

# DESIGN FOR THE AGE OF SPECIES – EXPLORING WAYS FOR DESIGNERS TO CARE FOR MULTISPECIES COEXISTENCE

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## ABSTRACT

This paper presents the project The Age of Species (TAS) and the ‘multispecies approach’ addressing the who in care with the aim to disrupt human-centeredness and open up for reconfigurations of design practices to better engage with troubled presents where a myriad of other species is overlooked and becoming extinct. TAS invites designers and scientists to speculate of and design for anthropo-de-centric futures by thinking through care and coexistence. By describing and reflecting on the experiences of an initial workshop and its outcomes as well as anchoring it with theories within feminist posthumanism, the aim is to explore and define the notion of a multispecies approach. The purpose is to raise questions to be developed in the continuation of the project TAS and share insights that may contribute to a wider discourse of human de-centering design.

## WHAT’S AT STAKE?

In a time where a lot of the problems we are facing, like climate change, can be traced back to design decisions, exploring ways to critically examine the role of the designer is necessary if we want practice-based design and research to contribute to transitioning our societies toward more sustainable futures. As an industrial

designer, I’m trained to solve human problems by using ‘resources’ like materials and labor without the profession’s expectations to care about their histories. The act of designing is inherently contradictory. On the one hand, design is the creation of something, on the other hand that creation equals destruction (Fry, 2009, p.205) in terms of extraction of materials from the biosphere.

TAS, (Figure 1), is a two-year long, cross-disciplinary platform of critique and speculation for invited designers and scientist that will develop into an exhibition in Sweden, during 2020, curated and lead by myself and Jenny Lee. The project was initially formed around the question: Is it easier for humans to imagine life on Mars than to care for Earth? Due to environmental decay and increasing material scarcity, scientists and the space industry have been investigating the potential of asteroid mining, planetary engineering and in-space manufacturing, to meet the demands of a growing population. For instance, private space company SpaceX is planning to launch its first manned mission to Mars in 2024, with the vision of establishing a Martian City and thus making humanity a multi-planetary species (Drake, 2017).



Figure 1 – Space-lichen collage for TAS, 2019

*Criticizing this colonialist aim, what if the focus would shift from the human to the unseen actors, whether living or non-living matter, rendered invisible by the common design process part of the current paradigm of progression?*

TAS is the initial part of my PhD project where I, from a curatorial perspective, will explore ways of thinking and doing that engage care in relation to other-than-human actors. TAS also uses speculative design as a guiding principle to create multi-planetary future scenarios, not as a goal, but as a tool to reflect on current earthly situations.

## CARE FOR COEXISTENCE

There are many practices of care – as in affective, ethical and political (Puig de la Bellacasa, 2017, p.5). As used in analyzing the workshop described below, care is relational and anchored in Tronto’s generic definition: “everything that we do to maintain, continue and repair ‘our world’ (...) which we seek to interweave in a complex, life sustaining web” (1993, p.103). Further elaborated on by Puig de la Bellacasa, “as a manifold of doings needed to create, hold together, and sustain life and continue its diverseness” (2017, p.70). *How can this notion of care guide designers in the choice of what to design and for whom?*

My suggestion, a multispecies approach, aims to engage in care by enabling thinking with, or acknowledging other-than human species. Stemming from Haraway, all thinking is *thinking with*, acknowledging heterogeneity, multiplicities, connectedness of our bodies and worlds, questioning boundaries and reductionism. (Puig de la Bellacasa, 2017, pp 71-72). The etymological meaning of multispecies is: Of, relating to, or involving several or many species. By using acknowledging, the meaning becomes subjective: To accept or admit the existence or truth of, I argue, that the human species is not the apotheosis of evolution but rather fully entangled with and dependent on others in acts of becoming with. As Haraway points out: “If we appreciate the foolishness of human exceptionalism then we know that becoming is always becoming with, in a contact zone where the outcome, where who is in the world, is at stake” (2008, p.244). The notion of a multispecies approach and suggestions of how it could be cultivated to enable thinking and becoming-with, emerged while planning the TAS project. In addition to the authors mentioned above, multispecies ethnography was influential for exploring how design can be part of a paradigm shift departing from the separation of nature and culture, human and other-than human, much like the “recent provocations within anthropology suggesting that human beings, seen ontologically, are multispecies beings” (Kirksey et al., 2014, p.4).

