

## **Pandemicity and Subjectivity: the posthumanist vulnerability of the zoe/geo/techno framed subject**

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### **Abstract**

The COVID-19 pandemic has caused unprecedented global disruptions, including a fundamental alteration to how humans exist. In this paper, we argue that the disruptions brought forth by the pandemic have provided us with a new perspective that allows us to better understand the various entanglements that are constitutive of the beings we are, but that also render us fundamentally vulnerable. Grounded in a posthumanist material feminist position, we adopt a view of matter as entangled and embrace the notion of agentic capacity while elaborating a definition of posthumanist subjectivity and its peculiar vulnerability. Building our analysis on Rosi Braidotti's formulation of the zoe/geo/techno assemblage, we further develop this frame navigating through the different entanglements that constitute the posthumanist subjectivity we scrutinize, considering each type from the perspective of the pandemic. As we argue, the increase in one type of entanglement at the expense of others may be generative of new possibilities but can also limit our thriving. What defines us as humans is the fact that we are constituted via the threefold entanglement of zoe, geo, and techno, radically boosting one and diminishing the others—purposefully or not—is bound to have significant impacts. Further, we claim that we cannot in fact isolate one type of entanglement from the others: each impacts the other as they themselves are also entangled.

## Keywords

Vulnerability; Material Feminism; Posthumanism; Subjectivity; Pandemic.

## Introduction

The COVID-19 pandemic has caused unprecedented global disruption. Humans have been relegated to their homes through various isolation and quarantine orders and have seen their interactions with other humans and the world altered in very significant ways. So-called “normal” daily life stopped, and every outing needed to be taken with care. A lot of people either lost their jobs or were relegated to the private space of the home, further jeopardizing the already precarious work/life balance. We have had to “re-invent” ourselves and the pressures have been experienced in very different ways depending on one’s gender, ability, race, class, etc. Across these differences, however, most have experienced a fundamental alteration to the human mode of existing. While this may have been experienced in a painful way, the sudden and extensive disruptions brought forth by the pandemic have also provided a new lens through which we can understand ourselves, magnifying and bringing to light the various entanglements that are constitutive of the beings we are.

To be clear: the pandemic did not generate these entanglements nor is the intention of this paper to provide yet another reading of the pandemic through the lens of posthumanist ontology. Rather, we wish to highlight that an event of this scope allows us to see more clearly what entanglements constitute us and how, especially when they are reduced or significantly altered. The zone of discomfort brought about by a crisis allows us to understand ourselves and the extent of our entanglements and related vulnerability better.

We adopt a posthumanist material feminist view of beings informed by the philosophies of Stacy Alaimo, Karen Barad, and Samantha Frost, among others, and discuss the concept of posthumanist subjectivity. We use feminist neomaterialist theory to develop Rosi Braidotti’s notion of the zoe/geo/techno framed subject presented in her 2019 book, *Posthuman Knowledge*. We therefore adopt a view of matter as entangled and embrace the notion of agentic capacity that posits agency well beyond the willful agency exercised by human consciousness. The world is an

entanglement of beings and their agentic capacity, which creates a vibrant and dynamic network of relations that is always shifting. This perspective entails understanding events such as the pandemic in terms of an intensified dynamic shift in this entangled world. As such, the agentic capacity of a tiny being, the virus, is extensive and causes the whole entangled network to be affected and to change and the entangled individual beings within it to readjust and reconfigure their entanglements. This causes disorientation and distress since beings thrive on the entanglements they are familiar with—albeit unconsciously—to go through life. For humans, this means some balance between interpersonal, material, and technological entanglements—a balance each and everyone has learned to negotiate for themselves. It also means that we must conceive of beings as fundamentally vulnerable: their openness and connectivity with other beings and the world makes them what and who they are. Vulnerability is a double-sided concept: we must exist as vulnerable and yet this vulnerability also potentially endangers us.

Building our argument on a posthumanist concept of subjectivity and vulnerability, we consider the pandemic – with its sometimes severe limitations placed on “real life” – as a fertile setting through which we can better understand the multifaceted entanglements we aim to explore. In response to the situation created by the pandemic and the, sometimes severe, limitations placed on “real life” we read subjectivity as constituted via this threefold entanglement of zoe, geo, and techno and posit that radically boosting one and diminishing the others—purposefully or not—is bound to have significant impacts. Further, we will claim that we cannot in fact isolate one type of entanglement from the others: each impacts the other as they themselves are also entangled.

### **Posthumanist Subjectivity and the spectre of the pandemic**

The disruptions brought forth by the pandemic have affected the ways in which different subjectivities experience the various entanglements that constitute them. For multi-entangled subjectivity to thrive a serious redefinition of the boundaries of the subject is required. This is not an easy task for a posthumanist: the posthumanities themselves arise in clear opposition to the roots of exclusion, marginalization, and hierarchy posed by the human(ist) subject. Further, one must be

wary of providing a definitive answer to the question “what is the posthumanist subject?” for fear of providing yet another narrow notion. Posthumanist material feminism provides tools for dismantling the solid boundaries of the subject erected by the hegemonic strand of humanist, ethno-centric, specieist thinking of modernity. It proposes a critique of the autarkic monolithic individual of knowledge along with a re-evaluation of materialism starting from the agentivity of matter and life itself. Nonetheless, the move to bring the *Earthbound*<sup>1</sup> to the fore through a posthumanist focus-shifting exercise could lead to a flattened ontology, exposing a material posthumanist subjectivity to the risk of losing the ethical and political potentiality that may have been the strength of the humanist subject.

