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## Art as Ecosophy: Hybrid Practices in Ecological Integration

### Umjetnost kao ekozofija: Hibridne prakse u ekološkoj integraciji

#### ABSTRACT

The thesis statement of this paper revolves around the idea that contemporary hybrid art practices aspire to transforming their purpose towards sustaining a balance between political and ecological infrastructures, thereby making societal and environmental issues more discernible and advocating for integrative ways of human existence within the environment. In an era marked by the devastating consequences of technological advancement, misuse of science for profit, and the antagonisms of economic dynamics, hybrid artworks offer alternative ways of existence within collectives, striving to reconfigure the connections between human subjectivity and the external world. The case study explored here is an art project by Špela Petrič, titled *Confronting Vegetal Otherness: Phytoteratology*. This paper centres on two primary arguments: Félix Guattari's concept of ecosophy as a framework for hybrid art strategies, and Donna Haraway's perspective from *When Species Meet* about the necessity to disrupt traditional power hierarchies among species. The aim of this study is to demonstrate how art has power to destabilize anthropocentric viewpoints. A transdisciplinary approach guides this text, with research methods including analysis, synthesis, observation, and comparative analysis.

**Ključne riječi:** hybrid art, anthropocentrism, ecosophy, Félix Guattari, Donna Haraway, Špela Petrič

#### SAŽETAK

Teza ovog rada počiva na tome da suvremene hibridne umjetničke prakse teže transformaciji svoje svrhe k održavanju ravnoteže između političkih i ekoloških infrastruktura, čineći tako društvena i pitanja životne sredine uočljivim i zagovarajući načine ljudskog postojanja u integrativnom odnosu sa svojim okruženjem. U doba koje se suočava s razornim posljedicama tehnološkog razvoja, zloupotrebom znanosti u svrhu profita i antagonizmima ekonomske dinamike, umjetnička djela predlažu alternativne i raznovrsne načine postojanja unutar kolektiva, u pokušaju da rekonfiguriraju veze između ljudske subjektivnosti i vanjskog svijeta. Odabrana studija slučaja za ovaj tekst umjetnički je projekt s nazivom *Suočavanje s vegetalnom drugošću: Fitoteratologija* čiji je autor Špela Petrič. Dva argumenta na koja se ovaj rad fokusira jesu koncept ekozofije Félix Guattarija kao okvir za hibridne umjetničke strategije i argument Donne Haraway iz knjige *When Species Meet* o potrebi da se destabiliziraju tradicionalne hijerarhije moći među vrstama. Cilj ovog rada jest pokazati kako umjetnost ima moć da destabilizira antropocentrične perspektive. U tekstu se rabi transdisciplinarni pristup, a primijenjene su istraživačke metode: analiza, sinteza, opservacija i komparativna analiza tekstova.

**Keywords:** hibridna umjetnost, antropocentrizam, ekozofija, Félix Guattari, Donna Haraway, Špela Petrič

## Introduction

In an era defined by neoliberal and cognitive capitalism, contemporary art has increasingly turned towards pragmatic and didactic approaches, advocating axiomatically affirmative perspectives. Amid the destructive impact of human-centred technological progress, the ambiguities of economic configurations reflecting the logic of capitalism, and the exploitation of nature and science for financial gain, the sequence of events becomes such that the world must think about matters of ethics across various domains of existence. In such circumstances, contemporary hybrid art presents a unique opportunity to challenge oppressive mental frameworks, as its value lies in its capacity to affect, influence, and initiate tangible change within societal configurations. This paper posits that contemporary hybrid art practices are striving to redefine their objective towards environmental activism, promoting a more balanced and egalitarian existence among species.

The following section outlines the terminology used in this paper, some of which is explained in the endnotes. To begin with, the term **hybrid art** refers to transdisciplinary and experimental artistic practices that emerge at the intersection of science and art. **Ecological art** denotes artistic production that concerns artists' attitudes towards any environmental situation. Serbian art theorist Miško Šuvaković defines ecological art as “based on direct and active engagement with the environment and the relations between nature and the artificial world of culture.”<sup>1</sup> The term **technology** here refers to the practical application of scientific discoveries and knowledge. Western art and philosophy have long engaged with the concept of **politics**. Croatian philosopher Vladimir Filipović points out that “politics as practice is more or less directly related to political theory and philosophy,”<sup>2</sup> further noting that “in contrast to ancient philosophical traditions, modern theories, almost without exception, conceive of politics as force and power.”<sup>3</sup> In her book *On the Political*, Belgian political theorist Chantal Mouffe explains:

“[...] by ‘the political’ I mean the dimension of antagonism which I take to be constitutive of human societies, while by ‘politics’ I mean the set of practices and institutions through which an order is created, organizing human coexistence in the context of conflictuality provided by the political.”<sup>4</sup>

In this paper, I use the term political to denote the aspiration for ethical multi-species coexistence, grounded in the imperative that all beings – human and non-human – should be treated with dignity and respect. My perspective of the term **political practice** implies artistic strategies and interventions that critically engage with power relations, challenging and destabilizing dominant hierarchical structures among species.

The case study chosen for this essay is the art project *Confronting Vegetal Otherness: Phytoteratology* by Slovenian new media artist Špela Petrič. The title of the artwork draws on Félix Guattari's concept of ecosophy and Donna Haraway's arguments on interspecies relations, both of which contribute to the theoretical framework of this essay.

Two hypotheses arise from the thesis statement. The first explores Guattari's concept of ecosophy, with the objective to demonstrate that ecosophy can be embodied in contemporary hybrid art strategies. The reasons for selecting Guattari's theoretical apparatus are that contemporary art is a suitable place for ecological revolution, capable of reconfiguring the relationships between human beings and what is traditionally considered external and natural world, and that art is a powerful instrument in criticizing dominant paradigms.

The second hypothesis draws on Donna Haraway's theoretical position from her book *When Species Meet*, which emphasizes the necessity to rethink the position of non-human being beyond the limit of considering the human being as an ontological basis, thus subverting the power relations among species. The parameters for choosing Haraway's book are multilayered and support this discussion based on several conceptual and thematic analogies, including her critique of anthropocentrism and her reconceptualization of the traditional notions of species boundaries and ethics.

