



After Basia Banda, Zamknij (Black Gap), 2015.
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Behaving, Mattering, and Habits Called Aesthetics

Part 1: Theoretical Navigation

Abstract

In this two-part article, I propose a new materialist understanding of behavior. The term “mattering” in the title refers to sense-making behavior that matters, that is, to significant habits and materialized behaviors. By significant habits I mean protocols, practices and routines that generate ways of reading material signs and fixed accounts of movement. I advance a notion of behaving that stresses its materiality and sensory shaping, and I provide select examples from music. I note that current definitions of behavior do not capture its material dimension. This is because behavioral science has mostly viewed matter as passive, and not as an active agency. Such an approach has metaphysically framed behavior as a phenomenon of presence that is external from its environment. The approach of behavioral science to matter where there are fixed borders between the internal and external is lacking, since it does not account for agential cuts as conceptualized by Karen Barad. Instead, I consider behavior performatively; as an ongoing iterative practice and as integral to the growth of immanently self-caused matter that spawns metastable relational formations that produce different possibilities for successive formations. In this regard, behavior matters, and matter behaves. One key aspect of my article advances Bernard Stiegler as a critical new materialist thinker. This advancement concerns the technical doings of artworks, which include the material activity that is generative of sensitivity: feelings and beliefs associated with a sense or meaning. I outline an example of the materiality of habits as constitutive of music. After that, I coin the transformative doings of matter on the artist as a “caripulation,” which is a desired movement or motion that transforms the mover and the moved. Finally, I raise “pharmacological” considerations in terms of the Stieglerian aspects of organic and inorganic organized matter.

Keywords

Behavior, New Materialism, Art, Aesthetics, Behavioral Aesthetics, Habits, Music

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Introduction

In this article, I propose that it is worth paying attention to the materiality of behaviors and feeling¹—to how behavioral aesthetics comes to matter within new materialist explorations of art/techne [τέχνη]—by developing new theoretical and exploratory thinking. The article’s structure arises from my readings of Bernard Stiegler’s philosophy, which I aim to develop *with* my text’s authorial agency. I experiment with a methodological mode of rhizomic writing (Hillier 2007, 16-17; Chloe Humphreys 2013), which performatively acknowledges and respects a kind of “alien” thinking (Miguens 2015; 2020).² After all, noetically active texts (like when we say a substance

¹ Aesthetics understood broadly as αἴσθησις. In Cognitive Behavioral Therapy, the general premise is that behaviors and theoretical mental/physiological terms, such as thoughts, feelings, and emotions, are all mutually interconnected and influence each other in time. The ability to identify a behavior and any other associated terms, i.e. joy, sadness, *Weltschmerz* (literally world-pain, a term coined by the German author Jean Paul) etc., is a technical (linguistic) ability to bring to conscious awareness and direct attention at some quality that is judged by the faculties of cognition and understanding as well as phenomenologically retained and projected via memory and anticipation. For emotions as behavioral complexes see: Bradley and Lang 2000. For a dictionary of invented emotions see: “The Dictionary of Obscure Sorrows” n.d.

² That is “alien” to established scholarly intellectual homogenizations of thought (writing) or Western Anglo-Saxon managerial standards that penetrate foreign traditions within the political and formal grammaticalizations of records and texts. I am verbalizing this in order to acknowledge the concerns of my reviewers, to whom I wish to extend my thanks and appreciation. I have decided to compromise and significantly revise this submission, so that this text is intelligible for the Anglo-Saxon academic culture (given the fact that it is written in English, a language whose grammatical structure is already analytical). Most of their suggestions for structuring the text fit Western “academese” criteria of communication practices. I received my academic training in Poland. So, despite the fact that I am an English native speaker, the writing style presented here is individuated and diachronic, a part of Teutonic (impressionistic, relativistic, interpretive, postmodern, digressive) thinking, writing, and practicing philosophy and communication. In the Anglo-Saxon perspective, writing is seen above all as a means of doing things through texts, i.e. interacting with people. From the Teutonic vantage point, writing becomes primarily a form of being through texts. It is likely, therefore, that problems will arise when Polish speakers are asked to perform a skill-dominated writing task, whether in their native tongue or in English. [...] The Teutonic approach to writing and teaching writing is described sometimes as focusing on content and showing some disregard for form [...]” (Duszak 1998, 196). So, I value academic noetic diversity, which is why I prefer to contribute in this way, as a means of individuating within the global tendency towards a uniformization of the culturally embedded intellect or Aristotelean *nous*. Besides, as Stiegler claims throughout his philosophy, reading should be *laborious*, since writing that

is biologically active) ultimately energize truth-seeking behaviors that are idiosyncratic movements of producing *différance* and curiously synchronizing extra-ordinary³ understanding.

I expect that each re-reading of this two-part article will stimulate novel critiques and productive misunderstandings. This is crucial given their necessity and value in terms of the Stieglerian “error,” “lack,” or “default” [*défaut*] in noetic genesis, producing human and even extra-human knowledge or at least that which is in excess of the human (referring to the incalculability of life) (Stiegler 1998a). For Stiegler, knowledge is by definition infinite, although it is limited by its “retentional finitude:” the technical horizons, limitations, or boundaries of memory and forgetting (Stiegler 1998b). So, I omit certain discourses⁴ from this text’s foreground, which is this article’s *default* that is necessary [*le défaut qu’il faut*] and which should not be resolved here.

I do not intend to develop a central narrative against which each section is fixed nor a “final” line of argumentation that can be established once and for all. This work [*œuvre*]⁵ is open and performative, it is care-fully⁶ and

individuates the singular difference of the diachronic “I” with a synchronic “We” qualifies as a pharmacological stimulate, for instance, encouraging the growth of the hippocampus in the brain. Thus, the aimed social role of this text is to train and elevate the value of the spirit/mind [*esprit*] or attention and being.

³ Here, extra-ordinary means an elevation of the ordinary or the “[...] everydayness that creativity always transfigures into something improbable, that is, into something singular [...]” (Stiegler 2010, 12).

⁴ These could include science and technology studies (Bruno Latour), object orientated ontology (negative new materialism), or vital new materialism. See: Gamble, Hanan, and Nail 2019.

⁵ Here, the use of square brackets denotes a reference to a foreign word which can be translated in many ways. This term is important in Stiegler’s philosophy. In this case, the French word *œuvre* means not only work (labor) or artwork, but also an opening, operation, and activity.

⁶ This term refers to the Stieglerian notion of care as thinking about attention so as to cultivate it. This is a temporary noetic practice of interrupted thinking done from time to time (Collins 2014, 219). Stiegler (2017a) conceptualizes thinking as care, which is exemplified by the wordplay between *penser* (to think, to imagine, to believe) and *panser* (to treat, to care, to bandage). Etymologically speaking, *panser* is a doublet of *penser* since both terms derive from the Latin *pensare*. The meaning of *panser* as “to take care, to heal, to concern oneself with” comes from *penser à* (thinking about, considering), and *penser de* (thinking of, having an opinion). This doublet should be viewed considering the original meaning of the term *ethos*, especially since *ethos* was understood as an accustomed place or a habitat of horses. *Panser* had meant to give (a horse) proper grooming or attention, to treat it well. Its virtue is in attempting to help both *feel* better; to care about and care for

artificially designed to be noetically active, which is the inadequacy of not reaching its “end,” an end that—metaphorically speaking—would be its death. The questioning, however, that I do intend to develop concerns itself with how the field of behavioral aesthetics makes intelligible the sensory mattering of procedural, habitual learning that constitutes every *work* of art (what I call making-sense). By habitual I refer to the Aristotelian *hexis* [ἕξις] and *ethos* [ἦθος] (Holmes 2018, 64-96).⁷ In *Nicomachean Ethics* (1105b), the feelings that accompany pleasure or pain, or the *páthē* [πάθη] that motivates and moves the soul (what I understand as the *esprit*), are defined in relation to the *hexis* which determines the direction or end of the experienced feelings as well as their intensity or quality. The Stoics later developed this term as a material binding power or what Seneca called the *unitas*. It was grouped along with *physis*, *psyche*, and *nous*. *Hexis* is the “*unitas* of inorganic matter” (Peters 1967, 83-84; Preus 2007, 290). Thus, the mattering of *habit* and its technical importance for behavior are worth exploring.

relationships. It ties the notion of looking after or being tender, nursing, and soothing, to what we call thinking, or any other activity of the mind. It should be noted that thinking is commonly viewed as a behavior, something an organism does. (Melser 2004) I believe this holds profound implications for philosophy in terms of attaching oneself to knowledge, as loving all kinds of thought, especially *savoir-vivre*, and for providing nourishment or *food for thought*. If the intellect (*nous*) is stimulated, if it receives proper treats or what is called positive reinforcement within its milieu or habitat, it grows. Careful thinking as *penser/panser* in terms of Cartesian *cogito ergo sum* is thus about attentive existential housekeeping; it is about practicing hygiene [ὑγιεινὴ τέχνη, *hygieinē technē* or the art of health]. In other words, *penser/panser* is communicative behavior, which is sound, wholesome or salutary, and necessarily implies the intimate, the domestic and the social.

⁷ The latter, *ethos*, emerges out of the former, *hexis*, which is an active having, not an action. *Hexis*, non-mechanistic procedural and repetitive embodied “habits” or a semi-permanent “second nature” (between “nature” and “culture” in Aristotle’s *On Memory and Recollection*), needs to be cultivated in order to command any *technai* and shape thought itself. See the section titled *Ethos and Hexis* as Rhetorical Habituation for detailed analysis of the relation between these two terms in the second chapter of Holmes’ book. There, we learn that daily habit, *hexis* (a state, characteristic, disposition or bodily comportment), derives from *echein* (to have/possess) and is understood as a trained or learned *active having* that proceeds *activity* and produces ethical action, action that is not impulsive nor necessarily completed, which can be suspended. *Hexis* is not always a repetition of a specific behavior in the presence of its stimuli, since it entails its inhibition and common sense. The general conclusion is that habits produce creativity, and not what is conventionally assumed, that they are obstacles to creative thinking, which would be to misunderstand the importance of procedural, repetitive, bodily actions that give shape to thinking, which in turn steer behavior; that is *ethos* as character formation or habituation, which is responsible for *excellence*, an aesthetic category used for judgement, a “practice” of cultivating a “second nature” or perhaps an artificial instinct.

This article has organized itself into an introductory section that is followed by a critical inquiry of the term behavior. Behavior is in *default*, and so the popular notion of this term is lacking and necessarily inadequate,⁸ which is the *default* of the formal acknowledgement of the activity of matter. The subsequent sections are like cays: small, low-elevation, sandy islands that share common ground with these problematics, while surrounding waters of the unknown (unobserved and unmeasured) conceal this. We may cross waters with bridges (structures of argumentation to follow) or by using individuated rafts and ships, so the “correct” navigation (argumentation) from one island to the next does not need to be linear, that is, follow grammated bridges or traces of noetic movement presented in this paper. The range of topics, the proposed map of beaches, includes the general habits of music-making, the Stieglerian notion of pharmacology, and theoretically flirts with select notions developed by Martin Heidegger and Maurice Merleau-Ponty.

