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**INTERACTIVITY BETWEEN BODIES AND MILIEUS WITHIN
TECHNO-AESTHETIC ART OBJECTS**
*INTERATIVIDADE ENTRE CORPOS E MEIOS EM OBJETOS TECNO-
ESTÉTICOS DE ARTE*
*LA INTERACTIVIDAD ENTRE CUERPOS Y AMBIENTES EN OBJETOS
TECNO-ESTÉTICOS DE ARTE*

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ABSTRACT

Relations consist of processual interactivity between bodies and milieus which do not differentiate between the natural and the artificial, human and non-human. Our paper seeks to problematize the experience of the encounter with an artwork seen as a techno-aesthetic object constitutive of interactivity and addresses the idea of degrees of interactivity as produced with and within an artwork as an associated milieu. In this sense, we posit various degrees of interactivity in a relational experience: mixtures, attractions, embodiments and perceptions. Thus, interactive processes are driven by an ethics of the potential of bodies to act by what a body can do in its intensity, in the dynamics of degrees of interactivity in the experience. These ideas emerge from the philosophical writings of Baruch Spinoza, Gilbert Simondon and Gilles Deleuze and are applied to the field of art in order to allow an understanding of the relations between bodies and associated milieus.

Keywords: interactivity; techno-aesthetic object; associated milieu; body; art.

RESUMO

Entendemos que as relações são compostas por processos de interatividade entre corpos e meios, os quais não separam natural e artificial, humano e não-humano. Direccionamos tal abordagem a fim de problematizar como ocorrem as experiências no encontro com a obra de arte, esta entendida como um objeto tecno-estético, bem como o que constitui interatividade e seus graus produzidos entre obra e meio. Aponta-se que existem vários graus de interatividade em uma experiência: misturas, atrações, incorporações e percepções. Os processos interativos são movidos por uma Ética do potencial dos corpos para agir e o que pode um corpo em sua intensidade, na dinâmica com os graus de interatividade em uma experiência. Estas ideias surgem a partir dos escritos filosóficos de Spinoza, Simondon e Deleuze e são aplicadas à arte, a fim de compreender as relações entre corpos e meios.

Palavras-chave: interatividade; objeto tecno-estético; meio associado; corpo; arte.

RESUMEN

Entendemos que las relaciones se componen de procesos interactivos entre los organismos y medios de comunicación que no distinguen entre lo natural y lo artificial, lo humano y lo no humano. Problematicamos como acontece el encuentro del espectador con una obra de arte—ésta entendida como un objeto técnico-estético—así como la constitución de la interactividad entre la obra y lo que aquí llamamos medio asociado: señalamos que se producen varios tipos y diferentes gradaciones de interactividad. Así, los procesos interactivos son guiados por lo que puede hacer un cuerpo con sus intensidades y por una ética de potenciales propia a los cuerpos en la dinámica de grados de interactividad en la experiencia. Os processos interativos são movidos por uma Ética do potencial dos corpos para agir e o que pode um corpo em sua intensidade, na dinâmica com os graus de interatividade em uma experiência. Estas ideias provienen de los escritos filosóficos de Spinoza, Simondon y Deleuze y las aplicamos al arte para mejor comprender la relación entre los cuerpos y los medios asociados.

Palabras clave: interactividad; objeto tecno-estético; medio asociado; cuerpo; arte.

Introduction

The present paper seeks to problematize questions of interactivity, through the relations of bodies and milieus within techno-aesthetic art objects, in order to open pathways that allow thinking the techno-aesthetic art object in terms of real interactivity and not simply responsiveness: What constitutes interactivity? What is the role of technology as the mediating agent? What kind of bodies, milieus, space-times result from the interactive techno-aesthetic art object? What are the ontological implications of these techno-aesthetic considerations? How may we think of interactivity in the humanities through art experience? We aim to bring the interactive art experience to the humanities to understand the interconnection between bodies and milieus as a collective process.

Traditional materialist thinking is fraught with dualities that hamper the positing of these problems and hobble productive understanding. Seemingly paradoxical extremes such as natural and artificial, art and life, analog and digital, human and technological, real and virtual, among other polar dualities, can be reconciled by creating paradigms that propose novel conceptions of what constitutes bodies and milieus. To such end, our paper will adopt an interdisciplinary framework that overarches the arts, technology, humanities and contemporary process philosophy in order to shed new light on these questions. We seek to raise the discourse on interactivity to a philosophical plane using the concepts of Baruch Spinoza, Gilbert Simondon and Gilles Deleuze in order to synthesize alternative approaches to think of bodies, milieus and art works. Each of these philosophers has concepts that can enmesh with those of the others to construct a robust conception of interactivity founded on a philosophy of immanence, non-serial causality, machinic individuation (as opposed to mechanicity) and space-time.

