Environments, Orientation, and Liquid Foundations

Robert Mitchell

As Ursula Damm and Mindaugas Gapševičius note in their introduction, the three *Shared Habitats* exhibitions that preceded this volume sought to expand "sensory perception with the help of technical objects and [by] adapting it to the stimulus sphere" of other beings, whether these latter were fruit flies, pigs, mushrooms, or other non-human denizens of our shared world. This volume documents those art projects, and connects those descriptions to analyses of theoretical and philosophical approaches that can help us to understand better the implications of these artworks. These theoretical and philosophical approaches include the *Umwelt* (environment) theory of theoretical biologist Jakob von Uexküll; philosopher of technology Gilbert Simondon's concept of the associated milieus of technologies; the theory of consciousness and self-survey of philosopher of biology Raymond Ruyer; environmental scientist M. Beth Dempster's concept of sympoiesis; Michel Foucault's project of mapping the history of different forms of care of the self; and philosopher Catherine Malabou's analysis of neuronal and corporeal plasticity.

For readers of this volume who have experienced in person some or all of the artworks described here, these theoretical contributions can extend and amplify the experiential reorientations enabled by the artworks themselves. For readers who have not engaged many or any of these artworks in person – and this may perhaps be a majority of the readers of this volume – the theoretical contributions and artwork descriptions can jointly help establish an openness to, and orientation toward, the lessons and learning facilitated by the exhibitions. In this introduction, I would like to make a contribution – admittedly minor – to that process by reflecting on three points that are arguably already implicit in the volume, but that can perhaps helpfully be brought even more fully into the open.

My first point concerns one of the guiding concepts for *Shared Habitats*, Uexküll's concept of the umwelt. As Andrew Pickering notes in his contribution to the volume, Uexküll's primary emphasis is on the unbridgeable *differences* between the umwelts of the various species of our world. The umwelt of the tick, for example, is simply other and different than the umwelt of the human. From this perspective, each species seems to be trapped inside its own soap-bubble-like umwelt, and cannot make contact with the umwelts of other species. Yet Uexkull's account is more complicated than this initial description might imply, and the complexity of his theory likely accounts for his appeal to many of the artists in this volume. In many of his asides and examples, Uexküll suggests that umwelts are not in fact as unbridgeable and unbreakable as other parts of his account might suggest. In the case of humans, it turns out there is not just one human umwelt, but multiple umwelts, which correspond to, among other factors, age and occupation. Uexküll contrasts, for example, an oak tree seen within the umwelt of the forester with that same tree as seen within the umwelt of a child. Because the forester focuses on turning trees into wood, he does not see those aspects of the oak prominent for the child, such as the "bulging bark which resembles a human face."[1] Uexküll also describes briefly the umwelts of the astronomer, the deep-sea researcher, the chemist, and the physicist.[2]

While Uexküll's stress in these examples is still on what divides umwelts – the oak tree seen by the child is not the same as that which the forester sees, and the umwelt of the chemist is not that of the physicist – it is also the case that all foresters, chemists, and physicists were once children, and a forester can become a physicist, or vice versa.

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1 Jacob von Uexküll, *A Foray into the Worlds of Animals and Humans: With a Theory of Meaning*, trans. Joseph D. O'Neil (Minneapolis: University of Minnesota Press, 2010), 128.

2 Ibid., 133–34.

In other words, human individuals not only can move between various human umwelts, but they do so as a matter of course. Nor is such movement between umwelts necessarily restricted to humans. As Pickering notes in his essay in this volume, Uexküll suggested that a guide dog for a blind person must learn to recognize "marks" in the dog's environment that would not normally "interest him [the dog]," such as a curb, but that "are in the blind person's interest"[3] (see Pickering, page 34).

