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Storying Sensuous Atmospheres of Peaches and Wheat

Towards New Horizons of Imagination and Possibility for Sustainable Food Systems

Abstract

Policy initiatives, research, and professional advice concerned with sustainable food systems remain largely stuck conceptualising individual consumers as rational subjects in need of technocratic interventions to induce behaviour change. While critical approaches do account for the relevance of socio-ecological, political, and economic circumstances, the affective, sensuous, and im/material relations — sensuous atmospheres — that are indissoluble from everyday life are either left out, or effectively conceptualised as the inert, given background on which life plays out. Taking the imagination as a key political participant in the struggle for a more just and sustainable world, this article aims to 'story' the sensuous atmospheres of everyday life in agricultural practice, making sensuous atmospheres visible as the very sensory-material substance that socio-ecological, political, and economic formations take. Drawing from sensuous (auto)ethnographic encounters on a farm in northern Italy, I ask: what kinds of stories are the sensuous atmospheres of techno-industrial and alternative agricultural practices made of, what kinds of stories do they tell, and how might they help to imagine new horizons of possibility in the making of more sustainable food systems? I begin the article with a discussion problematising food systems and the inadequate approaches often used to render them sustainable. I then conceptualise the notion of 'storying sensuous atmospheres', presenting the sensory ethnographic material in the style of 'sensuous scholarship' in which the fieldwork is simultaneously analysed and evocatively storied. I conclude the article by suggesting that the storying of sensuous atmospheres is one strategy to precipitate new horizons of imagining — in food systems and beyond — a more sustainable world.

Keywords: Sustainable Food Systems, Agriculture, Atmospheres, Sensory Ethnography, Politics of Imagination, Sensuous Politics, Sensory Studies, Degrowth

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> *The war against the imagination is the only one the capitalists have actually managed to win* (Graeber 2011, 113)

Introduction: Storying Food System Transformation

Despite decades of warnings from scientists, international treaties, and both institutional and grassroots awareness-raising, urgently needed sustainability transformations have largely failed to materialise across industry and government around the world. In sustainability and climate research, policy and expert recommendations are often framed in terms of consumer behavioural change (Köhler, Geels, Kern, Markard, Onsongo et al. 2019; Sahakian & Wilhite 2014; Shove 2010; Spurling, McMeekin, Southerton, Shove, and Welch 2013). In policy initiatives related to food system change, health, and sustainability, research also tends to focus on individual and cognised 'demand-side' issues, such as consumer's dietary choices, without giving critical attention to the systemic realities within which human behaviour unfolds (c.f. Creutzig, Roy, Lamb, Azevedo, Bruine de Bruin et al. 2019; Schill, Anderies, Lindahl, Folke, Polasky et al. 2019)[1]. Perhaps unsurprisingly then, agriculture-related emissions and the global obesity epidemic continue unabated (FAO 2020a; WHO 2021), suggesting that behaviour change campaigns are either misguided or insufficient for solving the crises at hand.

In this article I identify and situate two broad types of agricultural modalities and use ethnographic material to open an alternative route to conceptualising, researching, and imagining sustainable food system change in two interrelated ways. First, I attend to the sensory experiences of place, emplacement, and the atmospheres — *sensuous atmospheres* (Pink 2011, 2015; Sumartojo & Pink 2019) — of agricultural foodways formations; the myriad stories that compose them, and the horizons of imagination and possibility they might unfold as prospects for intervention, design, and activism. This approach emphasises the socio-ecological, economic, and political power relations of food systems that are sensuously and viscerally experienced as part of everyday life. Second, I develop a transformational approach that aims to go beyond mere critique by revealing "the historical, ecological, and civilisational capacities and experiences of human emancipation" (Hosseini & Gills 2020, 15). In striving for this transformational orientation, I employ the idea that knowledge is not "classificatory", as modern science might have it, "it is

1 For example, Shove (2010) has described several U.K. policy initiatives that are primarily focused on incentivising behaviour change; meanwhile, peasant and Indigenous groups around the world have long been practicing and advocating for sustainable food system alternatives like agroecology (e.g. Altieri & Nicholls 2017), a term — and the practices the term represents — that is still disputed in international policy-making (IDS and IPES-Food 2022).

rather *storied*" (Ingold 2011a, 159; original italics). Storying, in the sense I use it here, is two-fold: it refers first to the idea that things "*are* their stories, identified not by fixed attributes but by their paths of movement in an unfolding field of relations" (Ingold 2011, 162; original italics); and second, through 'sensuous scholarship' (Stoller 1997), storying aims to reveal possibilities of world-making which have become obscured or erased under the pressures of modernity, but nonetheless contain seeds of possible futures that might comprise more sustainable ways of making and organising the world.

