting assemblage for the alternation of thinking and feeling in relation to perception. It is essentially an assemblage that needs to be worked with—diagrammatically. While the horizontal conditioning of perception enables a heightened awareness for the relational nature of perception through digital and signaletic mattering, many new lines of potential experimentation take off from here.

CONCLUSION

Immediation defines a tool for thinking what is happening in the instant of an emergent experience. The relational co-emergence of matter, signals, and thought creates new sensations and bodyings through perception's relational nature. As a diagrammatic movement immediation is a non-representational process of bodying. The diagrammatic outlines a technique for tweaking regimes of signs toward destratifying tendencies, enabling new potential variations of reality to emerge; it is a technique for invention.

How perception is playing a central role for contemporary accounts of interactive media becomes apparent along the multiplicity of signaletic processes as part of digitally and affectively engaged experiences. Processes of immediation are crucially related to time. Digital media provide specific ways of activating multiple temporal dimensions in one experience, therefore enriching the felt and actualized potential for future events. From that point of view, the *Panoscope* is a confined zone for perceptual experimentation but its expressive forces leave traces—materially, mentally, and digitally. What has been developed as the double process of mattering describes the co-emergence of material processes and thought through the immediate quality of perception. The creation of worlds is therefore always a kind of following matter flows, not as banal materialism but as signaletic mattering where time provides the signaletic material. Foregrounding time in interactive media environments enables a thinking of the potential of a situation through its future-orientedness. Far from being utopic, immediation emphasizes the immediate quality of differentiation of experience through perception. How an

affective and creative engagement with technologies and human bodies comes to pass is therefore always a matter of capturing forces immanent to a general signalletic mattering.

From a relational perspective, media environments and the human subject do not interact. The idea of interaction would consider either, subject and object, as preformed entities. On the contrary, “relationality pertains to the *openness* of the interaction rather than to the interaction per se or to its discrete ingredients.”⁴⁰ Immediation replaces a spatializing conception of interaction and mediation between pre-defined terms. The immediacy of immediation composes a new type of reality, based on the temporal immanence of future becoming in the actual experience. Experimenting with such immediate dimensions requires an attentiveness for the creative force of perception and its transductive operation.

One of the major tasks for a conceptual outline of immediation resides in the speculative and pragmatic poles that each affective engagement with signalletic mattering comprises. *How* can we find means of accounting for experience’s excessive potentiality and compose with it transductively? The proposition made in this article is to constantly follow mattering processes and to develop in their presence ways of speaking and acting *with* and not just *about* or *upon* them. Immediation is an inventive practice of processual creation with our environments and their very own propensities. Such an approach requires thinking *with* what happens and taking encounters with matter seriously in their singular traits and creations.

ACKNOWLEDGMENTS

I would like to thank Luc Courchesne, Mike Wozniowski, Audrey Desjardins, Erin Manning, Brian Massumi and the Social Sciences and Humanities Research Council Canada (SSHRC).

Notes

1. In this particular context, the notion of immediation derives from private conversations with Alanna Thain and Brian Massumi. A first outline of the concept is currently developed as a SSHRC-funding application. For detailed information on the Pano-scope see: <http://courchel.net/> (accessed October 11, 2011).

