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The Territories of Political Ecology: Theories, Spaces, Conflict

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Experimental practice in the ruins of the Green Revolution: commoning with/in a water-scarce field

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ABSTRACT

This article considers water scarcity as an expression of agrarian crisis in South India. It explores how the drought affects the everyday life of communities in the area of Kadavur, limiting their possibilities to choose what crops they can grow, what food they may eat, and what futures they will cultivate. Moreover, it draws from the framework of experimental practice proposed by Papadopoulos in order to understand how more-than-social movements engage in material organizing to transform their condition. In the first part, it constructs the biofinancialization of organic millet, in relation to the making of cheap rice. Hence, it presents an ethnography of alterontological politics through enhanced care and tinkering with food. Moreover, the article explores the role of water management technology in the troubled ecology of the drought. Finally, by discussing an ethnography of borewell repair, it sheds light on the odd entanglements between a global technology and this situated ecology. This brings the fieldworker into the picture and considers the emergent politics of communing with/in the field.

Keywords: experimental practice; more-than-social movements; water scarcity; commoning; India.

Parole chiave: pratiche sperimentali; movimenti più che sociali; siccità; beni comuni; India.

1. INTRODUCTION: FIELDS OF EXPERIMENTAL PRACTICE

Water scarcity pervades the everyday existence of rural communities in the plains of Central Tamil Nadu (South India), evoking scenarios of collapse and serious constraints for livelihoods. Images of once fertile topsoil turning into cracked stone-hard floor, dry wells, starving cattle, failing crops and rural abandonment, are not rare in this region. In January 2017, with standards far below UN indicators for the 6th Sustainable Development Goal for Water and Sanitation (United Nations 2018), and after over ten years of dwindling rainfall, the government declared the state of drought. Curiously, a news agency reported this declaration had followed the extreme act of over hundred farmers who committed suicide¹. Farmers' suicides² have long been a diagnostic site for the failure of rural development in India, contextualized in a broader "agrarian crisis" in the aftermath of Green Revolution (Muenster 2012) and the liberalization of the 1990s (Lerche 2011). The political ecology of agrarian crisis in South India is at the basis of my perspective on everyday life in water scarce worlds: indeed, I understand the unequal food system and infrastructure in ruins, which I assess in this paper, as embedded in this crisis. Indeed, in his work on agrarian alternatives, Münster argues that the dispossession experienced by rural people in India "is paralleled by a [...] search for alternatives" which he explores in agroecological endeavors by small farmers (2015, 7). I found that this hopeful approach is also recurrent in environmental humanities literature that focused on how attentive ethnographies of the Anthropocene may shed light on the "arts of living on a damaged planet" (Tsing *et al.* 2017; see also Tsing 2016). In this paper, I build on these approaches in considering situated attempts to reconfigure the material conditions of everyday existence engulfed in water scarcity, and conjure the possibility that alternatives may emerge from the ruins of the Green Revolution. Below, I shortly describe my research field, define the theoretical framework and introduce my argument.

I first travelled to Tamil Nadu in December 2017 for few months and returned the year after for a longer stay, leaving in May 2019, just a few weeks before Chennai, the capital of Tamil Nadu, ran out of water,

¹ See for instance [20/10/2020] <https://archive.indiaspend.com/cover-story/monsoon-worst-in-140-years-144-farmers-dead-tamil-nadu-declares-drought-89699>.

² This is a dramatic story which is hard to account for; nor is the author hereby aiming to develop concrete proposals to overcome this recurring tragedy.

making the headlines on the world's news agencies. I conducted ethnographic fieldwork in the Kadavur Taluk, a small province in the central plains of Tamil Nadu, where the two villages of Sevapur and Vinobajipuram are located. Both villages were founded by Mother Lea Provo, a Christian missionary from Belgium, who came there in 1968 inspired by the figure of Gandhi. She started an NGO, called Inba Seva Sangam (ISS), which until today operates in this area, combining inter-religious dialogue, social work, and more recently a focus on agroecology. My fieldwork happened in the form of a collaboration with ISS, which meant that my work with the NGO and my research often overlapped.