Modern agricultural foodways are strongly configured by global agricultural power structures. I aim to make visible some ways that these global powers configure the sensuous and visceral structures of feeling in everyday life. Accordingly, I ask: what kinds of stories are the 'sensuous atmospheres' of techno-industrial and 'alternative' agricultural practices made of, what kinds of stories do they tell, and how might they help to imagine new horizons of possibility in the making of more sustainable food systems? Moving beyond normative orientations in the natural and social sciences, I seek to enact a 'sensory sustainability science' that better accounts for the indissoluble multi-sensorial and more-than-representational relationalities of everyday life. (Heinrichs 2019a; Heinrichs 2019b; Heinrichs & Kagan 2019; Vannini 2015). That is, rather than attempting to provide categorical answers to the questions asked, I opt to tell a story that reveals the ongoing, often overlooked or invisible sensory and visceral minutia of everyday life, and how these structures of feeling are produced by practices and ways of living that challenge, but are also shaped by and deeply entangled with, global and historical extractivist "onto-logics" and structures of power (Durante, Kröger & LaFleur 2021, 21; Chagnon, Durante, Gills, Hagolani-Albov, Hokkanen et al. 2022; Ye, van der Ploeg, Schneider & Shanin 2020).

I begin the article with a critical discussion of global food system sustainability, and detail how policy interventions are often still formulated around idealised assumptions about rational, individual economic subjects. I then situate and define the notion of 'agricultural foodways formations' before discussing the methodology and/as theory: sensory ethnography, sensuous atmospheres, and the storying of sensuous atmospheres as a political praxis of 'living well'. In this, the imagination is a key site of political struggle, "understood as the radical capacity to envisage things differently and construct alternative political projects" (Bottici and Challand 2011, 1). Drawing from sensory ethnographic fieldwork undertaken at a biodynamic farm and Ecovillage[2] in northern Italy, I use sensu-

2 The Global Ecovillage Network defines an Ecovillage as: "an intentional, traditional or urban community that is consciously designed through locally owned participatory processes in all four dimensions of sustainability (social, culture, ecology, and economy) to regenerate social and natural environments" (GEN n.d.).

ous scholarship to build this radical capacity, situating, historicising, and speculating on the sensuous atmospheres of working in peach orchards and wheat fields. I conclude the article by discussing its limitations, speculating future areas of study, and finish with a series of provocative, future-oriented questions aimed at precipitating imaginative work that asks the reader to seriously consider the implications — sensory, visceral, socio-ecological, economic, and political — that might flow from a world that practices agriculture in an 'alternative' mode.

Food System Problems, or Human Nature?

Global agricultural and environmental authorities such as the FAO (2020b) and IPBES (2018) demonstrate that agriculture is a major contributor to destructive land-use change, biodiversity loss, aquatic pollution, depletion of surface water, and emitter of greenhouse gases — particularly methane and nitrous oxide (Lynch, Cain, Frame & Pierrehumbert 2021). Yet, agriculture is not a monolith, and there is nothing inevitable about the negative ecological and health effects that might flow from it. Three separate reports, published between 2009 and 2017 by the corporate watchdog ETC Group (Emerging Technology and Corporate Monitoring)[3], identify two types of foodways globally: the "Industrial Food Chain" (Chain) and "Peasant Food Web" (Web) (ETC 2017)[4]. The ETC Group's findings show that although agriculture as a whole accounts for up to 50% of habitable land use globally, the Chain alone accounts for around 75% of that total but provides only around 30% of food meant for human consumption. When transportation and storage are accounted for, the Chain is estimated to emit between 85%-90% of all agricultural emissions. The Web, however, accounts for only around 25% of agricultural land use globally but produces 70% of the world's food for human consump-

3 Using FAO measurement parameters.

4 ETC Group, an independent organisation founded by author and activist Pat Mooney, defines the Peasant Food Web as: "small-scale producers, usually family- or women-led, that include farmers, livestock-keepers, pastoralists, hunters, gatherers, fishers and urban and peri-urban producers" (2017, 8), and who work land that is 5 hectares or less. ETC Group stresses that the Web is not a synonym for agroecology, organic, permaculture or other production systems, but acknowledge that most of what is produced in the Web is de facto 'organic'. Further, the Web includes those who own/control their own land, those who work for others and/or have been dispossessed of their land (see work on 'land grabbing' by Chain-affiliated organisations (see Borras & Franco 2012, for an overview). On the other hand, ETC Group defines the Industrial Food Chain" as: "a linear sequence of links running from production inputs to consumption outcomes. The first links in the Chain are crop and livestock genomics, followed by pesticides, veterinary medicines, fertilisers, and farm machinery. From there, the Chain moves on to transportation and storage, and then milling, processing, and packaging. The final links in the Chain are wholesaling, retailing, and ultimately delivery to homes or restaurants" (2017, 10).

