

BOOK REVIEWS

Book Review: *Living Surfaces: Images, Plants, and Environments of Media*. Abelardo Gil-Fournier and Jussi Parikka. MIT Press, 2024. ISBN 9780262547956

Yangqiao Lu¹^a¹ Cinema and Media Studies, University of Chicago

Keywords: surface epistemology, plant studies, history of science, light media, ecomedia

<https://doi.org/10.1525/001c.126578>

What do a glass bell jar in an eighteenth-century photochemistry lab and the remote sensing technologies applied in precision farming today have in common? According to Abelardo Gil-Fournier and Jussi Parikka, they are all instances of “how the surface of the earth has, over the last two centuries, become known and perceived as an environment of image” (6). Offering a genealogical account of this process, Gil-Fournier and Parikka invite the reader to imagine the planet as composed and structured by “living surfaces.” Examples of the living surface range from the transparent surface of greenhouses, the photosensitive surface of plants and photographic materials, to paper maps and satellite images. The term “living” here is descriptive and analogical, referring to the activities and logistical relations of the image which can be material, chemical, or visual and inscriptive, as in the case of surfaces of plants (6). These living surfaces constitute an ecology of media in the shape of “operational loops of imaging and shaping” (83) which eventually *become* the planetary, rather than merely representing it.

Living Surfaces can be considered a technoscientific sibling of Parikka’s *Operational Images* (2023).¹ In *Operational Images*, Parikka attends to the status of the image in the ever-expanding field of media studies and offers a non-representationalist approach that treats the image as an “epistemic force” (vii). The operational image draws attention to non-phenomenological relations and processes mobilized and structured by the visual, such as “measurement, pattern analysis, navigation, and more” (vii). *Living Surfaces* extends this intervention beyond cultural and social quarters to the realm of plants. Gil-Fournier and Parikka are daring in their recognition of the surface value of plants and astute in their observation of a unique capacity of plants to link across a vast range of scales in the biosphere and geosphere. It is

a Yangqiao Lu is a Ph.D candidate in Cinema and Media Studies at the University of Chicago. She is interested in the conceptualization of geomedia through scientific and artistic abstractions found in ancient and contemporary media objects. Her dissertation is set to explore land as a category of cosmological analysis, looking at how contemporary media arts have turned to “traditional” cosmologies, not only to critique the devastating effects of modern modes of extraction and exploitation of resources, but also to entertain alternative ways of imagining, inhabiting, and ordering land. A houseplant enthusiast, she has also been reading, thinking, and writing about plants as a member of the Phytological Critique research project supported by the Neubauer Collegium for Culture and Society.

1 In the Introduction to *Operational Images*, Parikka mentions this book project as part of the broader working network that *Operational Images* came out of: “Gil-Fournier and I [...] are writing a joint book on environmental imaging, surfaces, and operational images, which also continues some themes appearing in this book” (26).

based on these two dispositions that the authors find a sweet spot where the operational image and the vegetal surface correspond. Through a “proximity and merger of vegetal surfaces with media and image surfaces” (13), Gil-Fournier and Parikka activate the living surface as a mode of mediation.

Indeed, the timeliness of *Living Surfaces*’s genealogical gambit is that it brings the surface into focus when its conceptual formulation has been under-developed in both critical plant studies and eco-media. Surfaces of leaf and root systems are key to plant activities, yet—with the exception of Zoë Schlanger²—much of the conceptual work on locating plant agency is largely concerned with plant complexity beyond its surface value: their imperceptible and infinite movement against their apparent inertia, their language and communication against their silence³, their sentience⁴, thinking⁵, and intelligence⁶ against their objecthood. For writers who aim to find plants their own ontological and metaphysical status, the surface has seemed to be a risky subject, threatening to relegate the botanical to a merely “ornamental” role. This avoidance of the “superficial” has its mirrors in the wider discursive field of eco-media, where critical attention has primarily centered on the model of depth as its generative core. As scholars dive into the ocean, dig under the ground, or soar into the atmosphere, a focus on the vertical and the volumetric are responsible for revealing myriad power formations constitutive of the Anthropocene. Similar in their investment in the non-representational but different in its orientation, *Living Surfaces* argues that the surface does not equate to the symptomatic or to the mimetic and thereby identifies a new space for media theories of the environment.