When it comes to the specific theoretical location or situatedness of this article, the milieus in and for which the arguments of the piece are first and foremost put forward are located in art and music philosophy, more general philosophy concerning embodiment, cognition, and behavior⁹ (Ayoko and

⁸ Behavior, and its material failures and resistances, for me is understood phenomenologically in relation with tertiary retention, as nudge theory and its politics should make obvious (Thaler and Sunstein 2009; Raihani 2013; Ariely 2009; Kahneman 2012). As Stiegler writes: „When adequation is effective, interruption no longer occurs, although adequation is nothing more than a default: *'I think'* can no longer accompany this representation, which itself cannot present itself; flux has ended. The individual thus bequeaths this ‘completed inadequation,’ so to speak, to his or her posterity, in the form of tertiary retentions: a pipe, a bit of garden, love letters, tools, a butterfly or linen collection, a library (even a library of books he or she has written), a cat, photos, a cemetery plot. Anything is possible, even the unmarked grave and the public trash dump” (Stiegler 2011a, 58).

⁹ Milla Tiainen has brought to my attention that the focus on the constantly iterative and open-ended habits constitutive of behaviors of musical creation could be developed by some of the approaches charted in Nicholas Cook’s book *Beyond the Score: Music as Performance* (2013) i.e. the notion of “corporal (sic) thinking.” Inspired mainly by Deleuze and Guattari and some related philosophies, Tiainen also has written about the ever-dynamic nature of even the most entrenched habits of music-making, and about the undoing of habits through embodied potentiality reignited by imagination, in her PhD dissertation, *Becoming-Singer*, which was based on ethnographic and philosophical research with classical singers. Unfortunately, her dissertation is not easily available. Although, interested readers may refer to her other writings on the same topic that are in circulation—for example to Tiainen 2008 in the book, *Sonic Interventions*, or to Moisala, Leppänen, Tiainen & Väättäin 2014 in the journal, *Current Musicology*. However, I do not have the

Ashkanasy 2020; Kilbourne, Dorsch, and Thyroff 2018; Stienstra et al. 2012), and more specifically the philosophical practice of producing knowledge as perused by *Ars Industrialis* (Stiegler 2014b, 11-28).

The problematics of behavior are explored initially from an etymological and definitional analysis of the term. I note that the term “behavior” is ambiguous, and definitions—from non-specialist dictionaries like Merriam Webster to the philosophical accounts presented by philosopher Filipe Lazzeri—tend to overlook the materiality of behavior. These definitions conceive of behavior immaterially as a quantifiable and copiable style or pattern, cause or reason, function or operation, an organized movement, and finally, as a difference. All these aspects are positioned as external to matter and to its milieu or environment. The motives presented in this paper follow the thinking formulated by Stiegler in the series, *Technics and Time* (Stiegler 1998a; 1998b; 2011a), where the philosopher claims that the question of who (*esprit* or spirit/mind) or what (matter) invents the human, an entity which necessarily lacks an essential nature, is one that is undecidable.

My thinking of behavior is orientated by reflections on technics, as a necessary contribution supplementing the *default* in the thinking of people associated with new materialisms¹⁰ (Gamble, Hanan, and Nail 2019), as proposed by Charles Devellennes and Benoît Dillet, and Michał Krzykawski (Devellennes and Dillet 2018; Krzykawski 2019). The former two advance the plurality of new materialisms as a strength and pluralize the discipline furthermore by centering technics within its discourses (Devellennes and Dillet 2018, 9). In other words, they view Stiegler as a philosopher who advances the “unthought” by “taking the pharmacological nature of technics seriously, that is, treating it both as a potential cure and as a potential poison” (Devellennes and Dillet 2018, 18). They argue that such a “pharmacological” analysis “is a productive way to move the debate forward for new materialisms” (Devellennes and Dillet 2018, 18). Moreover, Krzykawski adds that Stiegler is a thinker of what is called hyper-matter (digital information), an energy and information complex where matter can no longer be distinguished from form (Stiegler, Petit, and Bontems 2008, 109-110). Fol-

space to develop this approach in this article, which is aimed at understanding the technology (Krzykawski 2019, 86) of behavior as Skinner problematized it, that is the “technology of behavior” (Skinner 2002). Stiegler understands bodily existence as exorganic and endorganic (Stiegler 2020a).

¹⁰ A discipline of various heterogenetic paradigms and theories. A better way of speaking would be to say new materialisms in the plural (Coole and Frost 2010; Sanzo 2018; Devellennes and Dillet 2018).

lowing the thought of Chinese philosopher Yuk Hui, who notes a contemporary technological shift from the “organized inorganic” to the “organizing inorganic” that repositions machines and other technical systems as not mere instruments but “gigantic organisms in which we live” (Hui 2019, 28), Krzykawski argues that “new materialist thinkers seem to overlook this shift [...]” in the hyper-material (Krzykawski 2019, 82). That is the shift from the passive “organized” to the progressive “organizing” aspects of matter, which for me raise behavioral questions. If organizing inorganic matter is conceived of in terms of gigantic organisms or Stieglerian “simple, complex and hyper-complex exorganisms” (Stiegler 2020), then their negentropic behaviors and habitats must also be studied. In addition, Krzykawski emphasizes that positioning Stiegler within the discourses of new materialisms would be philosophically promising, since “[...] revolutionary hyper-materialist thinking goes beyond what new materialist scholarship often refers to ‘nature-culture(s)’ and focuses on the vital link between technology and biology in order to better explain the technological condition of noetic life and offer a wider account of what is called thinking” (Krzykawski 2019, 88).

Moreover, as Devenelles and Dillet do, and as I do here, “By engaging with the work of Stiegler in this introduction, [...] we also aim to put this technological question at the forefront of new materialist agendas, something that remains a lacuna of much of the literature” (Devenelles and Dillet 2018, 9). They defend the claim that Stiegler is a new materialist thinker who derives his thinking from Derrida, not Latour (Devenelles and Dillet 2018, 15), and who provides the advantage of placing technics at the forefront of new materialist attention. Krzykawski approaches technics broadly in his critique, where he argues that “technics (*tekhnē*) designates all domains of what is referred to as *savoir* in French and what cannot be reduced either to ‘skills’ or ‘knowledge.’ Therefore, as Stiegler suggests, politeness, elegance, rhetoric, philosophy, poetry, dancing, as well as cooking, can be defined as technics, that is particular forms of performed *savoir* or *savoirs* [...]”. These knowledges, noetic activations, take place through thoughtful or careful practicing of a material “caripulation.”¹¹ He adds, “ ‘All human action has something to do with *tekhnē*,’ which means that ‘delimiting the field of technics’ is difficult (Stiegler 1998, 94)” (Krzykawski 2019, 86). Thus, there is a proper domain of *savoirs* that address the questions of behavior. So, I think of behavior as an ensemble of materially habituated techniques that are productive of sensibility and sensory formation, and in effect, produce diverse aesthetics.

¹¹ I define this term later in this paper.

Part I. Theoretical Navigation

Background context on the materiality of behavior

What ways of questioning, then, can be posed about the material relationship between behavior and the sensible (who/what makes sense—understood as the agency of producing sense perceptions and intellectual or symbolic meaning)? Sensibility is assumed to stem from organologically sculpting modes of perception and sensitivity¹² that grow with material media. (Stiegler 2011b; 2014; 2015; 2017b; 2017c; Dillet 2017) If phenomenology, like the *Structure of Behavior* by Merleau-Ponty, is to be today theoretically refocused on behavior, rather than on consciousness, then how can retention be developed?

I am interested in the intersection between being and having. In this article the questioning and proposal of paying attention to the materiality of behavior stem from studies that address the philosophical question of the general origin of behavior (and life) itself (Brennan and Lo 2011; Larson, Jensen, and Lehman 2012). Examples include behavioral chemistry—molecular-level behavior and the problem of “free will” in terms of the “decisions” of the “Self” of molecules, proteins, RNA, and so on—or the contemporary understanding of complex behaviors as recurrent processes of behavioral trait selection that have repeatedly emerged in biology (York and Fernald 2017). From a macro-scale perspective and in response to these sources, I noticed that behavior trait selection is also a question of co-selection by the properties and behaviors of material, technical sensory objects called inorganic organizing matter constitutive of tools coupled with refined anthropic gestures, for example writing, grammaticized and ordered

¹² Stiegler pursues this question by referring to the notion of the social sculpture as practiced by German artist Joseph Beuys (Fitzpatrick 2014). Organology is understood as a tripartite transductive relationship between human sense organs, technological artefacts, and social organizations. What is problematic is how to situate behavior in this tripartite relationship. It certainly cannot be reduced to physiology nor to instrumentality, so to only one term of this triple relation. I think that this was precisely the aim of what Rosetta Brooks, and other artists like Stephen Willits, has called *Behavioral Art* in the periodical *Modern Art Studio International* volume 185 issue 951 in the early 1970s. It was supposed to produce changes in how a given social class understands Others as well as in “sculpting” how they behave through means of cybernetic control. (Willats 2010). This would later develop into the notion of *performance*, which will become contested by Tania Bruguera in the 2000s through the foundation and closure of the *Catedra de Arte Conducta* (Behavior Art School).

in political culture¹³ (Everett 2012; Hayles 2012; Stiegler 2020b; Yamamoto 2013) and transmitted via Stieglerian “epiphylogenetic” memory (Stiegler 1998a, 175-79) from generation to generation through mimetic and technically supported habitual learning.