In order to navigate community engagements in these water scarce landscapes, I re-compose my observations from the field through the theoretical propositions by a growing scholarship concerned with the politics of matter in the commoning of more-than-human worlds. I adopt the framework of experimental practice – that is, in the words of Dimitris Papadopoulos: “modes of intuition, knowledges, and politics that trigger intensive material changes and mobilize energies in ways that generate alternative and autonomous spaces of existence” (2019, 3). Central to this work is the interest in movements committed to escape social and ecological degradation, building autonomous infrastructures through “material interconnectedness, practical organizing, everyday co-existence and the fostering of ontological alliances” (*ibid.*): or what Papadopoulos calls “more-than-social movements”. These differ from social movements, for they don't organize protests to challenge forms of control, dispossession and inequalities: they rather engage with matter creatively, trying to make other worlds in-common (*ibid.*, 198). Commoning is central to more-than-social movements: this does not entail belonging to the same community, but rather “being-in common” (Nancy in Papadopoulos 2018, 200) as an ontological condition. Hence, commoning emerges as a generous outcome of experimental practice, that is a response to the systemic dispossession at play in agrarian crisis. According to Papadopoulos, these are movements that try to craft alternative modes of existence, which he calls “alterontologies”. Throughout this article, I follow this framework to discuss how more-than-social movements may “ontologically make themselves and their own material conditions of existence” (*ibid.*) in Kadavur.

In the first part of the text I situate recent changes in the food system through a political ecology analysis and assess how the biofinancialization of organic millets is sustained by state-subsidized provisions of old rice. Moreover, by presenting an ethnographic account of cooking this

rice, I argue that the experimental practice of reconfiguring damaged food may offer unexpected ways out of everyday injustice. The latter part follows a similar pattern by looking at the role of water management technology in the making of the drought, with a focus on borewells in the village commune of Vinobajipuram. By presenting an ethnography of precarious borewell repair, I discuss the methodological implications of experimental practice. I mostly draw from Papadopoulos' interest for conducting research as "a theoretically motivated project grounded in sustained [...] political involvements as a committed practitioner" (2019, 5). Finally, by including my own perspective from with/in, I argue that the field is what *we*³ made in-common: a space made up of intimate relations. Indeed, by magnifying the aspects and moments that I found to be pregnant with transformation, I embrace the writing of ethnography that can never be just "description", but rather a non-neutral, non-objective theory of describing, perhaps always controversial (see Nader 2011).

2. BIOFINANCIALIZATION: FROM TH/RICE A YEAR TO TH/RICE A DAY

January in Kadavur is the month of harvest: the landscape changes quickly. Every year around this time most communities in Tamil Nadu celebrate a festival called "Pongal". This harvest celebration marks the aftermath of the Monsoon, usually characterized by abundance of freshly harvested food. Pongal literally means "boiling over" or "over-flow". Indeed, it is named after a sweet dish of rice and sugar boiled in overflowing pots. Until some years ago, both ingredients were harvested around this time of the year, also in Kadavur, at least until the water was available to irrigate paddy and sugarcane. Instead, amidst depleting groundwater levels, only few farmers could afford drilling their borewells deeper, to pump up the water necessary to cultivate these thirsty crops. In fact, during Pongal 2018 and 2019, when I was there, most of the fields were cultivated with millets and sorghum, which require up to ten times less water than paddy and can grow during a scarce monsoon. However, on Pongal and most other festivities during my stays in Kadavur, we still celebrated by eating this rice-based sugar-sweet dish. Afterall, most of our meals were rice-based.

³ This "we" may well remain open, as it refers to all who part-took, or may have – from my son and wife, to the people of Sevapur and Vinobajipuram, to the other forms of life attached.

Once, I interviewed Kumar, a smallholder from Kadavur, and asked him how often he ate rice – he had no doubt: “Three times a day. It’s our traditional food”. Instead, most of the millets and sorghum he grew himself were sold to organic retailers for cash. On the other hand, like most of the families in this municipality, they received “government rice”: 35 kg/monthly free of cost, subsidized by the Tamil Nadu Public Distribution System (TNPDS, commonly referred to as PDS). Every week, long queues of family-card holders would form in front of the “government shop” in Sevapur, awaiting their turn to collect a ratio of cheap food. With great frequency, I could spot government trucks transporting large amounts of jute bags through that valley and elsewhere. When I visited a PDS storage in the outskirts of Madurai, the major city in that region, I saw the huge piles of these bags stocked like buildings. Then, an officer I interviewed told me that some of those piles had been lying there for over ten years.

On another occasion, I was helping Raja harvesting his field. Raja, a smallholder in his 80s, was showing me around his land where he intercropped millets, lentils, and beans. “That’s what we ate as children: pulses, millets, kambu, ragi... rice only on special occasions. [...] Maybe, three times a year only”, he said. Instead, now they mostly ate PDS rice; “but [he added] it’s not tasty [...]. It’s stinky rice. Sometimes I don’t like to eat it, I give it to the goat. The rice is dusty, [...] with excrements from rats”. In encounters with Raja, Kumar, and other smallholders in Kadavur, I came to a partial understanding of the changing patterns in growing and eating food, over the last few decades. This I can describe as a shift: from th/rice a year, to th/rice a day.