This research is conceived as a transdisciplinary overview and analysis of relevant theoretical positions. The aim is to offer a possible model for conceptualizing art as a political and social practice that extends its scope to the non-human world. Another objective is to examine whether the application of Haraway's and Guattari's theoretical positions can enrich reflections on art's role in the post-Anthropocene era. Additional methodologies include observation and description of what art does and can possibly do as a social practice integrating non-human life. The synthesis will attempt to align Petrič's artwork with the arguments proposed by Guattari and Haraway. With respect to these theoretical models and the case study, the essay demonstrates the modalities of existence and mental articulation, along with their practical influence on the world, that a work of art can embody.

The first part of the essay is devoted to Špela Petrič's artwork titled *Confronting Vegetal Otherness: Phytoteratology*. The following sections explore Guattari's concept of ecosophy and its relevance to illustrating the position of ecological art, as well as Donna Haraway's discussion of multispecies sociality, which is here considered as an adequate theoretical apparatus<sup>5</sup> for analysing Petrič's project as a case study. The final section examines how contemporary hybrid art practices can address the issue of environmental injustice.

### ***Confronting Vegetal Otherness: Phytoteratology* by Špela Petrič**

In her work *Confronting Vegetal Otherness: Phytoteratology*, Slovenian artist Špela Petrič proposes alternative modes of procreation. Petrič explains:

“I pro-create plant-human entities, which I lovingly call monsters, via *in vitro* conception and hormonal alteration. The project embodies my desire to conceive and mother a trans-plant, to conjoin the gentle green alien, metaphysically dubbed the most primal of life forms, the barest of bare life, and my animalistic, politicised humanness harboring a culturally pregnant mind.”<sup>6</sup>

Plant embryos are cultivated in artificial “wombs,” in preference to traditional seed cultivation. The artist applies hormonal nourishment with hormones derived from her own urine, creating an artificial growth environment in the process of plant embryos procreation that allows her to critically rethink the mechanisms of plant subordination.

Petrič's artwork is excessive in that it compels the audience to move from indifference to critical reflection on the power dynamics between the human and non-human worlds, and this political and ethical excess is its distinctive feature. The artist challenges traditional ethical boundaries across multiple layers, such as humans daring to create life and intervene in the natural world, and art's role in fostering a more egalitarian and moral stance towards plants. Petrič also contests the roles of science, art, and technology, challenging dominant scientific paradigms.

The ethical questions Petrič raises concern humanity's ambition to intervene in the non-human domain and to modify nature along with its creation processes. She

suggests that human experimentation on plants need not always serve human well-being, and that plants need not be bred exclusively for human consumption or any other pragmatic purpose. As the artist explains: “These tiny monsters, coming into being from an impossible love, with intense labor and a yearning of plant parenthood, emerge in a time of environmental, political and social crisis as beings of permeability, harbingers of affective agential intra-action.”<sup>77</sup>

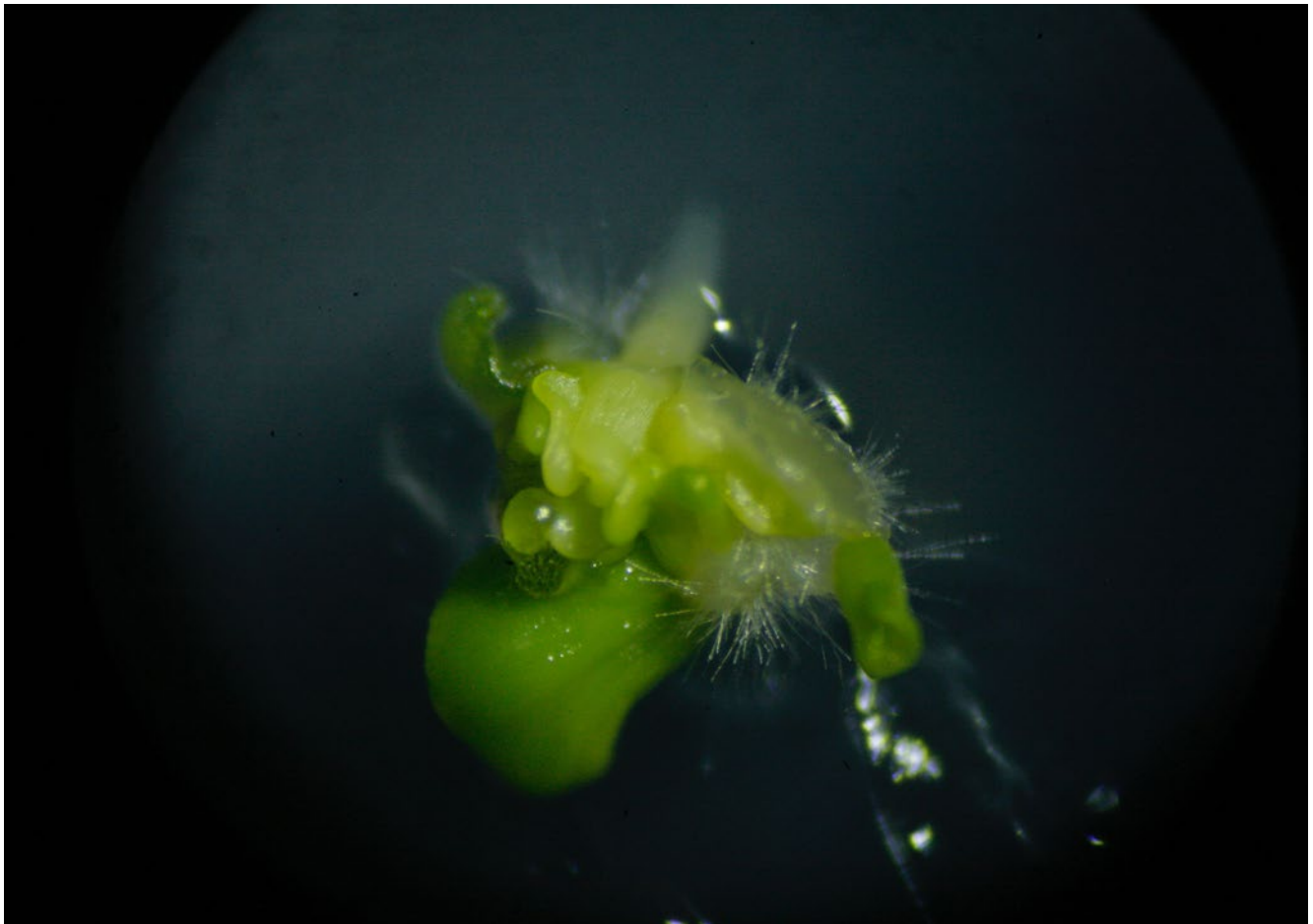
Petrič’s art project thus challenges the presupposed dominance of human beings over plants, advocating for a more intricate and multidimensional apprehension of multispecies correlations. In doing so, she disrupts and subverts societal hierarchies within the artworld and beyond, adopting an approach that extracts art practices from the artworld.