My proposal consists in the development of this understanding to include a new materialist approach to the phenomenon of human behavior, which cannot be reduced to the biological—or organizing organic matter such as the brain, DNA, or bodily dopaminergic systems. It must also include the social and the artificial [τέχνη], that is the noetic and its organizing inorganic material supports and “spiritual” cults, understood as cultivations of the localized, procedural, and embodied habits of cutting¹⁴ or individuating the

¹³ I bear in mind several ancient Greek notions in relation to the philosophy of culture (not to be opposed to technics), which I only have space to shallowly signal here without any in-depth elaboration: 1) Being κόσμος (kosmos), that is well-behaved or well-ordered. It would also be appropriate to bring to mind the “cosmetic”; 2) πολιτεία (politēiā) from which modern notions of the body politic and civil society derive, such as urbanity, politeness and to police; 3) πράξις (prāxis) as embodied practices and conduct, embodying virtue in the form of common sense, i.e. φρόνησις (phronēsis); 4) ἔθω (éthō), that is ethnicity and ethos, ethical character or customs and habits; and, 5) τρόπος (trōpos) understood as a style, direction, turning motion, manner, way of behaving in life, the use of discourse. When thought together and in simplification, we could say that the cultural body politic is one of steering or controlling the ways of ordering symbolic codes, rules, and even “laws” of behavior that differentiate civil life from barbarism and separate the possible from the socially impossible and taboo. Rules of etiquette are regulated and directed; such as, for example, correctly displaying the orthotic (exact) gestures and uses of a knife and fork to eat in a desirable way according to criteria of the social setting for a purpose that cannot be reduced to the simple drive to satisfy hunger. Thus, the flow of the cosmetic, polite, practical, ethnic, and stylistic modes of behaving and learning of *savoir-vivre* are subject to processes of discretization producing an image, i.e. γράφω (grāphō), or an alphabet of gestures, i.e. γράμμα (grámma), in the realm of imagination, including pictorial and literary depiction and idealizations conveyed by virtues such as *excellence*, which materialize themselves in the form of role models and best practice in the form of Stieglerian tertiary retentions. At the same time, this is a production of a certain aesthetic (looks and feelings) that lay the groundwork for sensibility itself. An example could be the discomfort felt when trying to adapt one’s behavior to social norms in order to not be rude, that is perhaps moving from chewing with one’s mouth closed in Western Culture to making loud lip-smacking sounds when eating in the presence of others in non-Western cultures. See “aesthetic dissonance” in Mróz 2019.

¹⁴ When referring to cutting, I recommend reading the final section or “cay” on pharmacology in this paper. In terms of Karen Barad’ agential realism, the smallest unit of analysis are phenomena. The phenomena of behavior would thus appear from within the relationship constituting doings and measuring agencies. When detecting cuts, cuts are made, and agencies are distributed. The agential qualities of phenomena are cut together

esprit or spirit/mind as a particular mode of perception and ways of feeling and living that support value. I have in mind cults of behaving and energizing characteristic of enthusiasm [ένθουσιασμός]¹⁵ like when we talk about cooperative “team spirit” in sports or business (Stiegler 2014b). Spirit value is orientated towards a certain virtue of elevation, surpassing of limits and generations of miraculous bifurcations,¹⁶ called *ex-celle*nce. So, to say behavior matters is to say, at least, that it is negentropic and anti-entropic, significant, and that it is physical.

This problem of selection that I have mentioned above may be considered as a problem of the heritable invention of milieus and behavioral stimuli of and by organisms, coupled organizational and temporal technical systems of both organic and inorganic matter. In terms of a phenomenological behavioral retention that I advance in this paper, the habits of organized organic and inorganic matter actively resist and anticipate forces of disorganization. They concern both biological entities and non-biological ones like crystals or the “free will” or choices exercised by molecules within behavioral chemistry. In other words, behaviors are metastable repeated traces, forms of memory, intra-acted¹⁷ between the habituations of both organized organic matter and organized inorganic matter.

With that said, my approach in this paper follows a theoretical exploration that builds upon the Stieglerian undecidability and *différance* of the who and the what that is posed in the problem of anthropogenesis or the inven-

or apart, which are performative decisions of the who or what that acts, these are agential cuts that temporarily stabilize certain properties and boundaries within phenomena (Barad 2007; Kleinman and Barad 2012; Barad 2014).

¹⁵ Being “possessed”—“having” internalized or in terms of phenomenology: retained, so transformed into extra-conscious thought—a “divine,” sacred, or singular essence, that is an “external” or socially shared property that is infinite and characterized by negentropy, which is differing from and deferring death, that is entropy, by energy sources that are renewable or not exhaustible.

¹⁶ Stiegler has recently published a book titled *Bifurquer* on this topic (Internation Collective 2020).

¹⁷ Intra-action is defined as follows: “Intra-action is a Baradian term used to replace ‘interaction,’ which necessitates pre-established bodies that then participate in action with each other. Intra-action understands agency as not an inherent property of an individual or human to be exercised, but as a dynamism of forces (Barad, 2007, p. 141) in which all designated ‘things’ are constantly exchanging and diffracting, influencing and working inseparably. Intra-action also acknowledges the impossibility of an absolute separation or classically understood objectivity, in which an apparatus (a technology or medium used to measure a property) or a person using an apparatus are not considered to be part of the process that allows for specifically located ‘outcomes’ or measurement” (Stark 2016).

tion of the human¹⁸ [*l'invention de l'homme*] (Stiegler 1998a, 134-179), where the human is an endangered phenomenon itself. Now, the aesthetic qualities of movement and technical categories (Koppensteiner, Primes, and Stephan 2017), such as speed or precision, indicate that gestures and behaviors incorporated with instruments of changing and refining automated corporal habits towards idealized protentions of excellence are products of their mutual technogenesis¹⁹ (Hayles 2012) and the development of biological organs, that is to say, habit as growth and loss of the flesh (Stiegler 2020b). When it comes to the apprehension of art objects as *objectus* (dance routines, songs, concepts, etc.) we usually evaluate the elevated and retained selections of performance²⁰ of these organic movements in the aesthetic features of the artifacts themselves, retentions that re-produce objects like paintings, dance, songs, and even abstract concepts like labor value.

My development focuses on behavior rather than action and performance because I view behaviors as “techno-logies” (Krzykawski 2019), a complex set of skills, repetitive programs subject to phenomenological retention and protention that form lifestyles. The phenomenon of behaving in a certain style arises from emergent transductive²¹ relationships (De Assis 2017, 698-701) of mattering which shape new techno-social²² norms and sensory habits, including long-term ways of envisioning the future, that is, protention. The term behaving conveys the possibility of learning and a qualitative measure of intentionality: adopting and changing norms between generations, and moreover it requires material re-minders or cues for regular attentive repetition and variation in order to conserve that pattern of mattering, which is human.

¹⁸ The human is not thought of as some innate property of *homo sapiens* like having self-consciousness, rather the human is a transient mode or pattern of rational existence supported by technics and performatively displayed by *homo sapiens*. That is to say, we are not intellectual, rational beings twenty-four hours a day, seven days a week.

¹⁹ The idea that humans and technics have coevolved together.

²⁰ See the case of this paper titled *pharmacological considerations*.

²¹ This is a concept developed by Gilbert Simondon. “Transduction refers to a dynamic operation by which energy is actualized, moving from one state to the next, in a process that individuates new materialities” (De Assis 2017, 695). I do not have space here to analyze in depth the differences and similarities of the processes of individuation between intra-action that give shape to agency and temporal processes of transduction, i.e. immanent processes of differentiation and individuation that over time energetically form transducers or modulators of resistance that gradually mediate real potential and actual energy by means of information, and thus give shape to the event.

²² This hyphen means that the two terms “technical” and “social” are co-constitutive and only emerge in a compositional manner in relation to the other. This signifies a transductive relationship.

However, because of transduction (resistance) of the flow of captured energy, intra-acted behavior is always threatened by the possibility of its spontaneous extinction (as well as re-emergence), that is loss or forgetting, and this includes the possibility of misbehaving (which is not necessarily a bad thing). In turn, I understand action in an Aristotelean fashion, as the materialization of potential energy—as in “passing to the act” (Stiegler 2009). In simplified terms, action conveys a thing done, a change of state, or a one-time act performed at a specific moment in time and it is also subject to entropic forgetting and decay without maintenance and work. For me, the singularity of the term action loses the broad sense of effort and automatization, or gradual passing into time, inherent in the life-long idiomatic formation, retention or learning of *ethos* and *hexis*: habits and routines, constitutive of *savoir-vivre* and *savoir-faire* in the realm of shaping synchronic human political life.

In my proposal of considering behavior in terms of its materiality, I would like to indirectly approach debates about actions and intra-activities (Barad 2007; Bennett 2001; Latour 1996; Ingold 1986) in Art Studies (Kontturi et al. 2018) from the sidelines by rooting behavior and habit²³ in Stiegler’s philosophy. The phenomenon of behavior can be viewed as the outcome of intra-action between organized organic matter and its *milieu*. Intra-action connotes the relationships within phenomena that are doings (Kleinman and Barad 2012, 80) that carve the material agential properties of behaving. Stiegler’s philosophy advances the pharmacology of cutting and an organological analysis of the project of behaving or what he calls acting out. I want to avoid confusing behavior (which organizes the passive and that, which is passing and has passed) with action (the realization of the virtual) when referring to the very similar posthuman discourses on intra-action (Kessler 2019, 80-86) from which behaviors emerge.

I view intra-action as a category that logically advances behavior. This is because the agential capacities of various behaviors and habits are ones that follow from or derive from agential cuts that are performed within the

²³ I would like to thank my reviewer for suggesting the analysis of the confluence of matter and behavior that make habits by deploying process philosophy’s model of identity, such as Gilles Deleuze’s process-orientated ontological understanding of habit. However, the Stieglerian analysis developed in this paper is one of that Stiegler already developed as a “theatre of individuation,” since he uses the Deleuzian notion of repetition, which is fundamental in Stiegler’s pharmacology. I have decided to omit this understanding of habit in favor of *hexis*. However, a Deleuzian development of habit in relation to art can be read, for example, in the article by Andrew Lapworth titled “Habit, art, and the plasticity of the subject: the ontogenetic shock of the bioart encounter” (Lapworth 2015).

world's intra-activity. In other words, intra-action (the relational emergence of agency) should be "cut" from my interests in behavior (the negentropic maintenance of agency which has relationally emerged and can be entropically lost), which is perceived, organized, and the temporal movement that is retained *a posteriori*, after the agential cut. This does not exclude the possibility of healing the cut and re-growing intra-actively. Nevertheless, the term behavior does not exist in a "vacuum", it is relationally "linked to and affected by the materiality and discursive frameworks with which it intra-actuated" (Barreiro and Vroegindeweij 2020, 141). In a sense, I aim at "delivering" a resituated humanist account of the phenomena of behavior, "saving" the techno-idiosyncratic transductive material agencies or retentions of the human in the negentropic becoming of the planet.

Therefore, I think within Stieglerian philosophy, according to which the rational and civil pattern that is the human is a temporary and mediated mode of existence always threatened by the possibility of a regress to subsist only in reduced modes of survival. It is a noetic being threatened by the loss of noetic functions and behavioral extinction leading to inhumane drive-based reactions. In other words, who or what is humane is constitutive of urbanity, civility, that is constantly threatened by regression and requires care (Cohen 2017). So, I have revalued behavior in terms of its habitual technicality. As a distinctive, perceivable and transmittable type of consistent ability to make (a *différance*) and make-do,²⁴ as τέχνη, I understand behavior as ordering transformative socializing procedural habits—a set of rigorous and disciplined routines—of embodying craftlike knowledges that one has "tasted," like *savoir-vivre*, *savoir-faire*, *savoir d'expérience*, and *savoir théorique*. In this regard, behaviors put various knowledges to action²⁵ (produce singular effects), and hence negentropically order, carve, a practiced phenomenological world. The body within which knowledge is stored may be any combination of organizing organic matter (e.g. muscles and brains) and organizing inorganic matter (e.g. machines and computers). Organized matter, technics, forms as a trace—and thus a memory as behavior (Delaney and Austin 1998; Keim et al. 2019)—of repeated singular actions that are elementary units of localized habits that constitute general modes of behav-

²⁴ The production or learning of skill (making of agency or the capacity to do), the ability to manage in spite of limitations and inadequacy, and the use of supplements, especially those that are "good enough."