Indeed, during my stays in Tamil Nadu, I mostly ate th/rice a day. One isolated exception was at the beginning of January, when I visited “Vanagam”, a community centre located in the Kadavur area. Vanagam was founded by Nammalvar, a popular leader advocating for return to chemical-free natural farming and food sovereignty. During my visit there, I was queueing for a meal, then my turn came, as Selvam, a volunteer, energetically slashed a portion of porridge in my tin. “That’s millet. Eat it! It’s our traditional food” he said. Selvam’s assertion was an example of a broader discourse, which often emerged throughout my research, where millets are referred to as the ecologically appropriate grain, amongst Indian initiatives for organics and agroecology, blogs, civil society, as well as international media and projects sponsored by the government. In the case of Kadavur, this was evidently written in the landscape, where it had become mostly impossible to cultivate rice, given the scarce water available.

In fact, people grew and harvested millets, but carried on eating th/rice a day, mostly “government rice” of the lowest quality. So, where did the millets go? By discussing with NGO officers, members of the KOFA⁴, and smallholders about their motivations and opinions of millet and rice, it became clearer that, even where there may be a desire to eat millets, this can often not be satisfied. Like in Kumar’s case, millets shall be sold for income, whilst rice is simply available through the PDS-sponsored food accessibility scheme. On the other hand, millets were grown organically for the retailers to trade them with urban markets, where consumers are careful to their diets and willing to pay premium prices for healthier carbs. This was exemplified in the slogans of Bangalore’s 2019 international faire “Organic Millets”, which celebrated this grain as a source of “sustainability, health, and business”⁵. This discourse and the practices attached seem to appropriate the reproductive value of millets, which consume less groundwater, need no pesticides and help prevent disease, such as diabetes and obesity.

The valuation of millets may be better understood in terms of “biofinancialization”. This process is defined by Papadopoulos as “the financialization of life and matter [...] in order to describe how the commons becomes the ground and the material substratum on which biofinancial accumulation thrives” (2018, 33). On my research field, I could witness clearly how the market for organic wholefoods appropriated the food of Kadavurians and neighboring rural communities, already impoverished by decades and even centuries of dispossession, and now more heavily affected by environmental breakdown. Millets held an important reproductive value, because they could be cultivated with little water, it required no chemical inputs, and as a staple food it could integrate more nutrients for a better diet than th/rice a day. Seed varieties that have been cultivated for years, and long before the Green Revolution, as well as the knowledge and practices attached, may well be counted as common pool resources, to which a whole set of shared forms of existing and organizing around food are attached in Kadavur. Kumar’s memories of eating millets cooked by his mother, Selvam’s “traditional food”, and Raja’s practice of intercropping different plants on the same field for decades, are just some examples of millets as commons.

⁴ The Kadavur Organic Farmers’ Association is the local retailer that buys the grains and sells it to the national market.

⁵ See the official website of the 2019 edition [01/08/2020] <http://itf2019.organic-millets.in/>.

The fact that retailers would buy it, in the midst of socio-economic hardship, combined with other uncertainties faced by smallholders in this region, left little choice but selling as much millet as possible. On the other hand, the fact that the government subsidized large amounts of rice free of cost, made it seem very reasonable to give away crops for cash, and eat the cheaper food. In other words, the option of accessing government rice, put farmers in the position where they must “choose” to sell their organic millets, almost erasing any possible space to do otherwise. Papadopoulos sheds light on how “the current financialized regime of production has become so embodied in the ontology of our everyday lives that even social groups that can challenge its legitimacy cannot do so without challenging their very existence” (*ibid.*, 29). Similarly, Kumar or any other smallholder would have been a fool to not accept this deal: to keep the millets and reject the government rice would have profoundly challenged his and his family’s way of life, their taste, what they deemed desirable, and the material foundations of their everyday. Hence, the biofinancialization of millets did not only subtract the reproductive value of millets – in exchange for undesirable “stinky” rice – but also engulfed the Kadavurian peasant society into an existence where the conditions for articulating possible alternatives had shrunk. More than appropriating food in order to extract surplus value, the biofinancialization of millets disoriented whole worlds surrounding that food, excluding the very possibility to decide to grow what one eats, and eat what one grows. It disempowered the local community to *make* their food, evidently affecting the material grounds and hence the existence of people there.

A viable political ecology approach to food in water scarce Kadavur, may well have gone deeper into the rice-millet conflicts over questions of nutrition, health, tradition, or followed the millets along the food chain, drawing the link between commodity fetishism and claims of sustainability. This study instead remains concerned with the tactics of communities at the margins of the state, capital, and not by chance hardly hit by ecological breakdown. That brings me to Lakshmi’s kitchen.

