

## **Widok. Theories and Practices of Visual Culture**

**title:**

The Posthumanist Reproduction of Care

**authors:**

Agnieszka Jelewska, Karolina Żyniewicz

**source:**

Widok. Theories and Practices of Visual Culture 32 (2022)

**URL:**

<https://www.pismowidok.org/en/archive/2022/32-reproduction-tracks/the-posthumanist-reproduction-of-care>

**doi:**

<https://doi.org/10.36854/widok/2022.32.2531>

**publisher:**

Widok. Foundation for Visual Culture

**affiliation:**

SWPS University

University of Warsaw

**keywords:**

ethics of care; bioart; critical art practice; liminal practice; art&science;  
motherhood; interspecies relationships

**abstract:**

A conversation between scholar Agnieszka Jelewska and artist Karolina Żyniewicz around the topic of care in the latter's liminal practice of knowledge production.

**Agnieszka Jelewska** - Professor at Theater and Media Arts Department (Adam Mickiewicz University) in Poznań, Poland. From 2011 she is also a director and co-founder of Humanities Art and Technology Research Center at AMU ([artandsciencestudies.com](http://artandsciencestudies.com)) and a member of research and art collective Dead Baitz. In 2003, she was a Visiting Researcher at Kent University in Canterbury, UK; in 2005, she got a prestigious Polish scholarship by Foundation for Polish Science. She was giving lectures i. a. at Kent University in Canterbury, UK (2003), Folkwang Universität der Künste, DE (2015), Harvard University, Boston (2015), Emerson College, Boston (2015). She was on research stay at Folkwang Universität der Künste, Essen, DE (2005/2006). She is a curator and co-author of art and science projects, such as *Transnature is Here* (2013), *Post-Apocalypse* (2015), *Anaesthesia* (2016). She was awarded Golden Medal for sound design for collective interactive installation *Post-Apocalypse* (2015) at the Prague Quadrennial of Performance Design and Space, Czech Republic.

**Karolina Żyniewicz** - Artist (2009 graduated from the Academy of Fine Arts in Łódź, Department of Visual Arts) and researcher, PhD student (Nature-Culture Transdisciplinary PhD Program at Artes Liberales Faculty, University of Warsaw). Working in a laboratory (mostly at the Institute of Genetics and Biotechnology, Faculty of Biology, University of Warsaw), Żyniewicz locates her works in the field of bio art, although she tries to avoid using this term. She sees her liminal activity as situated knowledge production. She is mostly focused on life in its broad understanding (its biological and cultural meaning). Her projects have mostly conceptual, critical character. The main point of her PhD research is multilevel relations emerging during the realization of liminal projects. She tries to put her observations, as an artist/researcher (liminal being), in the context of Science and Technology Studies (STS), Actor-Network Theory by Bruno Latour and feminist humanities.

## The Posthumanist Reproduction of Care

**Agnieszka Jelewska:** In the organic realm, reproduction is essential to the preservation of life, as the primary modus of producing offspring by parent organisms. In economics, the concept describes the recreation of means and conditions necessary for perpetual production. The term is also used to denote the creation of copies from an original, especially paintings or photographic prints. Its semantic range is associated with creation, the expansion of matter, the copying of certain data pools, and procedures involving certain predetermined actions performed for procreative purposes. In recent years, however, many areas of posthumanist philosophical thought, art, and science practices have tied the concepts of reproduction and motherhood strongly to the redefinition and expansion of the semantic field of care, to include responsibility not only for human but also nonhuman life. This shift correlates, on the one hand, with the rapid pace of technological change and the emergence of entities from the laboratory which infiltrate the fabric of social life and blur the lines between nature, culture, and technology, and on the other, with studies of accelerating climate change, indicating that the Earth must necessarily be treated as the host of co-existing human and nonhuman systems.