For us, in terms of what is living in the world, there is no difference between that which we deem artificial and that which is deemed natural. To differentiate the artificial from the natural, the organic from the machinic, is to introduce species as constitutive of distinctions of hierarchical superiority where there should be none. In this sense, in experiencing interactivity in milieus implicating techno-aesthetic objects, the compositional relations create novel modes of expression of what a body is and what it can do. Yet, we must keep in mind that a technology gives expression to its own specific modality of producing bodies, but in terms of the data proffered to our senses there are no differences in quality. To imagine the

body differently we need to cast off anthropocentric and transcendental positions and consider its spatial extension, potentials, intensities and movement in new ways. The question of the body and milieu will be examined from a Spinozist (Spinoza, 1994) perspective based on the idea of parallelism between body and soul and the concept of the intensive immanent body; we will also investigate Deleuze and Guattari's (1987) and Simondon's (Brouwer & Mulder, 2007; Simondon, 1989) understanding of the concept of milieu.

To think of interactivity is a question of considering the intensities that are brought out by the experience of the creative process. Hence, the main thrust of this paper will be to investigate the question of degrees of interactivity in the experiences between bodies, felt as affect. There are various modalities that register degrees of interactivity in experiential relation, which can be understood as the normalization of intensities reciprocally produced in any experience: mixtures, attractions, incorporations, embodiments and perceptions (Oliveira, 2010). Mixtures are the voluntary and involuntary affects between bodies in associated milieus. The understanding of mixtures of bodies is related to various philosophical conceptions of immanence. Attractions speak of an animal art that shows us the potential of the milieu and the affects of bodies. The body here referred to includes not only the human body, but any non-human body as well—animal, technological, immaterial—formed by the speed or slowness of matter-taking-form/matter taking form. Such bodies embody life through technics and technicities that do not dissociate the natural and the artificial, the analog and the digital, matter and form. The (mis)perceptions produces an ephemeral landscapeness within the meta-stable system constituted by the artwork-human-milieu.

In this sense, French philosopher Gilbert Simondon salvages the relation between man and technics by re-defining human existence in terms of the technical reality that surrounds it. Simondon (1989) developed the concept of technicity in terms of open machines and conceived new environments for their unfolding in terms of the associated milieu which allows the inter-dependent co-arising of the technical object, creator and environment into an event. Through the techno-aesthetic object, art liberates technics and techniques from their technological and cultural contexts in order to surpass their initial function as well as promote other ways of feeling and thinking. This direction consists of a political and ethical position (and not a moral stance) that provides us with the means of thinking our existence in terms of the technical reality that surrounds us.

These ideas are inspired by Spinoza's question "What can a body do?" [IIPost2P2S] (Spinoza, 1994, p. 71) and by his answer, "We never know what a body can do" until the encounter, and then, what it can do depends on the intensity of the encounter (Deleuze, 1990, p. 218). Spinoza's question is the foundation of this paper and it will be concurrently problematized through three different fields of knowledge: Arts, Philosophy and Psychology. It begins by asking the question "What can a body do?" and proceeds to ask "How much can a body do?" in the encounter which in our case is with an artwork. In this encounter with the artwork, the relations between the artwork/artist's/viewer's bodies and the milieu happen as an interactive process. Any experience implies interactivity but our interest lies in how this interactivity happens: What are its modes of production? How are bodies themselves affected? What are the nuances of such experience? Thus, our aim is to investigate the ontology of experiencing the artwork, or better yet, experiencing the artwork through its processes of interactivity, herein referred to as degrees of interactivity (Oliveira, 2010). So, the question "How much can the body do in the encounter with the artwork?" is posed in terms of degrees of interactivity between bodies and milieus associated through intensive experience.

The nature of a body formed by a technology—thinking, walking, seeing, typing—is essentially artificial. A body is not dualistic as it integrates dichotomies: it is analogue and digital, human and machinic, natural and artificial, perceptive and imperceptive, body and soul, matter and form. It must be stressed that the body as matter-taking-form only exists in the presence of other bodies and belongs to the associated milieu by which it was created and within which it was created. Artwork, human, animal, machine, landscape, idea-body... bodies of flesh, blood, computer chips, images, sounds, waves, frequencies, affects, signs... bodies not bounded by skin, canvas, walls, or screens... extensive bodies in milieus where they become associated as intensive relations. Promiscuous/ethical bodies are found in the art-life experience; promiscuous in the act of mixing themselves, and ethical in their potential to act according to the dynamics of degrees of interactivity within each experience.

Thus, bodies are always in relation with each other, associated to the milieu to which they belong. Therefore, to understand these relational bodies, a modality of association capable of dealing with these associated bodies and milieus is needed.