2. Luc Courchesne, *Panoscope 360°*, <http://courchel.net/> (accessed November 10, 2011).
3. The notion of *affective tone* derives from Alfred North Whitehead. See Alfred N. Whitehead, *Adventures of Ideas* (New York: The Free Press, 1967), 176.
4. Andrew Murphie, ‘Putting the Virtual Back into VR’, in *A Shock to Thought: Expression after Deleuze and Guattari*, ed. Brian Massumi (London/New York: Routledge, 2002), 188–214.
5. *Ibid.*, 193.
6. Jacques Rancière, *Politics of Aesthetics* (London/New York: Continuum, 2005).
7. Brian Massumi, *Parables for the Virtual: Movement, Affect, Sensation* (Durham/London: Duke University Press, 2002), 51.
8. *Ibid.*, 152.
9. Anna Munster, *Materializing New Media: Embodiment in Information Aesthetics* (Hanover/London: Dartmouth College Press, 2006), 159.
10. Massumi, *Parables for the Virtual*, 59.
11. Munster, *Materializing New Media*, 29.
12. Jane Bennett, *Vibrant Matter: a Political Ecology of Things* (Durham: Duke University Press, 2010).
13. Gilles Deleuze, ‘What Is a Dispositif?’, in *Michel Foucault Philosopher*, ed. Timothy T. Armstrong (New York: Routledge, 1991), 159–166.
14. Karen Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham/London: Duke University Press, 2007), 151; Isabelle Stengers, ‘Introductory Notes on an Ecology of Practices’, *Cultural Studies Review* 11, no. 1 (2005): 193.
15. Gilles Deleuze, *Cinema 2: The Time-Image* (Minneapolis, MN: University of Minnesota Press, 1989), 17, 31. Deleuze adds: “In everyday banality, the action-image and even the movement-image tend to disappear in favour of pure optical situations, but these reveal connections of a new type, which are no longer sensory-motor and which bring the emancipated senses into direct relation with time and thought. This is the very special extension of opsigns: to make time and thought perceptible, to make them visible and of sound”, *ibid.*, 18.
16. Gilles Deleuze and Félix Guattari, *A Thousand Plateaus* (Minneapolis, MN: University of Minnesota Press, 1987), 409.
17. Munster, *Materializing New Media*, 160.
18. Deleuze, *Cinema 2*, 27.
19. *Ibid.*, 28.
20. William James. *Essays in Radical Empiricism* (Mineola, NY: Dover Publications, 2003), 39.
21. Brian Massumi, ‘Like a Thought’, in *A Shock to Thought: Expression after Deleuze and Guattari*, ed. Brian Massumi (London/New York: Routledge, 2002), xvii.
22. Donna Haraway, ‘Compoundings’, in *Sensorium: Embodied Experience, Technology, and Contemporary Art*, ed. Caroline A. Jones (Cambridge, MA: MIT Press, 2006), 119.

23. Gilles Deleuze, 'Ontologie-Ethique', Lectures on Spinoza, 1980. <http://www.webdeleuze.com/php/texte.php?cle=26&groupe=Spinoza&langue=1>.
24. Gilbert Simondon, *L'individuation à la lumière des notions de forme et d'information* (Grenoble: Millon, 2005), 24.
25. Ibid., 32 (*my trans.*).
26. Jonas Fritsch, 'Understanding Affective Engagement as a Resource in Interaction Design', Proceedings of *Engaging Artifacts*, Nordic Design Research Conference, 2009.
27. Parikka, Jussi Parikka, 'Media Ecologies and Imaginary Media: Transversal Expansions, Contractions, and Foldings', *Fibreculture* 17 (2011): 36.
28. Gilles Deleuze, *Foucault* (Minneapolis, MN: University of Minnesota Press, 1988), 73.
29. Gilles Deleuze, *Nietzsche and Philosophy* (New York: Columbia University Press, 1983), 101.
30. "At any rate, thought and imagination are the leading edges of this exploratory expansion of potential, because they can wander from the particular present posture even without actually leaving it", Brian Massumi, 'The Thinking-Feeling of what Happens', *Inflexions* 1 (2008).
31. "It seems that the force of gravity lies at the basis of a laminar, striated, homogeneous, and centered space" as opposed to a smooth space of de-stratified matter-flows. In Deleuze and Guattari, *A Thousand Plateaus*, 370.
32. Brian Massumi, 'Panoscopie: La photographie panoramique de Luc Courchesne', *CVPPhoto* 60 (2003): 22–26. English unpublished translation accessed at: <http://www.brianmassumi.com/textes/Panoscopia.%20The%20Panoramic%20Photography%20of%20Luc%20Courchesne.pdf> (accessed July 28, 2011).
33. Munster, *Materializing New Media*, 173; Gilles Deleuze in his work *Cinema 2: The Time-Image* most prominently developed the "direct perception of time through film". Ibid., 27. He describes the time-image as that, "which gives what changes the unchanging form in which the change is produced". Ibid., 17.
34. Deleuze and Guattari, *A Thousand Plateaus*, 141.
35. Deleuze, *Cinema 2*, 43.
36. Ibid., 29. See also the article in this volume: Bodil Marie Stavning Thomsen, "The Signalitic, Haptic and Real-Time Material."
37. The notion of diagrammatic practices has been coined by Sher Doruff, who is continuously developing her own techniques and concepts for diagrammatic practices. See Sher Doruff, 'Diagrammatic Praxis', *JAR—Journal for Artistic Research* 0 (2010), <http://www.jar-online.net/index.php/issues/view/480> (accessed July 25, 2011).
38. Deleuze and Guattari, *A Thousand Plateaus*, 142.
39. Deleuze, *Foucault*, 84.
40. Massumi, *Parables for the Virtual*, 235.