### “Parenthood”

Another significant aspect of Petrič’s project is her transgression and subversion of parenthood. The artist anthropomorphizes the “baby plants,” referring to them in human-like language, and playfully satirizes the anthropocentric tendency to assign human characteristics to the non-human world. She thus provides an alternative view of motherhood by means of transgression and disrupts the established views on what motherhood entails. As Petrič explains: “Hormones are primordial messenger molecules, stemming from a common evolutionary parent of plants, animals and microbes.”<sup>78</sup> She continues:

1.  
Špela Petrič, plant-human  
monsters, 30x magnification,  
detail from the work  
*Confronting Vegetal Otherness:  
Phytoteratology*, Het  
Glazen Huis, produced by  
Zone2Source, Amstelpark  
Amsterdam, 2016. (the photo  
is courtesy of Špela Petrič)

Špela Petrič, biljno-ljudska  
čudovišta, povećanje 30x, detalj  
djela *Suočavanje s vegetalnom  
drugošću: Fitoteratologija*, Het  
Glazen Huis, Zone2Source,  
Amstelpark Amsterdam, 2016.



“In *Phytoteratology*, a bit of embryonic tissue is taken from the thale cress (*Arabidopsis thaliana*), a common weed, and submitted to my care, compassion, and commitment. Biotechnological protocols and science allow me to nurture the tissue into a myriad of plant embryos, conceived not in a seed but an artificial womb, the incubator. I extract steroids from my urine to assist the embryo development, the molecules speaking to them of my presence, in response to which they alter their epigenetic patterns and grow a unique body morphology. These tiny monsters, coming into being from an impossible love, with intense labor and a yearning of plant parenthood, emerge in a time of environmental, political and social crisis as beings of permeability, harbingers of affective agential intra-action. Making kin with plants, caring for us, hopeful monsters.”<sup>9</sup>

### Exaggeration

Petrič's artwork employs intentional exaggeration in several aspects.<sup>10</sup> To begin with, she creates plant-human hybrids, thus crossing the boundaries of what is culturally, politically, and ethically acceptable. The outcome of her project is a “hybrid family,” also the title of a famous work by the Slovenian artist Maja Smrekar. This “hybrid” family does not share blood relations but is linked through the steroids extracted from Petrič's urine. Aspects of exaggeration are also present in her strategy of disrupting natural cycles and artificially amplifying the tension between what is discursively constituted as organic and synthetic. Within this context, the position of plants has been transfigured to active participation in a shared biological and political space. In other words, the alternative ecosystem generates its own power dynamics, hierarchical structure, and discursive antagonisms.

### The Three Ecologies and the Issues Surrounding Anthropocentrism and post-Anthropocentrism

The term “Anthropocene” was coined in the 2000s by the Dutch chemist Paul Crutzen and the American scientist Eugene F. Stoermer to define the current geological epoch, marked by significant human impact on the composition of Earth's crust. German philosopher and cultural theorist Peter Sloterdijk considers the human role as “geologically relevant,”<sup>11</sup> emphasizing humanity's profound, indirect influence on Earth's systems. This impact is particularly evident in the extensive use of fossil fuels and the pervasive production and discharge of non-degradable plastics, which leaves a lasting geological mark. Plastic is ubiquitous and infiltrates so many aspects of our daily lives that its presence is easy to take for granted, yet its ecological footprint is immense.<sup>12</sup> In her text “Life and Death in the Anthropocene: A Short History of Plastic,” Canadian theorist and cultural critic Heather Davis explains:

“Plastic – in its production, distribution, and waste cycles – represents the inevitable corollary to unfettered economic growth: it is both intensely resource-depleting (eight percent of world oil production goes into the manufacture and production of plastics) and ecologically devastating. Indeed, plastic brings together some of the most abiding environmental concerns of our time because of its pervasiveness, banality, and longevity.”<sup>13</sup>

Plastic pollution in terrestrial and aquatic ecosystems, and its discernible effect, call attention to the need for a philosophical transition away from anthropocentrism, as foregrounded in post-anthropocentric tendencies that question human-

centred paradigms. A critical aspect of post-anthropocentrism is the scrutiny of technology, which transforms the relationships between the human and non-human worlds, and their environment, often simultaneously enhancing and disrupting these connections. Post-anthropocentrism is a philosophical and theoretical position that attempts to transcend anthropocentrism, which places human beings at the centre of the world and prioritizes human needs and interests. What ecology does and strives to do aligns with post-anthropocentrism, highlighting an inclusive approach and connectedness between organisms. In her book *The Ethics of Earth Art*, contemporary art theorist Amanda Boetzkes suggests that natural life is not self-sustained and that there can be no untouched nature that exists unrelated to human activity:

“[...] natural life is not autoproduced or automaintained; it is always already produced by the technologies that manage it, and always for human purposes. Thus, there is no nature that is not thought through ecotechnology, through a reductive biological model, through conservation, resource management, sustainability, or environmental crisis, or in short, through a human-oriented framework. Nature is constituted by technological processes of denaturalization.”<sup>14</sup>

Therefore, incorporating ecological perspectives into art and other human practices requires exposing the limitations of anthropocentrism position and acknowledging these constraints to foster a more fluid, integrated relationship with the external world.

Reflecting on the use of coal,<sup>15</sup> petroleum,<sup>16</sup> and power engines,<sup>17</sup> alongside the discovery of electricity shortly before 1800 and its technological mastery in the 19<sup>th</sup> century,<sup>18</sup> Peter Sloterdijk posits: “The collective that today is characterized with terms such as ‘humanity,’ and whose influence on Earth is described as ‘anthropogenic,’ consists mainly of agents who have, in less than one century, appropriated the technologies developed in Europe.”<sup>19</sup> Therefore, Sloterdijk continues, “In this case one should rather speak of a ‘Eurocene’ or a ‘Technocene’ initiated by Europeans.”<sup>20</sup> Exploring the notions of Eurocentrism and technocentrism aligns with the examination of power relations, partly providing a contextual framework for exploring Guattari’s notion of ecology as it challenges capitalist subjectivity and questions the power structures inherent in capitalism.