Material feminism and critical posthumanism focus on the immanence of relational exchanges within materiality and their performative potentialities (Dolphijn & van der Tuin, 2012; Barad, 2003), the vibrancy of matter (Bennett, 2010), the power of the natureculture hybrids (Haraway, 1991), and the intra-active agentivity and energy shaping organic and non-organic entities (Barad, 2007; Frost, 2016). These are fundamental to a wider recognition of the assemblages obscured by the Eurocentric notion of “the subject.” A more complex and heterogeneous web of agencies and agentic capacities constitutes living and non-living creatures. As posthumanists, we remain concerned with the complicated task of thinking subjectivity and, using the framework of feminist materialism, we construe it as embodied, exercising actual agentic capacity, able to enact and perform changes and to be affected at the same time. A posthumanist subjectivity keeps together the many entanglements of bodies and the earth, the partiality of situated perspectives, and the non-human/more-than-human otherness, the new techno-hybrid forms of life, and the need to preserve some aspects of the givenness of zoe.<sup>2</sup>

Among critical posthumanist feminists, Rosi Braidotti stands out as one who keeps the focus on the situated political vocation of subjects. We are embedded and embodied (Braidotti, 2019) and, as such, have ethical and political responsibilities. Following Braidotti we propose a specific understanding of the concept of subjectivity

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<sup>1</sup> This term is the English translation coined by Donna Haraway (2016) of Bruno Latour’s concept of “Terriens” which he opposed to human beings as subjectivities bounded and reliant on Earth’s (Gaia) agency. See Bruno Latour 2014 and 2015.

<sup>2</sup> The concept of zoe will be further analyzed below. The expression “the givenness of zoe” points indeed to the materially inherent feature this concept preserves and that exists (“is given”) regardless of how human knowledge considers it.

that is not merely considered as the pure inscription surface<sup>3</sup> of power relations, nor the autarkic “One” which refers to the human being of the mainstream version of Enlightenment thinking. Moving away from the self-referential game of identity recognition that excludes all kinds of “othernesses”, we propose to focus on understanding *what a subject could be* in opposition to the normative-descriptive philosophical habit of analyzing *what a subject is*. In this way, we aim to foster the ongoing consideration of both the dis-identified human subjectivities and the non-human, organic, techno-framed and even non-organic beings as protagonists of the posthumanist assemblages.

This broader notion of subjectivity is non-definitive and non-normative—all the while being held accountable for its agentic impact. A posthumanist subjectivity truly is a becoming, a making-with—a sort of relationality—and intra-active materialization of connections<sup>4</sup>, able to escape reductionist dualisms. By refusing the Kantian notion of the subject as the center of knowledge and criticizing the Western affirmation of the human subject craving identity recognition, the posthumanist perspective gradually weakens this privileged position. As a becoming-subjectivity, the posthumanist subject seeks affect laden, unexpected alliances (Lykke 2018). As a flourishing of multiple agentic capacities that resist the stance of a singular identity, this posthumanist subjectivity, as we explore it, is a zoe-geo-techno assemblage (Braidotti, 2019). Instead of being a fixed identity, it shares the exceeding vitality of zoe, a partial and situated perspective of the geo, and the techno-poiesis transformation of the contemporary era. The twofold movement of the epistemological shift and the account of more-than-human agency is what constitutes our critical posthumanist re-evaluation of the subject and a paradigm shift from the modern anthropocentric conceptualizations.

Our experience of pandemicity has generated conditions—shifting significantly our zoe/geo/techno entanglements—through which we can gain insights about the posthumanist subjectivity we have always been. The major disruptions “initiated” by

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<sup>3</sup> Braidotti’s work is definitely influenced by the political philosophy of Michel Foucault. Knowledge production, cartographies of practices, the centrality of bodies and power relations are concepts that are always taken into account in her thought. It is thanks to this approach that a dismissal of subjectivity is impossible. Nonetheless, the critical posthumanist perspective developed by Braidotti needs to consider the powerful agentic capacity of bodies and the *potentia* that springs from them. Posthumanist embodied subjectivities participate in prismatic entanglements: power relations do not shape them and affect them as rough matter or as pure “inscription surface”. See Foucault 1978.

<sup>4</sup> In this sense a posthumanist materialist subjectivity follows the theory of agential realism given by Barad.

the action of a being—Sars-CoV-2—traditionally conceived as not exercising a clear-cut agency, are still ongoing in human and non-human animal lives, thereby demonstrating this being's great agentic capacity. The globalized and interconnected nature of human society has facilitated the massive circulation of Covid-19, but more: the pandemic tells us something about the assemblages we inhabit and we are. So far, several posthumanist thinkers have provocatively re-drawn da Vinci's perfect and performing figure of the Vitruvian man, replacing its supposed ideal body with that of historically marginalized subjectivities. Women, animals, cyborgs, and even transpecies could figure in these redrawings<sup>5</sup>. Once we fully recognize the intra-active relationality of different agentivities affecting and composing the multi-entangled reality we inhabit, not only can we account for different agentic impacts—and therefore for a different understanding of ethical and political *response-ability*—but even a tiny being like the virus can occupy the position of “measure of all things.” With respect to the pandemic, this is exactly what happened: a non-exceptional event indeed—the unfolding of entanglements—has been perceived as extraordinary—re-writing for instance, our routines, our productive system, our globalized capacity for mobility—only because we have never accounted for our entanglements and our “making-with” the alterities in the first place.

One of the founding philosophers of the posthumanist turn, N. Katherine Hayles, has recently taken into consideration the suffering generated by the proliferation of the virus. Doing so, she reads the impetuous force of matter's agency into the dynamics of the pandemic, focusing on evolutionary potentiality. The virus has caused a crisis for the dominant species: “[I]t reminds us with horrific force that although humans are dominant within our ecological niche, many other niches exist that may overlap with ours and that operate by entirely different rules” (Hayles, 2020). Following Hayles, we reiterate that the COVID-19 pandemic should not surprise us: other agentic capacities, such as that of a tiny viral RNA, are showing humans how misleading it has always been to consider ourselves the most influential life form on the planet with our supposed mastery over nature. Sometimes, other subjectivities appear to be stronger, more powerful and pervasive than the best, most refined hyper-technologies humans

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<sup>5</sup> See Tsing 2017.

can design<sup>6</sup>. We are only starting to account for the many entanglements we are embedded into because our very lives and supposed uniqueness are threatened. Once more, we end up reproducing the negative dualism of us against the other, reproducing the exclusionary dualism and the immediate dynamic of inside and outside and pitching the virus as the alien other insofar as it threatens our existence—instead of conceiving it as having always had an agential capability and a constant relationality with other subjectivities (whether destructive or not)<sup>7</sup>.