3. ALTERONTOLOGY: MATTERS OF COOKING

“Give me a kitchen and I will raise a world” (Papadopoulos 2018, 207).

I spent many mornings and afternoons in the communal kitchen of Sevapur. There, a team of three women and one man work every day,

cooking and serving three warm meals to an average of 500 people. That requires countless hours of chopping, frying, roasting, grinding, fermenting, and washing. Lakshmi is one of the women cooking. I got used to seeing her most of the time busy providing meals for large crowds, with overly modest equipment, and learned most of my Tamil language and culture helping her in that kitchen.

One day, Lakshmi caught my attention, as I noticed her keen on a large amount of “government rice”. Squatting with a jute bag full by her side, and a large pot by the other, she held a flat basket of knitted leaves in her hands, with which she spun the rice at constant rhythm. By playing a regular beat she smoothly separated the excrements, stones, dusts, powder, insects and other dirt, from the “clean” rice corns – for hours. Every now and then, she did a sharper move, with which she dropped the discard to the ground. Once in a while, she emptied the basket in the big pot, where she sank the grains in water. As I watched her finishing, she looked at the clean rice with pride and satisfaction. Those grains were grinded with white lentils and fermented overnight, then steamed in cotton cloths: it became “idli”, served soft and warm to the ISS school children and staff, with chutneys and sambar.

The stinky rice was a leftover of the green revolution’s intensive agriculture: a product of the agri-techno-politics that may well be held accountable for the ongoing drought, which affects these same communities. It is, in other words, a symptom of the persisting poverty and dispossession amongst the subaltern people of Kadavur – a situation that is not an exception to the rest of rural India. Yet, Lakshmi’s caring and laborious act of cleaning it, alongside the art of cooking edible food for many, transformed it. Indeed, the idlis were delicious to the point that it became hard to taste, imagine, or remember how their base ingredient had been eroded by chemical-intensive cultivation and years of inappropriate storage. Lakshmi’s moves and practices had set the rice in motion – carefully making, and generously sharing edible food. This act of care was in my view transformative, for it generated a whole new possible world of enjoying that rice for food. The shuffling, cleaning, soaking, and cooking were a generative mediation with ontological implications on the becomingness of that food: a caring practice of tinkering new relations between the eater and the eaten (Mol 2010)⁶.

⁶ Describing Lakshmi’s labor as a matter of care (Puig de la Bellacasa 2017), does not yet account for the troubled web of relations shaped by the power structures at play in her context. Indeed, one should question the conditions under which Lakshmi comes

By tinkering with food, dirt, water and what was at hand, Lakshmi didn't solve a problem affecting her community, but she tried to make a stable microecology. In an "ecology of proximity [...]" there is always more than one solution, and this 'more than one' is grounded inside, not outside, the ways in which a problem is matter related: matter works through a pluriverse of canals, of bridges" (Ghelfi 2015, 85). Lakshmi's kitchen may have become a laboratory for noticing and making other possible workings of matter – in this case, rice. I understand this as a process of emergent "material literacy", what Papadopoulos describes as "ongoing, involutory (involution with nonhuman others and things) experimenting with matter" (2018, 201). This differs from other forms of literacy at stake in this field: for instance, that of PDS, which requires citizens to be informed of their rights to perform access to food security, through civil behaviors, such as registering for family-cards, applying for aid, and acting diligent in the queue once a week. It is also different from the literacy of vocal and visible Nammalvar-like activists: for instance, when I encountered Selvam at Vanagam, he wanted to render his food sovereignty struggle visible by articulating the right to eat traditional organic foods. Instead, through tinkering and caring in an ecology of proximity, Lakshmi imagined and made good enough food from what was left of the drought, matter that was accessible: in this case "stinky" government rice. The tinkering and cooking shifted the ecology of eating "government rice" (rather than organic millets) in Sevapur: from stinky to genuine, from an intensive monoculture to a diversity of vegetables, textures, and spices, from toxic plantation politics to convivial shared meals, from dependency on state food security scheme to an autonomous practice.

The material literacy at stake may be both the consequence of, and the prerequisite for, the continuance of existence of dispossessed actors, that draw different politics for more livable worlds, or what Papadopoulos calls "alterontologies" (2019, 159). Admittedly, it is also a gamble to imagine that ecologies can themselves transform as a consequence of this ontological organizing. A part of the answer is that alterontologies of the drought are possible in practice even when Lakshmi, and others, begin without being sure about how it will happen. Moreover, the transformative potential of Lakshmi's care work would vanish if it was just an

everyday diligently to fulfil her role of food provider for such a large community and her working conditions too. However, my aim here is to highlight the re-productive and transformative force of her act, on which I am focusing.

isolated attempt to overcome the constraints of water scarcity. Hence, below I shall contextualize it in a larger co-production of attempts to make generous infrastructures in-common.