The Associated Milieu

The unfolding of the art event incorporates actual and virtual participants. It involves forces, intensities and their potentials into an intuitive becoming where the event is guided by an immanent intelligence which orients the creative process and its advance into novelty as invention. Here we see that the movement of these forces, intensities and potentials does not subscribe to a neatly definable line of causality but is more akin to a turbulent flow of energies whose total sum manifests a resultant direction.

Thus we come to understand the milieu as an assemblage of forces and intensities constitutive of meta-stable bodies—yet, this field of activity does not happen in space as a temporal unfolding but arises immanently in space-time: it is not space plus time but space-time. The individuated event as an emergent amalgam of milieus and bodies acquires and expresses its own space-time within which participants become associated as one in the experiential milieu that involves them. And instead of expressing the processual unfolding of the event as a field, as a flat surface, we consider it as a "more-than a planar surface" which fuses time, space and participants into what Simondon will call a milieu, an associated milieu, in his book, *Du mode d'existence des objets techniques* (1989) [On the Mode of Existence of Technical Objects].

The concept of the associated milieu is a useful model to analyze the co-arising relationships that take place between the participants and the conditioning territorialities as an environment. The descriptive term "associated" when applied to describe milieu refers to a specific mapping of an ensemble made up of constitutive elements and conditioning environmental modalities which come together to create an individuation through the ongoing exchanges of energy that take place within a specific milieu (Simondon, 1989, p. 57). The associated milieu allows for an interactive, reciprocal recursive relational causality to take place between the elements so that we may conceive of space-time as the immanent plane from which the subject and object arise as the generic activity of passing from the objectivity of the concretion where participation conditions as information which in turn, simultaneously, allows the relational to take form itself as operational coherence as unfolding. In other words, the milieu is not a substrate. It allows for a non-static, dynamic coming-to-being as an event of taking-notion of the milieu is not unitary: not only does the living thing continually pass from one milieu to another, but

the milieus pass into one another (Rebolledo, 2013). The associative milieu allows the integration of the various participants in the art event and constitutes a concrete continuity.

In French, the term *milieu* does not only refer to a physical environment or setting, it means “surroundings,” or a “medium” as in biology, or “middle” as amidst. The milieu is normally understood as the ensemble of external conditions within which a living being lives and develops or as the assemblage of material objects and physical circumstances which surround and influence an organism. “Milieu” can also be seen as an environment in the widest ecological sense of the term, i.e. as the locus of the dynamic interaction of all the factors and mechanisms that participate in the sustenance of an ecosystem. To paraphrase Massumi (Deleuze & Guattari, 1987, p. XVII), the term milieu should be read as a technical term combining all these meanings.

The concept of the associated milieu is a useful model to analyze the reciprocal and recurrent co-arising causal relationships that take place between the individual participants and territorialities. The descriptive term “associated” when applied to describe milieu refers to a specific mapping of an ensemble made up of constitutive elements and conditioning environmental modalities which come together to create a concretized individuation through the ongoing exchanges of energy that take place within that specific milieu. The associated milieu sustains, unites and brings together human and non-human individuations as a multiplicity understood as images: it is not a stage upon which a scene unfolds, or a play where only the actors perform, or a canvas upon which the pigments run into each other, or a manuscript where the words follow each other in sequence (Oliveira, 2010). The milieu is the setting and environment of concretion, of aggregation, where things condition each other in order to form something which in turn, simultaneously, allows these very same things to take form themselves. In other words, the milieu allows for a non-static, dynamic form as an event of images taking-form as experience.

The milieu crosses through individuals, simultaneously existing within them and outside of them like the air which one breathes, or the water that permeates our body, or the earth that nurtures and nourishes us. To think of the milieu is to think of the production of the individual proper, its modes of functioning and its pre-established connections and relations. In this way, the milieu is active and defines itself as a source of energies, perceptions and actions. According to Deleuze and Guattari (1987), the notion of the milieu is not unitary: not only does

the living thing continually pass from one milieu to another, they are essentially communicating. And here it should be emphasized that milieus communicate not only in the sense of being connected machinically, but in the sense of exchanging information through the action-reaction dynamic which is constitutive of the production of images. “The associated milieu is not so much an apparatus or machine which transforms but the expression of the integrated sequential process” (Rebolledo, 2013, p. 48). In this way, the associated milieu is the setting and environment of concretion where participants condition each other in order to take form as a something which in turn, simultaneously, allows these very same things to take form themselves. But perhaps the most important aspect of this analysis is that these conditionings are considered participants in the event as simultaneously constitutive of space and time as temporality—they are simultaneously and reciprocally cause and attribute to the creation of the art event. The constitutive elements participate in the co-operative functioning according to a reciprocal necessity within the machinic assemblage as a milieu where the parts maintain their individual integrity yet can only fulfill the role attributed to them as participants contributing to the functioning of the apparatus as a coherent whole (Rebolledo, 2013, p. 174).