The reason why I have linked the notion of Eurocentrism and Guattari’s philosophy in this text stems from the philosopher’s criticism of global capitalist structures that operate through a Eurocentric logic of progress, development, and modernity. Guattari writes: “There can be little doubt that around the world increased pollution, global warming, deforestation, desertification and the loss of biodiversity are anthropogenic, or that the motor of this generalized impoverishment of the biosphere is capitalism.”<sup>21</sup>

Guattari describes ecosophy as “an ethico-political articulation.”<sup>22</sup> The main point of ecosophy is that the ecological crisis calls for a radical rethinking of our perceptions and our interaction with the environment, society, and human subjectivity. Ecosophy aspires to study the human condition within the context of its environment, thus indicating that nature and culture are inseparable entities.

In his book *The Three Ecologies*, Guattari challenges traditional views on the ecological crisis: “The only true response to the ecological crisis is on a global scale, provided that it brings about an authentic political, social and cultural revolution, reshaping the objectives of the production of both material and immaterial assets.”<sup>23</sup>

French philosopher Manola Antonioli elaborates in her text “What is Ecosophy”:

“In opposition to the standardized discourse about ‘sustainable development’, which emphasizes (often in a sanctimonious and guilt-inducing manner) the relations between ‘individuals’ and their environment, ecosophy (especially in its Guattarian variant, which I specifically refer to here) draws our attention to the plurality of ecologies, environments, habitats, that do not ‘surround’ us as a container would envelop its contents, but that define us and that we constantly define and reconfigure in a network of relations.”<sup>24</sup>

It is through ecosophy that solidarity and ecological harmony can be restored. This reconfiguration of the dynamics between living beings, their environments, and the discourses surrounding them, as well as incorporeal species, can be achieved through a renewed sense of responsibility among individuals. Guattari distinguishes three ecological registers:

**Environmental ecology:** According to Guattari, environmental ecology has an imperative to reconstruct the planet and its natural environment, seeking solutions and proactive engagement with the dynamics and mechanisms of evolution. His warnings focus on biodiversity, ecosystems, and interactions between organisms and their environment. There can be little doubt that the increased pollution, global warming, deforestation, desertification, and the loss of biodiversity are anthropogenic, or that the motor of this generalized impoverishment of the biosphere is capitalism.<sup>25</sup> Guattari explains that natural balance will gradually become dependent on human activity, necessitating programs to regulate atmospheric composition. Even though industries that implement AI promote sustainable solutions, environmental concerns accompany the development of these technologies, notably in electronic waste disposal, pollution, energy consumption, and emissions from data centres. As Amanda Boetzkes notes: “Through the enactment of an ethical responsiveness to space, the artwork brings this earthly component into view, evidencing the way in which natural phenomena are integral to defining the sites of human conflicts, politics, and social formations.”<sup>26</sup> Guattari similarly observes: “Environmental ecology, as it exists today, has barely begun to prefigure the generalized ecology that I advocate here, the aim of which will be to radically decenter social struggles and ways of coming to one’s own psyche.”<sup>27</sup> Boetzkes defines ecology as follows:

“In its strictest sense, ecology is the study of the interaction of organisms with their environment. It is predicated on the principle that every creature is connected to every element that composes the environment, so that all living things depend on the balance of a complex system of growth and decay.”<sup>28</sup>

Boetzkes’s holistic understanding of ecology aligns with Guattari’s expanded perspective, encouraging a shift away from the entrenched anthropocentric views of progress that understand human beings as isolated entities, while Guattari advocates the interrelation of human societies, human subjectivity, and ecosystems. Both perspectives underscore the necessity of recognizing the interdependence of social, political, and mental realms, challenging the isolation of human beings as inherently more valuable than non-human life.

**Social ecology:** Social ecosophy aims to restructure human relations and modes of production, extending its scope to the reconstruction of collective existence and addressing the need for protection from “mass media subjectivity”<sup>29</sup> and the pursuit of social justice within capitalistic frameworks. Guattari explains: “An essential programmatic point for social ecology will be to encourage capitalist societies to make the transition from the mass-media era to a post-media age, in which the

media will be reappropriated by a multitude of subject-groups capable of directing its resingularization.”<sup>30</sup> He notes: “It is not only species that are becoming extinct but also the words, phrases, and gestures of human solidarity.”<sup>31</sup>

Guattari calls for alternative value systems and a unified, collective political approach to prevent the marginalization of social ecology:

“It seems evident that, unless a politically coherent stance is taken by collective praxes, social ecology will ultimately always be dominated by reactionary nationalist enterprises hostile to any innovation, oppressing women, children and the marginalized. I am not proposing a ready-made model of society here, but simply the acceptance of a complete range of ecosophical components so as to institute, in particular, new systems of valorization.”<sup>32</sup>

**Mental ecology:** In the realm of mental ecology, Guattari explores the psychological dimension in ecological registers, which overlaps with environmental and social ecologies. He critiques Integrated World Capitalism (IWC) for its detrimental impact not only on the environment and the social dimension of communities, but also for the fact that its scope extends, in an underhanded manner, to the mental well-being of individuals. Guattari emphasizes the need for a higher degree of solidarity and a sense of collective responsibility to transform human subjectivity and establish alternative value systems. He explains: “It is equally imperative to confront capitalism’s effects in the domain of mental ecology in everyday life: individual, domestic, material, neighbourly, creative or one’s personal ethics.”<sup>33</sup> His critique of capitalist logic advocates for a more integrative and ethically responsible approach, urging his readers to “reevaluate the purpose of work and of human activities according to different criteria than those of profit and yield.”<sup>34</sup>

### **How Does the Concept of Ecosophy Contribute to Illustrating the Position of Ecological Art?**

In the following section, my aim is to demonstrate how Guattari’s notion of ecosophy illustrates the position and potential of hybrid ecological art. This includes examining the way contemporary hybrid art practices exist, the scope of their activities, and how they affect other political and social practices. In the most general sense, this section will outline the position of ecological hybrid art through the lens of ecosophy.