In her widely discussed book *Matters of Care: Speculative Ethics in More Than Human Worlds*,<sup>1</sup> María Puig de la Bellacasa re-evaluates the traditional understanding of the concept of care, and examines the interpretation that frames it as an ethical and political duty to think within the categories of the nonhuman worlds of technosciences and naturecultures. The ethics of care, the scholar argues, must be construed today as a sort of relationship established with another organism, both human and nonhuman. I believe that a similar, multi-threaded situation unfolds in your works. On the one hand, you find yourself as a caregiver to nonhuman organisms (especially in *Symbiosis*,

where you co-exist with insects), and on the other, you look after entities created in the course of transforming strands of your genetic material in a laboratory experiment (*Safe Suicide*, *Last Supper*, and others). Both cases give rise to new models of relationships. The sphere of dependence you generate shifts the semantics of reproduction toward care, ethics, and broadly conceived motherhood. The entire process you go through – from idea, through lab experimentation, all the way to the end result – is, to some extent, an attempt to reframe the interpretation of care and motherhood in the twenty-first century, on account of both technonatures and the ongoing redefinition of human co-existence with nonhuman life. Here, care manifests itself in relationships: between artists, women, and scholars with the laboratory as a place; the people working there; and the technological objects, processes, and entities generated in the course of lab work. This process might well be called “posthumanist motherhood,” open and relational, unsealing the medicalized, political, and biological interpretations of reproduction. Your work encourages the retelling of stories and re-evaluation of the potentialities of motherhood, care, and co-existence with others in the twenty-first century.

**Karolina Żyniewicz:** When I was taking my first steps as an artist after graduating from university in 2009, posthumanist thinking in the vein of Haraway, Barad, or Bellacasa was not as mainstream as it is today. Nevertheless, ever since I can remember, I’ve had this intuitive need for care, rendered in three different incarnations. The first entails caring for living organisms, or living matter, which I involve in my creative pursuits. What I am seeking here is a sense of responsibility, rather than accomplishing some predetermined artistic objective. If I want to get something from another living entity, I must first give it the respect it deserves. The second incarnation, which I share with researchers working in labs, involves care rooted in

professional ethics – the careful performance of duties which wastes neither living organisms nor chemical reagents. Responsibility also comes into play here, to a group or to partners, but also toward plans and one's own assumptions. The third and final incarnation of care that I practice involves caring for the audience. I strive to maintain active communication with the people visiting my exhibitions, to speak with individuals interacting with my work, trying to understand what I was trying to say with any given piece. An approach like that is not without drawbacks, as the feedback may be somewhat unpleasant or may not sit well with the project's original intentions. However, despite these risks, it was always clear to me that I wanted to take care of problems/issues, of broadly conceived life, mine and not-mine, human and nonhuman. The feedback on care in one project enables and stimulates further, future care. I believe that I share this particular outlook with many people working at the intersection of biology and art.

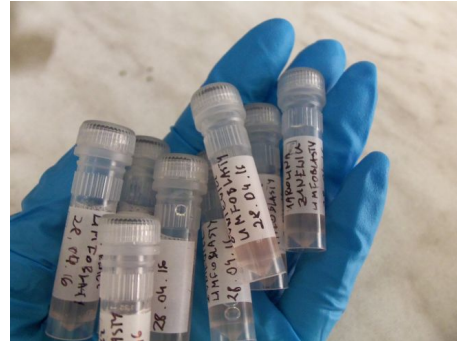


Documentation of the ten-day performative exhibition *Delectatio morosa*, held at the Miłość Gallery in Toruń; the workstation and bedroom of Karolina Żyniewicz and the insects