²⁵ This, as Michał Krzykowski writes, "requires a new sense of critique and a new understanding of what knowledge-making practice actually means in relation to hypermatter" (Krzykowski 2019, 86). See footnote No. 8 in Krzykowski's article.

ior. Behavior is plural, pre-mediated or intentional (not necessarily conscious), and consists in temporal practices of making-sense, sensibility²⁶ [αἴσθησις], orientated not only by an end, but by the exteriorization or individuation of the Self,²⁷ which Stiegler claims is always inadequate or in default. Behavior, as a holistic complex of specific habits of organizing actions entangled with matter, itself emerges with inorganic material supports (laws, languages, metronomes, pens, videos, etc.), which also “behave” in a double meaning.²⁸ Later in this paper, I philosophically thematize this double meaning of behavior within the dual composition of the *pharmakon*, which is equally poisonous and remedial, destructive and productive.

Select problematics of behavior

In this section, I explore problematic or “fuzzy” definitions of behavior, which I understand philosophically as a phenomenon of existential retention and protention in matter (being and having). In other words, it is a selective storage of living experience (e.g. memories and dreams) in organizing organic matter (e.g. a brain, dopaminergic system, gut-brain axis, etc.) and

²⁶ Understood as sense perception, and as the ability to make sense, including the capability of (re)producing shareable knowledge for oneself (and others, including the self as other, that is an idealized and projected future “me” that does not exist but is projected as already having reached an understanding, that is has “acquired” knowledge, including knowledge of what is not yet understood) that becomes an understanding since one “knows” what “it” is like to “do” something. Consider the question “What is “it” like to play guitar?”. The “it” here refers to a particular experience, and the *like* not only includes analogy or metaphor, but also the sense (at least symbolic) of a particular ordered set of repeated actions called playing guitar, which one also “likes”. This repetition is not an exact repetition, but one that changes meaning and restructures sense perceptions, the brain and body, with each undertaken repetition.

²⁷ End as in goal, and end as in death. Behavior requires care, thoughtful maintenance since it is always threatened by the processes of extinction and forgetting (a fading of non-reinforced conditioned responses over time). Civilized, socialized, or “cultured” (as in *cultura animi*) behavior motivated by far-sighted desire is always threatened by its collapse into barbarism once desire is reduced to short-sighted drives and impulses.

²⁸ The dual behavior of matter can be illustrated by particle behavior and wave-like behavior of material particles at the atomic scale, such as the behavior of the photon or the duality of radiation. Moreover, arranged in greater masses, new behaviors emerge when particles join to create different states, for example, gas, liquid, solid, and superficial fluid, and which have new behavioral properties when subject to extreme conditions (when pushed to the limit). Information is also a state of matter. Matter is also organized technologically.

organizing inorganic matter (e.g. artworks, computers, globalized industries, etc.) (Parikka 2007; Alaimo 2010; Sampson and Mazmanian 2015; Rao and Gershon 2016). According to Stiegler, the latter are representative of processes of exosomatization at various levels of complexity (Stiegler 2020a) of the former. For example, neuroplastic embodied brains produce exosomatic organs like computers or other memory aid devices that necessitate coordinated gestures, e.g. to draw tally marks, which physically and structurally transform those brains over time through repetitive somatic routines and trained non-mechanistic habits of movements and gestures that selectively develop into specialized behaviors called *techniques*. Learning takes place through the aid of rote learning techniques that are transmitted via technical supports [ὑπόμνησις] or mnemotechnics which carry the memory of a past, selected experience, including traditions and customs, that is, ethos. Behavior conceived *a posteriori* emphasizes the captured and stored agency transmittable to an individuating social being, a being that consists in relations constituted after experienced perceptual selections, after the act or agential “cut,” that is to say, decisive inclusion and exclusion of what is considered, in terms of a passing intra-action. The point in this section is to present various equivocal definitions in order to show that the materiality of behavior is left unthought.

The Merriam-Webster Dictionary defines behavior, a word first used in the 15th century and etymologically derived from “be” and “have,” a form of existential retention, seizing or taking hold-of, as “the way in which someone conducts oneself or behaves;” “the manner of conducting oneself,” where conduct is defined as “to cause (oneself) to act or behave in a particular and especially in a controlled manner;” and “the way in which something functions or operates.” The Oxford dictionary provides similar definitions, including a teleological one, where behavior is intentional and directed at other people. As the Brazilian philosopher Filipe Lazzeri Vieira²⁹ notes, this is an extremely prevalent term that is difficult to pin-down. He tries to clean up the linguistic ambiguity with a much more rigorous analysis: “behavior is said in at least four ways: (i) as the occurrence of an organism’s action

²⁹ Lazzeri Vieira is an epistemologist and philosopher of mind, action, and psychology. He is currently developing ways of conceptualizing behavior and some categories related to behavior. He undertakes an analysis of its theoretical definitions, and studies models of behavioral selection as determined by effects as well as the differences between overt and covert behavior, including the biological functions of behaviors and their intentionality or direction by goals. He takes the concept of action and analyzes action from a behavioral perspective, how action is related to other theoretical terms.

or reaction; (ii) as a class or pattern; (iii) as group behavior; and (iv) as a change or movement of an object” (Lazzeri 2014, 78). Lazzeri highlights two definitions. According to the epistemologist and philosopher of biology, mind, and language, Ruth G. Millikan (1993), “A behavior is [...] at least the following: 1. It is an external change or activity exhibited by an organism or external part of an organism. 2. It has a function in the biological sense. 3. This function is or would be normally fulfilled via mediation of the environment or via resulting alterations in the organism’s relation to the environment” (Millikan 1993, 137). What is more, “according to Moore, behavior is an event in which a functional relation exists (in the sense of a probabilistic correlation we can establish) between the environment and one or more neural or muscular systems of the organism responsible for movement or posture; and this functional relation, roughly, must conform to rules that define operant, reflex or other known behavior patterns” (Moore 2008, 66-68). What such definitions tend to exclude is the materiality of behavior. According to performative strand of new materialism, which is theorized—among others—by researchers like Karen Barad and Vicki Kirby, it is a mistake to presume forces as external to matter, something that “guides, structures, or grants meaning to its behaviors” (Gamble, Hanan & Nail 2019, 112; see also Barad 2007; Kirby 1997; Irni 2013; Jones 2015; Barclay 2017). A fault, thus, would be to conceptualize behavior as external to the forces of *hexis* (habit) that give it shape or as external to its environment, and as separable from them, as phenomena that can be distantly observed and measured without intra-actively transforming (selecting) what is being observed. They also signal that behaviors are general, repeatable, and controllable processes of organologically amassing already constituted relationships through established retentions between an organism, its environment, and itself.

The definitions above consider behavior *per se* as an abstract function or property of matter, including negentropic and entropic organisms. Let us take as an example the behavior of wood, which would be another way of phrasing the retained existential relationships in which the matter of wood habitually—defined here in analogical terms of modes of growth, general appearance, or shaping as used when describing crystal habits (Massumi 1992; Kontturi 2018; Bernstein 2002, 46)³⁰—influences and is influenced

³⁰ Katve-Kaisa Kontturi has brought to my attention that the wood example is one that has been important for new materialisms. Extensive examples have been developed, for instance, by Brian Massumi, who provides an account of woodworkers collaborating with and getting to know wood. This is an account of what I would claim advances a Stieglerian

by its surrounding conditions. The behavior of wood, as properties of this differentiated material itself that comes in many states and varieties, lays at the foundation of determining the techniques of the luthier, the musician, and *musicant* (Rouget 1985, 102-103) or amateur. This includes its corruptions and failures. The poor acoustic properties of wood that had already habituated or characteristically shaped themselves into guitars in early jazz bands, groups that developed due to the industrial turn in music (Donin & Stiegler 2004, 6-20) lead to the invention (the who/what is undecidable) of the electric guitar, where wood and its emergent techniques have altogether bifurcated and been augmented inasmuch as to constitute an electric sonorous and acousmatic reality. One of the eventual doings of wood conjoined with people was to play jazz. Obviously, there is a relational and regional history to the behaviors of matter, and this history is an important factor in the development of various artistic techniques and accidents, both happy and deadly.

Stiegler's general organology is a methodological account of the material ontological history of a plethora of instruments—an account that extends beyond musicology—in the form of the study of all instruments, or technologies and devices like the computer, their history, cultural applications, classifications, and other technical aspects concerning how certain technologies consist in their effects, like produce an aesthetic, perception, sound, or behavioral change. So, when thinking of the habits (ways of growing, giving an appearance or look, shaping) of organizing organic and inorganic matter constitutive of temporally organized endosomatic and exosomatic movements, I would like to signal that the appropriate method for advancing the study of behaviors would be through general organology. Just as wood habituated into music, so do behaviors selectively develop in terms of their looks, feels, and complexity.

However, before attempting to draw any historical account another problematic of behavior needs to be raised. It is found in the distinction between quantification and qualification. Behavior—which needs to be attentively

understanding of *otium*. It is an extra-ordinary *time for care*, rhythm of thoughtful commerce between the forces of wood and the woodworker that shape an emergent temporary consistence (see: the section “Subsist, Exist, Consist” in *Ars Industrialis*'s vocabulary) that is not reducible to subsistence, not reducible to a calculated trade of *negotium*, a form of life shaped by the hyperindustrial reductive logics of the market. These are singular practices of the forces of the Self, which is always “stuck” in its own inadequacy and always beyond it-self. It emerges within the struggle of collaborating with materials in order to overcome “stuckness” or *anthropy* in the process of individuation (Kontturi 2018, 104-110; Stiegler 2011a; 2018; “Vocabulary—English Version | *Ars Industrialis*” n.d.).

developed or else it goes extinct (back to the potential realm, to the “before” of the agential cut of intra-activity)—can undergo quantification (measurement, and thus, selection) and repetition. Yet, it is an ongoing iterative indeterminate process. This is even more perplexing when it is subjugated to axiological arbitration, which is an attempt to qualitatively evaluate behavior as good or bad, caring or evil, respectable or scandalous, toxic or helpful. Multiple cases of the ambiguity of behavior can be imagined, such as occupational hazards or the mania that is provoked by the toxicity of the artist’s lead paints which induce hallucinations (Montes-Santiago 2013), or the mispractices of not properly disposing of those paints, which ecologically threaten the environment with pollution. Still, such a toxic material was necessary for constituting an artistic epoch and its material practices of care. This leads us from one set of selection criteria to another: from a historical account to a philosophical one.