## IMPLEMENTATION

The multispecies approach was applied to a set of exercises in a four day-long workshop at STPLN open offices and maker space in Malmö in November of

2018. Three international design studios from different disciplines were invited to take part of the initial workshop following three inspirational guest lectures by scientists. The workshop was designed to allow space for thinking and making, creating a transition from a human-centered to a multispecies mindset throughout the exercises or missions. Starting with the participants enacting future human astronauts performing a space journey from Earth to Mars (Figure 2,3), the following missions were successively framed by the question: *By looking through the lens of non-human species, could designers become aware and design for better futures where all species can benefit from the activity of the other?*



Figure 2 – Sensory altered interactive performance, 2018



Figure 3 – Astronauts wearing goggles that distort vision, 2018

The somewhat humorous missions were conducted in groups of two and are described below in chronological order:

- Terra Mapping

In an multiplanetary future and potential habitation of the planet Mars, it is crucial to create a livable environment. What planetary conditions and materials can be found on Mars? Your mission is to assess the terrain and conditions on Mars by collecting data and samples to ensure the future survival of all species.

- Species Mapping

Your mission is to collect data and samples to ensure the future survival of all species by identifying potential species living in Mars, and how together with earthly species you could make up new ecosystems that benefit all.

- Identify if there are species living on Mars and the role they may play in a future ecosystem on Mars.
- Identify what Earth species will be crucial to bring to Mars.

- Human Mapping

You, as human must acknowledge that we as a species are not exceptional. Your mission is to explore how we can actively be part of a new circular ecosystem of other living organisms in space.

- Species Care

The ongoing growth in human population and resource consumption is changing the planet in fundamental ways. One consequence is the loss of biodiversity. Humanity depends on biodiversity in myriad ways, yet species are being rapidly lost due to human activities. Species-diversity is an integral component of ecosystems, and the value they provide is undervalued by humankind. Your mission is to nurture and care for your companion species. As a foster parent you are responsible for its health and wellbeing. It must be with you at all times. You are responsible for it for the duration of its or your life cycle. Should your species die, you will have failed the mission. Failure is not an option.

The species handed out in the mission were bacteria, mushrooms and triops (Figure 4).



Figure 4 – (wikipedia.org Triops) *Triops cancriformis*, a prehistoric critter, older than dinosaurs, commonly called “living fossil” a term coined by Darwin.

## DISCUSSION

The following findings are based on the participating designers’ reflections during an ideation session and discussion. A questionnaire was sent out to get feedback on the Species Care mission. Unfortunately, none of the designers replied, which required more interactive means of communication, as in informal interviews. Findings also emerged in an analysis of the workshop-outcomes conducted by the project coordinators and from my own reflections after connecting it to the literature mentioned.

The core themes that emerged fell into three categories, Human, Species, Operative, for example ideas concerning preparing for space travel, ownership in space and design of future homes. As the vast majority of ideas where human-centered it will not be further described in this paper, but it led to the important insight that the designers had difficulties shifting away from anthropocentric perspectives. As a result, the decision was made to make an open call to attract designers already aligned with this type of thinking, to partake in the continuation of TAS.

## FACTS AND FABULATIONS

To analyze the multispecies approach, it’s relevant to focus on the Species Care mission, where the designers presented extensive research along with more poetic reflections, mixing fiction and fact, for example metaphorically describing the triop cysts as ancient seeds waiting for rain to come back to life. I draw parallels to Haraway’s use of “poiesis – the making of speculative fabulation” or SF, an abbreviation she attributes more meanings like “science fiction, science fact, speculative feminism, so in dela ficelle, so far” (2016, p.31). Weaving together multiple sources of thought, art practice and science is what feminist posthumanists Åsberg and Braidotti argue can be an “engine of discovery and alter-worlding device” (2018, p.3). *How can fabulation and alter-worlding devices, be used to bridge science, art and design with the possibilities to open up communication with wider audiences, affirming the speculative approach and the transdisciplinary aim of TAS?*

As an extension to Haraway’s SF, I could add *so fun*. The humorous aspects of the mission descriptions, the performative props and the role-play came about naturally in the convivial planning process of the workshop. Only in later reflections it became clear that humor can be considered a method. *How can humor be explored further in the TAS project as way to approach the extremely serious topics it is dealing with?*

## CARE BY DOING

The aim of the final mission was to engage the designers to care for a species and observe if this would open up for a relational sense of coexistence. What the species care mission also set out to do, framed by a current space hype dominated by technoscientific mobilizations, was to explore if “paying attention to

practices of care can be a way of getting involved with glimpses of alternative livable relationalities” as phrased by Puig de la Bellacasa (2017, p.170). The participants expressed that they got embodied experiences and their initial curiosity about the species grew into a feeling of responsibility when, at the end of the fourth workshop day, the different species needed to be carefully moved from the maker space to the various destinations of their hosts. They also mentioned that caring for the species outside of the workshop, bridged the mission as a one-off experience and the private realm, and as a result prolonged their reflections on the multispecies and anthropo-de-centric topics of the workshop. I believe the workshop succeeded in planting a seed for “disruption of anthropocentered temporalities” (Puig de la Bellacasa, 2017, p.23).

