



# My Starter and I as Cyborg Holobiont

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When I become intimate enough with someone for them to meet my family, I also feel compelled to introduce them to my sourdough culture. My bacterial friends and I have a long and deep relationship, closer in some regards than I have with most humans, as our bodies continually merge with and nourish each other. In its relation to me, the sourdough culture also becomes a technology; indeed, it is one of the most ancient biotechnologies for processing grains.

When a technology is also a living thing, it throws into relief the relational nature of all technology. Separated from me, the starter exists in its own being as bacteria; but in relation to me and my activities it becomes something technological. I sometimes think about a world after humans, in which the objects that currently seem technological in essence (iPhones, laptops, tow-trucks, cash registers, cranes) would slowly fade into their being in relation to nonhumans, ceasing to be technology and becoming metal, glass, glue, plastic, dust, hot surface for sun-bathing lizard, container for tide pool, barrier to worm, tall point for eagle nest. Speak-

ing from this peacefully-apocalyptic reverie, I would challenge the claim (from John Durham Peters [2015] and others) that “durability” marks something as technology and would emphasize relationality. Something technological only endures as such through human relationships. Indeed, the sourdough starter is a technology, but to think of it as a “thing” with durability is not quite right. It resists an individualizing gaze in its rhizomatic, emergent relatedness.

My sourdough starter’s technological being in its relationship to me opens questions about our awareness of each other. How does it feel about me? What does it know about me? Before answering, it’s important to actually locate the bacterial culture. Where is it, exactly? It is in an old cream cheese container in my fridge, indistinguishable from its bed of moist rye flour. It is waiting there to be brought forth and “activated,” not with an electric button, but with different forms of energy: flour, water, and heat. Yet, it is not just in the fridge; it is also all over my hands, always, and has been for years. Sourdough bakers’ hands’ biotic make-up mimics that of their starters; my starter has affected my microbial being. In this way, the sourdough starter is spatially dispersed, and its awareness of me is equally hard to pin down. Indeed, as it merges with my own microbial biome, it is hard to abstractly separate it from me: it may even form a part of my own awareness of its awareness. We form a holobiont.

Like all relationships, this one requires work and renewal. If I stopped baking bread, the culture in my fridge would slowly die, and the microbial biome of my hands would shift towards some new biotic bouquet. In this way, my sourdough starter is aware of my rhythms and has adjusted its life to them: it

knows each week it will come out of the fridge and merge with me again, that I will feed it, and give it warmth. It knows what I eat, it knows how warm my apartment is, it knows the kneading rhythm of my hands. It has adjusted its microbial content to favour dark rye flour, periods of dormancy, the fecund biome of human hands, abrupt changes in temperature. In this relationality, its knowledge of me and of itself are inseparable. It is productive to resist thinking of the sourdough culture as a “thing”: it is its relationships.

Its knowledge of the world at large is more mysterious. Here the “it” of the sourdough starter really finalizes its dissolution, as it (they?) steps into being as a kind of temporal-relational medium. The sourdough starter in some ways exists across time and space, and is in no way confined to my fridge and my hands. I was given a scoop of the sourdough starter in 2014 by a man named Jona, who in turn got a scoop from someone named Sina sometime before this in Germany. How old the starter is, is a mystery; and what parts of it are ancient and what new is equally uncertain. This invites the question: is the starter in my fridge of one being with the starter in Jona’s fridge, wherever he ended up in the world? Do our starters form similar holobionts with us, such that I become intimately related to Jona through the medium of the bacterial culture that we share on our hands? And all the people I have since passed the starter on to, Dave and Nixi, Amna, Nicola, Ermen, and so on...are they part of this meta-holobiont? What is the sourdough starter’s experience of the world, dispersed across countries and times, bonding people together through their nourishment?

I'm reminded of Hölderlin's poem "The Ister," in which the river forms a site for human settlement, relationships, connection, and technological being in a way that foreshadows current argument that environments are media. Like the sourdough starter, the river in the poem is a non-artifactual technology of human becoming...and "yet what that one does, the river, / Nobody knows."

#### REFERENCES

Peters, John Durham. *The Marvelous Clouds: Toward a Philosophy of Elemental Media*. University of Chicago Press, 2015.