**AJ:** Your approach echoes Bruno Latour's findings from his seminal essay "Love Your Monsters: Why We Must Care for Our Technologies As We Do Our Children," where he argued that modern post-environmentalism must accept that human societies are inextricably linked with nonhuman nature, meaning that nature can neither be tamed nor simply left to itself. In the essay he brings up the summer of 1816, during which the young British writer Mary Godwin went with her fiancé Percy Shelley to visit Lord Byron at Lake Geneva, Switzerland. They planned to spend much of the summer outdoors, but the eruption of Mount Tambora in Indonesia the previous year had changed the climate across Europe, leaving the weather so bad that they spent most of their time housebound. After reading a book of German supernatural stories, someone suggested they each write their own. Soon after that fateful summer, Godwin and Shelley married, and in 1818, Mary Shelley's horror story was published under the title *Frankenstein; or, The Modern Prometheus*.<sup>2</sup> Retracing the story of its writing (and the natural circumstances that brought it about) and examining the narrative itself, Latour stressed that Dr. Frankenstein's crime was not that he invented a creature through a combination of hubris and advanced technology, but that he abandoned it, leaving the creature to itself. When Dr. Frankenstein finally meets the "monster" on an Alpine glacier, the latter claims that he was not born a criminal, but was made one, only after his creator left him and he fled the laboratory. Curiously, as Latour points out, the story of Frankenstein's monster is typically considered a cautionary tale about what could be called a "freak of nature" – a technology that upsets or unmakes the natural order. In reality, however, it revolves primarily around the abandonment of care for entities brought to life through technological experimentation.

## Networked care – the intra-relationships of science and society

**KŻ:** I keep circling back to the link between responsibility and care, which naturally brings up Haraway’s distinction between “responsibility” and “response-ability.” Both concepts fit perfectly with my practice of responsible relationship-building, based around respecting all participating parties. I also have a measure of affinity for the concept of “intra-action,” first proposed by Karen Barad, which I heard repeatedly described as appealing in theory but very hard to translate into reality, and while I may not be translating it, I feel like I am definitely implementing it in practice. Still, I find it hard to explain precisely which of my actions correspond to particular parts of that theory.



Mediated and preserved proximity between Karolina Żyniewicz and her B lymphocytes

**AJ:** Barad directs us to a key context: drawing on the work of quantum physicist and author of the so-called “Copenhagen interpretation,” Niels Bohr, she emphasizes the significance of the scholar–apparatus–object relationship. Barad argues that technologies and tools are not merely static arrangements, “but rather, apparatuses are specific material practices through which local semantic and ontological determinacy are intra-actively enacted.”<sup>3</sup> Barad explicitly points out in her work how tangled scholars and the objects they examine are in the matters and discourses generated by their intra-relations, a notion also remarked upon by Rebekah Seldon when she argues that “matters and discourses are co-constituting, and so

asking what knowledge does is always a matter of asking after its ongoing entanglements.”<sup>4</sup>

The concept of intra-relations perfectly captures the ontology of fragments: cells, entities, but also vestiges and relics, failed attempts, and residual matter from the many different stages of the process you go through when creating projects. The figure of Frankenstein’s monster resurfaces here, suggesting the need for a different perspective on created or reproduced beings. Scientists have a really hard time communicating these sorts of issues. It seems, therefore, that your actions constitute an attempt to build dynamic relationships between objects and artifacts which, processed in laboratories, are reproduced and “introduced” into social and cultural circulations, thus becoming new, heretofore unknown beings, beginning to co-exist with our organisms, with nature, and influencing certain cognitive shifts.

The need for a social understanding of laboratory practices that could be described using the framework of intra-action also guided the work of Australian artist Jill Scott, the architect of the Zurich-based international *Artists-in-Labs* project, which aimed to establish artistic residencies in several Swiss research laboratories.<sup>5</sup> Early installments of the project ran into considerable difficulties, as researchers proved deeply skeptical about what artists could possibly communicate to the broader public about the work performed at a given facility. It was only in later years that they realized the process was not focused on the social reproduction of laboratory artifacts,



Preparation of test tubes with Karolina Żyniewicz’s immortalized B lymphocytes for placement in liquid nitrogen

showcasing them as oddities, but rather sought to mediate and translate between the scientific and public realms. Many of the works produced in the course of the project suggested new avenues of communication between the two, thus indicating that the opening of knowledge production systems to community and artistic involvement may very well be indispensable.