4. MORE-THAN-SOCIAL MOVEMENTS: INTIMATE EXPERIMENTS WITH/IN THE FIELD

Vinobajipuram is a small village commune near Sevapur, with a short history. In the mid 1980s, ISS purchased this land at convenient rates from the state of Tamil Nadu, with donations raised by Belgian Mother Lea Provo to realize her vision: a thriving rural community. This village was built to become self-reliant in food production, and generate income from a dairy cooperative, poultry farming, and small manufactures. At departure, landless families of Tamil repatriates from Sri Lanka were invited to form a commune there, being given lease of a house and 2 acres of the neighbouring land each. Since foundation, the village has been run collectively by its inhabitants, under the supervision of ISS, and continues to be so, even after Mother Lea's death in 1997. It was originally built on red dusty soil and dry bush land: photographs from the NGO archive show an arid landscape. In the 1980s, the project of making this place livable and fertile was based on the newly available technology of the borewell: the drilling of vertical pipes to access underground aquifers provided the "liquid grounds"⁷ of this community project. During interviews, the early inhabitants of Vinobajipuram shared their memories of the village turning green while coming to life in its early years, with a variety of plants growing and bearing fruits: exotic trees like "mangoes, cashews, coconuts, bananas", provided "greenery, grass, fodder for cows", there were "milk [...], fresh breeze, shadow, tinder", and other elements of flourishing cultivation. It seems plausible to attribute the rapid transformation shifting the area's ecology mostly to the adoption of hydraulic technology of borewells. Indeed, land and water were the material base of Mother Lea's dream; the former could be bought, but the latter had to be pumped up from the underground. The hope in the commune was built on a "promise of infrastructure" (Anand *et al.* 2018).

⁷ I borrow this metonymia from Nikhil Anand's post [15/08/2020] <https://www.e-flux.com/architecture/liquid-utility/259641/public-water-and-the-intimacy-of-hydraulics/>.

In Vinobajipuram, society, technology, and environment, are deeply entangled. The ecology and infrastructure of the commune are mediated by borewell technology, and the functioning of this assemblage determines limits and possibilities of life there. A growing literature from political ecology and science-technology studies takes issue with the productive role of infrastructure in contexts of water scarcity, in India and beyond. For instance, Metha focused on de-naturalizing narratives of the drought and the role of large dams in rural areas (2001 and 2005); Anand's study on Mumbai traced the social life of water (2017); and Ballesterio highlighted the dependency of water management projects on the (un)reliable performance of both people and the environment for planning controlled ecologies (2015), amidst frequent trouble (2019). This literature often highlights the power relations at play in the over-production of knowledge and figures by the technoscientific expertise of water management, *vis-à-vis* the material politics of water scarce realities from below. In the case of Vinobajipuram, the attitude to plan and measure seemed like a gone memory of the early years, whilst the current reality lied in the everyday struggle to keep this infrastructure going.

Indeed, the last complete survey of the area was conducted in July 1998, soon after Mother's death. By that time, a total of 25 borewells had been drilled and mapped, together with 5 open wells⁸ – that makes for a total of 75 households, an average of 1 borewell or well every two and half households. Evaluating whether this was the right strategy of water management for the commune is far from the scope of this paper. For now, we may assume that this infrastructure was realized as an effort to meet expectations of cultivating fertility in the commune. Whether that was the case or not, we know that it failed. In fact, in the historical memory of the inhabitants I interviewed, this seems to have functioned for the first fifteen to twenty years of Vinobajipuram's existence. In most accounts, this initial "golden age" was followed by decay and erosion, manifested most strongly in the condition of water scarcity alongside unemployment and livelihoods' distress. To date, the signs of a decadent socio-ecology are visible all over Vinobajipuram, mostly in the form of loss and abandonment.

From my interviews and excursions to the fields, it appears that, over the last 15 years, around 80% of the trees decayed, and those left are seldom giving fruits. Also, most of cattle were sold or died; hence, the

⁸ Open wells are an older technology of storing and managing water in Tamil Nadu, like in many other regions of the world.

cooperative stable lays vacant, and the former poultry farm is now a ruin. In fact, my endeavor to learn more of this commune often took the turn of archaeological work: scraping off the layers of history of an outlived development project. The village population is decreasing, with the majority of the fields left uncultivated, and a large part of the younger folk moving to other districts seeking daily wages or college education. Most critically, water ratios amount to 15 liters per household, every other day: meaning that a family of five gets no more than 7.5 liters per day, well below the UN's minimum threshold of 50 liters daily (United Nations 2018). The actual number of borewells present in the area is unclear, knowledge about the water table is outdated and nebulous, with scarce information available over the wells' depth, current use and conditions: most of them are dry, damaged, or lack the electricity necessary for them to function, with only a few exceptions.