Relations are not between bodies but *in the between* of bodies becoming, so that bodies are not limited by their contours; they extend within the milieu and are already in contact prior to their surfaces touching. The milieu transversally crosses bodies so that at times the milieu is body and, at others, the body is milieu. In installations, the work is a milieu that houses bodies—a milieu that promotes the exchange of energy between bodies, that contains scents and sounds, which collects light from projectors, which gathers the viewer into the experience, which composes a specific architecture. Simultaneously, the installations are also pulsating bodies, which vibrate at their own frequency, which are attuned to the pulsations of other works, which act on, with and through other milieus. A body only exists in the relation with other bodies, through the milieu as the *in between* of bodies. We need to emphasize that bodies do not mix with each other, but emerge from the *between* of one and the other, in the *between* of the ground which belongs to the plane from which they emerge (Oliveira, 2010).

Degrees of Interactivity

This paper emerges from concerns and observations about how the artwork as a techno-aesthetic object belongs to the associated milieu, from

seeking to understand the relations between bodies and milieus as an interactive experience. The artwork emerges from the relations constitutive of milieus which are mediated by technologies, where relations are expressed in terms of the capacity of bodies to 'hold their own' in experiencing the range of reciprocating imagistic intensities as degrees of interactivity. These degrees represent the varying gradation of affective differences in experiencing the activation of potential into active powers of experiential intensity in perception: mixtures, attractions, perceptions, embodiments. Various concurrent movements of reciprocal activation take hold—of mixing, of blending, of attraction—incorporating fragments of bodies into an extended duration which encloses the perception of the experience as a self-involving ephemeral landscape. Thus, we pose that in every experience there are different modes and degrees of interactivity between bodies and milieus: mixtures, attractions, perceptions, embodiments.

Mixtures are inevitable. They make themselves known as the affectively-felt tonality of voluntary and involuntary associations between hybrid bodies and milieus keen to experience each other in different ways. To understand the pragmatics of bodies, it is imperative that we comprehend their emergent relations. Plato's, Spinoza's, Deleuze's and Simondon's ideas of immanence produce the emergence of bodies in different ways. In Plato and Aristotle, the transcendent and immanent planes oppose each other, as do body and soul, where the supremacy of the soul prevails. Spinoza (1994) brings together transcendence and immanence, as well as body and soul, as parallel relations. The relations between bodies and milieus are immanent and intensive; bodies and souls being relations of speed and slowness.

Their *Ethics* are based on what a body can do, what it is potentially capable of doing, and what positive encounters can activate potential and empower it to act. In Simondon (1989, 2005) and Deleuze & Guattari (1987), bodies and milieus mutually create each other through the meta-stable vibratory, recursive detente of action-reaction. Bodies, as accretive relations of individuation, as the gestures of choreographic entities, are no longer subordinate to the Aristotelian hylemorphic imperative of substance and form; being, as the union of the individual and the milieu, is no longer expressive of the substance of Spinoza's Divine Being; mixtures address the interdependent relations between bodies and milieus.

The associated milieu of installation artworks is composed of dissimilar milieus and elements: image projections, amplified audio, volume of the exhibition

space, ambient lighting, the movement of the spectators, the willingness or lack to interact with the artwork, etc. For example, in the immersive performance *FEED* by Austrian artist Kurt Hentschläger shown at Montreal's Elektra Festival in 2009, the work and the milieu became one. During the performance, the hall is completely filled with smoke, into and onto which images were directly projected accompanied by an intense, amplified audio track. The viewer/spectator finds himself within the techno-geographic milieu so that the work and the milieu fuse into each other. The associated milieu becomes the space-time which houses the dynamic relations between humans and the artwork through a recursive causality within the milieu which conditions it as it is itself conditioned (Simondon, 1989).