The need for such a translation became particularly pronounced as the SARS-CoV-2 pandemic broke out. Not only have individual coronavirus mutations wrought havoc on the human population, but the virus itself has become a sociotechnological object. Its biological existence is no longer in any way separable from its political implications, manifested by inequity in worldwide vaccine access; its economic impact, following the lockdown mandates; or its media footprint, exemplified by ubiquitous infection and death-rate visualizations and the increased presence of science experts across the media. Social media have become the tool of choice for the reproduction of different kinds of knowledge, prompting the emergence of both speculative movements, as well as a variety of conspiracy and anti-vaccination theories. Consequently, the invention of new forms for communicating science and lab work to the public seems more pressing than ever.

**KŻ:** During the first wave of the pandemic, I took part in a series of meetings held under the working title *Viral Culture Bio-art and Society*, which brought together arts-&-science representatives from all over the globe. We spoke a lot at the time about the potential impact of the COVID-19 pandemic on the work of bio-artists and the reception of their projects. We discussed what care and responsibility should look like in the context of this crisis, and how to encourage audiences to enter into relationships with nonhuman beings when at the same time they are trained to protect themselves against this. It wasn't easy looking for answers to questions about the efficacy of our

past efforts in the face of a situation resembling one giant bio-art project but incomparably more lethal. The pandemic, meanwhile, marches onward, severely constraining any attempt at returning to normalcy and showcasing new projects centered around relationality. At this point, I feel that the sheer wall of existential angst is still too thick to punch through with any sort of art-based message.

Throughout the VC meetings, virtually all attendees admitted to struggling with some form of creative paralysis. We didn't know how to move forward, what to do in the face of a situation that has long since spiraled out of control. How to take care of anything else besides our own lives and those of the people closest to us. A few months had to pass before I felt ready to craft any sort of message about what's going on. I noticed that most of my fellow attendees followed suit around the same time. Examples include Olga Kisseleva's *Art & AI* project, in which she drew comparisons between the reproductive mechanisms of biological and computer viruses. After taking a scan of a classical sculpted bust at the Louvre, the computer system was infected with a virus that exhibited reproductive mechanisms typical of coronaviruses, consequently corrupting the resulting 3D print. It was a very interesting departure point for a discussion about the meaning of reproduction. Human reproduction is a markedly emotional issue, toward which very few remain indifferent. The unrestrained reproduction of a virus, however, particularly one that threatens our very lives, is viewed in an almost universally negative light. Our natural, evolutionary drive to survive as a species is ultimately much stronger than the theoretical declarations of posthumanism. Still, we should seek to make at least a little space for reflections looking in the opposite direction. Our reproduction, after all, does not exactly serve the best interests of the planet, so it might be good to try and see the virus as it is, however strange that sounds. Unsurprisingly, it

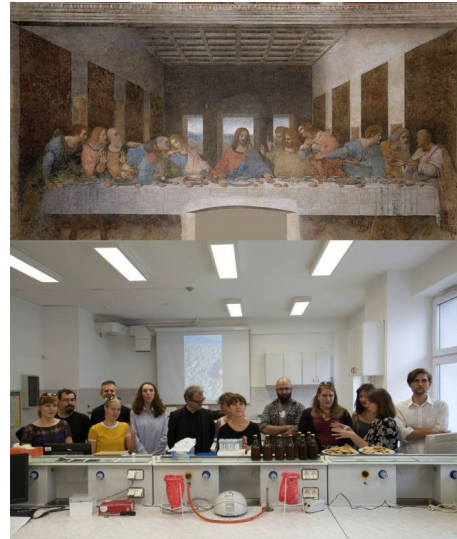
turns out that crises tend to lay bare our anthropocentric hypocrisy.

## The Mothering Art triptych: *safe suicide*, *The Last Supper*, *Synthetic Motherhood*

**AJ:** Coming back to your projects – seeing as our focus is on reproduction, motherhood, and care, it seems that *safe suicide*, *Synthetic Motherhood*, and *The Last Supper*, which comprise a sort of triptych, would be the best choices to explore these areas.