However, there were also indications of difficulties in seeing a greater purpose of the multispecies approach. As a response and an effort to communicate the purpose of a multispecies approach, the writing of this paper outset to situate the approach in a theoretical framework. For the project coordinators, it is necessary to expand on the definition of care, it’s temporalities and ethical implications when developing TAS further, involving more human and other-than-human subject matters into the project. For example, what the animal rights movement, ecofeminists and indigenous struggles have put a focus on, as brought up by Puig de la Bellacasa. How to “acknowledge ‘their’ agency, and our involvement in it, without denying the asymmetrical power historically developed by human agencies in bios?” (2017, p144). The main insight gained from literature input and reflections of the workshop resulted in re-formulating the multispecies approach as an *ethos* of care.

#### MARS AS A MONSTER?

Being critical of the anthropocentric and colonial aspects of space explorations, yet still making the departure from Earth’s ghostly landscapes haunted by the violence of modernity (Tsing et al., 2017, pp.G1-G13), TAS is using Mars as a projection plane for critical speculation and design fiction. *Can we think through the metaphorical concepts of monsters and ghosts?* It doesn’t make Mars a monster per se, rather, the monstrosity emerges as future embodiments of the ecological disruptions created by human activity.

#### CONNECTING THE NARRATIVES

Two main narratives are becoming clear, one is the dark, techno-driven dystopia in Martian terrains and another is that of a crawling, living multispecies-care-narrative. Since the subjects of multiplanetary and multi-species futures can seem disparate, this paper will end with a short discussion in order to facilitate for the continuation of TAS.

Mars is often called a lifeless planet (Fries et al., 2017) and so far, research has proven no traces of living organisms. Given this, an inevitable question emerges:

How does these two narratives connect? The writings of Lynn Margulis and Dorian Sagan (2007) proved important in validating the TAS concept. First of all, they point out that “no single life-form or member of one species alone could ever colonize space.” (2007, p.96). We can utilize this quote to open up discussions not only of what companion species are needed in order to create the necessities for human survival, (like producers of oxygen and food), but more importantly, to highlight symbiosis. Margulis concept of symbiogenesis, argues that any organism is always a member of a community. Margulis, who was a radical evolutionary theorist and whose work was dedicated to microbes, unpacks this further. About 90 % of the human cells in our bodies are the genomes of bacteria, protists, fungi etcetera, and not human. “Without them, we would have no air to breathe, no nitrogen in our food, no soil on which to grow crops. Without microbes, life’s essential processes would quickly grind to a halt, and Earth would be as barren as Venus and Mars.” (2007, p.32).

Hence, there is an established connection between the scales of micro and macro, bacteria and space. To frame the speculative and multispecies approach clearly in the TAS open call, we developed five concept strands exemplifying future scenarios where humans “coevolve with plants, animals, and microbes.” (D. Sagan, L. Margulis, 2007, p.95), (Figure 5).

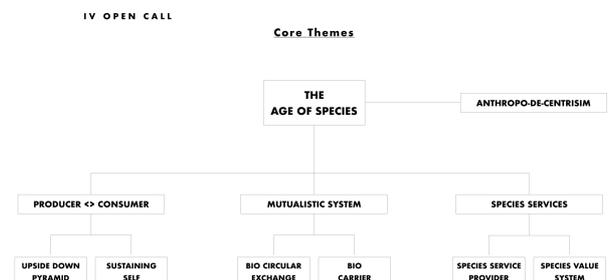


Figure 5 – Core concepts of the TAS open call

#### CONCLUSION

By looking at the workshop as a case, and as a response to its outcomes, this paper set out to define a multispecies approach as an aim to acknowledge other-than-human species in general and those affected by design practices in particular. Learning from Haraway, Puig de la Bellacasa, Tsing et al., Åsberg and Braidotti, the approach requires thinking with, accepting that humans are fully entangled with and dependent on other species. Encouraging an ethos of care for such entanglements is the purpose of this multispecies approach.

Using speculation and fabulation, both in the workshop and the open call for TAS, opened up for entering scales of macro- and microcosms. Margulis and Sagan also

facilitated for the potential merge of the disparate lifeless planet of Mars into a future crawling, living multispecies-care-narrative.

As a result of the analysis of the workshop, TAS was developed through an open call and ten international designers are currently working with a more defined and developed multispecies approach. From my curatorial perspective, it becomes clear that the most important story for The Age of Species project to continue narrating, is the one of life as symbiotic entanglements across bodies, questioning the current issues of human exceptionalism on Earth.

This paper will end by extending an invitation to designers to co-create the multispecies approach.

*How can we together challenge the prevalent human-centeredness and open up for reconfigurations of design practices to better engage with troubled presents where a myriad of other species is overlooked and becoming extinct?*

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