Thus, the general problematics of behavior studied philosophically are problems of materially re-objectifying what humans make-sense as abstract and what resists fixed objectivity, which makes it a philosophical problem *par excellence*. It is a matter of materializing behaviors. However, we cannot physically grasp behavior with our hands like a pen or any other concrete, tangible object regardless of size. We grasp behaviors with the embodied and materially supplemented mind, those grasps are stored in each practiced gesture and devices of recording. Behavior, although perceived, is not exactly present-at-hand. This is behavior as theorized by science and marketing: behavior that needs to be “repaired” in order to reach some goal set by scientists or marketers. Theorization itself is a sort of meta-behavior of complex decision making or selection that scrutinizes a “failure” of perceived behaviors, examples of such theorization lay in the doings of con-artists, pick-up artists, or even ourselves when we try to figure out why certain behaviors fail to be operational or useful. Behavior is not exactly ready-at-hand either, since everyday, ordinary, unproblematic, not theorized habits, especially in the case of addiction, are states of simultaneous disrepair of the organism and restoration of the habits. At times, we conduct ourselves automatically, without consciously theorizing why; nevertheless, subconscious “theories” may in fact hypomnematistically develop or grow into the living body through habit (*hexis*).

We may also structurally problematize human behavior as a mode of being in-itself [*en-soi*] and for-itself [*pour-soi*] (Merleau-Ponty 1963). Human behavior, without forgetting its corporeal materiality, is dynamic, and as a subjective embodied experience of repeated selection and loss, is a tem-

poral object of phenomenological inquiry. Nonetheless, we can also easily and clearly do many things with behavior onto-epistemologically and technically: it can be observed and ignored, identified and misidentified, turned into a stereotype, manipulated and fabricated, arranged and re-arranged, and so on. Of course all of these *actions* and *reactions*, interactions and intra-actions, are modalities of behaviors themselves, which is to say “matters of practices/doings/actions” (Barad 2003, 802) or a secondary “enactment of boundaries” (Barad 2003, 803) that must be studied in light of the way they self-stabilize and destabilize differential boundaries by the active participation of matter, of which one form includes the material instruments, devices, tools, and technologies, in the “world’s becoming.” The materiality of the human flesh, and human organizations which materialize, matters just as much as every other body of material force (Barad 2003, 809). So, the term “behavior” is quite significant and dependent upon material conditions, yet it is also ambiguous.

To recapitulate what has been developed in this section, I have presented my understanding of behaviors (observable movements) and habits (*hexis*), and I have proposed a shift from the abstract (like the past and future, which do not exist) to the material (present). The problematics of behavior in terms of its definition revolve around equivocal definitions that tend to overlook the mattering of existential retention, of being and having at the same time, of be-having. Their abstract functions, or habits, develop in time and can be “passed down.” A transitory example on the behavior of wood was described. Stiegler’s general organology and pharmacology (cutting that is both positive and negative) can provide a historical account of some aspects of behavior in terms of the relations between endosomatic and exosomatic organs as well as collective social organizations and institutions. From such an account, other problematics should be included, such as the problem between measuring behavior quantitatively and qualitatively; and studying behavior from a philosophical perspective, which is not necessarily limited to ethics. Two examples were provided, one in Heideggerian terminology in terms of presence-at-hand and readiness-at-hand, and the other in Merleau-Ponty’s modes of being in-itself and for-itself. Another path or road of meaning-making is a route paved by new materialist thinking. What follows are several short exploratory developments from this section that can be read in any order.

Adrian Mróz*

Behaving, Mattering, and Habits Called Aesthetics

Part 2: Theoretical Cays of Phenomenologically Making-Sense

Introduction

Four cays are presented. The first is titled “behavior matters.” It consists of a composition of ideas from a discipline of behaviorism that relate with how behavior is material and how its meaning is actively practiced. Methodological behaviorism views its object of study as external, mechanistic, and separated from an *esprit*, which can be understood as a characteristic (*ethos*) or style of habitually be-having and growing exosomatically. Through habits, behaviors have their own material agency and forces of self-replication or selection. The second cay is titled “Oh Behave! The doings of habit or making bodies of art,” which is an account of the problem of sensibility and feeling (aesthetics) in relation to behavior. Phenomenological aspects of habitual retention are raised. This situates behavior as a phenomenon that does not exist, but rather consists with exorganogenesis, which is the production of artificial objects that resist utility or reductions to fixed employment. So, all art is an axiomatic product of behavior. The next cay is named “On the Material Habits Constitutive of Music, Caripulation, and Memory.” For clarification, the term, to caripulate, I generally use to describe a practiced movement conjoining the Latin *carus* or the wish and desire that is first needed for

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any movement whatsoever, and the *carō* or the body as flesh, as in manipulation—which is a handful—or pedipulation, especially when talking about the feet or *pedesis*, which is a theory of motion “directly and iteratively related to its immediate past but is not determined by it” (Gamble, Hanan, Nail 2019, 125). Here musical behavior is thought of as a kind of *savoir-vivre* that grows (habituates) bodies and their capabilities for moving. The goalings and bodily gestures are conceptualized by what I call caripulations that store the “objective” memory of behavior that has passed and that anticipates its next step and repetition through the growth of flesh and production of new instruments. It is an organologically practiced movement of making symbols orientated by desire, generative of *savoir-faire*. Three distinctions of behavior that leave marks and make selections (caripulations) are presented in accordance with the premises of the phenomenological general organology, which include: its primary retentions as present behavior that is passing, its secondary retention as memory inscribed in the growth of flesh, and its tertiary retention as artificial technical supports that shape and are shaped by behavior. Finally, because of the possibility of manipulating tertiary retentions, which condition the selections of primary and secondary retentions and protention, a pharmacological motive is proposed for the further caripulative priming of behavioral drives (associated memories). The pharmacology of behavior includes its sensed patterns that are composed organologically, contextually both toxic and therapeutic. Behavior is artificial or technical, it is a *techne*, which has been overlooked by philosophy because of its assumed naturalness.

Behavior matters

New materialist thinking provides understanding that adds to the philosophical investigations of behavior that matters. The new materialist problematics of behavior would include its meaning and how it is material. I would like to explore the situation when we say a certain behavior matters in this section, since what we usually mean by that phrase is that behavior is important or significant. In effect, it makes-sense. In the arts and crafts, all behavior matters since etiquette and performance guidelines regulate them. To mis-behave would be to break norms and bring about scandal. It would also imply breaking expectations or exhibiting new forces and agencies. Of course, the arts also involve this kind of breaking of expectations and established habits. Then again, to say behavior matters would also be to say

that a doing of matter is to behave, meaning that certain behaviors are activated by stone tools (cutting), watercolors (painting), and other media (acting, performing, being a medium).

The terms that we use every day to denote changes of states such as action or reaction are also equivocal and quite ambiguous, which is significant if we consider that they are used to describe a massive extent of reality, from physical changes in matter and its properties to psycho-physical stages of change that are correlated with behavior change. Rather than thinking of matter as mechanistic, and with it the flesh and embodied behavior in general as just mere Cartesian mechanisms, the vitality of matter, its performative dynamics (Tillman 2015), constitutes the general focal point in the recognition of habit as it relates to performative materiality and practiced human life. In the framework of agential realism, matter is not “passive” (Tillman, 2015, 30). This signifies a confutation to the idea that the behavior of matter is permanent and fixed. In simplification, behavior is what comes after an intra-active cut. Instead, as Diana Coole describes, intra-active matter “[...] is self-transformative and already saturated with the agentic capacities and existential significance that are typically located in a separate, ideal, and subjective realm [...]” (2010). If, for a moment, we shift our attention to the psychological behaviorism (Graham, 2019) of Ivan Pavlov where organic responses to external physical stimuli have been coupled with different stimuli, called classical conditioning, we see that the assumptions of the old schools of behaviorism fit snugly into the mechanistic paradigm of physics, where all behavior change supposedly originates from “external” actions that manipulate fixed “internal” mechanisms, which is to fail to understand any exosomatic organicity.

These organological changes of states, as a mechanistic readiness to respond to stimuli, also reveal the idea that matter is “separable.” Here the methodological behaviorist schools (Graham 2019) come to mind, where there is a privileging of observable external behavior as explanatory for an organism’s behavior. In such a case, the assumption that a mysterious extra-material force called a “mind”—in other words the premise that matter holds no faculty for reflection or thought, as unmeasurable or inaccessible—is ubiquitous yet concealed. Changes of mental states (forces of granting meaning), thus, would be material changes omitted by methodological behaviorism. Moreover, the stimuli—as isolatable—are conceived as distinct from the agent they are acting upon, or even the human scientist is separate from the subjects they manipulate. Maurice Merleau-Ponty, who criticizes the mechanistic sciences with the aid of pathology, shows in *The Structure of*

Behavior that mechanicalistic cause-and-effect chains are not necessarily appropriate because of the *phenomena* of *wholes* (Merleau-Ponty 1963). Because of this phenomena, the structure of behavior is endowed with meaning, it makes-sense, and is more than a sum of its parts or mechanistic, linear chains of causal reflexes and reactions of the material flesh to isolated physical stimuli. This means that behavior is neither random nor probabilistic. It is not necessarily mechanistic and has a procedural bearing. Its pedetic¹ unpredictability lays in the mutual intra-active influence of matter with itself due to relational material arrangements and changes (Gamble, Hanan, and Nail 2019, 125-127).

A re-affirmation of the ontological significance of materiality draws with it the consequences of diffracting behavior itself. Matter cannot be separated from the *esprit* or mind/spirit (as external forces of meaning-making), and it cannot be isolated from other matter. So, matter behaves, and specific behaviors materialize. There is a dynamic relation between consciousness and behavior, including a plethora of other forces such as will and intent, the *nous* or intellect, and the collective or social, which all significantly interact with matter that has its proper agency as “an ability to cause some kind of change” (Tillman, 2015, 32). Through habits, behaviors have their own agency and forces of self-replication or selection. This brings us to aesthetics, the philosophy of sensing or making cuts, a substantial consequence, reconnecting it with ethics, the political, and bringing new understanding to the technical, to *techne*. Stiegler goes so far as to claim that *techne* had been disadvantaged and isolated by Platonic and Heideggerian philosophy in favor of *episteme* (Stiegler 1998a, 1; see also Parry 2020).