These exceptions matter: most people I interviewed said they wanted to stay, and there are attempts of regenerating the commune, for instance, through training programs in organic farming and small agroforestry projects. Moreover, a group of farmers is mobilizing to re-organize in a "water commune", to share investments and farm collectively, irrigating from two borewells that still function, with the help of an engineer. I also came across young families who have been moving to Tiruppur, living in crowded areas with daily wages, and say they are trying to return to Vinobajipuram. This are signs that the drive for commoning is still in a phase where different forms of ontological organizing are possible and being experimented, also in the drought. There remains little margin for maneuvers that imagine generous futures, especially when it comes to water. Yet, this may be the starting point for experimental practice: the need, or even the obligation, to learn new ways to engage with problems.

Nikhil Anand explored the co-production between intimacy and hydraulics in his work on Mumbai, drawing from Berlant's understanding of intimacy, which "poses a question of scale that links the instability of individual lives to the trajectories of the collective" (2000, 283). Berlant defines intimacy as "a collection of 'attachments' that transcend the public and the private, [...] [and] are key to joining individuals to collectives and institutions" (cited in Anand 2019). For example, the labor of hydraulics draws intimate connections along which water may flow – or not.

This brings me to that morning when John drove by Vinobajipuram and honked for attention. There was "an emergency": an essential borewell was not functioning and needed repair. He drove me and a few other

men into a field, until we reached the borewell. John kept on examining the hole leading deep underground, trying to orientate himself in that unusual direction, and checking the electric connection. One meter at the time, we pulled up white PVC pipes, trying to pull out the engine, which was at the bottom. It was demanding labor, and we got all visibly tired from the job, under a burning sun.

During a water break, I noticed the name of the company on a pipe, I took a photo⁹, and got back to finishing the work.

The day after, we returned. John unpacked the engine, saying that no damage had been found by the mechanic; he still hoped the issue lied with electric connection, so he installed the engine and fixed a new electric cable which he sealed with several rolls of rubber tape. We dropped it back down, and once the engine touched the ground, John switch on the electricity: nothing happened. He looked down the hole through the pipes, visibly troubled. He tried to move the top, turned it, trying to get a sense of what was happening on the other end. It didn't work. He shook the pipes more nervously. Then he banged it to the ground, so others helped him to lift it and bang harder to the deep underground, until, somewhat unexpectedly, the water sprang out of the pipe. I hadn't seen so much water flowing for a long while: the leak formed a pond in that field, turning the red dust into a comfortable mud, and flooding the overly dry lentil plants. We all took advantage of the flowing water for refreshments, before we switched off the electricity. The joy was accompanied by relief, and awareness that we got close to failing – a scenario which would have had dramatic consequences for the whole village (*Fig. 1*).

The photo is the one I took during the borewell repair. I took it following the impulse to document my work, but also out of a less conscious curiosity to draw a particular link. That same evening, I wrote a message to my father, asking him whether he knew Ashirvad¹⁰. His reply was quick: “Yes, it's part of the Aliaxis group”. Aliaxis¹¹ is a major Belgian corporation, specializing on piping systems – their slogan is “We Make Life Flow”. This company's work shapes forms of life in Vinobajipuram and all over the world, as “infrastructures give form to relations between states and subjects on one hand, and corporations and capitalist circuits on the other” (Appel *et al.* 2019, 5).

⁹ Below, I shall refer back to this detail.

¹⁰ <https://www.ashirvad.com/company/>.

¹¹ <https://aliaxis.com/>.



*Figure 1. – Ashirvad, a company of the Aliaxis group.
Photo by P. Autorino.*

Recently, Aliaxis grew as a global leader in the sector, purchasing other national companies all over the world. In India they bought a major share of Ashirvad and registered great profits from the growing request for piping systems in a time of exacerbating drought. Going back to Papadopoulos, this corporation had been an important stakeholder in the biofinancialization of the drought, where water management technology was at the same time the cause for groundwater depletion, and yet the only solution at hand to continue having water (even if in small amounts) to irrigate crops or other daily use.