Let us consider some models of contemporary posthumanist subjectivities such as Dolly the Sheep, the first cloned mammal<sup>8</sup>, and Nadine, the female humanoid robot working as a customer service agent, and the Matsutake mushroom at the core of Tsing's work.<sup>9</sup> They are non-human others, creatures inhabiting our posthuman times, animal, fungi, or gynoid existing and employed in the socio-cultural territories of scientific research and human histories. Nadine and Dolly are human-made, non-born of a woman (Haraway, 1997), techno-embodied entities: in their beings, the *techno* feature of the assemblage, that is discussed further below, is the most prominent. Matsutake fungi's existence in the apocalyptic ruins of industrial capitalism, by contrast, resists due to the zoe-geo potentiality of their assemblage. Nonetheless, it is not their enhanced techno or zoe entanglement that makes them "posthumanist

<sup>6</sup> Hayles would not use "subjectivities" in this way. Some of her argument here is based on her 2017 book, *Unthought. The Power of the Cognitive Nonconscious*. In it, she argues that there are nonconscious cognitive processes, both biological and technological, that perform important functions for life to unfold. She claims, that while "technical systems cannot be fully alive, they can be fully cognitive. ... *Cognition is a process that interprets information within contexts that connect it with meaning.*" (2017, 22) These nonconscious processes are the conditions of possibility for consciousness and reason to develop. Importantly, for Hayles, it is impossible to disentangle beings or processes. She says "The better formulation, in my view, is not a binary at all but interpenetration, continual and pervasive interactions that flow through, within, and beyond the humans, nonhumans, cognizers, noncognizers, and material processes that make up our world." (2017, 32-3) Agencies are to be found across these relations but "the capacities and potentials of those agencies are not all the same and should not be treated as if they were interchangeable and equivalent." (2017, 67) Hayles' position also informs our analysis here.

<sup>7</sup> The agential capacity of the virus is of course always ambivalent. While it is true that there are positive affects of the pandemic, such as the global reduction in CO2 emissions (see Le Quéré et al. 2020) these have only been temporary, so much so that once life and the production chain was readjusted after the early days of hard confinement, emissions bounced back (Tollefson 2021). Not to mention the millions of deaths and individuals left with lifelong disabilities associated to long-Covid. It appears the negative effects outweigh the positive ones, making it challenging to "inhabit the trouble" (Haraway 2016). Still, we believe, on this point, that an ethical reflection on the agency of the virus should not go in a direction that highlights its negative and positive aspects on the basis of a value judgement. Considering the agential relationality of what we call posthumanist subjectivities – that are always entangled and not unrelated – means being able to account for them as part of dynamics that hold human and non-human together. This perspective should enable us humans to stop ignoring the fact that we only inhabit this planet, and therefore perhaps avoid disruptive suffering such as the one generated by the Covid-19 pandemic.

<sup>8</sup> Dolly's case has been discussed by different posthumanist thinkers (e.g. Braidotti 2009 and 2013) as an example of the contemporary embodied Other allied with the marginalized subjectivities, sometimes as a cyborg and sometimes as posthuman alterity.

<sup>9</sup> Nadine was created by Swiss-Canadian scientist Nadia Magnenat Thalmann, an eminent computer-graphic scientist who crafted and programmed the gynoid, making her look like her. Nadine "has" a personality and can express moods. She is capable of anger or happiness (maybe also vulnerability?) according to how she is programmed. For a closer look at Nadine see Baka et al., 2019. As for Matsutake mushrooms, see Tsing (2017).

subjectivities". Rather it is the fact that they are not entirely "standard" creatures still enacting changes as material agencies interconnected with other worlds. The unease they represent widens the concept of subjectivity itself by going beyond anthropocentric perfectible models. Their partiality, due to the historical marginalization produced by the humanist anthropocentric view, is what we consider as the hallmark of posthumanist subjectivity. Ultimately this posthumanist shift allows a revision of the epistemological and heuristic function of what is to be considered "subjectivity," emphasizing the perspective of many non-human others as valuable and dismantling the epistemological privileges posited by human exceptionalism.

Creatures like Dolly, Nadine, or the Matsutake raise the questions: is *the subject* queer? The cyborg? The migrant? The CRISPR edited animal and/or plant<sup>10</sup>? Is it maybe the lab creature or the high-risk extinction species? The posthumanist subjectivity we advocate for here does not seek the mere rehabilitation of minorities: no one needs to be adapted to, or oppressed by, a unique model any longer. The ambiguous traits which escape from the identitarian recognition of "the subject" make us evaluate positively their vulnerability and, therefore, their ethical and political potentiality.

Existing as a posthumanist subjectivity entails embracing the prismatic world of the entanglements composing us. The posthumanist framework, together with intersectionality and decolonial studies, reframe the concept itself and what it means to be vulnerable in an affirmative way.

## Posthumanist Vulnerabilities

As entangled beings—subjectively and materially—we are necessarily vulnerable. What does this mean? Turning to physics (Barad 2007) and biochemistry (Frost 2016) allows us to understand that the matter constituting our bodies and our selves is dynamic, vibrant, and itself a field of relations. Particles interrelate and interconnect to constitute atoms, molecules, cells, organs, etc. Our bodies are permeable bundles through which multiple traffic occurs.<sup>11</sup> The many permeable membranes of our

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<sup>10</sup> Capasso and Santoemma 2020.

<sup>11</sup> To capture this, one may want to use the Deleuzian term "assemblage" or the term "mangle," as Susan Hekman does, borrowing it from Andrew Pickering (2014). Whether one uses "bundle," "assemblage," or "mangle," one must always keep in mind that this is never fixed, always dynamic, in the making.

bodies allow for the traffic of molecules necessary for our life to exist, the most obvious example being the air exchange occurring in the lungs. As Frost puts it, no traffic through membranes, no life (58). Our bodies are permeated in many different ways by external substances and particles, ones we willingly ingest for our pleasure or sustenance and others we are unaware of and which, at times, make us into toxic bodies. Our transcorporeal beings are open to the world and less than autarkic (Alaimo 2010; 2016).