Oh Behave! The doings of habit or making bodies of art

In this section I explore the existential implications of the perceived phenomenon of “be-having” that becomes constitutive of states and disposition, of habits. In 2019 I posed the question of what generally is understood as art (*techne*) *does* in place of asking for a substantial definition of what art *is* (Mróz 2019b). Growing from my previous deliberations, I do not intend to stabilize the ontological, or metaphysical, understanding of art (craftwork, applied arts, fine arts, entertainment, etc.) and fix its workings in terms of a static definition. Such a fixation is usually contested by the avant-garde

¹ “Motion of semi-autonomous self-transport” like the movement of the foot when walking.

practices of artists and art workers who may refuse to be locked-in by formal prescriptive barriers, which are practices of employment rather than *works* or *workings*.

What is lacking here is the problem of *aísthēsis* [αἴσθησις] in relation to behavior. Analyses that do touch upon the subject of behavior usually stop at banal conclusions that art challenges habits and fixed mechanistic behaviors, which certainly is deceptive, and which ignores the ongoing iterative and performative processes of habits (*hexis*), which materialize. Art (techne) generally understood is a working of habits and a fixing of aesthetically (sensory, feeling) orientated behavior that is not a mechanistic fixation. But to know what we are talking about, we must realize that behavior itself is not fixed, as an experienced object of reflection or diffraction, it is matter's way of moving in constant flux. Phenomenologically, subjectively experienced behavior is not the same behavior that we remember (retain), for the same exact behavior can be equivocal, since it is a temporal object of the embodied material consciousness just as much as a melody is, and there are protentions or anticipations manifest in behavior, such as in the bodily movements of a predator prepared to catch a prey, which is the memory and anticipation of devouring.

If we take an understanding of sensitivity as causal prefixed and determined reactions, which is to say that of the pair stimulus–reactions, then we fall into the trap of fixing the flesh into closed entropic reflex system models, where stable unchanging systems need to be thought of as in place. Merleau-Ponty, however, suggests the opposite (1963). Behavior emerges as an entangled act of commerce between an environment and the interdependent (which we can understand through metaphor as a dependence of the monads) and intra-dependent (which we can analogically understand as the state of being of holobionts) as well as the emergent (superorganisms like the ant hill which is capable of “remembering” as a collective as opposed to the individuals ants who do not share this memory) entities that arise from a plethora of environments and create new milieus at the same time. Behaviorists most certainly do not negate the mind, they only make the claim that they cannot measure the mind, which is to say that it is the infinite.

In an article for *Psychology Today* Tim Carey writes that behavior does not exist, and he is right insofar as we understand that neither does art, since they form a consistency that persists and insists itself, for he claims, with a cliché of contemporary consumer aesthetics and viewing mind as metaphysically distinct from matter, that behavior “only exists in the eye of the beholder” (Carey 2019, para. 17), which makes it a subjective problem

of relational aesthetic (sensory) inquiry. This is to say that behavior's materiality is at once a perceptual (techno-epistemic) and an organological (ontic) problem. Carey instead substitutes the equivocal term "behavior" with the term "goaling". This is because behavior, as he notes, is ill-defined and caught in a vicious loop. The term "goaling" is a verb that is synonymous with control processes (hexis), which consist in an attempt to control involuntary and voluntary actions or various approaches to reach specific goals (that is maintain *homeostasis*) of an organism. Even if such "innate" action is called "instinctive" or "reflexive", it is still dependent on learning and memory, or making-sense. One goal of any social organism would be that of "exclaiming" or expressing its Self via technical exteriorizations (growth of the body and its supplements) or exorganogenesis. That said, there are goals that one may be conscious of, and goals that are forgotten or that one is totally unaware of, and this should not be thought of as limited to the agency of an individual, but rather as the intertangled web of intra-actuated goalings, not reducible to instrumentality or utility, conducted by all inhabitants contributive to the processes of individuation. This idea leaves room for the fact that one and the same organism may have contradictory behaviors, which often are called pathological or dis-ordered. However, if viewed *pharmacologically*, then this contradiction becomes an accidental necessity in terms of the already passing present orientated towards a future becoming.

To reiterate, I do not have in mind the problem of habits as forms of fixed, mechanistic, never changing behaviors, because to do so would be to completely ignore the phenomenology of behavior itself. No organic behavior is ever an exact replication, no habit is ever fixed, and as a singular action that is sensed and unfolds in time, a specific attractive or repulsive behavior is itself a temporal object composed of retentions and protentions, of memory and anticipation, of trauma and anxiety, of nostalgia, nightmares and dreams, and of hopes and desirable or fanciful carnalities. Moreover, it is also programming idealized automatisms into organizing organic matter, which become craft and skills elevating their products in their time for care to the extra-ordinary status of art, as well as de-automatizations, which happen while learning and growing (habituating) a new body for new tasks that demand such a novel embodiment. All art (techne) is a product of behavior. And all aesthetic sensitivity is an effect of art's material fabrications and organological manufacturing. The final product, which is the artwork, is thus only a small part of a great scheme of doings,² one that steers behaviors and

² Katve-Kaisa Kontturi addresses many of these marginalized aspects such as stratification and destratification, co-working, or the autonomy of process in the great scheme of

grows perceptual patterns of “appreciation” or art consumption as well as its fabrication, production, logistics, and technical realities. These processes have been generally taken for granted, and thus made invisible.

On the Material Habits Constitutive of Music, Caripulation, and Memory

Hyper-industrial aesthetics consists in the programmed behavioral conditioning of responses and reactions like saying “wow!” “breathtaking!” or “beautiful!” (Mechner 2019) and in learning how to pay sensory attention, how to focus on the material sources of beauty, pleasure, reward, and so on. In turn, these tactics transform an environment (like advertisement as sensory pollution and exploitative devaluation of the embodied spirit/mind) and the collective and individual perception of and attention to stimuli which reside in the dynamic of conditioning one’s body with peripheral artifacts so as to grow “an eye” or “an ear” (Stiegler 2011b) and so as to grow resistance or develop habitual desensitizations. The industrialization of making-sense enacts a cognitive modification of the ways humans process various sensory stimuli, such as works of art and entertainment, according to selections (memory). Such behavioral selections are habitually retained in materially inscribed social reality (Barrett 2018), traditions and institutions that care for artifacts and maintain emotional labor.

Certainly, artists, art workers, and the amateurs shape an aesthetic through various media at vastly various levels of complexity, from the applied arts of decoration and crafts to the massive performances that engage thousands. The musician must co-work with the material foundations of music. This working is a learning of habits, and a fundamental shaping of behavior as the labor that advances the work of art. A musician must carefully learn how to behave (*savoir-vivre*). They may change their diet to have strong nails for playing on the guitar, and then shape those nails following the demands of nylon strings. They will certainly re-shape their bodies through practice routines and training exercises. They grow new flesh and hard-wire automatisms and reflexes that are the foundations of music. Music is primarily a work of the body. It has always been a shaping of the ear through the shaping of the flesh and its perception systems and artificial objects that sculpt thinking-it-self. Conversely, ever since the invention of the

the emergence of art and its doings in her book, *Ways of Following: Art, Materiality, Collaboration* (Kontturi 2018). I would like to thank Milla Tainen for pointing this out.

gramophone, music has been separated from the practice of moving one's body with an artificial instrument to generate a sonic disturbance in the air. This movement, this organized behavior, has been re-organized: industrialized and passed-on to the machines, including computers. The work of producing music now involves the swipe of the finger or the touch of a button, which results in the sensory audible experience of listening to music, but no longer a rigorous act of being with one-self while producing sounds, *of a critical listening to our body's ex-static and ex-cellent relaxation that had been needed in order to intra-act with its material instruments to produce any idealized form of sonorous flow*. We hear music everywhere now, and its habitual significance and disciplining of corporeality have significantly transformed (Delalande 2020) since its industrialization.

The self-control needed to conduct music (practice routines and a musical *savoir-vivre*, learning skills such as *how to read* music, the search for improvisational *savoir-faire* and technical knowledge, the task of inventing the new as the knowledge of conceptualization, and so on) has resulted in the industrial division of the behaviors of music by inventing music experts, called musicians, who are tasked with the work of playing music for the benefit of music consumers, be they art critics or the mass markets audience. Listeners have in reality been musically proletarianized, since they have lost the artificial behavioral knowledges that are fundamental in the carnal needs of the body and the material demands of instruments, including production realities (musicians are very keen on technicalities like selecting the type of wood an instrument is made from, or on the fabrication process and instrumental maintenance itself). It is also a practice of learning how to grow a body, how to be with aesthetic dissonance, of enjoying a piece and at the same time being disturbed by it, since the *challenge* of playing has been one of challenging and ex-ceeding abilities and habitual skills, as well as the perceptions needed to appropriately move the body and to, finally, move others.

Abstracting from the above-mentioned *discipline* of music, we may generalize: all artwork is work that is a working of the artist by the material that the artist *caripulates*. I selected this term in place of manipulation, which has a negative connotation, with the intention to be as maximally inclusive of the entire body as possible without privileging the hands and their digits. To illustrate the former, the behavioral caripulation of material by artists which is also material that carnally sculpts the artist's being, we may consider learning how to knit, how to sculpt, how to tattoo, how to draw, how to paint, how to play an instrument, how to edit and upload content for social media like vlogs or capture and disseminate selfies, how to act or learn how

to play a role for theater, how to tell jokes or stories, how to learn new habits and forget (poor) habits that have been made while learning certain skills, or how to curate the artefacts installed in contemporary art museums and galleries. Of course, we could name other examples for consideration, but this would lead to an endless list. Nevertheless, such ability or *savoir-faire* is transformative and singular in each case. Material is a manipulation of physical matter (manually knitting a sweater) and in others it is abstract (such as in making conceptual art).

In order to become consciously aware of our own behavior, it must be submitted to a process of phenomenological objectification, to scrutiny and criticism by others, which is at the same time a factor of *stimulation* that changes the original behavior in such a way that leads to the materialization of the symbolic, as is the case with *savoir-vivre*. This quasi-externalization process is one that leaves traces and signs. If this were not the case, then tracking by hunters, including *marketers*, *coaches*, and *psychics* who have learned to read *body language*, would be an impossibility. In other words: "Humans have always left traces of our behavioral and cognitive processes. These traces have evolved with us: where our ancestors left stone tools and cave drawings, we now leave digital traces—social media posts, uploaded images, geotags, search histories, and video game activity logs" (Paxton & Griffiths 2017, 1630). Through the traces of behaviors, which are computational (Gomes et al. 2017, 8), we caripulate temporal sequences or time itself, which is the play of 1) the conduct of here-and-now taking place for a moment in the present, 2) the memories of behavior (as repetition or repetitive behaviors called habits and stored in the living flesh: the muscles, nervous system, and brain, and which can be forgotten, or go extinct, and also spontaneously recover), and 3) the recordings of behaviors, which are their *material* traces to which Paxton and Griffiths refer, such as the stone tool which is a memory of the action of cutting or the meta-data produced on digital media, which are memories materially externalized by organizing organic matter or the living body understood as the flesh, since algorithmic "alerts" may remind us to do some action (calendar or alarm clock) or act a certain way (such as open an app or respond to a text message).