The fact that I saw Ashirvad's name on the pipe is not at all surprising per se. During my time in Tamil Nadu, I came across many brands of multinational companies I was familiar with from home. But an odd connection between me and Aliaxis-Ashirvad was yet to be unveiled: at the time of my fieldwork, my father was working as a consultant for that very company in Bruxelles, earning a good salary. This drew an unexpected link between me, that field, and my home in Europe, highlighting my positionality, from where I could travel and work across these places, which was the most evident differentiation between me and my acquaintances in Sevapur and Vinobajipuram. In short, that photo

pointed straight to the trouble of my differentiated relationship with the field and questioned the politics of locating my work there.

By becoming aware of the odd connection between my history, the Ashirvad pipe, and the gathering around that borewell, I saw the possibility to turn that situated collaboration into a site to destabilize the power relations and inequalities at play between me and others: on that field we were experimenting at crafting an alterontology, shifting relations between me and them, between us and the underground, the pipe and the company who produced it, that situated ecology and its infrastructure. Indeed, a vast collection of attachments was at stake there, where the livelihoods of my family in Europe and people in Vinobajipuram were suddenly so connected, through my location work on the field. In that moment, my choice to collaborate in repairing the borewell was an experiment at transforming my relationship with the community on the field and being-in-common. It was an attempt to escape the existential conditions that set us aside from each other. The alterontological politics of my presence and connection with/in the field emerged through this intimate experiment at being-in-common.

The collective maintenance of the borewell was an episode marked by tinkering, which crafted material literacy, similarly to Lakshmi's work with the government rice. Both were engagements with matter embedded in damaged ecologies, aimed at re-emerging from a situation where the livability of a larger community was at risk. Yet, what emerged more strongly in the borewell episode was that the repair became a site of intimate collaboration between a group of committed people, where different unexpected connections were drawn. That started with the call for an "emergency", justified by the realization that we were indeed one step away from disaster. As Rebecca Solnit eloquently noted, "inside the word 'emergency' is 'emerge'; from an emergency, new things come forth. The old certainties are crumbling fast, but danger and possibility are sisters" (2004). Following Solnit's suggestion of a connection and a possible bifurcation in moments of emergency, that could offer both/ either possibility or disaster, there were "emergent" alternatives being born from the emergency. That was first tangible in how the tension and trouble we had gone through when the borewell didn't seem to work, brought me, John and the others closer, and felt it was a common issue. A set of attachments emerged between me and these Tamil-speaking men around the borewell, where intimate experiments evoked an emergent politics of commoning with/in the field. Through these attempts at making generous infrastructures in-common, the "co-emergence of

politics and matter creates alternative spaces of existence” (Papadopoulos 2019, 203), where more-than-social movements may craft more just worlds.

5. CONCLUSION

To engage in fieldwork, and now in writing about Lakshmi and John’s experimental practice, was an experiment in itself. The theoretical framework has served to shed light on the emergent politics of commoning with/in Sevapur and Vinobajipuram. I hope to have also contributed to experimental practice by discussing its framework in relation to this case-study, as well as by exploring the possible co-emergence of alter-ontologies between the field and fieldworker. Indeed, a good part of my fieldwork was aimed at sustaining the very practices that I was researching, which employed my active presence and honest commitment. I did not cease to be a father, an activist, or a friend, because I was carrying on participant observation for ethnographic research: my fieldwork has walked into the homes and fields of the people I interviewed, cooking together, sharing meals and hard labor, as well as joy and trouble; as much as these encounters from the field have shaped my research, life and experience. By committing to this practice, I also experimented being-in-common with/in the field.

The ruins of the Green Revolution are animated by odd relations with the commons, that trigger attempts to re-organize materially. In this essay, I argued that the communities of Sevapur and Vinobajipuram do not, and probably cannot simply renounce to the damaged food and infrastructure. Kumar and Raja’s families will not go back from th/rice a day to th/rice a year all of a sudden. Instead, other worlds become possible by working out intimate involution with these materialities – for instance through tinkering, shuffling or banging, and further exploring the possible bifurcations and multiplications of other thousand possible ecologies (Hoerl 2013). There is always “more than one solution”, and that makes it worth experimenting: give me a field, “and I will raise a world” (Papadopoulos 2019, 207).

