

BODIES, INTERACTIVITY AND TECHNICITY IN MEDIA ART

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This paper addresses the *degrees of interactivity* produced with and within an artwork. The act of experiencing an artwork shows that any experience is made up of relations of intensity within processes of interactivity between bodies and milieus. These ideas are based on the philosophical writings of Baruch Spinoza, Gilbert Simondon and Gilles Deleuze and are applied to the field of interactive art.

Introduction

This writing is inspired by Spinoza's question—*What can a body do?*—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 and the body's capacity of affecting and being affected. Spinoza's question is the foundation of this paper and it will be concurrently problematized in three different fields of knowledge: Arts, Philosophy, and Psychology. Also, we avoid paradoxical extremes, e.g. natural and artificial, art and life, analog and digital, human and technological, real and virtual, etc which can be reconciled by creating paradigms that propose novel conceptions of what constitutes bodies, environments, artworks and technology.

It begins by asking the question *What can a body do?* and proceeds to ask *How much can a body do?* in the encounter, in our case, with an artwork. In this encounter with the artwork, the relations of affects and affections between the artwork/artist's/spectator'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, in the artwork with its processes of interactivity, herein referred to as *degrees of interactivity*. [1] The artworks as outcomes of a processual and systemic thought which does not dissociate the artwork-human-milieu, and directed to the intensities of the encounter. 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 in intensive experience.

The body referred to here includes not only the human but the non-human as well—animal, technological, immaterial—formed by the speed or slowness of matter-taking-form. According to Spinoza, “we have conceived an individual as composed of several individuals of diverse natures, other in respect of motion and rest, speed and slowness”. [2] To imagine the body differently we will 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 will be examined from a Spinozist perspective based on the idea of parallelism between body and soul and the concept of the intensive immanent body; from Deleuze and Guatarri we will use the concept of the body without organs; and from Simondon the information body.

The body formed by a technology—thinking, walking, seeing, typing—its nature 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.

Thus, bodies are always in relation with each other, associated to the milieu to which they belong. This paper emerges from concerns and observations about how the artwork is constituted: the artwork belongs to the associated milieu; the artwork is a techno-aesthetic object produced by technology and its entrained technicities; and the artwork can only be understood through the artwork-human-milieu system.

Associated Milieu

In this sense, we propose a relational perceptual causal chain that underlies a machinic experiential interpretation of the interactive process where viewers become one with the artwork in the experiential milieu that will come to be seen as the exhibition spacetime.[3] We seek to consider the experiential milieu itself as the conditioning environment for the subjective entity that constitutes the event and locate it at the junction of the site of exhibition and the viewer function where the virtual and the actual coincide and become pure experience. In order to do that what we need is not a perceptual causal chain per se but a remapping of the experiential milieu where viewers become one with the artwork-world within which they are enveloped.

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. Conceptually, "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.

The concept of the associated milieu, conceived by French philosopher Gilbert Simondon in his book *Du mode d'existence des objets techniques* (1989), is a useful model to analyze the co-arising relationships that take place between an artwork and its conditioning environment. The descriptive term "associated" when applied to describe milieu refers to a specific mapping of an ensemble made up of constitutive elements (which can be sub-ensembles) 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. [4]

The milieu allows for a reciprocal relational causality to take place between the elements so that we may conceive of spacetime as the immanent plane from which the subject and object arise. The associated milieu sustains, unites and brings together bodies: 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. 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 taking-form as experience.

The milieu crosses through bodies, simultaneously existing within the body and outside of it 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 body 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.

From these preliminary ideas about milieu, it appears that the artwork is produced from the relations between bodies and milieus, mediated by *technologies of creation* and their technicities, where relations are expressed as variable intensities of interactivity, i.e. as *degrees of interactivity*. These degrees are nuances of the act of experiencing: mixtures, attractions, embodiments and perceptions. Various and concurrent movements, mixing within the milieu, attracting each other, incorporating fragments of bodies, perceiving (themselves) as body and associated milieu as ephemeral landscapes.

Degrees of Interactivity

Mixtures are inevitable; they are voluntary and involuntary affections between bodies and associated milieus; hybrid bodies belonging to the milieu and keen to experience themselves in different ways. To understand the pragmatics of bodies, it is imperative that we understand the immanent relations of bodies. Plato's, Spinoza's, Deleuze's and Simondon's ideas of immanence produce differentiated bodies. 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 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. We are equal in terms of attributes, and singular in terms of modes of existence.

Their Ethics are based on what a body is capable of doing, and the positive encounters which potentialize it. In Simondon and Deleuze, bodies and milieus mutually adapt to and create each other in the act of experiencing. Bodies, as relations/gestures of individuation, are no longer subordinate to Aristotelian substance mentioned earlier; being, as the union of the individual and the milieu, is no longer Spinoza's Divine Being; mixtures address the interdependent relations between bodies and milieus. They are mundane signs inhabiting mixtures. These paradoxal mundane signs can lead us to intensive relations with the milieu, exposing bodies to contagion; or they can leave us with empty action-reactions, abandoning the body to suffer the effects without knowing the causes.