I have formulated these three distinctions of behavior with the support of Bernard Stiegler's analysis in the series *Technics and Time*, especially volume three. There, he undertakes an analysis of retentions and protentions, and contributes the category of tertiary retentions to Husserl's phenomenology. Briefly, retentions refer to what consciousness retains, keeps, or apprehends. Primary retentions are the now moment, which in Husserl's compari-

son to the melody, would be analogical to a given note of a melody that happens to be playing at a certain point in time. Secondary retentions refer to repetition, to memory, to the imagination. After hearing a melody, it is possible to consciously replay it within the imagination. Now, tertiary retentions, are the supports of both primary and secondary retentions. I understand them as all marks and traces, techniques and technologies, all devices and equipment, from which consciousness and its memories as selections, that must include their protentions, come.

If applied to *behavior*, rather than consciousness, then how can retention be possible? It is necessary to note that behavior can be manipulated, or as I prefer to say—caripulated. This is evident through the success of classical conditioning and radical behaviorism—“far from being dead” (Brown & Gillard 2015, 24)—or the study of functional relations *with* environment events (Heward & Cooper 1992, 345), which is used still today to get dogs into scary MRI machines for studies. Behavior at a certain moment is easily comparable to primary retentions. What is not clear is the storage of memory in behavior. Memory as behavior is conceivable, since learning is something organizing organic matter and organizing inorganic matter *do* (Delaney & Austin 1998, 76), and ancient mnemotechniques of dances and songs (Kelly 2016) should suffice as evidence for the claim that secondary retention of behavior is an organized form of repetition that carries knowledge, actions learned either by heart or in parrot-fashion.

When it comes to tertiary retentions, the recorded trace, which is organized inorganic matter, then we have come to live in an age where an exact repetition of a behavior is possible for the very first time ever in human history. The photograph has given us exact visual replicates of poses, attitudes, stances, and general looks. With cinema, however, we can view one behavior repeatedly without any modification to its form. Moreover, this exactitude of behavior, especially in terms of algorithmic governability, is no longer something for the distanced gaze, of watching and re-watching various fantastic behaviors on the screen. Robotics provide dancers who move exactly coordinated with precisely the same movements in identical fashion at every performance. This is a novelty. Humans have been dancing the robot for decades. Nowadays, the task is to teach robots to dance the human, whose data are being collected, analyzed and whose actions are being algorithmically caripulated.

Pharmacological Considerations

Pharmacology is a philosophical term used by Stiegler and originally developed by Plato, Jacques Derrida, and later by Michael Rinella. It should not be confused with the very specific meaning referring to the medical or pharmaceutical industry producing chemical biologically active substances for bodily absorption, although I do indeed think also of this concept (the *pharmakon* understood as responsible for *cutting* or *striking*) in terms of “chemistry” or “magic,” which I understand as a kind of aesthetic (feeling of beauty or style) that envelops desire or attraction, enthusiastic possession *qua* love or passion. When saying matter is active, I understand it as matter that can be the source of aesthetic reactions (like exclaiming “wow!”) as well as bodily and social changes (e.g. in cognition or disciplines).

First, it should be noted that the distinction between organic compounds and inorganic ones remains only as a distinction and is not intended to draw sharp ontological boundaries. Nor is it an opposition, especially since this distinction is ambiguous and there is no agreed-upon definition in the life sciences, wherein organic is usually understood as a compound containing carbon-hydrogen bonds, whereas biological organisms do indeed contain inorganic compounds within their systems, which are essential for their survival (Betts et al. 2013, ch. 2.4). Moreover, if we take an *exosomatic* view (Stiegler 2018, 2) which is to question the *Da*³ of *Da-sein* (von Herrmann & Radloff 2011) that discloses human bodily life, then the relationship with inorganic organized materials which are artifacts, tools, instruments, and so on are co-constitutive of a relation that is just as essential to the growing patterns of the human being as water or oxygen under the dermatic boundaries of the flesh. For the stone tool requires digits that are capable of manipulation, and this implies that through behavior the environment has selected for the organ of the hand, and its supports in the shape of feet and an upright posture which has freed the mouth from grasping. This continuous process of transformation is still undergoing, as research in the cognitive sciences has shown there is an ongoing restructuration of the brain’s functions due to the use of digital media (Hayles 2012).

³ The “Da” in *Dasein* means neither “here” nor “there,” nor does it mean something present (*anwesend*) or extant: it is solely the designation for the phenomenon of “un-closedness,” that is, for “openness.” But what kind of openness? “The expression ‘Da’ means this abiding disclosedness (*Erschlossenheit*)” (GA 2/176-177). The “Da” of “Dasein” has the purely ontological significance of disclosedness, which is said to belong to Dasein abidingly (214).

Nonetheless, if we take a “pharmacological” research perspective, then all matter is active in some regard. For the philosophy of art this would or could include, for example, the material substrate of paints, which were toxic and hallucinatory, or the steel string of a guitar, which *cuts* into the skin of beginners and draws blood. There is no passivity or any distanced inactivity of matter, since there is much discussion (Bolt 2000) about the biological activity of molecules, and likewise, their psychoactive influences and effects, like social activities in the forms of rites and rituals or in terms of the use of power in suppressing certain biochemical becomings and privileging others within enormous, global, geo-political and economic superstructures of human ant-hills, where emergent *organizational* behavior is not a sum of its individual actors alone.

The philosophical application of the pharmakon, as scrutinized by Derrida, Stiegler, and Rinella, has given rise to the understanding of the pharmaco-logical as the discussions and theories organized by pharmaka. What are pharmaka? This notion derives from ancient Greek, and denotes a plentitude (Pokorny 2017, 133-135, 276-277, 325, 632) of colorful things that cut and leave marks, and thus, are “magical” and can heal through therapy, in the meaning that Homer uses when he says ἦπια φάρμακα πάσσειν in the Iliad (531), which is a “troika” or triple application of soothing [i] pharmaka (drugs or herbs) on arrow wounds, for the arrow must be cut out of the body through the (ii) skilled use of the knife, and an enchantment or magic [iii] spell (which, instead of magic, we must think of as memory supports, or mnemonic devices) is sung over the wound of the *suffering* patient (under the influence of *pathos*) who needs therapy (Holmes 2010, 79).

As we know, dug-up roots and herbs that require cunning in their caripulation can also interact with the flesh to discretely kill or cause harm. There has been a historical separation of a distrust with regards to drugs between the male and female, the right and left, between doctors and witches, the rational and irrational (Ehrenreich and English 2010; Whaley 2011; Faraone 2001; Hillman 2008). For the positive attributes have been associated with the privileged whereas the negative effects have been passed on to the scapegoat, the pharmakos, which have included women, foreigners, and the artisan *techne* itself (let’s not forget that certain artists have been banished from Plato’s *Republic*, and today they are still accused of “demoralizing” the Youth in moral panics), which is symptomatic of the containment and replication of repressive structures.

The action of *cutting* strikes at the root of the *pharmakon*, and as such, should be taken as a *techne*, which is also a cutting, for which the Slavic equivalent of *techne* would descend from the Proto-Balto-Slavic *téštei*, which

in Polish has become *ciosać*, a word that designates the work of carpenters, to hew, to give shape and form through the cut that is at the root of the *labor* (as a birth) of all assembly, which is constructive and destructive at the same time, and never in opposition, but a composition, a *différance*. The power of the *cios*⁴ equips the arms since the *arm* can be extended and opened to shake someone's hand or shaped into a fist to strike them down.

Considering the above, the social cut is also present in what we may call discipline or conduct. There is a right behavior assigned to sitting at the table, to the *savoir-vivre* of consuming food, a privileging of the use of the right hand over the left, there is a proper way to appreciate art, and a correct version of scrutinizing goals. Behavior is the unthought *arche* of philosophy, which tries to deliberate this problem in terms of: φρόνησις–phronesis (wisdom of useful skills), ἦθος–ethos (ethics as habits), πράξις–praxis (doing), ποιέω–ποιέō (making), of τρόπος–trópos (a manner), ὕβρις–hubris (overconfidence or pride), εὐκοσμία–eukosmia (decency or good order), παροιμία–paroinia (drunken conduct), or σκαιούργημα–skaourghma (left handedness as ill-behavior, malice, cunning, treachery, or foolish action). Behavior as a *techne* was unthought since it was a natural movement of the cosmos, of order, and of orderly behavior. The ethos of music was to instill masculine and feminine behaviors into its practitioners, catharsis was to wash away any lingering acting-out and misbehaviors from the fabric of society since Ancient Greece. It was not until the 20th century did behavior become seen as an operant or re-active *medium* for scientific manipulation with the advent of behaviorism and for artists to cut, to shape, and to form in the form of the avant-garde. We can see this notably: in the works of Stephen Willats's *Centre for Behavioral Art* at Gallery House in London in the early seventies of the last century, that contributed to the development of conceptual art in terms of the creation of the practices of *performance*; and in the Cuban *Cátedra Arte de Conducta* of Tania Bruguera, who *cut* her behavioral art school's life short in rebellion against the Western practices of performance.

I adopt the artist Bruguera's view that the term "performance" is one that privileges contemporary anglo-centric Western culture and legitimizes established neocolonial market institutions of what Annie Le Brun calls "globalist realism," that is, a "shock" or disaster capitalism (Klein 2008) understood by me as a mutation of socialist realism of the Soviet Union (Le Brun

⁴ Polish: hit or blow, as in punch—the equivalent in French is *coup*, or the Ancient Greek κόλαφος, which is to strike with the fist, treat roughly, or to afflict and toss to and fro, which in Polish is *kłuć* or *kłóć*.

2018). Contemporary art occupies both private and public environments, i.e. tangible, everyday social relationships, including the transformation of daily life and in particular its aesthetic framework, which is what Bernard Stiegler describes as an “aesthetic war” (Stiegler 2014a) that is waged through marketing and the Le Brunian art market. Given that the issue of “lifestyles,” or everyday behavior, has always played an essential political and moral role in the eyes of activists and theorists alike, contemporary art, according to Le Brun, is now aimed at producing an effect of consternation or shock on as many people as possible. This, for her, is part of the ideological as well as emotional undertakings that are carried out on a massive scale. Le Brun writes: “Just as the Soviet regime aimed to shape sensibilities through socialist realist art, it seems that neo-liberalism has found its equivalent in a certain contemporary art (Koons, Hirst, Kapoor, Cattelan, etc.), whose energy is being used to establish the reign of what I would call globalist realism. The difference is that, in order to exert this global influence, there is no need to rely on representations edifying from a specific ideology. For it is no longer a question of imposing one conception of life over another, but essentially processes or devices [*dispositifs*] that are in perfect harmony with those of the financialization of the world. And if the terror of ideological totalitarianism is here replaced by the seductions of market totalitarianism, the specificity of globalist realism is to invite us to train ourselves” (Le Brun 2018, 36).