REFERENCES

- Anand, N. 2015. "Leaky States: Water Audits, Ignorance and the Politics of Infrastructure". *Public Culture* 27 (276): 305-330.
<https://doi.org/10.1215/08992363-2841880>
- Anand, N. 2017. *Hydraulic City: Water and Infrastructure of Citizenship in Mumbai*. Durham (NC): Duke University Press.
<https://doi.org/10.1215/9780822373599>
- Anand, N. 2019. "Public Water and the Intimacy of Hydraulics". *e-flux Architecture*.
<https://www.e-flux.com/architecture/liquid-utility/259641/public-water-and-the-intimacy-of-hydraulics/>
- Anand, N., A. Gupta, and H. Appel, eds. 2018. *The Promise of Infrastructure*. Durham (NC): Duke University Press.
<https://doi.org/10.1515/9781478002031>
- Arrighetti, G., P. Autorino, M. Bandiera, J. Chialà, C. Colella, e E. Milazzo, a cura di. 2020. *Epidemia 3: Cosmopolitiche. Pratiche e movimenti della transizione ecologica*.
- Ballesterio, A. 2019. "The Underground as Infrastructure? Water, Figure/Ground Reversals, and Dissolution in Sardinal". In *Infrastructure, Environment, and Life in the Anthropocene*, edited by K. Hetherington. Durham (NC): Duke University Press.
<https://doi.org/10.1215/9781478002567-003>
- Berlant, L., ed. 2000. *Intimacy: A Special Issue*. Chicago: University of Chicago Press.
- Ghelfi, A. 2015. *Worlding Politics: Justice, Commons and Technoscience*. PhD Diss., University of Leicester.
- Ghelfi, A. 2019. "Note su Ecologia Politica e Movimenti". Published in *Effimera's blog*. [01/04/2020].
<http://effimera.org/note-su-ecologia-politica-e-movimenti-di-andrea-ghelfi>.
- Gupta, A., and J. Ferguson, eds. 1997. *Anthropological Locations: Boundaries and Grounds of a Field Science*. Berkeley: University of California Press.
- Haraway, D.J. 2016. *Staying with the Trouble: Making Kin in the Chthulucene*. Durham (NC) - London: Duke University Press.
<https://doi.org/10.1515/9780822373780>
- Hoerl, E. 2013. "A Thousand Ecologies: The Process of Cyberneticization and General Ecology". In *The Whole Earth: California and the Disappearance of the Outside*, edited by D. Diederichsen and A. France. Berlin: Sternberg.
- Hustak, C., and N. Myers. 2013. "Involutionary Momentum: Affective Ecologies and the Sciences of Plant/Insect Encounters". *Differences* 23 (3): 74-118.
<https://doi.org/10.1215/10407391-1892907>
- Lerche, J. 2011. "Agrarian Crisis and Agrarian Questions in India". *Journal of Agrarian Change* 11 (1): 104-118.
<https://doi.org/10.1111/j.1471-0366.2010.00295.x>

- Mehta, L. 2001. "The Manufacture of Popular Perceptions of Scarcity: Dams and Water-Related Narratives in Gujarat, India". *World Development* 29 (12): 2025-2041.
[https://doi.org/10.1016/S0305-750X\(01\)00087-0](https://doi.org/10.1016/S0305-750X(01)00087-0)
- Mehta, L. 2005. *The Politics and Poetics of Water: Naturalising Scarcity in Western India*. New Delhi: Orient Longman.
- Mol, A., I. Moser, and J. Pols, eds. 2010. *Care in Practice: On Tinkering in Clinics, Homes, and Farms*. New York: Columbia University Press.
<https://doi.org/10.14361/transcript.9783839414477>
- Münster, D. 2012. "Farmers' Suicides and the State in India: Conceptual and Ethnographic Notes from Wayanad, Kerala". *Contributions to Indian Sociology* 46 (1-2): 181-208.
<https://doi.org/10.1177/006996671104600208>
- Nader, L. 2011. "Ethnography as Theory". *HAU: Journal of Ethnographic Theory* 1 (1): 211-219.
<https://doi.org/10.14318/hau1.1.008>
- Papadopoulos, D. 2019. *Experimental Practice: Technoscience, Alter-Ontologies, and More-than-Social Movements*. Durham (NC): Duke University Press.
<https://doi.org/10.1215/9781478002321>
- Puig de la Bellacasa, M. 2017. *Matters of Care: Speculative Ethics in More than Human Worlds*. Minneapolis: University of Minnesota Press.
- Scott, J.C. 1998. *Seeing Like a State: How Certain Schemes to Improve the Human Condition Failed*. London: Yale University Press.
- Solnit, R. 2016. *Hope in the Dark: Untold Stories, Wild Possibilities*. Edinburgh: Canongate Books.
- Tsing, A.L. 2015. *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins*. Princeton: Princeton University Press.
<https://doi.org/10.2307/j.ctvc77bcc>
- Tsing, A.L., H.A. Swanson, E. Gan, and N. Bubandt. 2017. *Arts of Living on a Damaged Planet: Ghosts and Monsters of the Anthropocene*. Minneapolis: University of Minnesota Press.
- United Nations. 2018. *Sustainable Development Goal 6 Synthesis Report 2018 on Water and Sanitation*. New York.