Attractions move bodies. Bodies touch each other through the associated milieu where they come together complicitly. Desire expands bodies throughout the milieu, and keeps them connected. We are dealing with an animal art that shows us the potential of the milieu and the affects bodies resulting from the animal behavior of feeling the vibrations of other bodies of through the associated milieu. "All art begins with the animal, for it is the animal, and not machines, minds, or subjects, that carve territories and bodies simultaneously: minds, machines, subjects are themselves the artistic products of this coupling of bodies and milieus". [5] Animals can only catch their prey when part of their body and part of their prey are mixed. When part of the artwork is already part of the spectator's body, we enter the artwork with one body and leave it with another one. Animal-becomings make us discover non-human bodies.

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. "For, in proportion as the body is capable of being affected in a greater variety of ways, and of affecting external bodies in a great number of ways, so much the more is the mind capable of thinking". [6] In the attractions, it is understood that bodies produce affects—Art being a block of affects and percepts. [7] 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.

Embodiments are visceral once we give body to that which is lived. Causes 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.

In this sense, Simondon rescues the relation between man and technics by re-defining human existence in terms of the technical reality that surrounds it. Simondon 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 and purpose as well as promote other ways of feeling and thinking. It must be emphasized that 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.

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. "Matter is thus defined in terms of a *form-taking activity* immanent to the event of taking-form." [8]

Each element draws out implicit forms which are manifested in the techno-aesthetic operations which also determines 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.

(Im)perceptions are landscapes of creations/actions to be lived. They are actions resulting from embodiments, i.e. they are the effects of mixtures, attractions and embodiments. In order for us to live, we need landscapes to shelter our bodies and souls. 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 with the affects which inhabit it. Perceptions take place between the perceiver and that which is perceived by means of dynamic forms. "Art brings back out the fact that all form is necessarily *dynamic form*". [9] 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. [10]

The function of Art is to produce information, 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. It is paradoxical as any other—it closes up when it falls apart in the dissolution of the form, where it can reach the extremes of schizophrenic landscapes; it opens up when absorbing the immaterial dimension of life though the perception in the perception, where landscapes full of different signs are created.

Conclusion

Mixtures in mundane signs, attractions in amorous signs, embodiments in sensuous signs, perceptions in signs in Art: [11] *degrees of interactivity* of an experience. For an experience to be intensive, the sign must remain open to its dynamic and associative processes as it is not a particular sign or element but the associations of signs and elements which move through all *degrees of interactivity*. In this sense, the problem the paper considers is the dynamics of *degrees of interactivity* in the experience of bodies—artwork, artist/spectator, machine, ideas—and their associated milieus, or better, the process of interactivity in art.

We seek to problematize questions of interactivity in order to open pathways to think the techno-aesthetic art object in terms of real interactivity and not simply responsiveness: What constitutes interactivity? What is the role of the spectator/participant? What is the role of technology as the mediating agent? What kind of bodies, milieus, space-times result from the interactive techno-aesthetic object? What are the ontological implications of these techno-aesthetic considerations? How may we think of interactivity in the humanities through art experience?

When researching interactivity in the Arts, it is inevitable not to take the problem to the field of interactive art. Interactive artworks take place and are modified during the artist/spectator/artwork/milieu experience; as they are fundamentally relational, they break down the frame and require participation. Their immaterial potential will be realized in the relational mode in which they operate by acting as a mechanical translator of content and representations, or as a machinic transducer of information. “We understand transduction to be a physical, biological, mental, and social process through which and activity is propagated from individual to individual within a domain.” [12] By being an art of action, interactive art can instantly produce action-reactions, or the action can be the effectiveness of the techno-aesthetic operation of the artwork itself as performed by the spectators, in other words, an artwork keeps its operation open in order to allow the spectator to access its implicit forms. Interactive art presents possibilities to explain the processuality of *technologies of creation*.

Technology has its own specific modes of producing bodies which go beyond those which participate in interactive processes. In this sense, when interactivity is produced within techno-aesthetic objects, the compositional relations create novel modes of expression of what a body is and what it can

do. Therefore, the questions become: what is possible (or not) within this construction of bodies and milieus in interactive art? Where is the ethical limit which guides such productions? How much can a body endure within the proposed relations?

This paper comes to the conclusion that *processes of interactivity*, especially in interactive art, address the ethics of the body's potential to act [13] in terms of *how much can a body do?* We seek answers to how an artwork can provoke "joyful" encounters which liberate the potential to act as well as *degrees of interactivity*. The artwork itself does not *per se* exist except as the aesthetic experience with and within the artwork: it exists as an individuation of the artwork-human-milieu system. Simondon's ethics propose processual thought as a constant individuation. His philosophy of technics addresses an ontogeny of human and non-human being (individual and milieu) and is not concerned first-hand with the final configuration of things but with how they become what they are. It is thought that can support interactive art and made to be modified over time as it gathers existential amplitude in its matter-taking-form process.

Promiscuous/ethical bodies are found in the art-life experience; they are promiscuous in the act of mixing amongst themselves, and ethical in their potential to act according to the dynamics of *degrees of interactivity* within each experience.

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