In another work, a video installation *CoRPosAsSocIaDos* [Associated Bodies] by Andréia Oliveira, 2010, edited and animated images were processed through interactivity software along with the sampled sound recordings of the inside of the human body. The altered images were projected onto a screen and supplemented by an amplified and processed audio track played within the interactive video installation. Within the installation itself, the viewer is invited to share the milieu of projected moving images of female figures by interactively experimenting with the projection as aesthetic experience. The intention of the (de)construction of the audio/image body realized within the video installation produces a transient sense of disorientation and disorganization of the viewer's body so that the viewer can abandon him/herself to the experience of blending into the artwork—not through the domination of one of the senses, but through a synesthetic experience. "We will speak of the haptic whenever there is no longer a strict subordination [of the senses] in either direction, either a relaxed subordination or a virtual connection, but when sight discovers in itself a specific function of touch that is uniquely its own, distinct from its optical function" (Deleuze, 2003, p. 155). At that moment of being within the artwork, something is left of the artist's body, of the body of the wood matrix on which the projected images originated, of the model, of the computer, of the software and in the video-installation, of the viewer which form that other milieu which associates all the bodies involved (Oliveira, 2010). The body's mode of feeling diffuses interstitially through the associated milieu—it associates, i.e. concretizes the multiplicities of my body with the multiplicities of other bodies with, within and through the milieu. And it is in the act of being concretized through and through that we mutually perceive each other's multiplicities, which we can distinguish within the larger group of characteristics.

Figure 1. Video installation CoRPosAsSocIaDos [Associated Bodies]



Fonte: courtesy of Andréia Oliveira © 2010.

Within the milieu, bodies attract and repel each other, and these relational forces move bodies. Bodies are in touch with each other through/as the/within the associated milieu where they come together in a complicit manner. The appetite of desire expands bodies throughout the milieu, and keeps them connected through the mutual activation of potential and reciprocal empowerment to act. We fall back on affects of relations, where the agent-causes of other bodies on our own are known, where affects are felt as variations of the force of existence of the soul and of the potential of the body to act. In the attractions, bodies produce affects—Art becomes a block of affects and percepts (Deleuze & Guattari, 1994, p. 66). When attracted, one is captured by the amorous signs that deceive and create fictions, either making us prisoners of the illusions of representation, searching for origins and truths, or releasing us to confabulations, lies and invented realities. One cannot interact with all the works in an exposition or completely with an artwork. Walking through the works on display, some of them, and sometimes only one, may call our attention. And if our gaze is drawn towards one or several, there is a feeling of the presence of another body, one that attracts us or is becoming enamored of us. The attraction is not one of Platonic beauty or of the Kantian sublime, but of an attraction produced by something in the other body which resonates with something in our body,

which causes our body to dilate within the milieu until it reaches the other body, and the senses are piqued as a bodily attraction. That work which attracts us differs from the others the moment we perceive its multiplicities and peculiarities. However, it is impossible to perceive the work in its totality because we cannot interact with the work as a whole—one can only interact with those aspects of the work which can enter into dialogue with aspects of my body.

Through the mixing and the attraction/repulsion, the bodies embody each other. Embodiments are visceral once we give body to that which is lived. Causes as conditions are not only known, but also created; propositions, objects, experiences are produced by means of technologies. The act of embodying life is technological, in that what is natural is effected by the artificial. Appropriate technologies are needed to give form, or better yet, for matter-taking-form. Artists use/invent technologies to compose the elements affecting them in order to arrive at the technicities of the artwork. Technicities belong to bodies; they are the expressive qualities that arise from the composition and organizations of their elements as individual ways of composing: the singing of a bird, the coloration of a plant, the functionality of a machine, the expressiveness of an artwork, the gestures of a dancer... Technicities move within the

technical and aesthetic dimensions of techno-aesthetic objects, centering us on that which happens within matter and form (Simondon, 1989, 2005).

Each element draws out implicit forms that are manifested in the techno-aesthetic operations that also determine them. The aim is to understand that which is produced in the experience, in the artwork, artist, spectator, art gallery—with its materials, elements and implicit forms. From sensuous signs, we embody that which tells us about the material qualities and guides us to the immaterial in Art. Signs bring on degrees of interactivity which create information that disrupts the artwork-human-milieu system while internal resonances are produced. Thus, tendencies and attractions become embodiments.

Art goes beyond explaining the creation of ephemeral landscapes, it brings us to create unusual landscapes. The singularity of landscapes consists of making visible that which is invisible and allows us to arrive at the imperceptible in perception, the immaterial in the material, the technicities in technologies. It must be stressed that the body perceives before the soul can contemplate; the body perceives not only with the sense organs but also in response to the affects which inhabit it. Perceptions take place between the perceiver and that which is perceived by means of dynamic forms (Massumi, 2009, pp. 183-186). For this reason, the artwork can only be understood through the intrinsic and extrinsic dynamics of the meta-stable system of the artwork-human-milieu. This system encompasses an internal resonance herein understood as interactivity. Because the system is meta-stable, it is subject to the problematizing caused by information, which triggers new individuations (Simondon, 2005, 71-77; 220-224).