In this new space, questions of aesthetics become essential. If surface epistemology opens up the image to analyses of its material, technical, and historical environments, it is the book’s belief that analytical accounts of environmental programs such as (DARPA’s) Advanced Plant Technologies would not be sufficient without understanding the role of images in the design and execution of the colonial and state violence. To introduce aesthetic questions into the mix, Gil-Fournier and Parikka make unusual yet fruitful connections. For example, in chapter four, Andrei Tarkovsky’s *The Mirror* (1975) is grouped together with propaganda documentary *España se prepara* (1949) for a clarified ecology of visual media during Spanish inner colonialization. By drawing our attention to the circulatory logic of these different moving-image media, Gil-Fournier and Parikka also make a case for

2 In *The Light Eaters: How the Unseen World of Plant Intelligence Offers a New Understanding of Life on Earth*, Schlanger offers extensive discussions of surface activities as evidence of plant intelligence.

3 For an example, refer to *Thus Spoke the Plant* by Monica Gagliano.

4 For an example, refer to “[Becoming Sensor in the Planthropocene: An Interview with Natasha Myers](#)” by Meredith Evans in the Society for Cultural Anthropology, Visual and New Media Review, *Fieldsights*, July 9, 2020.

5 For an example, refer to *How Forests Think* by Eduardo Kohn.

6 For an example, refer to *Plant-Thinking: A Philosophy of Vegetal Life* by Michael Marder.

cinema, reconceiving its historical mediation and milieu while adding to the growing body of literature unearthing the intersections of the cultural and agricultural.

In the book, an introduction is followed by seven chapters in which Gil-Fournier and Parikka build a genealogy where the realms of media and the planetary become increasingly entangled through scientific observations of vegetal phenomena, beginning in the late eighteenth century. The book conceives the living surface as an epistemic and aesthetic instrument across modernity, yet it is not intent on profiling historical constants or consistencies. Instead, Gil-Fournier and Parikka use scaling—more specifically multi-scaling—as their principal organizing device. Characterized by a sense of multiplicity, the book is organized into what Gil-Fournier and Parikka describe as “a meshwork” comprising the Earth’s geographical, vegetal, geological, and architectural surfaces. This is then further “multiplied in the actual products of sensing, such as images, spectrometric data, and other instances” (143).

While the book seems to follow a linear history, it is most productive when read as an archipelago of scenes, moments, and subjects, whose interlacement goes beyond what a sequential form of reading allows. This is the result of Gil-Fournier and Parikka’s methodological experiment to modify and extend Aby Warburg’s *Bilderatlas Mnemosyne*. The Warburgian method entails careful grouping and deliberate juxtaposition of images for a montage effect that energizes each component with flux and immersion. In their translation, Gil-Fournier and Parikka graft this art historical method onto a well-curated collection of scientific sites and practices. Unexpected connectors, such as sensory intensity in the form of sensations and desires for light, emerge across several chapters.

This grafting method is highly suggestive of future avenues of research, as it opens up histories of science and technology to aesthetic investigation and organization. This, of course, raises many important questions as well. How do we articulate aesthetic lineages in historical accounts of science without subjugating one narrative to another? Aesthetic discussions introduce new scales of ordering. How do we use scale productively? Is scale a method, a theme, or both? When *Living Surfaces* assigns scale an ambitious set of triple functions as “generative of a ‘tangle of new relations,’” enabling the “stabilization of forms of knowledge and experience” and being “employed in a history of media techniques,” the function of scale begins to blur. The book’s attention to both the “inter-scalarity” of the plant and the “multi-scalarity” of the surface begins to feel like an omnipresence of scale that threatens to dilute the meanings of these terms. For future research, directions building on this book’s intervention may seek to extend the media objects and methods of the living surface beyond the Western Hemisphere: can there be a genealogy of surface that is attentive to local compositions

and circulations of materials, images, and senses? Finally, is there space for plant agency in the merging of vegetal and media surfaces? The book invites new perspectives that take the biological workings of the plant into aesthetic account.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CCBY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons.org/licenses/by/4.0/legalcode> for more information.