**KŻ:** All of these projects are quite personal. For each, my flesh, my body serves as the primary departure point. Here, we find ourselves circling back to issues of motherhood and care, as well as sharing and giving. In my case, it's not sharing myself with a child or children (at least not my own), but giving myself to others by way of pouring my body, my time, my energy, and my attention into my projects. This became apparent when I underwent a skin biopsy to isolate my fibroblasts. Both the doctor who performed it, and the laboratory staff who later cultured the cells, found it hard to conceive that I was doing it for purely artistic reasons.

Sharing my process, my personal trajectories, however, seems more important than simply sharing bits and pieces of my body. Curiously, these personal stories are rarely decipherable for the average exhibit visitor. I regret how difficult it is to communicate this sharing or giving, which usually leaves it ignored or at least underappreciated. Somewhat facetiously, we could compare it to clichéd maternal behavior, which sees mothers complain



Documentation of the performative dinner concluding *The Last Supper* project held at the training labs of the Institute of Genetics and Animal Biotechnology

about their sacrifices going unrecognized. A similar pattern may hold true for persons integrated into the relational family at the stage of project presentation. It's very hard when their understandings and interpretations differ so profoundly from the original underlying premises.

One key aspect shared by all of the projects mentioned here is the use of biological matter extracted from my body. In *safe suicide* it was my B lymphocytes, from which I then extracted the genetic material necessary for *The Last Supper* and *Synthetic Motherhood*. Additionally, all the projects were implemented within the same time window. I began working on *The Last Supper* when I was still deeply involved with *safe suicide*, and *Synthetic Motherhood* was produced alongside *The Last Supper*.

I'm glad that we're not treating *Synthetic Motherhood* as the sole project concerning reproduction, although in this case the link is rather obvious. In a sense, I view *safe suicide* as the richest source of insight on reproduction. Culturing a cell line means caring for its reproduction, but caring laced with far-reaching control. In vitro, cell division proceeds at a much different pace than it does in vivo. Caring for my cell lines was, at its core, not much different from my old pursuits, which involved working with different species of insects, e.g. with burying beetles, whose life cycles I learned so well that I even managed to sustain their reproduction well into the winter, when they typically enter diapause when living outside laboratory conditions. I say this to give an example of what openness and mindfulness of a nonhuman other may look like. While I would not go so far as to call it motherhood, the behavior was still predicated on a natural need to take care of



Documentation of the performative dinner concluding *The Last Supper* project, pouring beer. Photo: Paweł Golik

living things. At this point, people familiar with my work could very well ask me what sort of care I had actually practiced, given that I finally killed my cells and ate my insects. There is a dissonance here, but it might not apply to people like me who grew up in the countryside, where animals are kept with the utmost care and commitment, only to be deliberately killed for sustenance. In the case of the cells, as the title of the project, *safe suicide*, suggests, I was working with the meanings of suicide. If it wasn't for these ambiguities and ambivalences, there would be no art in it – it would be little more than hobbyist culturing.

## Contamination as collaboration

**AJ:** It is posthumanism, framed as an interdisciplinary science, that seems to carry questions and suggestions similar to those you mentioned – a new approach to situated knowledge, and domesticated and companion species, as well as, first and foremost, an understanding of the consequences brought on by the rift between humankind and the rest of life on the planet, and the increasing agricultural exploitation and industrialization of the environment. A key part of the discourse is comprised by the praxis of relationships. This particular strain, which your works stand as an example of, could conceivably be called “involved posthumanism.” Certain forms of involvement were also explored in the anthropological projects of Anna Lowenhaupt Tsing, focused on the relationship between humans and fungi; while not interrogating the realities of the laboratory, they are still built around the invention of new communities straddling the intersection of human and nonhuman.<sup>6</sup>

**KZ:** Anna Tsing's findings are very interesting in the context of everything we've been talking about here, especially care and responsibility. Her work also fits particularly well with our current

pandemic reality. It does not have to be understood literally, because at this point we would be hard-pressed to convince anyone that contamination/infection is a positive form of interspecies collaboration, but if we focus on growing more aware of diversity, as Tsing emphasizes, it might be easier for us to communicate and actually collaborate with fellow life. But maybe we ought to start by working on interpersonal relationships, because – as the pandemic so clearly laid bare – we’re more divided than ever, to the considerable detriment or even ruination of most of our social structures. When it comes to collaborating with nonhuman life, I believe that awareness of the fact that it might be our only chance for surviving climate change is steadily growing.