The function of Art is to produce affective (in) formation, to cause alienations so that landscape-simulacra can arise. Landscapes are created through the oscillation between panoramas—prisoners of false impressions and mimetic representations—and simulacra formed in the encounter of dissimilarities in order to produce invented realities: invention is the highest degree of interactivity. Signs in Art give access to the information that produces phase changes in the artwork-human-milieu system: the sign in Art is not the perfection of the sign. The sign in Art is as paradoxical as any other—it closes up when it falls apart in the dissolution of the form, where it can reach the extreme of schizo-landscapes; it opens up when absorbing the immaterial dimension of life through the perception in the perception, where landscapes full of different signs are created.

Interactive Collective Experience

The artwork can bring to us a sense of experience of the world and the concept of interactivity can lead to a different understanding of our participation in it. How we have posited our approach sets the ground for a definition of the collective as an interactive relational plane, which does not fall back on binary logic. This allows us to ask: if the collective is the mode of being which immediates the relation between individual and social, how can one define the collective as a relational multiplicity that respects the individuality of the constituent elements but does not obliterate continuous cohesiveness?

Through nominalism, one can offer a top down definition of the collective as a substantive which accords a common property, character or shared quality to a number of individuals. As such, the collective can be seen as a selection extracted from a population which together exhibits a holism effect (Massumi, 2009): the individuals may be more or less defined but they can be grouped, classified, differentiated from other like individuals through this common or shared quality. Yet, to define a collective in this way always brings out the conceptual shortcomings of classification—no group can adequately interpret the definition nor can it be adequately described by parts which are themselves inadequately determined and undergoing constant change. Although this differentiated grouping can be conceived topologically as composed of spatially disconnected existents, the collective is usually thought of as an aggregate, as a territorialized social of common interest. The composition of the collective individualization lies within the unity afforded by the interest as an ascribed focus attributed to a collective body—a body such as a body politic, or a student body, where the set of inclusion is open, yet its definition is closed and transcendental. To guarantee the perdurance of the entity, a set of rules and codes of conduct have to be rigidly enforced which curtail the degrees of freedom of the various constituent entities. This entails a power and disciplinary structure applied through a hierarchy which enforces the definition and maintains the identity. The cohesion is ascertained by the adherence, subscription or subjection to the definition which at one point might have been internally defined but which now requires that it be externally prescribed. In terms of subjectivity, the individual actors are no longer self-determined but relinquish their subjective will to an external institution.

Rather than impose identity and individuality onto a collective, a horizontal participative interactivity can create a fluid subjectivity that concretizes the

collective itself. The relational fusion arises through the expression of a like-minded purpose by all the participants but where the cohesion is found in other areas other than the principal one. Membership in the collective is not only a matter of subscribing to its definition but in “fitting in” affectively. For example, making interactive art satisfies the fundamental criteria for membership in an ad-hoc interactive artist’s group but fitting in might require a distinctive set of unrelated qualities or shared affinities, for example, a DIY mind-set, a penchant for steam-punk aesthetics, a preference for Southern Comfort, hillbilly music, a hipster look, tattoos of a certain kind, a particular way of using language... to the point that an individual with all these qualities who is into electronic composition might immediately be accepted. There is no membership structure per se—meetings tend to be semi-extemporaneous events spontaneously organized on social sites or through word of mouth and the frequenting of the same hangouts or social scene. There is no hierarchy to the group, there is no president or board or code of ethics or charter, but there is a lax cohesion which keeps the group together and alive. There is a constant turn-over in the meta-stable membership and the qualities that express fitting-in are always under constant mutation as the membership goes with the flow of shifting tastes and affinities: for example, a penchant for Southern Comfort might change overnight to artisanal Mexican tequilas.

In this second modality, a collective entity can thus be seen as a defined, individual body—a fluid individualization resulting from individuation—which acquires heft in terms of identity, coherence and adequacy as a body through a loosely structured becoming facilitated by a multiplicity of supplementary qualities. To in fact become a collective, constituents must overcome the foundational conditions and compose with and through the field of attuned relations and with the indeterminate and shifty nature of their interactive complexity (particularly in face of the mounting multiplication of unlikelihood at each step of the way): the collective as a body must overcome the threshold of the built-in contingent resistance to its actually happening prior to its being considered a collective. This demonstrates the integration of an internally determined subjectivity emerging from a self-directing, self-resolving attentive focus composing with an attunement of a field of forces or qualities emergent through and with the event: the collective becomes a composition between the primary guiding proposition as the frame that offers direction to the integration of secondary or ancillary qualitative characteristics which provide the cohesion. Although this conception is relational and dynamic,

the individual elemental constituents are still considered preconstituted invariant entities (making interactive art).