We are also entangled subjectively, and the subjective intertwines with the material in ways that render them inseparable. Existentialists and phenomenologists—such as Beauvoir, Sartre, and Merleau-Ponty—along with structuralist thinkers—Foucault most prominently—have recognized the constitutive role that intersubjectivity plays in making a subject but also the importance of situation and institutions of power that permeate our existences. In the case of the human, therefore, its being is constituted materially and subjectively via these manifold relations, exposing the individual to various modes of self-constitution including its own relation to itself and to its situation.

Our openness to the world and to others—the fact that we are permeated by them just as much as we permeate them through our agentic capacity—renders us vulnerable. But this ontological fact is not to be understood merely negatively. We want to distinguish the posthumanist notion of vulnerability from the notion of precarity as discussed by Judith Butler (2004; 2009). Butler's analyses of grievable lives and precarity are essential and certainly provide a clear understanding of various social structures of power and how they lead to the dismissal of entire groups of humans, those whose lives are not grievable because they are not recognized as valuable or even human. These analyses can support social and political movements toward inclusion and equality and should not be dismissed. As Susan Hekman puts it, "[a]ddressing the exclusion of some subjects from the realm of being must become our foremost political priority. Our politics must be oriented around broadening the norms that define human life, who counts as grievable and who doesn't" (2014, 182-183). Butler's more recent work (2020) has pursued this as well. As important as her analyses are, however, we need to supplement them to include considerations on materiality and nonhumans as well. Rosalyn Diprose (2013) has rightly pointed out

that the role played by non-human elements is often disregarded in discussions on precarity and by Butler in particular.

How do we define posthumanist vulnerability? Deconstructing the word and examining its etymological root is a good way to start. As Diprose points out, the Latin “vulner” means “to wound” and the usual meaning we attach to “vulnerability” is “to be susceptible to physical or emotional injury. [This understanding of vulnerability] assumes that the body is normally well-bounded and should remain so” (188).<sup>12</sup> But this cannot apply to the entangled subject. We need to take vulner—ability<sup>13</sup> in a different sense. The entangled subject is vulner—able since it is a body that does and undoes what it interacts with. It has the ability to wound, yes, but mostly to affect.<sup>14</sup> The Latin “afficere” would be more appropriate and “affect—ability” a better way to describe what actually goes on. Being entangled in that affective fabric, our being is not only on the giving end of “wounding” but on its receiving end as well. To wound is to affect; to be harmed is also to harm. We are not self-contained entities interacting with one another. It should also be understood that “ability” here does not point to any kind of strong willful autonomous agency. Instead, we are dealing with agentic capacity which is often expressed via intentless action.<sup>15</sup> This makes us, through and through vulner—able as affect—able.

Most often we seek to guard ourselves against vulner—ability and attempt to render ourselves invulnerable.<sup>16</sup> It can be argued, however, that in doing so, we cause damage to ourselves and render us “inhuman” (Drichel 22). This amounts to a dehumanization process which impedes our thriving. Instead, we ought to embrace our vulner—ability, first by understanding what it is, and then by actively seeking a multitude of experiences so as to maximize our opportunities for growth. This understanding entails accepting that various positive and negative entanglements will ensue, some

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<sup>12</sup> However, as pointed out by Moya Lloyd, vulnerability ought not to be equated with injurability (see Lloyd 2015, 172). We thank the anonymous reviewer who directed us to this work.

<sup>13</sup> We use a strong hyphen here to emphasize the two action verbs and their impact that are conjoined in the term.

<sup>14</sup> There is an expanding number of works exploring the notion of vulnerability. One can only surmise that the heightened global state of crisis in which we exist—a manifold of ecological, political, social, economic, health crises, all intertwined to various degrees—has led scholars to reflect on our vulnerability. Our article inserts itself in this discussion as we acknowledge that we cannot do justice to the richness of the debates. Daigle is finalizing a monograph that explores these in further details (Daigle forthcoming).

<sup>15</sup> When Frost analyses biochemical processes that occur in the body she uses the phrase “intentless direction” to capture how many of these proceed without any conscious intent. See Frost 2016. These would count as cognitive nonconscious processes as per Hayles. See note 4 above.

<sup>16</sup> Through their pursuit of human enhancement and immortality, transhumanists unveil this desire as their driving motivation.

of which we will welcome and others which we will seek to protect ourselves from as in the simple gesture of putting on a coat to protect our bodies from cold weather<sup>17</sup>. Protecting oneself in this way is a mode of affirmative embrace: one recognizes one's entanglement and vulner—ability and recognizes that, for oneself to thrive, a level of protection that adapts to the entanglement and modifies it is preferable. One may say that this posthumanist vulnerability is an ambiguous potentiality, one we need to understand but keep ambiguous. The focus on materiality and its radical entanglement allows us to understand how our vulner—ability is constitutive of ourselves and other beings—it is the very foundation of life and what allows for life to persist. As such, it needs to be embraced, cherished, and fostered.

Further, posthumanist vulner—ability needs to be read with the diffractive lenses of the multiple entanglements that we, posthumanist subjects, are embedded into and constantly perform. The powerful diverse agentivities composing the assemblages we are intersect to such a degree that we should more accurately talk about a sympoiesis of affections at work in posthumanist vulner—ability, a “making with” (Haraway, 2016).<sup>18</sup> We read vulner—ability along the lines offered by the zoe/geo/techno framed and produced subject.

## Zoe/Geo/Techno Vulner—abilities

First, what counts as *zoe*? Of the three elements of the assemblages composing the material-semiotic figuration of posthumanist subjectivity, *zoe* is foundational and transversal to the others. From a Spinozist-Deleuzian perspective, Braidotti refers to *zoe* as the “materialist concept of nonhuman life” (2018, 3), an immanent vitality unfolding both alongside and within the human-animal embodied life. This vitality

<sup>17</sup> Our thanks go to the anonymous reviewer who offered this great example. They were weary of a tendency to generate a new dichotomy between good and bad entanglements, embracing/rejecting those. We think that it is always a matter of degree and that what matters most is how we respond.