**Raising awareness through excess:** In Petrič’s art project, the artwork becomes an instrument for creating a non-human Other and a place for articulating relationships between beings, contrasting sharply with the conditions of existence under IWC.<sup>35</sup> One interpretation of ecosophy as active social practice involves an effort to reorganize power dynamics in a way that will challenge profit-driven, exploitative capital accumulation and mass-media impact in shaping subjectivity. When art becomes a tool for ecosophy implementation, it integrates audiences into vital debates, raising awareness on shared concerns. Petrič’s excessive behaviour creates awe, imbalance, and discomfort for viewers while provoking questions about the artists’ capacity to disrupt established norms. Petrič blurs the lines between art and science, highlighting the limitations of scientific authority. Although she holds a degree in biology, she operates from the context of art, critiquing human exceptionalism by offering an alternative perspective, according to which plants are not merely a resource for human manipulation and experimentation.

The artwork is provoking and encourages viewers to reconsider power dynamics among different species, inviting introspection and a critical view of constructed hierarchies.



**Art as a challenge to scientific paradigms:** Contemporary hybrid art practices are a powerful tool to challenge entrenched scientific paradigms. As humans advance technology to preserve and facilitate survival on Earth, nature is becoming increasingly dependent on human actions. Guattari argues that natural balance will progressively rely on human intervention, necessitating programs to preserve and regulate atmospheric composition. Such artificial conditions are bound to fundamentally alter and reshape the ecosystems' dynamics. In *Confronting Vegetal Otherness: Phytoteratology*, this reliance on human intervention is reflected in plants' dependence on the artist's nurturing and breeding in artificial "wombs." Petrič demonstrates in a humorous way the absurdity of scientific ethics, shaking the viewers' faith in science and criticizing its role as an institutional practice. She does this by exemplifying that scientists are not the only ones who can conduct experiments and procreate life in laboratories. As Yves Michaud observes in his text "Art and Biotechnology": "We mustn't forget that art can have a dark, transgressive dimension that does not imitate the world but rather produces a new world where values may be not only contrary to those accepted in the world, but simply incomparable."<sup>36</sup>

Humour arises in Petrič's work from the unexpected merging of scientific seriousness with challenges to biological boundaries. She humanizes the plants by referring to them as her "babies," speaking of "impossible love"<sup>37</sup> and "plant parenthood."<sup>38</sup>

**Art's role in shaping human perception:** Beyond promoting ecological sustainability, hybrid art practices hold value in their ability to influence and shape human perception. Guattari emphasizes that art's interest lies in its capacity to de-frame, breaking away from serialized, standardized meanings ("homologized" according to Pasolini) and allows those who have access to it to reinvent and resingularize themselves.<sup>39</sup> Through transgressive behaviour and ethical, political, and moral excess – founded on artistic freedom – contemporary hybrid art actively participates in shaping human perception.

Petrič's work highlights the intersection of nature and artificiality, destabilizing constructed binaries and proposing a more fluid relationship between nature and technology. This artificially created symbiosis invites alternative reflections on power dynamics within ecosystems. By challenging established beliefs and viewpoints, Petrič's work encourages viewers to perceive the world from alternative angles. By exploring alternative discourses and extending boundaries, this work of art deepens our awareness of ourselves and the external world.

### ***When Species Meet, Donna Haraway***

The second hypothesis of this essay asserts the need to challenge established power structures between species, suggesting that contemporary hybrid art practices serve as a tool to demonstrate the potential for articulating alternative conceptions of multispecies sociality. Both Petrič and Haraway focus on the non-human Other, advocating for a more ethical cohabitation between humans and other species. The key point examined is how art confronts established and constructed power structures and proposes alternative forms of social interaction between different species.

**Petrič's project challenges traditional species hierarchies:** In *When Species Meet*, Haraway highlights the importance of questioning conventional power dynamics among species. She proposes alternative models of sociality and demonstrates how reshaping mental frameworks and formulating fairer policies are possible. According to Haraway, the subordination of non-human others is a mental and political construction rooted in anthropocentric thinking: "My hope for companion species is that we might struggle with different demons from those produced by analogy and hierarchy linking all of fictional man's others."<sup>40</sup>

Companion species are figures of a relational ontology, in which histories matter, i.e. they are material, meaningful, processual, emergent, and constitutive.<sup>41</sup>

Traditionally, plants and other non-human beings have served primarily to enhance human life, providing pleasure and comfort to human beings. Petrič's work, however, suggests deterritorialization from anthropocentric subjectivity and acceptance of companionship with non-human beings.

Haraway explains that since there are alternative locations where reproduction processes can take place, even a partial relocation of reproductive potential has fuelled academic debates, commercial promotion of reproductive technologies, and ethical dilemmas around such processes:

“Even partly relocating this power from (properly impregnated and in situ) wombs (of the same species as the being-to-be) to laboratories, clinics, embryos in freezers, stem cell collections, surrogate wombs of anomalous kinds, and genome databases has undergirded industries of academic pronouncements, commercial boosterism, and bioethical angst.”<sup>42</sup>

What Haraway is criticizing and rethinking is the formation of polarity that consists of human and everything else that is not human, and the impossibility to define the latter without its human counterpart:

“One being becomes means to the purposes of the other, and the human assumes rights in the instrument that the animal never has in “it”self. One can be somebody only if someone else is something. To be animal is exactly not to be human and *vice versa*.”<sup>43</sup>

**The artwork proposes an alternative form of sociality among species** and shows how articulating more equitable policies between plants and human beings is possible. By creating plant-human hybrids (phytopolutans), Petrič's work confronts historical and contemporary maltreatment of plants, underscoring the need for a more ethically nuanced approach. In doing so, she proposes an alternative way of coexistence within the world. Abha Sur and Samir Sur suggest that one should consider the democratic capacity of science: “[...] it is not science but rather the social world we inhabit, of which science is a part, which will determine whether we will unleash the democratic potential of science or become mired in its dogmatic essentialisms.”<sup>44</sup> Thus, it is art that becomes a space for embodying the democratic power of science.

In *When Species Meet*, Haraway focuses on the co-evolution and companionship between humans and dogs, highlighting the multidimensionality of their relationship, with both biotechnological and social facets. She demonstrates that this relation is reciprocal: “Nor have people emerged unaltered from the interactions. Relations are constitutive; dogs and people are emergent as historical beings, as subjects and objects to each other, precisely through the verbs of their relating.”<sup>45</sup>

Petrič's work advocates embracing a similarly equitable and reciprocal relationship with non-human world (plants), which has already been conceptualized differently with regard to some companion animals. The treatment of plants differs in that they are traditionally considered beings with no subjectivity, with only instrumental value. Both, Petrič and Haraway centre their arguments on the non-human Other, proposing the cognitive framework for a reconfiguration of multispecies sociality. Both contest the culturally and socially determined representation of the natural world, constructed from an anthropocentric perspective.

