

aerobic topologies

CAROLIN MELIA BRENDEL

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Not an introduction
or dissolving liminalities

[02]
Air and
intra-activity

[03]
Fermentation/
fermenting

[01]
Art versus/beside/
with/and text



[04]
Traversing as
knowledge practice

[05]
Multiple apparatuses
of seeing/filming/knowing

SCHLEBRÜGGE.EDITOR

socio-spatial knowledge practices of fermenting microbes

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Not an introduction or dissolving liminalities

When I commenced this body of text, I began with writing fragments. Now, I am confronted with the task of formulating an introduction – the section that unifies the elements, sorts the parts, establishes an order and offers a comprehensive view. Complete blockade. One of the reasons for undertaking the artistic research project *Aerobic Topologies I-XVII*, together with my colleague and friend Helena McFadzean, is the subject and the troubling process of boundary formation. Writing a beginning is such an act of demarcation. Hence, it almost compels me to resist even starting to do so. Refraining from drafting an introduction is a refusal to participate in the routine of drawing a line. Still, I am writing. Attempting the impossible; to undo the divide while creating it. The phenomenon of dissolution and the image of a porous border is reconciling, enabling me to initiate the writing process despite my reluctance.

Fermentation is continuous crafting and dismantling of liminalities. This might be the very reason why it served as a central methodology for this project. The practice of fermenting remains perpetually present; in our past actions, in our/my engagement with the resulting artifacts and as I deal with it textually. My encounter with fermentation investigates the limited validity of disciplinary epistemologies, departing from disciplinary norms while simultaneously seeking disciplinary perspectives to approach it. This emphasis on the dividing lines between disciplines gave rise to a transdisciplinary intra-action¹ between and within biochemical, bodily/embodied, microbial, historical, political, socio-cultural, material, subjective, geographic, infrastructural and economic articulations. Differentiations emerge during and through the confrontation/engagement/observation but not a priori. Consequently, a boundary is still instituted, an order is still established, yet they are dedicatedly inspected for their potential porosity/decay/fragility. I tend to approach subjects of interest at their liminality, during the junctures when their contours take shape and dissolve. I am intrigued by examining phenomena at their mutual limitations. When brought into confrontation with their counterparts, they are more likely to reveal their constitutive conditions and are more prone to abandoning their inertia. This can also signify a moment of destruction of a disciplinary, epistemological or otherwise established demarcation. It is an epistemologically enthralling situation.

This entails the question of possibilities for knowledge that open up through contemplating the porousness of boundaries. It brings forth a certain interest in knowledge production per se. It incites an inquiry into the dilemma of whether and why knowledge emerges solely and inevitably through the act of effecting a separation, through enacting what Karen Barad (2003) would term an “agential cut” (p. 815).

¹ This term was coined by Karen Barad. For details, see pp. 55–56.

For this transdisciplinary intra-action to unfold, it felt necessary to create a space in material-discursive terms with a mixed media installation and in discursive-material terms by writing this text. A spatial situation that invited the multiplicity of epistemologies and materialities to reside at the same time in one place. This simultaneous presence constitutes a particular epistemological condition. Instead of a mere addition or juxtaposition, a multiplication of these perspectives/embodiments can happen, their knowledge transforms and further knowledge can form. Drawing together distinct approaches/physicalities on the same matter – in this case, relating to topological² knowledge, air and fermentation – is also very convenient for highlighting the positionality and limited applicability of each knowledge form, establishing a splendid foundation for critical analysis, bashing anthropocentric modes of knowing, destroying claims for objective truths and driving a wedge into the nexus of knowledge and power.

The writing of this text has been a fragmentary, non-linear endeavor that has converged into a textual form that is not only approachable through a linear reading from the beginning to the end, but uncloses and leaves open multiple passages of access. The structure of the book is an invitation to choose your own point of entry and exit, to find your way to engage with it through any element. You may want to begin with the artistic work, combined with deliberations on the difficulties of relating to it textually and thoughts on text as an artistic medium (chapter 01). Alternatively, you might first want to read about possibilities to approximate air and delve into the question how to think air with Barad's concept of *agential realism* and the notion of intra-activity (chapter 02). Another idea would be to get directly involved with fermentation and its situating in contrasting contexts, from activist collectives to colonial space missions and start-ups targeting capital accumulation from air (chapter 03). Beginning with the movement of traversing from the vantage point of microorganisms in the medium of air as well as in anthropocentric infrastructures of shipping systems is an option (chapter 04). It would equally make sense to immediately immerse yourself in the complex of an apparatus and different gadgets that generate and mediate spatial/topological/site-specific knowledge and scientific insights (chapter 05). Otherwise, you could start right at the end with speculations about methodologies in artistic research.

² Topology is understood as "the way the parts of something are arranged and related" (Oxford Dictionary, 2023a). Topology also refers to the study of the behavior of a surface structure that registers shifts of the differential space-and-time changes in a continuous deformation (Imperiale, 2000, p. 35). The topological being concerned with the deformation of complex relational arrangements in contrast to the topographical, which strives for static models of formations.

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[01]

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**art versus/
beside/with/
and text**

Artistic practice
and textual media
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Aerobic Topologies I–XVII (2022) **mixed media installation**

Aerobic Topologies I–XVII (2022)

Carolin Melia Brendel and Helena McFadzean

Mixed media installation

Symbiotic cultures of bacteria and yeasts,
mirrors, cardboard, glass, aluminum,
microscopic camera, LED spotlight, water, vinegar,
video 21'50", video 9'43", video 5'03"

Air as an agential infrastructure, as a mode of transfer, as a politicized space, as an epistemological stance. Fermented surfaces, microbial articulations besides anthropocentric reasoning. Aerobic micro topologies between logistic fragments. Logics of customs services, topological descriptions, spatialization of knowledge.

It all started with our interest in topological epistemologies and the agency of air. To explore these matters, we collaborated with the fermenting microorganisms present in kombucha/SCOBY (Symbiotic Cultures of Bacteria and Yeasts), which digest spatial conditions into their own becoming through aerobic fermentation. Besides their close surroundings, kombucha microbes ferment in collaboration with the humans that tend to it, sharing microbes and habitats. Through the air, kombucha is nourished and provided with site-specific information. Over time, it forms a jelly-like layer on its surface, a comment on the site informed by the local air, an aerobic topology.

Aerobic Topologies I-XVII started by building a multilocal network of site-specific material/knowledge. Parts of a kombucha traveled via restrictive shipping logistics from Vienna to twenty different places and participants across Europe. The samples were cultivated and cohabitated with a group of hosts for several months, who documented the fermentation at their homes and witnessed the socio-topological investigation by the fungi and bacteria of kombucha.

Via human-made shipping itineraries, most of the microorganisms found their way back to Vienna. Some were lost on the way, others were returned to the sender or stopped by the customs service. Traces of the dispersed and contrasting knowledge practices agential throughout the artistic research's becoming – microbial, aerobic, logistical, infrastructural, geographical, corporate – formed a mixed media installation, a lively apparatus and intra-active lab that continued its air-dependent space mediation while on display.

With the assemblage of different site-specific ferments, we created an installative setting for the articulation of microbial onto-epistemologies of space. The arrangement unfolded a space unsettling anthropocentric paradigms of topology to explore potentialities of spatial knowledge beyond mathematically depictable models, such as geographic information systems and their respective power configurations and effects.

A collection of documentary fragments and brief descriptions of the multiple intra-acting elements of the installation ensue.



Fig. 1 Exhibition view I



Fig. 2 Exhibition view II

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