<sup>18</sup> In her latest book *Staying with the Trouble: Making Kin in the Chtulucene* (2016), Donna Haraway recalls the concept of symbiogenesis used by biologist Lynn Margulis in the development of the endosymbiotic theory of eukaryotic cells (Margulis 1981). Playing with this concept, Haraway wants to describe how different agentivities unfold and the way cells, tissues, and living organisms live, evolve, and affect one another in an open and incessant exchange—what Margulis called the “intimacy of strangers.” Lynn Margulis further sustained and supported the symbiogenesis theory against the idea of autopoiesis, known in biology thanks to the work of Maturana and Varela (1974) that coined the term “autopoiesis” in order to study and define the self-creating and self-organizing aspects of the living system as a closed environment. Following Margulis instead, Haraway puts the concept of sympoiesis to work, informing the “tentacular thinking” and re-elaborating the concepts of poiesis and agencies of matter and beings through a more open and intersected web of connections and constant influences in a wider ecological framework. To us, a posthumanist vulnerability is more connected to the web of sympoietic affections than to a poietic self-referential affection.

exceeds the notion of a living being as a rational and conscious being as proposed by modern Western philosophy. The current generic term “life” is rooted in the concepts of *bíos* and *zoé*. In the classical tradition,<sup>19</sup> *bíos* is the concept of life related to the duration of existence which includes the *kind of livings*: the political, the theoretical, and even the life lived in pleasure.<sup>20</sup> For the human being, *bíos* is the discursive life as opposed to the biological one; it is the ethical-political existence, being in the world as a participant of certain cultural, social, and perhaps anthropological and religious habits. When life coincides with *bíos*, it is because it has been understood as an involvement in the *polis*, or more generically in ongoing human affairs, as discursive-rational existence. By contrast, *zoé*, which refers to the non-specific life, ever floating between living beings—human and non-human others— is a sort of life that does not stop nor end, but becomes.

Braidotti’s reflections on zoe-vitality is grounded in a critique of Giorgio Agamben’s political philosophy which rests upon the dualism just described. This critique allows to better grasp the idea of zoe/geo/techno subjectivity and its vulnerability and should be read in her notion of the *becoming-posthuman* of subjectivity (2013). Agamben adopts and problematizes the distinction between zoe and bios<sup>21</sup> and its reception in Western philosophy to focus on contemporary political devices and events. He sets the bios/zoe dualism within the framework of an evaluation of the sovereign form of government, differently understood as a totalitarian regime or the current political form of democracy. The preliminary statement from which Agamben’s reflections originate is the acknowledgement of zoe—which he calls “the biological life”—entering the *polis* or, to use his term, “bare life” (*nuda vita*), the vulnerable aspect of life being made political as an event of Western modernity.<sup>22</sup> Agamben makes this recognition explicit through his reading of Michel Foucault’s analytics of power—above all through the famous concept of biopolitics.<sup>23</sup> Life has been the main acting and playing field of politics; still, for Agamben the manifold production of practices, subjectivities, and

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<sup>19</sup> We are mainly referring to Aristotle and Plato’s philosophies whose distinction between bios and zoe and what counts as life and the living, have mostly influenced the history of Western philosophy and political philosophy.

<sup>20</sup> This is the three-sided conceptualization of bios presented in Plato’s *Philebus* and quoted in Agamben’s famous introduction to *Homo Sacer*.

<sup>21</sup> From now on, we will use the terms in their common and current semantic usage within contemporary philosophy debate—zoe and bios—and not with the Greek transliteration *zoé/bíos*.

<sup>22</sup> See Agamben 1998.

<sup>23</sup> See Salzani 2021 for a better account of Agamben and Foucault’s political philosophies and the theoretical differences between them.

power relations that are inscribed onto the zoe-bios forms of human life do not merely pertain to the development of biopolitics. The whole political power structure of Western thought has unfolded via the inclusion/exclusion of zoe and bios, that is, by means of political operations based alternately on these categories of life. By adopting this reading, Agamben plays with the concept of zoe, putting it mainly in the field of human relations and the cultural-political realm, even if it is conceived as biological life.

Against Agamben's conceptualization of zoe, Braidotti reformulates the political and material agency of zoe and does not juxtapose it to the bios pertaining only to human beings. In other words, Braidotti argues against a flattened concept of zoe that would be made into a function of bios, the human world, and the political arena: "the materialist concept of nonhuman life (zoe) has emerged as central not only as vulnerable 'bare life' [...] but also as a productive and vital force" (2018, 3). Our feminist posthumanist frame of thinking claims zoe as closer to a trans-species life than to the biological side of bios, as if it were part of a two-sided coin. Since it is shared among living beings (or even among the non-conventional living beings such as Dolly and Nadine as discussed above), zoe exists beyond the practical-rational substratum of the subject. If Agamben ties "bare life" with a vulnerable and limited aspect of zoe, the same concept revised by Braidotti in feminist materialist terms differs "from the habit that favours the deployment of the problem of zoe on the horizon of death, or of liminal state of non-life" (2013, 121). A post-anthropocentric shift provides a renewed vision of life and opens up the understanding of zoe as a force that directs the most disparate subjectivity to act and perform its vulner—ability in a double move that affects and is affected upon. Such vulner—ability appears therefore to be distinct from the pure "bare life" which, instead, is vulnerable because it is an inscription surface upon which human power relations will be inscribed.

This reprise of zoe posits a widespread, affirmative vitality, which springs from matter and the multiplicity of ways of being alive and exercising agency, as proposed by Jane Bennett's concept of vibrant matter for example. Since we have realized that there is more than bios and that the agency of life exists as zoe in non-human and even non-organic subjects, it would be misleading to understand vulnerability as mere individual human fragility. Zoe never stops, never dies; it is a life-force shared among material

subjectivities in all their different embodiments and shapes. Even in death, the immanent liveliness of the holobionts and the re-meshing of everything composing life (Haraway 2016) still arises and rearranges itself. This is what the concept of posthumanist zoe-vulnerability embraces: a “scandal, this wonder, this zoe, that is to say an idea of Life that is more than bios and supremely indifferent to logos, this piece of flesh called my ‘body’, this aching meat called my ‘self’ expresses the abject/divine potency of a Life which consciousness lives in fear of” (Braidotti 2002, 14).