## Hybrid family

**AJ:** Being with others, caregiving, and motherhood all serve as key points of reference in the work of Slovenian artist Maja Smrekar. I am thinking primarily of a series of her works entitled *K-9\_topology*, which went on to receive the Golden Nica at the 2017 Ars Electronica Festival, in which she explored the potentialities of a multispecies family. Her 2016 video installation *Hybrid Family* featured the artist breastfeeding a puppy; the piece drew on posthumanist theories of becoming-animal by rethinking the social and ideological instrumentalization of female bodies and breastfeeding. As Smrekar argued, “Overcoming the classical distinction between private life and political existence, I felt I needed to perform with my own body and the bodies of my dogs to re-gain our position of power by staging a public performance with a puppy Ada.”<sup>7</sup> Directly referencing Donna Haraway and the “decolonial reproductive freedom in a dangerously multispecies world”<sup>8</sup> that she postulated, the project was controversial, but still broadened the definition of motherhood as a choice and a deeply creative

condition, while framing interspecies care as a pressing need.

**KŽ:** By showing that it is possible to care for an animal other than a human to the extent that one was ready to surrender one's body, Maja Smrekar sent a very powerful message. The act itself seems a literal example of contamination, of "defiling" a human body. Likewise, in my project *The Last Supper*, the tainting of a beverage with human contaminants held considerable significance to many involved in the tasting. In both projects, the idea of contamination was mostly symbolic, seeing that we share a lot of our genetic material with other organisms. Additionally, in the case of *The Last Supper*, dipping my finger in the beer would likely lead to a greater degree of biological contamination in the beverage than anything I did to it inside a lab.

One other aspect of Smrekar's project that I believe important is the direction of the transformation, and whose body underwent the change. The artist took considerable risk and responsibility upon herself. Obviously, the project itself could be criticized as overly anthropocentric, once again having the human decide everything. The arrangement, however, was more complicated, as it featured a human offering care without the ability to control the recipient's response or to know whether the recipient actually enjoyed it. There is always the risk that, despite our best intentions and openness to companion species, our relationships with them will succumb to familiar patterns of human domination.

**AJ:** Smrekar's attempt to decolonize the social and biological constructs of motherhood pushes into the rather difficult subject of intra-relational extended motherhood, which itself transcends the sociobiological framework of parenthood by including nonhuman life. The posthumanist reproduction of care that we're discussing here involves the privileging of detail, context, and emotion, as well as attaching particular significance to seeing

sensitivity and interdependence as inevitable rather than anomalous conditions. In her essay, Amelia DeFalco argued that “care scholarship has typically excluded the rich posthuman potential of care as a capacious concept flexible enough to theorize the incredible range of human/non-human interdependencies and ontologies that produce and sustain life.”<sup>9</sup> In feminist and posthumanist discourses, as well as in projects exploring the intersection of technology, science, and art, the concept has long been explicitly reformulated and expanded.