A third modality of looking at the collective is also a relational composition where the elementary terms that account for the collective entity are neither pre-conceived nor pre-constituted beings; only relation as an essence of being within the pre-individual is that which is becoming-compositional as propositional of the event in the making. It is what determines the derivative as differential where the terms go to zero and what is left is the expression of the relation of composition of the inventive different of intuition. The movement can be raised as a notion through the comprehension of the certainty of its necessitarian cause as a had-to-happen but it can also be seen through the contingency of its emergent becoming in spite of its unlikelihood, of its chanciness, of the indeterminacy implicit in its implausibility. The collective is again seen as a threshold event as a continuous phasing, but what is here breached is a dimension of time—not as linear “chronos” time but in terms of the relational denseness of experience as intensity expressed as temporality—what Deleuze calls Aionic time (Deleuze, 1994, p. 284).

One way to understand the relational is to articulate the constitutional concern as the common ground of the collective. This guiding interest is not as an externally ascribed focus of the collective but a moving composition of interactive relations conditioned by affective attunements emergent through the event. The constituent elements of the collective relate with each other as being-doings which reciprocally compose each other on the spur of the moment, as impromptu interactive responsiveness. A spontaneous aggregation takes place, which results in a coherent operativeness as an a-centered, leaderless subjectivity. Together, taken as a whole, the spontaneous coming-to-being composes a collective body as a provisional, meta-stable, self-composing, auto-determining entity. Here we move away from a static conception of the collective as a set individualization to a dynamic, self-guiding proposition composed of loosely-knit subsidiary individuations and affective attunements individuating together. These entities compose relationally through participatory contributions towards some common purpose which together as a being-doing compose in a spontaneous manner a collective body co-extensive with the event. The collective is composed of entities which compose with and through each other a Gestalt effect, a wholeness where those that do not compose along the same lineaments are left out of the compositional dynamic as non-participants or negative conditionings.

If we consider human beings not as physical persons but as an interactive multiplicity of being-doings, as a diversity of intensities, forces and potentials, we can see a collective as a different type of animal-body as animated being. These pre-individual intensities, forces and potentials inevitably mix it up as they are wont to do, but in this mix of becomings and interpenetration as an interactive relational field, participation involves the human and non-human, the living and non-living, the actual and the virtual, the visible and the non-visible. These interactive participants become players in the constitution of a new social commons as a collective. The collective becomes alive as an interactive assemblage acquiring potentials and powers of action as a movement made up of human and non-human beings alike. The assemblage of relation that constitutes the collective initially seeks an operative consistency, attains a meta-stability towards the establishing of motive subjectivity, and disbands when its purpose is fulfilled. It is a gradual accretion of intensities that can be qualified as a technical object, as a collective movement of thought as well as a performative political, philosophical, psychological and aesthetic machinic assemblage. This machinic multiplicity incorporates not only the immediate interactive participants but the social commonality of the physical and virtual environments as a relational ecology which we have already seen an associated milieu. The becoming collective as an event becomes social movement-in-the-making as well as a social-movement in the making and an infinite plurality of social movements and attunements in the making where the flow of intensities produces according to an unformulated agenda which occupies participants, i.e. which invades them with being-doing, within the immanent event as a subjective becoming. Thus, the collective, as a coming together and as a nominative determinism, can be seen as an emergence where the constituents result from a reciprocal causality of interdependent, interactive co-arising or what Deleuze calls reciprocal determination.

These dimensions of individuality which compose the collective along three different but simultaneous moments describe the composition of the collective. As such the three co-exist but are not always simultaneously actualized—it would seem that philosophy conditions perception so that which may be considered readily apparent to one will not be so readily apprehended by others. But to see the collective in these three ways opens a panoply of possibilities towards the understanding of becoming.

How can we understand these ideas as an actual being in the world? If we consider the body-social of

a student demonstration against austerity cutbacks to education, we can say that it becomes alive as a social assemblage acquiring potential and power of action which is informed by an ethics which makes it difficult to discredit the manifestation of its unity. The social comes together before our very eyes as a movement, as a displacement, as an urban transduction made up of human and non-human participants alike. A social movement as a movement of thought, as a performative political, philosophical, psychological discourse which incorporates, implicates and animates not only the demonstrators and the social commonality of the locative nature of the immediate environment, but the onlookers, the unevenness of the pavement, the graffiti covered façades of buildings, abandoned cars in the street, the police presence with their horses and their dogs and smoke bombs and tear gas, media coverage with their focus of interests, celebrity journalists and technical hardware, helicopters overhead, wayward feelings of apprehension, anxiety, fear, joy, exaltation, solidarity and the accretions and abandonments by fellow-travellers, hangers-on and the curious, etc all work together as an interactive, activating associative entrainment.