This would then be a self-training or auto-behaviorism almost reminiscent of machine learning, and a form of self-discipline that corresponds to what Stiegler calls symbolic misery, which is a reduction (and hence a loss) of subliminal motivation or desire (way of diverting energy) to desublimated impulsive drives designed and engineered by the market’s use of behaviorism and psychoanalysis (Stiegler 2014; 2015). The stake of behavioral aesthetics is one of political and economic control over long-term processes of social and psychic individuation, that are not subordinated to short-term selection criteria of the financial market. Accordingly, I use the term behavior just as Bruguera had proposed within the methodology of the *Cátedra Arte de Conducta* in Havana. She claims: “The fact of being unable to pronounce the word performance well also made me think quite a lot whether I wanted to do something which I did not entirely master, precisely because, culturally, it did not belong to me. [...] The word ‘behavior’ that until then I had seen only related to manners—twice seven years apart—came to me and was redefined: first, as the name of a school which actually was a mild prison, with no bars; second, as a statement of power. When looking for its

translation, I saw it was also associated with movement, conduction, from one point to another." Whereas, "[...] Performance is already an Academy with a tradition against which we should work" ("Tania Bruguera | Debates (about Behavior Art)" n.d.).

Summary and Conclusions

In this double article I have proposed paying attention to the materiality of behavior, which stems from studies that address the philosophical question of the general origin of behavior and life itself. The article's structure arises from my readings of Bernard Stiegler's philosophy, which I developed with my text's authorial agency and a methodological mode of rhizomic writing. I did not intend to develop a central narrative; instead, I proposed theoretical explorations of topics conceptually organized as performative cays. They were situated above as islands of art and music philosophy, as well as more general philosophy concerning embodiment, cognition, and behavior. The conceptual *default* of behavior is lacking, and necessarily inadequate, and popular definitions generally overlook the activity of matter and the materiality of behavior. These approaches define behavior in abstract immaterial categories. Devellennes and Dillet claim that Stiegler is a Derridean new materialist thinker or at least is worthy of the attention of new materialist researchers, advancing technics to the forefront of new materialist agenda. Thus, I have explored behavior here in terms of *tekhnē*.

In Part One, I theoretically navigate the material relationship between behavior and the sensible. Sensibility is assumed to stem from organologically sculpting modes of perception and sensitivity that grow with material mediums. I theoretically refocus phenomenology on behavior in order to develop the mattering of retention as habits. My proposal consists in the development of this understanding to include a new materialist approach to the phenomenon of human behavior, which cannot be reduced to organized organic matter. In terms of a phenomenological behavioral retention that I advance in this paper, the habits of organizing organic and inorganic matter actively resist and anticipate the forces of dis-organization. In other words, behaviors are metastable repeated traces intra-acted between the habituations of both organizing organic matter and organized inorganic matter. The libido, desire, or historic transformations of the experience of the sensible, emerge within the boundaries of the relationship intra-acted between the living and the animating "dead." Life is understood by Stiegler as an active, temporary and localized, struggle against rises in entropy, as anti-entropy and as its dialectical negation, negentropy.

My approach follows a theoretical exploration that develops the Stieglerian undecidability and *différance* of the who and the what that is posed in the problem of anthropogenesis/technogenesis. My development focuses on behavior rather than action and performance because I view behaviors as technologies, repetitive programs subject to phenomenological retention and protention that form lifestyles. However, because of transduction (resistance) of the flow of captured energy, intra-acted behavior is always threatened by the possibility of its spontaneous extinction. In turn, I understand action in an Aristotelean fashion, as the materialization of potential energy—as in “passing to the act.”

In my proposal of considering behavior in terms of its materiality, I indirectly approach debates about actions and intra-activities in Art Studies. Stiegler’s philosophy advances the pharmacology of cutting and an organological analysis of the project of behaving. The agential capacities of various behaviors and habits are ones that follow or derive from agential cuts that are performed within the world’s intra-activity. The who or what is humane is constitutive of urbanity, civility, that is constantly threatened by regression and requires care. I also philosophically thematize the double meaning of behavior within the dual composition of the pharmakon.

In the subsequent section of the article, I explore problematic definitions of behavior, which I understand philosophically as a phenomenon of existential retention and protention in matter (being and having). They signal that behaviors are general, repeatable, and controllable processes of organologically amassing already constituted relationships through established retentions between an organism, its environment, and itself. These definitions consider behavior as an abstract function or property of matter, including living and dead organisms. Obviously, there is a relational and regional history to the behaviors of matter, and this history is an important factor in the development of various artistic techniques and accidents. So, when thinking of the habits of organizing organic and inorganic matter constitutive of temporally organized endosomatic and exosomatic movements, I propose that the appropriate method for advancing the study of behaviors would be through general organology by using a common analogy to wood. Behaviors selectively develop in terms of their looks, feels, and complexity. Behavior can undergo quantification and repetition. Two considerations were provided, one in Heideggerian terminology in terms of presence-at-hand and readiness-at-hand, and the other in Merleau-Ponty’s modes of being in-itself and for-itself. So, the problematics of behavior in terms of its definition revolve around equivocal definitions that tend to overlook the mattering of existential retention.

Part Two of the article consists of a composition of exploratory says that relate with how behavior is material and how its meaning is practiced. I explore the situation when we say a certain behavior matters. Matter cannot be separated from the *esprit* or mind, and it cannot be isolated from other matter. Aesthetics is thought of as a philosophical practice of making-sense and selections. I explore the existential implications of the perceived phenomenon of “be-having” that becomes constitutive of states and disposition, or habits. Analyses that do touch upon the subject of behavior usually stop at banal conclusions that art challenges habits and fixed mechanistic behaviors, which ignores the ongoing iterative and performative processes of habits (hexis), which materialize. Art (techne), generally understood, is a working of habits and a fixing of aesthetically (sensory, feeling) orientated behavior that is not a mechanistic fixation. If we take an understanding of sensitivity as causal prefixed and determined reactions, which is to say that of the pair stimulus–reactions, then we fall into the trap of fixing the flesh into closed reflex system models, where stable unchanging systems need to be thought of as in place. This is to say that behavior’s materiality is at once a perceptual (techno-epistemic) and an organological (ontic) problem. I do not have in mind the problem of habits as forms of fixed, mechanistic, never changing behaviors. I develop this in relation to the way musicians learn to behave.

By abstracting from the above-mentioned discipline of music, I generalize: all artwork is work that is a working of the artist by the material behavior that the artist “caripulates,” which is a term I have developed in relation to manipulation. In order to become consciously aware of our own behavior, it must be submitted to a process of scrutiny and criticism by others, which is a factor of stimulation that changes the original behavior. I have formulated three distinctions of behavior with the support of Bernard Stiegler’s analysis in the series *Technics and Time*. I understand them as marks and traces, techniques and technologies, from which consciousness and its memories as selections, that must include their protentions, come. When it comes to tertiary retentions, the recorded trace, which is organized inorganic matter, then we have come to live in an age where an exact repetition of a behavior is possible. Moreover, this exactitude of behavior is no longer something for the distanced gaze, of watching and re-watching various fantastic behaviors on the screen.

Pharmacology is a philosophical term used by Stiegler and originally developed by Plato, Michael Rinella, and Jacques Derrida. When saying matter is active, I understand it as matter that can be the source of aesthetic reac-

tions as well as bodily and social changes. In a “pharmacological” research perspective, then all matter is active in some regard. For the philosophy of art this could include any process that is beneficial or destructive, negentropic or entropic. The philosophical application of the pharmakon has given rise to the understanding of the pharmaco-logical as the discussions and theories organized by pharmaka. Dug-up roots and herbs that require cunning in their caripulation also interact with the flesh, which can grow or decay. The action of cutting is relevant to the notion of pharmakon, and as such, should be treated as a *techne*, which is to give shape and form through the cut that is at the root of the labor (as a birth) of all assembly that is a composed difference which is constructive and destructive at the same time. Behavior as a *techne* was unthought since it was considered a natural movement of the cosmos, of orderly behavior. The ethos of music was to instill masculine and feminine behaviors into its practitioners, *catharsis* was to wash away any lingering acting-out and misbehaviors from the fabric of society since Ancient Greece.

Therefore, the open, exploratory and active work of shaping thinking above is a theoretical proposal of paying attention to the materiality of behavior, which is considered as a kind of repetitive memory that individuates the Self and its associated milieu. Behavior, as an art or *techne* that cuts and gives shape to taste, is revalued in its conjectural habitual technicality as an ordered transformative socialized procedural habit (*hexis*). I note that hyper-industrial aesthetics consists in the programmed behavioral conditioning of responses and in learning how to pay sensory attention, or how to focus on the material sources of beauty, pleasure, reward, and so on. The industrialization of making-sense enacts a cognitive modification of the ways humans process various sensory stimuli, such as works of art and entertainment, according to selections (memory). As a *techne*, behavior is pharmacologically active, so it is a matter of “chemistry” or “magic,” which manifests aesthetic dissonance (cuts of discomfort and comfort, emotional labor balancing satisfactions and frustrations) and the organological growth of artificial, physiological, and social bodies. Standard definitions of perceived and measurable phenomena of behavior overlook the activity of matter, which contains its own agency and meaning. Technique is considered an important type of appealingly shaping or stylizing behavior, which is more of a philosophy (analysis of meaning) or an art (expression and crafting of the Self in its retained organized ways of possessing its own being) than a science (instrumental).

Each behavioral technique is constituted by procedural, ongoing iterative and performative growth processes, habits [ἔξις, ἔθος], which are special temporal selected movements that influence the intra-active tendencies of both organic and inorganic organized matter. Behavior does not “exist.” It appears and disappears. It is phenomenologically interpretable and temporal. As a *techne*, it orders the passage of time and happens in time. It can be ethnically cultivated and historically passed down (inherited) through the generations. Behaving can be judged in terms of its beauty, it can be well-done, or poorly executed. It is also saving and dooming.

Hence, behaviors have their aesthetics and are phenomena that qualify for greater philosophical review, at least via the problems of their presence-at-hand, readiness-at-hand, or considerations of behavior’s ambiguity for-itself (subject) and in-itself (object). Behavior freed from the baggage of mechanistic behaviorism necessitates considerations in terms of its aesthetics, as tastes in *savoir-vivre* and *savoir-faire*, also understood as the origin or *arche* of all art, which is rooted in ordered gestures and movements that shape exosomatic organicity: material artifacts (artworks and technics), organizations and institutions (etiquette), and bodily sense perception itself (physiology).

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Merja Aletta Ranttila, Niin kauas kuin lennän (So far as I fly), 1996.

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