The *ouverture* of the zoe-vulnerability cannot be prescriptive, since it highlights how the *vulnus*, the harm produced by the “wound,” complicates human affairs and is never the only one. Rather, being zoe-vulnerable is what makes the posthumanist subject concomitantly perform an affection—affecting another—and be the subject of affection—be affected by the multiple, constantly moving entanglements that zoe permeates. We reconceptualize vulnerability as a polymorphic intersection of agencies and an exposition to the world, “able” to be open to the “other” material forms of life. Being zoe-vulnerable is a collective capability—not just an ability—that could certainly cause harm but also affection, and that defines in any case our openness to the assemblages of the world.

Following this argument, each zoe-vulnerable being can be affected in its specific and peculiar roots, history, gender, and capability. What occurs, however, is that in a culture pervaded by the paradigm of human exceptionalism, zoe is a field of appropriation. Indeed, from this perspective zoe’s vulner-ability has become a battleground and an occasion for exploitative and extractive human actions on different levels: from terraforming and intensive monocultures (Shiva 1993) to unrecognized, embodied bio-labor (Cooper and Walby 2014). Similarly, as non-rational existence, zoe has been re-signified when associated with the idea of a second-rate form of life: a sort of non-standard human existence, like that of Indigenous, black people, women, working class, migrants, and so on.

With this double aspect of zoe in mind—as disregarded by anthropocentric models—we can affirm that the unavoidable openness produced by zoe offers us two perspectives through which we can think the pandemic. First and most immediately apparent, the failure to recognize non-discursive vitality, which materialized in the agentic capacity of Sars-CoV-2 as destructive virality, has generated an enormous

cost in terms of loss of lives and pain. Second, the policies of the various states for managing and/or containing the spread of the virus, which were at times too rigid and at times too lax, have generated a sort of discrimination by considering some existences as hierarchically inferior precisely because they participate less in bios, that rational life that characterizes the dominant type of human being Western rationalities are devoted to. We can think in these terms in relation to some states where the management of the circulation of the virus has failed due to an obsession with preserving economic growth. Mild containment policies *de facto* fostered high rate of life losses especially in marginalized forms of existences in terms of class or ethnicity. Likewise, rigid containment measures operated a similar discrimination as it took the form of rejection of human lives at some countries' borders. This is a phenomenon that persists even as the epidemiological curve improves<sup>24</sup>.

Some of these phenomena are explicit in the context of geo-vulnerability, to which we now turn. It is peculiar, however, that while some bodies are separated by social distancing measures, personal protection equipment, or at the borders when prevented entry or put in detention centers (or quite literally cages), at the same time lives continue to be increasingly and pervasively permeated by the multiple digital platforms that further jeopardize the work/life balance. The connections between the geo- and techno-entanglements and the extraction or rejection of life itself, *zoe*, is due to *zoe's presence at the crossroads of all the entanglements we experience*, something we learned during the pandemic. Even when the whole world was put in lockdown, the multiple relations we are entangled with have continued, albeit in new forms, generating the dis-equilibrium that was brought about and with which we continue to struggle and that has the generative power of *zoe* at its very root.

As creatures living on earth and sharing ecosystems—be they wild, rural, or urban—we are also geo-entangled. As such, the nature of the environments in which we live constitute our beings. This goes well beyond the phenomenologico-existential notion of situation because the very materiality of these surroundings enters the bodies and

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<sup>24</sup> Of course, this improvement tendency is only temporary, as the overall curve going up and down over the last two years has shown us. As the World Health Organization (WHO) has repeatedly claimed, our lack of global approach to the pandemic is contributing to prolonging it, allowing for new variants to emerge with ensuing rise in cases and mortality. Unfortunately, too many countries' leadership do not recognize our deep geo-entanglements. This leads them to engage in nationalistic vaccine hoarding that is highly detrimental to the Global South. Our failure to treat the world is a failure to treat our privileged selves.

those bodies, through their agentic capacity, shape their surroundings and seep into them. There is mutual material co-constitution of beings. Pollutants are found within bodies, just as much as the oxygen we need to live. Whether one lives in a concrete high-rise apartment building in the urban sprawl of a megalopolis or in a century home in the countryside, surrounded by vegetation, wild or tamed, the impact on and constitution of one's being will be different. Exposure to pesticides, for example, is magnified for field workers or folks living in rural areas where they are in use, leading in some cases to increased rates of cancers. Likewise, the large city or suburban division dweller who drives into a city center for work every day is exposed to a different kind of air pollution generated by all the engines powering the vehicles that move people around, in, and out of the city. The connection to and interactions with nature are also radically different whether one lives in one type of environment or another. However, the contrast need not be so extreme between a rural and a megalopolis setting. Even smaller cities contrast with less rural settings. There are all kinds of gradations from the wild to the hyper-urban. We are not trying to describe every type but pointing to the different material settings and surroundings in which beings exist and are constituted. These matter as they shape our way to exist in the world and how we value nonhuman beings and nature as a whole which in turn impacts the policies we put in place that have local, national, and global impact.

But these are not separated in the global world in which we live. The being of the farmer ploughing the land and growing produce is perhaps more closely entangled with the land than the urban consumer of that produce, but the connection and entanglement is always there. It is a matter of degrees. What occurs environmentally at a far distance inflects the geo-entanglement one experiences. The melting of ice caps, the exacerbation of climate change and related increased extreme weather events such as the Australian monster bushfires of 2019 and devastating hurricanes, the decrease in biodiversity, as well as the overall increase in CO<sub>2</sub> production, this all contributes to constituting our beings. Humans and nonhuman animals, plants, minerals, ecosystems, and the Earth system as a whole all do things and they also all suffer things. Their agentic capacities are intertwined, impacting one another. As Timothy Morton puts it, "the more you know, the more entangled you realize you are, and the more open and ambiguous everything becomes" (2010, 17). As our

understanding of the nature of agentic capacity becomes clearer, we can better grasp our geo-entanglements, and thereby our geo-vulnerability. But again, it is not a matter of either embracing or guarding ourselves from the exposure. We must “perform the exposure”<sup>25</sup> (Alaimo 2016) with all the ambiguity it may entail<sup>26</sup>.