Petrič invites the audience to develop and demonstrate greater empathy towards the non-human Other, while Haraway urges that this issue be reconsidered in both academic discourse and everyday life. Petrič explains:

“The result of *Confronting Vegetal Otherness* is not to be read as a pursuit of functional hybridity, but rather a conceptual enslavement of particular capacities of plants and humans with the purpose of recognizing the limits of compatibility, empathy and post-anthropocentrism.”<sup>46</sup>

Petrič's intent is not to propose the literal creation of hybrids; rather, her work conceptually explores the possibilities of coexistence between humans and plants. In this way, contemporary hybrid art serves as a mechanism for reflecting on and pursuing strategies for mutual inhabitation among species.

### How does Hybrid Art challenge environmental injustice?

Artistic creation substantially contributes to changes in aesthetic and scientific paradigms (including ecological discourses), thereby significantly enriching debates on constructed systemic inequalities among different species. The following section explores the multifaceted ways in which contemporary hybrid art influences the maintenance of ecological balance.

**Transdisciplinarity:** Artists working within hybrid art transform excessive artistic behaviour and provocation into a ground for aesthetic and philosophical innovation. In transdisciplinary research, the emphasis often lies in exceeding disciplinary boundaries. Anna Laine writes:

“The continuum is fluid, but transdisciplinarity has developed from a discontent with interdisciplinarity in terms of the latter's reconfirmation of the disciplinary organization of knowledge instead of moving beyond its boundaries to create synergies and new ways of working and thinking.”<sup>47</sup>

Due to its transdisciplinary nature, hybrid art not only has the capacity to change aesthetic paradigms, but also engages with other levels of society “in diverse fields such as science, economy, urban life, school, the psychiatric establishment, forms of sociability, and (as a result) each level of ecology (including, of course, preservation and reinvention of natural environments).”<sup>48</sup> Its power lies in its capacity to confront stigmatization and normalize ethical coexistence across various groups.

By adopting a transdisciplinary approach, hybrid artists question the conventions and established traditional beliefs on what constitutes art, in a way that involves the social dimension, i.e. communication and collaboration between individuals in diverse professions, such as scientists from different disciplines as well as artists. Due to this social-relational character, contemporary hybrid art creates a platform for disciplinary symbiosis. Such art has the potential to conduct inquires and incite scientific discourse regarding ethical concerns, possibly extending its influence to reconfigure scientific paradigms.

**Hybrid art practices engage critically with power structures:** Contemporary hybrid art has the capacity to disrupt, through artistic provocation and transgression, the prevailing narratives that justify exploitation and environmental abuse. In her book *The Art and Science of Innovation: Transdisciplinary Work, Learning and Transgression*, Lorraine White-Hancock relates the notion of transgression to crossing boundaries: “The idea of ‘transgression’ is associated with movement across boundaries. This movement becomes visible as transgression relative to particular social norms and identities.”<sup>49</sup> By taking nonconformist and alternate perspectives on ordinary and established discourses, hybrid art practices confront hegemonic power configurations and their dynamics. Both science and technology, when in the service of dominant ideologies and power mechanisms, can be subjected to artistic subversion and transgression, but subversive and transgressive art can also derive support from science and technology.

“[...] the aesthetic paradigm does not solely derive from artistic creation, even if renewed artistic creation can fundamentally contribute to its change and the emergence of a new trend in diverse fields such as science, economy, urban life, school, the psychiatric establishment, forms of sociability, and (as a result) each level of ecology (including, of course, preservation and reinvention of natural environments).”<sup>50</sup>

**Participatory potential of hybrid art:** It is not only for the purpose of artistic production, but also for the realization of artworks by virtue of participation, that contemporary hybrid art practices often involve relational aspects to other community members. Many ecological hybrid art projects incorporate participatory methodology, fostering community engagement, collective action, knowledge-sharing, etc. Ecological hybrid art projects massively integrate local communities into various stages of creation and this inclusion plays a significant role in raising environmental awareness. In her book *Artificial Hells: Participatory Art and the Politics of Spectatorship*, Claire Bishop explains that “[...] today’s participatory art is often at pains to emphasize process over a definitive image, concept or object. It tends to value what is invisible: a group dynamic, a social situation, a change of energy, a raised consciousness.”<sup>51</sup> Even if a work of art is not directly participatory, references to community, collectivity (be this lost or actualised), and revolution are sufficient to indicate a critical distance towards the neoliberal new world order.<sup>52</sup> Bishop is making a binary distinction between social and artistic discourse:

“The social discourse accuses the artistic discourse of amorality and inefficacy, because it is insufficient merely to reveal, reduplicate, or reflect upon the world; what matters is social change. The artistic discourse accuses the social discourse of remaining stubbornly attached to existing categories, and focusing on micropolitical gestures at the expense of sensuous immediacy as a potential locus of disalienation.”<sup>53</sup>

Nonetheless, there have been multiple examples in contemporary hybrid art practices (as well as in other art practices) that demonstrate how social and artistic discourses intermingle to form a single discourse. As in this particular case, artists engage with different fields of knowledge such as biology, biotechnology, ecology, ecofeminism, etc., to examine and discuss various aspects of society, challenging the boundaries between artistic and social discourses to create a unified voice.

**Critique of anthropocentrism:** Just like any other natural ecosystem, the one that Petrič has created is influenced by humans, yet here, a human being is in the service of plants, nurturing the plant embryos with hormones derived from human urine. Through this work, Petrič humorously suggests an alternative way of human existence with non-human beings. The project foregrounds the integrity of plants and challenges the belief that human beings alone possess intrinsic value and are, as such, superior to other organisms.

**Reimagining human-plant relationships:** Petrič’s project departs from the traditional perceptions and articulations of the correlation between two opposite entities, i.e. human and non-human. This polarity has been a long-established paradigm that needs to be restructured. Through artistic provocation and excess, Petrič challenges the conventional methods of plant breeding for the purpose of artistic experiment, unlike the breeding of cultures for their instrumental purpose. Here, plant embryos are cultivated in artificial “wombs” and nurtured with hormones derived from the artist’s urine. Plants are thus deterritorialized from their natural way of cultivation, as they embrace a fluid and transformative relation with non-plants by being cultivated in artificial “wombs”, which is a feature specific to the reproductive

behaviour in mammals. Nurturing plant embryos with hormones derived from the artist's urine embodies an alternative type of ecosystem, where energy and matter are transferred from one organism to another in an artificial way. In other words, the energy transfer is initiated and mediated by humans. The artist demonstrates that thinking in binary logic, which treats culture as the opposite of nature, has reached a stage where it requires profound reconsideration.