As film theorist Inga Pollmann has noted, Uexküll's descriptions and exemplifications of specific umwelts often relied on technologies and media, such as film, the phonograph, and experimental devices. Pollmann suggests that Uexküll's umwelt theory in this way opened up two paths for subsequent theorists, critics, and art practitioners, depending on whether commentators neglected or embraced the importance of these mediating technologies for Uexküll. The first path, which Pollmann calls "the path of man," was represented by authors such as Max Scheler, Helmuth Plessner, and Martin Heidegger, who were generally uninterested in the role of technologies in Uexküll's account, and used Uexküll's theory primarily as a means for distinguishing between the capacities of humans and those of all other animals.[4] Pollmann calls the other route "the path of alienation (or the path of the animal)"; this path was represented by film theorists and artists such as Blaise Cendrars, Jean Epstein, Walter Benjamin, Adolf Behne, and Franz Marc. Rather than using umwelt theory to distinguish between humans and animals, travelers along this second path instead sought to "cross-breed human, animal, and technological perceptions."[5] For these travelers, technologies such as film were a key means by which humans could allow themselves to be opened to, and in a sense be pos-

3 Ibid., 100.

4 Inga Pollmann, "Invisible Worlds, Visible: Uexküll's Umwelt, Film, and Film Theory," *Critical Inquiry* 39, 4 (2013): 781.

5 Ibid., 782.

sessed by, the umwelts of non-humans. This path also inspired the creation of the 1937 "A Dog's World" diorama at the American Museum of Natural History in New York, in which visitors could press a button and "see" a staged room as a dog would see it.[6]

Stephan Isermann's inventive *The Pig Simulator* (page 109) follows and extends this latter path, though the specific use of technology in Isermann's project suggests that the purely visual engagement of a project such as "A Dog's World" (especially when set within the context of a natural history museum) is perhaps often not enough to break out of one's own soap bubble. Rather than allowing participants to observe comfortably the world of a pig from over its shoulder, Isermann instead forces humans into pig-like postures and movements, and situates participants in a virtual reality world based on the hybrid umwelt of industrial meat production, within which all pigs have one rather unpleasant final destination (pork). It is worth stressing that if *The Pig Simulator* allows participants to inhabit briefly and obliquely the umwelt of pigs who live in meat production facilities, it does so not simply because it forces human beings to crawl around on all fours and see the limited world of the meat facility from that vantage point. That physical position is, of course, pig-like – but it is also dog-like, horse-like, mouse-like, alligator-like, and so on. What presumably makes this experience feel specifically *pig*-like are also the many cultural associations, ranging from servitude to sexuality to play, of crawling around on all fours in public in front of others. *The Pig Simulator* in this way suggests that catching a glimpse of the inside of another umwelt is not simply a matter of using technologies to see (or hear or feel) what that other entity sees (or hears or feels), but also, and equally, a matter of exploiting cultural aspects of our own shared umwelts that can orient us away from our human worlds and toward the worlds of others.

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6 Inga Pollmann, *Cinematic Vitalism: Film Theory and the Question of Life* (Amsterdam: Amsterdam University Press, 2018), 103–8.

My second point concerns the orienting capacity of these artworks and the theoretical pieces in this volume. It seems fair to say that, for a significant majority of humans living in Europe, North America, and Asia, our current umwelt is largely determined by what geologist Peter Haff calls the "technosphere": that is, the global and "interlinked set of communication, transportation, bureaucratic and other systems that act to metabolize fossil fuels and other energy resources."[7] One consequence is that we devote a considerable amount of attention to technologies, especially computers and screens, and very little to plants, animals (except as pets), and what we used to call "the natural world." Even finding opportunities to attend to non-domesticated plants and animals is not easy, for, as urban historian Chris Otter notes, many of us have in effect come to occupy enclosed tubes, rather than a landscape or globe:

> *The technosphere allows humans progressively to abandon a largely outdoor existence, and to retreat into increasingly sealed, climate-controlled spaces. [. . .] The technosphere is a new phase in the history of human niche-construction. It is ruthlessly cleansed, with sanitized surfaces, vacuum cleaners, disinfectants and antibacterial soaps. [. . .] Microbes and insects are largely (if imperfectly) expelled from human settlements, while congregating, thriving and evolving in infrastructural niches. Pets and plants, meanwhile, are welcomed, while livestock inhabits its own increasingly hellish, mechanized zootechnosphere.*[8]

While we of necessity encounter the artworks of *Shared Habitats* within the technosphere, they nevertheless provide opportunities to develop new forms of attention (or, following Georg Trogemann's discussion here, new

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7 Peter K. Haff, "Technology as a Geological Phenomenon: Implications for Human Well-Being," in *A Stratigraphical Basis for the Anthropocene*, eds. C. N. Waters, J. A. Zalasiewicz, M. Williams, M. A. Ellis, and A. M. Snelling (London: The Geological Society, Special Publications, 2014), 395.