The event becomes social movement-in-the-making as well as a social-movement in the making and an infinite plurality of social movements in the making where the ambulatory nomadic flow of intensities, the unformulated agenda, the rising intensity of the face of resistance as a relation of forces interacts with hegemonic power, also a relation of forces, to occupy the world as an immanent event, as a subjective becoming. The assemblage of walking demonstrators and everything else that constitutes the event is a body whose ambulatory unfolding constitutes the memorial discourse of its becoming-demonstration, of its individuation as a processual social movement which seeks a consistency, attains a meta-stability based on interactivity towards the establishing of a motive subjectivity, and disbands when its purpose is fulfilled. The social body and the non-verbal discourse emerge together on the ground of the demonstration as a territorializing-becoming, a subjectivity with a certain duration made up of human, non-human, actual and virtual entities and their perduring affectual effects: the walking demonstrators meld with the police and the public and the media on the street as an emergent subjective entity-in-the-making that flows and changes with every step as an adaptive evolution to the changing dynamic landscape of location and interaction. All this happens within a historical process of unfolding activated by myriad conditionings: a grass-roots popular subjectivity, a history of populist activism, a conservative-backed

hidden political agenda, a crumbling infra-structured urban setting, a monetized cultural milieu, a globalizing exploitative economic backdrop, an austerity-inflamed governmental psycho-social policies, a dissolving educational framework, the exclusionary practices of moneyed, dominant interests, the declaration of exception by the city and federal governments, the aggressive, false-consciousness of the police... we can infinitely populate this inventory, but it will never be exhausted. Within this associated milieu, all these participants constitute a nomadic subjectivity that has no clear agenda, no mandated leadership, and no obvious cohesion other than the common motivation of indignity actualized. If another march on a different date and time is called, the demonstration will be a completely different event with perhaps similar themes repeating but nothing identically the same. And once the protest disbands, the various composing elements dissolve to become other and go on to fulfill other roles or functions: the students become passengers on public transit, the roadway becomes a support for vehicular traffic, the police return to their criminal investigations, smoke-bomb canisters are recycled by dumpster-divers, graffiti ceases to be affectively inflammatory and becomes once again a palimpsest of urban adornment...

Conclusion

In this paper, we have seen that relations consist of processual interactivity between bodies and milieus which do not differentiate between the natural and the artificial nor the human and non-human. By problematizing the experience of the encounter with an artwork, we have tried to show how interactivity and degrees of interactivity produced with and within an artwork are created as an associated milieu. To think the milieu is to rethink the individuation of the individual and of the trans-individual as interactive process articulated through their coming to being by way of the concreteness of actuality. In this sense, we posit various degrees of interactivity through the relational experience of human and non-human bodies as process: mixtures, attractions, embodiments and perceptions. These ideas emerge from the writings of a philosophy of difference and are applied to the field of interactive art in order to understand how artworks become intensive and modified through the artist/spectator/artwork/milieu experience. Thus, interactive processes are driven by an ethics of the potential of bodies to act, i.e. by what a body can do in its intensity, in the dynamics of degrees of interactivity in the experience of the artwork. We can apply these ideas to an understanding of the becoming of bodies and their

interaction in the world. This brings out aspects of a “transindividual” social and how the collective can exist as an interactive, not unfragmented multiplicity within itself and its inter-dependent co-arising with other entities to express itself as an individuating subjectivity.

To think the interaction of bodies as we have in this paper has considerable repercussions not only to how we understand the interactivity of viewers and artworks or to how interactivity encourages us to see the relation between the individual and the collective in Social Psychology, but for epistemology in general and logic specifically. To posit interactivity through the associated milieu as the mediation of becoming puts into question traditional laws of thought because to think bodies in terms of the philosophy of difference questions the foundations of what constitutes logical structure and the *fundamentum divisionis*. The Law of Identity (if a thing is P, then it is P), the Law of Non-contradiction (a thing P cannot be P and not P at the same time) and the Law of the Excluded Middle (a thing P is either P or not P) cease to have the certainty afforded by subjective and objective entities with perfectly defined constituents or precisely defined borders and therefore this calls into question fundamental aspects of coherent thought, logical systems and universals. As a result, thought cannot proceed with the same certainty it once had based on the Principles or Laws of Thought or on what constitutes the ontologically real, the cognitively necessary and what can be taken as non-inferred immediate knowledge. The same issues arise with the definition, composition and constitution of classes, how the relation among classes occurs and through what terms duration and continuity can be ascertained. Further, the distinction between the knower and the known is dissolved, and the rift between the knowing subject and the object of knowledge is replaced by an ecology of imagistic interactivity. To elaborate the alternative logic of the built-in contingency and openness of the philosophy of difference, thought needs to shed its untenable, false certainty and open itself to novel and exciting possibilities of creation, multiplicity and invention through epistemologies which embrace inter-, multi- and trans-disciplinarity. It is our contention that the concept of interactivity as presented here can move our thinking in that direction.

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