**Art as exploration of ecological interconnectedness:** Petrič's work highlights the interdependence and reciprocity of humans and plants within an ecological system. This symbiotic interaction is achieved in an artificial way, through technology. The artist emphasizes the immensity of human impact on the natural world. By adopting bioart techniques and advanced technologies, the artist challenges anthropocentric views that prioritize human needs, advocating for the manner of thinking of the environment more integratively. Her work is directed towards discursive relativization and contests anthropocentrism as a dominant belief according to which intrinsic value is reserved for human beings while the value of non-human beings depends on their potential to contribute to human well-being. Using an artistic intervention that implies the modification of natural processes, Petrič refutes the anthropocentric paradigm and encourages an egalitarian perspective on interspecies exchange and a dynamic evolution of human relationship with the non-human world.

**Art pointing at ethical considerations:** Eco-artists are at liberty to employ imagination, vision, wit, humour, exaggeration, ridicule, glorification, and every other expressive means that artistic license allows.<sup>54</sup> It has been clearly acknowledged that contemporary hybrid art has assumed the role of a social practice that highlights and criticizes environmental injustice. As Wolek writes: "The beginnings of ecological art took place in the 1960s, at the time when publications about the disastrous state of the Earth began to appear. The art can be treated as a sign of the awakening of ecological awareness."<sup>55</sup>

In their text "Labs Shut Open: A Biotech Hands-on Workshop for Artists," Oron Catts and Garry Cass point out:

"As our knowledge and abilities to manipulate life increase, so does the need to make sense of where we are going. Art can play an important role in creating cultural meaning and informed involvement that are needed in order for our society to comprehend the very significant changes we are facing."<sup>56</sup>

Petrič's work exemplifies how art practices can subvert science's role in environment exploitation, profit-driven activities, and neoliberal capitalism in general. In such a transdisciplinary setting, art's power lies in its ability to question the role and position of science in contemporary world and criticize the institutionalization of science. By confronting the audience with transgressive situations and peculiarity, an artwork can reach the viewers on an individual level, provoking them directly into critically considering their own attitudes towards the environment, thus raising awareness about the mechanisms of exploitation and the relations of dominance and inferiority between the human and non-human worlds. Antonioli writes:

"Guattari raises a very good point when he claims that [...] the artist is some sort of 'wandering knight' who aims towards heterogenesis (in opposition to capitalistic homogeny); against the simplification of money as a universal equivalent, art can ensure diversity and singularity."<sup>57</sup>

## Conclusion

This essay has explored how contemporary hybrid art practices strive to redefine their purpose towards balancing political and ecological structures, thereby bringing societal and environmental concerns to light and advocating for the destabilization of anthropocentric viewpoint.

The first hypothesis is that Guattari's concept of ecosophy provides a theoretical basis for the development and implementation of hybrid art strategies. Ecosophy provides a foundation that hybrid art practices embody and materialize through their strategies and procedures. Primary considerations analysed in this paper address the following considerations: 1) art's capacity to raise awareness of environmental injustice through excess, 2) art's challenge to the traditional scientific and anthropocentric paradigm, 3) art's role in fostering connections between humans and their environment, and 4) art's participation in shaping human perception beyond merely promoting ecological sustainability.

The second hypothesis emphasizes the necessity of questioning established power hierarchies among species, positing that contemporary hybrid art demonstrates how alternative models of multispecies sociality are possible. Both Špela Petrič and Donna Haraway focus on the non-human Other, aiming to reimagine the forms of sociality between the human and non-human worlds. Consequently, hybrid art advocates for fairer, more balanced relationships between human and non-human beings, and for ethical coexistence at the intersection of the artificial and the natural, prompting a reconfiguration of power relations. Key points supporting the second hypothesis include: 1) that hybrid art challenges traditional power hierarchies among species, and 2) that it proposes new forms of sociality among species.

The final considerations regarding contemporary hybrid art's influence on environmental injustice include:

- 1) Transdisciplinary influence: Hybrid art not only has the capacity to reshape aesthetic paradigms but also engages broadly with other levels of society – “in diverse fields such as science, economy, urban life, school, the psychiatric establishment, forms of sociability, and (as a result) each level of ecology (including, of course, preservation and reinvention of natural environments).”<sup>58</sup>
- 2) Critical engagement with power structures: Hybrid art practices challenge hegemonic power structures and their mechanisms, adopting alternative perspectives that disrupt established narratives.
- 3) Participatory potential: By extending beyond traditional notions of artistic production, contemporary hybrid art involves the audience relationally, encouraging community engagement and collective action.
- 4) Enhanced accessibility: Hybrid art's inclination towards technology expands its reach to wider audiences via digital social media platforms.

In *The Ethics of Earth Art*, Boetzkes argues that “[...] art has a part to play in critiquing the ways we frame nature through representation as well as through science and technology. Moreover, it does so by forging an aesthetic awareness of how nature exceeds these discourses and representations.”<sup>59</sup>

Contemporary artists draw from various disciplines including biology, ecology, and bioethics, aiming to make an impact not only within the artworld, but also in

the broader societal sphere. By challenging dominant paradigms and prevailing narratives, artists create alternative discourses and ways of existence. By questioning their own place and role in the world, as well as the place of science, hybrid art practices shape human perceptions and attitudes, fostering a holistic approach to human coexistence with non-human living beings.