Excerpt from a log documenting operations on genetic material carried out by Karolina Żniewicz for her *Synthetic Motherhood* project

**KŻ:** One project that comes to mind here is the Art Oriente Object collective’s *May the Horse Live in Me*, predating Smrekar’s efforts, in which the human body was contaminated with animal biological material. To an extent, efforts like these are necessarily strictly speculative, as we are not capable of feeling and functioning like other animals. Here, we touch on another – in my opinion crucial – aspect of projects blending art and technology, where care is predicated upon honesty and credibility. It is important that we clearly separate the elements of speculation that could be empirically verified thanks to technological and

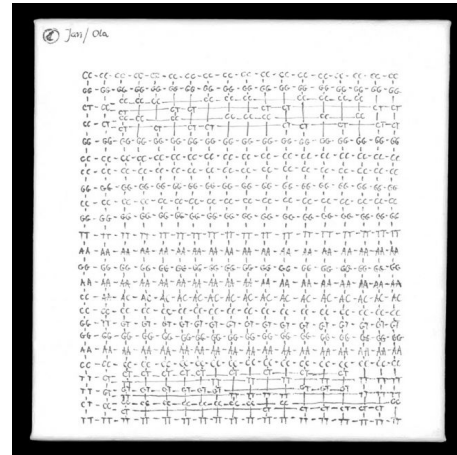
scientific advancements from what must remain a matter for the future.

This was particularly important to my work on *Synthetic Motherhood*, in which I sought to predict the appearance of my potential offspring. At the lab where I worked on the genome-related portion of the project, I learned that the only things you can actually predict about your children's appearance is the color of their eyes, hair, and skin – that's it. The project itself was an attempt to craft a response to Heather Dewey-Hagborg's *Stranger Visions*, in which the artist created a series of three-dimensional portraits allegedly based on genetic material isolated from random cigarette butts, chewing gum, and hair found on the street. *Synthetic Motherhood* helped me realize such far-reaching phenotype forecasting is simply impossible. Professor Branicki (from the Małopolska Centre of Biotechnology), an internationally renowned forensics expert, told me that there are companies out there, like Parabon, which offer such forecasting services for distinctive facial features, but their methods and protocols are proprietary and remain confidential, which significantly lessens their credibility. While I never spoke with Dewey-Hagborg and have never heard her explain her efforts, it seems important to me that people are informed about which parts of art projects are actually possible and which remain figments of imagination. Allowing audiences to believe that genetically designing offspring is within the realm of possibility today would only amplify the public's fears surrounding the subject, fears augmented by humankind's previous brushes with eugenics. By pursuing my project, I "called the bluff," so to speak – I took it upon myself to separate fact from fiction so that others wouldn't have to. I find it absolutely fundamental not to mislead my audience – it's a pillar of my professional ethics. This principle also applies to my collaborations with scholars and scientists. I wouldn't want them to feel that the knowledge they share with me is in any way

distorted or turned against them.

Speculative efforts like these are vital, regardless of where they are pursued, as they allow us to identify certain conceptual goals, but they cannot be conceived as anything other than speculation. Doing otherwise leads to trouble, as we can clearly see from the rampant spread of conspiracy theories: when not labeled as speculation, they are too easily embraced as knowledge. We need to stay aware of our audience and how we speak to it. Personally, I would hate to see arts-&-science projects be in any way considered insufficiently defined pseudoscientific speculation.

**AJ:** In *Synthetic Motherhood* you also explore how the concept of motherhood is changing under the influence of technology. The story of your potential offspring can also be read as a strong critique of the neoliberal discourse of choice and the eugenic logic driving efforts to mold our progeny to our wishes. We know, at this point, that the technology required is simply beyond our reach, but it's not unreasonable to think that it will become available in the future. And your project is clear in labeling its use of speculation. Efforts like these may provide the public with a platform to use in the interrogation of innovations that may very well be implemented in the near future across wealthier societies, further exacerbating existing inequalities in access to medicine and health technologies. We conclude our conversation with the topic of speculating about the future, which plays a key role in projects blending art and science. On the one hand, the growing pace of technological development gives rise to new ethical issues related to the notion of



Visual representation created by Karolina Żyniewicz for use in gallery presentations

reproduction, but, on the other, finds itself increasingly open to an ever-broader range of scientific, social, political, and economic realities.