In recent years, the agentic capacity of one species has been recognized as the most impactful as a new geological epoch has been named: the Anthropocene. There is not one place on Earth where we cannot find a trace of human action. The nuclear fallout from the 1950s has reached the remotest locations and there is therefore no such thing as a pristine spot on the planet. The concept of the Anthropocene captures the imagination. Indeed, humans ask themselves: How could we have had such a large-scale impact? How can one individual action, compounded with that of a collective, be of such magnitude? This is the outcome of the geo-entanglement which renders us geo-vulnerable.

Another aspect of this is the global nature of the world we live in. Not too long ago in human history, people lived in relative isolation. It was not unusual for someone to spend their entire life in a town and not travel anywhere or, if travelling, to take days to do so. Crossing oceans was a perilous and complicated journey and most often done only once to resettle for life.<sup>27</sup> Foreigners were few and other countries were “strange,” as per the French term to designate them: “l'étranger.” To travel beyond one's national borders was to go to “l'étranger,” the strange world. Foreigners are still referred to as “étrangers.” With the rise in travel, immigration, and enhanced technology fostering instant communication from one corner of the globe to the other, there is not much strangeness left to the world. The world is a familiar place and it is easier to understand how what happens across the globe can have an impact on oneself. The

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<sup>25</sup> This notion of performing the exposure is reminiscent of Judith Butler's suggestion that a more generative dealing with vulnerability is to mobilize it. This, of course, is in the context of her reflections on the political and social forms of resistance that have been the focus of her work in the last few years. She does not want to understand vulnerability as opposed to agency and instead argues that “...vulnerability, understood as a deliberate exposure to power, is part of the very meaning of political resistance as an embodied enactment.” (2016, 22) Vulnerability and how we perform or mobilize it can be extremely generative.

<sup>26</sup> Referencing Morton's *The Ecological Thought*, James Smith points out that just as Morton “advocated the embracing of ecology, even the ugly, the abject and the dangerous, so too must we embrace this danger. We are surrounded by strange strangers, as Morton puts it, eternally strangers and eternally strange by virtue of their strangeness” (131).

<sup>27</sup> It is important to acknowledge that for all too many individuals over the past centuries of colonization, resettling across the ocean was forced on them as they were brought to the so-called “new world” as slaves. A traumatic experience as bad as that of the inhabitants of what was in fact just as old a world as Europe. The Indigenous peoples' lands were taken away and they too were displaced when not outright eliminated. Likewise, the many circumstances leading to contemporary migration—such as poverty, war, environmental crises—force individuals to seek to resettle in what they perceive to be more hospitable countries. Global movement is as traumatic and violent as it can be happy when one goes abroad for a vacation, a research stay, or to conduct some business.

globalized world we have created renders us vulnerable in new ways, as shown currently by the global health crisis created by the virus. While this is not the first instance of a pandemic, the extent of its reach and the global mediatic reaction to it is unprecedented. One could follow its progression in real time through various digital tools and media. Reports of Amazon forest Indigenous people being carriers of a virus most likely originating in China are one of the best illustrations of how geo-entangled and vulnerable we are.

These considerations take us to the last form of entanglement we want to examine: techno-entanglement. In his *Homo Sapiens Technologicus* (2016), Michel Puech argues that the human's way of being in the world is via technique and technology. We are homo technologicus insofar as technology is our mode of inhabiting the world (61). We exist as integrated bundles of body/technique/technology (Puech 30).<sup>28</sup> We have always used *technè* to go about the world and live our lives. But there is a great difference between a stick that helps us pick an apple, a steam engine that propels us on rails, and a smart phone. We now live in a world of accelerated technological and scientific advancements that impact the way in which we exist as subjects. Likewise, medical knowledge is ancient and surgeries have helped prolong or enhance human existence for thousands of years (the earliest evidence of surgery is that of trepanation in 6,500 BCE). But that is at a far distance from the genetic engineering rendered possible nowadays. This may lead us to wonder at which point a scientific or technological advance may be considered frivolous (do we "need" 5G or an even more sophisticated iPhone?) or dangerous (what counts as legitimate enhancement and what as illegitimate?).

We have always experienced techno-entanglement. We have always used tools but they have become more and more sophisticated and more intimate. We sleep with our phones, Siri or Alexa wakes us up (and listens as we sleep), pacemakers make our hearts beat, smart watches monitor our biometrics (and save and sell this data to corporations), cochlear implants allow one to hear, implanted chips allow us to ride public transit by simply waving one's wrist rather than carrying and showing a pass, etc. Technology has become very intimate, entering our bodies in ways that were

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<sup>28</sup> Puech does speak about our existence as grounded in the ecological but does not include it in this bundle. Had he done so, he would have offered a "formula" similar to Braidotti's.

inconceivable not too long ago in human history. Even if we have been cyborgs for a long time (using spectacles, dentures, and other prostheses), the level of sophistication the cyborg has reached is unprecedented but what's more is that we can, with every bit of confidence, expect that today's cyborg will be passé in a short period of time. Indeed, the pace of technological innovation has accelerated greatly. The rotary phone was with us for decades until it was replaced by portable phones, and then smart phones with models becoming nearly obsolete in a matter of a few months. One can easily think of many different examples in this highly advanced society we live in.

While some may question the necessity of continued innovation and think of it as frivolous, it is true that some technologies stand in need of improvement. An example we would like to consider is that of webcams. As they are currently designed, webcams do not allow for eye contact between interlocutors. One either looks at the eyes displayed on their screen leading the interlocutor to look at someone speaking to them but not looking at them, or one looks at the camera leading oneself to experience disconnection as one is not looking in the eye of the person they are speaking to. It seems that a technological innovation that would allow for eye contact while videochatting would be a fantastic advancement. Eye contact is important for communication. But is this what we are missing when we are forced to resort to videochats and meetings due to a situation like the one brought about by the pandemic?