8 Chris Otter, "The Technosphere: A New Concept for Urban Studies," *Urban History* 44, 1 (2017): 151–2.

Foucauldian practices of "care for the self"). As Ursula Damm notes, the exhibition in one sense continues Bauhaus architect Lazlo Moholy-Nagy's commandment to the artist "to penetrate yet-unseen ranges of the biological functions, to search the new dimensions of the industrial society and to translate the new findings into emotional orientation" (page 221). Yet the artworks here also enable orientations that aim to lead us at least a partial step outside an industrial society that has become far more encompassing than Moholy-Nagy could likely have imagined.

Freya Xia Probst's *Rhizomes* exemplifies this capacity of these artworks to orient us away from the dominant coordinates of the technosphere. Probst describes this work as "[e]xperiments with pearls, small gears, the positioning of seeds or different mediums," which then "lead to different plant responses," and result in wearable articles of clothing. To view the results of this work is to reflect on Probst's own forms of attention that made the work possible; by channeling Probst's form of attention, we can also begin to observe in our own lives the various relations among biological media, plants, and animals (including humans) that occur at the borders of the technosphere. Ursula Damm's *Drosophila Karaoke Bar* is another compelling example of such reorientation, for her work enables participants to attune themselves aurally to fruit flies. Mindaugas Gapševičius's projects also exemplify this capacity for reorientation, in this case by focusing our attention on microorganisms: SCOBY, for example, is a "symbiotic culture with bacteria and yeast," a "'culture' that is also an old fermentation technique" (Volkart's description: pp. 197–202).

My final observation, which emerges out of my first two points above, bears on how we should understand the nature of this reorientation. It is tempting, channeling Marshall McLuhan,[9] to see these media projects as enabling *extensions* of existing human capacities (or, to draw more on

9 Marshall McLuhan, *Understanding Media: The Extensions of Man* (Cambridge, MA: The MIT Press, 1994).

Uexküll's work, as enabling us to expand the number of umwelts to which we have access). That seems to me, though, the wrong way to understand these projects. Such an interpretation assumes a connection between capacity-extension and control that many, and perhaps all, of these works contest. Becoming attuned to a *shared* habitat is likely a matter of relinquishing at least some aspirations for control. From this perspective, Henning Schmidgen's discussion of Simondon is especially helpful. As Schmidgen notes,

> *[f]or Simondon, the human body does not solely consist of more or less clearly defined organs and limbs. It also possesses a liquid foundation (Deleuze calls it the "organless body"), and it is this splashing, inner milieu which humans draw upon when they invent technical objects that act as genuine mediators* (médiateurs) *between artificiality and naturalness. It is this mediation that allows the forces, potentials, and virtualities contained in life, and thus also in human beings, to be brought to the forefront. (p. 60)*

This is an extraordinarily helpful point, and it orients us toward images of fluidity and all of their attendant forces, such as pressure, elasticity, flows, and eddying. These latter seem like especially useful means for understanding both how earlier technologies have "act[ed] as genuine mediators (*médiateurs*) between artificiality and naturalness," and how new technologies might more productively operate in our own era of climate change and rising ocean waters. This also provides us with a wonderful image for thinking further about the specifically artistic uses of technology instantiated in the works in *Shared Habitats*, and the ways in which they reactivate and reorient that liquid foundation.

Robert Mitchell's *(*1969) research focuses on relationships between literature and the sciences in the Romantic era, as well as contemporary intersections among information technologies, genetics, and commerce, especially as these have been played out in the legal, literary, and artistic spheres. His most recent work has focused on the theory and practices of experimentation in both the arts and sciences, the history of vitalism, and the relationship between aesthetics and biological concepts of population.*