**KŻ:** I'm glad that we were able to map out this network of problems inextricably linked with the notion of reproduction. We could even go so far as to argue that we have re-produced the notion itself. It turns out that you can actually discuss reproduction without abusing the term. Efforts to reshape conceptual frameworks are essential in light of the dizzying pace at which our deeply technologized reality seems to change. The quicker we master the effective re-production of our thinking and language, the greater our chances to adapt to these new realities that consistently force us to rethink the development of humans as a species.

**AJ:** Which is why reorienting ourselves toward posthumanist interpretations of care and motherhood seems a key perspective, and a proposal to rethink our ethics of co-existence.

- 1     María Puig de la Bellacasa, *Matters of Care: Speculative Ethics in More Than Human Worlds* (Minneapolis: University of Minnesota Press, 2015).
- 2     Bruno Latour, "Love Your Monsters: Why We Must Care for Our Technologies As We Do Our Children," in: *Love Your Monsters: Postenvironmentalism and the Anthropocene*, eds. Michael Schellenberger and Ted Nordhaus (Oakland: Breakthrough Institute, 2011), 87.
- 3     Karen Barad, "Posthuman Performativity – Toward an Understanding of How Matter Comes to Matter," *Signs: Journal of Women in Culture and Society* vol. 28, no. 3 (2003), 820.
- 4     Rebekah Sheldon, "Form/Matter/Chora: Object-Oriented Ontology and Feminist New Materialism," in: *The Nonhuman Turn*, ed. Richard Grusin (Minneapolis: University of Minnesota Press, 2015), 187.
- 5     Jill Scott, *Artists-in-Labs: Processes of Inquiry* (Zurich: Verlag, 2006).
- 6     See: Anna Lowenhaupt Tsing, *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins* (Princeton: Princeton University Press, 2015); and the curatorial digital platform *Feral Atlas: The More-than-Human Anthropocene*, produced in collaboration with Jennifer Deger, Alder Keleman, and Feifei Zhou, <http://feralatlans.org> (accessed December 12, 2021).
- 7     Maja Smrekar, *Hybrid Family*, <https://www.majasmrekar.org/k-9topology-hybrid-family> (accessed December 17, 2021).
- 8     Ibid.
- 9     Amelia DeFalco, "Towards a Theory of Posthuman Care: Real Humans and Caring Robots," *Body and Society*, August 14, 2020, <https://journals.sagepub.com/doi/full/10.1177/1357034X20917450> (accessed December 12, 2020).

## Bibliography

Barad, Karen. "Posthuman Performativity – Toward an Understanding of How Matter Comes to Matter." *Signs: Journal of Women in Culture and Society*, vol. 28, no. 3, 2003

Bellacasa, María Puig de la. *Matters of Care: Speculative Ethics in More Than Human Worlds*. Minneapolis: University of Minnesota Press, 2015

DeFalco, Amelia. "Towards a Theory of Posthuman Care: Real Humans and Caring Robots." *Body and Society*, Vol 26, Issue 3, 2020.

<https://journals.sagepub.com/doi/full/10.1177/1357034X20917450>

Deger, Jennifer, Alder Keleman, and Feifei Zhou. "Feral Atlas: The More-than-Human Anthropocene," accessed December 17, 2021, <http://feralatlantlas.org>

Smrekar, Maja. "Hybrid Family", <https://www.majasmrekar.org/k-9topology-hybrid-family>

Latour, Bruno. "Love Your Monsters: Why We Must Care for Our Technologies As We Do Our Children." In *Love Your Monsters: Postenvironmentalism and the Anthropocene*, edited by Michael Schellenberger and Ted Nordhaus. Oakland: Breakthrough Institute, 2011

Lowenhaupt Tsing, Anna. *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins*. Princeton: Princeton University Press, 2015

Scott, Jill. *Artists-in-Labs: Processes of Inquiry*. Zurich: Verlag, 2006

Sheldon, Rebekah. "Form/Matter/Chora: Object-Oriented Ontology and Feminist New Materialism." In *The Nonhuman Turn*, edited by Richard Grusin. Minneapolis: University of Minnesota Press, 2015