## NOTES

- <sup>1</sup> MIŠKO ŠUVAKOVIĆ, *Pojmovnik suvremene umjetnosti*, Zagreb, Horetzky, 2005, 157.
- <sup>2</sup> VLADIMIR FILIPOVIĆ, *Filozofski riječnik*, Zagreb, Nakladni zavod Matice hrvatske, 1989, 253.
- <sup>3</sup> VLADIMIR FILIPOVIĆ (note 2), 254.
- <sup>4</sup> CHANTAL MOUFFE, *On the Political*, London and New York, Routledge, 2005, 9.
- <sup>5</sup> The term apparatus refers to a set of concepts introduced by Guattari.
- <sup>6</sup> <https://www.spelapetric.org/phytoteratology> (last accessed on April 30, 2024).
- <sup>7</sup> <https://www.spelapetric.org/phytoteratology> (last accessed on April 30, 2024).
- <sup>8</sup> <https://www.spelapetric.org/phytoteratology> (last accessed on October 23, 2024).
- <sup>9</sup> <https://www.spelapetric.org/phytoteratology> (last accessed on October 23, 2024).
- <sup>10</sup> In her doctoral dissertation, “Modalities of Extreme, Excessive, Radical, and Extravagant Contemporary Visual Art Practices” Sunčica Ostoić develops a concept of “exaggeration,” which she distinguishes from “excess” and “transgression.”
- <sup>11</sup> PETER SLOTERDIJK, The Anthropocene: A Process-State at the Edge of Geohistory?, in: *Art in the Anthropocene Encounters Among Aesthetics, Politics, Environments and Epistemologies* (eds. Heather Davis and Etienne Turpin), London, Open Humanities Press, 2015, 329.
- <sup>12</sup> HEATHER DAVIS, Life & Death in the Anthropocene: A Short History of Plastic, in: *Art in the Anthropocene Encounters Among Aesthetics, Politics, Environments and Epistemologies* (eds. Heather Davis and Etienne Turpin), London, Open Humanities Press, 2015, 349.
- <sup>13</sup> HEATHER DAVIS (note 12), 350.
- <sup>14</sup> AMANDA BOETZKES, *The Ethics of Earth Art*, Minneapolis and London, University of Minnesota Press, 2010, 104.
- <sup>15</sup> PETER SLOTERDIJK (note 11), 328.
- <sup>16</sup> Ibidem.
- <sup>17</sup> Ibidem.
- <sup>18</sup> Ibidem.
- <sup>19</sup> Ibidem.
- <sup>20</sup> Ibidem.
- <sup>21</sup> FELIX GUATTARI, *The Three Ecologies*, London, and New Brunswick, The Athlone Press, 2000, 4-5.
- <sup>22</sup> Ibid., 28.
- <sup>23</sup> Ibidem.
- <sup>24</sup> MANOLA ANTONIOLI, What is Ecosophy, in: *Schizoanalysis and Ecosophy, Reading Deleuze and Guattari* (ed. Constantin V. Boundas), London, New York, Bloomsbury Academic, 2017, 75.
- <sup>25</sup> IAN PINDAR and PAUL SUTTON, Translators’ Introduction, in: *The Three Ecologies* by Felix Guattari (note 10), 4-5.
- <sup>26</sup> AMANDA BOETZKES (note 14), 8.
- <sup>27</sup> FELIX GUATTARI (note 21), 52.
- <sup>28</sup> AMANDA BOETZKES (note 14), 1-2.
- <sup>29</sup> MANOLA ANTONIOLI (note 24), 6.
- <sup>30</sup> FELIX GUATTARI (note 21), 61.

- <sup>31</sup> Ibid., 44.
- <sup>32</sup> Ibid., 64.
- <sup>33</sup> Ibid., 50.
- <sup>34</sup> Ibidem.
- <sup>35</sup> In Guattari's book *The Three Ecologies*, the abbreviation IWC stands for Integrated World Capitalism. IWC exercises control over people by means of mass media and its impact is exerted in environmental, social, and mental ecological registers.
- <sup>36</sup> YVES MICHAUD, Art and Biotechnology, in: *Signs of Life: Bio Art and Beyond* (ed. Eduardo Kac), Cambridge, MA and London, The MIT Press, 2007, 394.
- <sup>37</sup> <https://www.spelapetric.org/phytoteratology> (last accessed on October 27, 2024).
- <sup>38</sup> <https://www.spelapetric.org/phytoteratology> (last accessed on October 27, 2024).
- <sup>39</sup> MANOLA ANTONIOLI (note 24), 77.
- <sup>40</sup> DONNA HARAWAY, *When Species Meet*, Minneapolis, MN and London, 2008, 309.
- <sup>41</sup> DONNA HARAWAY, *The Haraway Reader*, New York and London, Routledge, 2004, 307.
- <sup>42</sup> DONNA HARAWAY (note 40), 138-139.
- <sup>43</sup> Ibid., 206.
- <sup>44</sup> ABHA SUR and SAMIR SUR, In Contradiction Lies the Hope: Human Genome and Identity Politics, in: *Tactical Biopolitics: Art, Activism, and Technoscience* (ed. Beatriz da Costa, Kavita Philip), Cambridge, MA and London, The MIT Press, 2008, 215.
- <sup>45</sup> DONNA HARAWAY (note 40), 62.
- <sup>46</sup> <https://www.spelapetric.org/scotopoiesis> (last accessed on April 22, 2024).
- <sup>47</sup> ANNA LAINE, *Practicing Art and Anthropology: A Transdisciplinary Journey*, London and New York, Bloomsbury Academic, 2018, 16.
- <sup>48</sup> MANOLA ANTONIOLI (note 24), 77.
- <sup>49</sup> LORRAINE WHITE-HANCOCK, *The Art and Science of Innovation: Transdisciplinary Work, Learning and Transgression*, Cham, Springer, 2023, 19.
- <sup>50</sup> MANOLA ANTONIOLI (note 24), 77.
- <sup>51</sup> CLAIRE BISHOP, *Artificial Hells: Participatory Art and the Politics of Spectatorship*, London and New York, Verso, 2012, 6.
- <sup>52</sup> CLAIRE BISHOP (note 51), 12.
- <sup>53</sup> Ibid., 276.
- <sup>54</sup> LINDA WEINTRAUB, Introduction to Environmental Art, in: *To Life! Eco Art in Pursuit of a Sustainable Planet*, Oakland, CA, University of California Press, 2012, 3.
- <sup>55</sup> MAGDALENA WOLEK, Ecological Art and its Main Thesis, *Scientific Papers of Silesian University of Technology*, 141 (2019), 432.
- <sup>56</sup> ORON CATTI and GARRY CASS, Labs Shut Open: A Biotech Hands-on Workshop for Artists, in: *Tactical Biopolitics: Art, Activism, and Technoscience* (ed. Beatriz da Costa, Kavita Philip), Cambridge, MA and London, The MIT Press, 2008, 143.
- <sup>57</sup> MANOLA ANTONIOLI (note 24), 77.
- <sup>58</sup> Ibidem.
- <sup>59</sup> AMANDA BOETZKES (note 14), 2.