A great number of us have had to retreat to our private spaces. But these private spaces are already and always public because of how they are technologized. Private spaces are zoe/geo/techno-entangled just as much as their inhabitants with whom they are also entangled. At the beginning of the worldwide shutdown, a tweet by @roseannecash circulated, generating a great number of variations in meme form, saying that: "Just a reminder that when Shakespeare was quarantined because of the plague, he wrote King Lear." This generated many responses. First, it is hard to imagine what quarantining at that time might have meant. The media technologies a good number of humans have access to in the 21st century were completely absent then. Being quarantined meant to be literally cut off from the world, except for whatever news the town crier would spread. The tweet generated many reactions and

criticisms because of the pressure it seemed to be putting on individuals to use the lockdown time to be more productive. If Shakespeare could create a chef d'oeuvre, why couldn't you? Aside from the fact that not everyone is a Shakespeare, one can easily see how being quarantined today is not the same as isolation, thanks to our highly technologized private spaces and what they afford in terms of contact.

The phrase "social distancing" has been gradually replaced by "physical distancing" to emphasize that one can still remain socially connected while being physically distanced, which is allowed by all the technologies we use. In privileged settings where wi-fi is available and reliable and computers, tablets, and phones are owned, this social connection is possible. Even a now primitive technology like a landline phone allows for some level of social connection that was not available to someone during the time of a Shakespeare. However, and after months of making a lot of use of these technologies, there still remains that as zoe/geo/techno assemblages we are deeply affected and destabilized. One chunk of our regular "normal" experience is missing: being in the presence of others. Sharing the same space, smellscapes, soundscapes, perceiving the movement of bodies, feeling the other's gaze on oneself as one speaks, etc.: this vibrant fabric of our existence is not rendered possible by currently available technologies. No Zoom party can be the equivalent of an embodied experience of being with others and sharing an experience with them. Maria Puig de la Bellacasa explains that "these new forms of connection produce as much copresence as they increase absence. They do not really reduce distance; they redistribute it" (2017, 109). The attempt to replace "social" with "physical" while referring to the distancing necessary during a time of pandemic is meant to remind individuals that they can still be connected. But the reason this fails to a certain extent is that this surrogate technologized social connection is simply not the same as a real-life connection. The entanglements have been significantly shifted.

What the situation generated by the coronavirus is teaching us is that we have a need to experience ourselves as the interconnected beings we are. If there is a disruption to the normal "balance,"<sup>29</sup> we may even experience physiological responses. The

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<sup>29</sup> By using the term 'balance' we do not mean to indicate that there is some state of equilibrium that is right or good for beings. Each individual strikes for themselves moments of consolidation and stasis in the midst of all the relations and entanglements they are. Major changes bring more important adjustments but adjustments to shifts occurring in the dynamic unfolding of our entanglements are always occurring.

stress generated by the disruption to our normal everyday experience as zoe/geo/techno assemblages expresses itself in various ways. Some people feel exhausted even when they have a proper eight hours of sleep a night.<sup>30</sup> The explanations given—disruption of habits, increase in number of decisions to make, overload of information and negative news, or even the amount of cognitive energy required in the effort to ignore the flow—all revolve around the mind and the increase in activity an unprecedented situation like the pandemic has generated. The mind works more therefore we are more tired. But this is ignoring the largely affective way in which our existences are thrown off. Our chests feel compressed even if we know, rationally, that we are safe. Our guts are twisted in knots, even if we just filled the pantry with essential (and non-essential) goods to consume. Our bodies are fatigued despite the plentiful amount of sleep and lesser physical activity related to staying at home. These are all embodied reactions to having an essential chunk of ourselves suddenly diminished, another one substantially increased, and the balance we have negotiated for ourselves, for our zoe/geo/techno-entangled being thrown off.

What this discussion reveals is that our entwinement with technology is necessary. It shapes our way of being in the world and our way of relating to ourselves and to others. Technology's many affordances—in all the spheres in which we use technological and scientific advances, which arguably is all spheres of life given the nature of zoe/geo/techno entanglements—comes with an assortment of vulnerabilities which are sometimes increased, the more advanced the technological development is. To reiterate, we are vulnerable precisely insofar as we are permeable and entangled. We are entangled in multiple ways and thereby constituted in multiple ways and vulnerable in as many ways.

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Examining posthumanist subjectivity with feminist materialist tools and highlighting the various entanglements that constitute us helps understand the unbalance experienced during the pandemic just as much as this unbalance has provided us a

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<sup>30</sup> Many researchers have explained this phenomenon. See <https://www.insider.com/why-youre-sleeping-more-during-the-coronavirus-pandemic-2020-4>

magnifying lens to understand these entanglements. We have discussed each type of entanglement and vulnerability one after the other to more clearly delineate what each type entails. However, they cannot be taken separately since they are always experienced together. We may think of that as another iteration of intersectionality: in addition to the intersectionality of gender, race, class, age, ability, and neurotypicality, our selves are constituted at the intersection of the operations of the three types of entanglements we discussed—and the intersectionality we are more commonly familiar with operates within and across each. What the pandemic crisis has shown us is that enhancing one form of entanglement—in this case the techno-entanglement at the expense of the zoe- and geo-entanglements—alters our beings in significant ways. A sudden lack of direct contact with the “outside” material world and with various forms of otherness has greatly impacted the encounter between entanglements. We have continued to experience the external world via the virtual and digital spaces to which we are techno-entangled. However, this has changed our ability to be affected and affect and at the same time it has set limits to the collective potential that a posthumanist subjectivity puts into action through these encounters. Any disruption to the ongoing balancing of the various entanglements that constitute us shifts our vulnerabilities and potentialities and creates new ones. The way in which we respond and adapt to the potentialities opened up, grabbing them or rejecting them, also shapes our being and contributes to creating new balances that remain dynamic. Our individual and collective beings are altered through these disruptions and potentialities. This is because we are beings always susceptible to change and material agentivity unfolds through all the entanglements we are bound to, in a permanent exchange, be they with the human, the nonhuman, artificial, organic or inorganic. Our vulnerability and openness allow for us to change, for life to unfold, in damaging and/or generative ways. We have always been like this. The crisis has been the magnifying lens through which we have come to understand how interconnected we are and how, indeed, the fluttering of the butterfly’s wings can have tremendous impact or, in our case now in 2022, the transmission of a virus can put the world on hold and cause the disruption it has.

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