tion, or about 50% when off-farm production, such as foraging and fishing, is discounted (ETC 2017)[5]. The numbers associated with the Web and the Chain suggest that very different agricultural and food-procuring practices are occurring simultaneously, but the Chain often comes to stand for 'agriculture' as a monolith. The numbers also suggest that the Chain, despite the many arguments from its proponents that call for its continuation in the name of food security (e.g Reynolds & Braun, 2022), is not living up to its long-touted promise of 'feeding the world'.

A view of agriculture based on the ETC Group's numbers does not seem, however, to have had much impact toward restructuring the way agriculture and food systems are organised. Instead, international bodies reporting on climate and biodiversity, such as the U.N., FAO, or UNEP, as well as many national initiatives, persist in policy that is ostensibly geared to 'feeding the world'. Food and sustainability initiatives might revolve around the imperatives of dietary change. For example, reports often highlight cultural or territorial food knowledges and traditions like the so-called Mediterranean Diet or New Nordic Diets, and urge people to *choose* more plant-based diets (see e.g. Our World in Data 2019; FAO 2020c; IPBES 2018). The things that humans and others eat (i.e. diets) are undoubtedly a critical factor in transitioning to living more sustainably. However, with a narrow demand-side focus that urges individuals to change their diet, the blame and burden of sustainability comes to rest with individuals, and is apparently predicated on the idea that sustainable societies are possible *if only* consumers would change their behaviour in response to having "better information" (Shove 2010, 1275).

Is it plausible that people around the world are simply *choosing* to ignore the advice of experts? The close correlations with trade policies and increases in non-communicable diseases would appear to undercut this possibility (Zuryak 2020). In addition, much behaviour change theory still relies on deep-seated assumptions about human behaviour (Schill et al. 2019). As Ingold (2000, 27–39) has unequivocally shown, neoclassical economics, rational choice theory, and behavioural psychology — to name only a few schools of such thought — are exemplars par excellence of these assumptions, namely that individual choice is an extension of evolved human nature: *homo economicus*. When recommendations from the FAO, national or international governmental bod-

5 Despite a recent controversy over of these data sets, in which some FAO-affiliated researchers (Lowder, Sánchez & Bertini. 2021; see also, Ricciardi, Ramankutty, Mehrabi Jarvis, and Chookolingo 2018) inexplicably alter the measurement parameters that the FAO itself uses, the numbers presented by ETC Group have been reproduced consistently since 2009 and remain widely recognised as a legitimate proxy, including officially by the FAO (see GRAIN 2022, for a collective response from ETC Group, GRAIN, IPES-food, among other food-focused organisations).

ies show a clear investment in pursuing behaviour change as policy, they also reveal their dependence on such assumptions. Broadening the examination of this issue, I look beyond behaviour change to focus on the systemic relations set up by the agricultural foodways categories that form the basis of this analysis, and which set the possibilities and limitations for the atmosphereric configurations and the sensous and visceral experiences they might afford.

Agricultural Foodways Formations

I use two lcategories of agricultural foodways formations to orient my analysis and help contextualise this story. I refer to these categories — loosely inspired by the ETC Group's Chain and Web formulations — as 'techno-industrial' and 'alternative'[6]. These referents are not meant to be tightly defined categories. Even loosely defined, however, each one can afford a widely differing range of possibilities for sensuous experience. Both techno-industrial and alternative agricultural foodways comprise policies, practices, knowledges, financial, and material infrastructures that configure distinct, even overlapping structures of feeling (Anderson 2016), including everyday sensory and visceral experience (Hayes-Conroy & Hayes-Conroy 2015). This is not only the case for those working in a particular agricultural formation, but also for those eating from them or living in their proximity. Indeed, in alternative formations, as I will show, one is probably more likely to encounter sensory difference, such as the visual and gustatory differences experienced in encounters with spherical red, orange, and green coloured eggplants *(*Figure 1).

I conceptualise *techno-industrial agricultural formations* as those which: favour mono-cropping; depend on 'Green Revolution' technologies such as external, synthetic inputs of fertilisers, pesticides, herbicides, and fungicides; are primarily concerned with increased yields as the main driver of continuing operation; tend to be associated with reduced biodiversity; orient sales toward export markets; do not rely exclusively on soil but also hydroponic and aeroponic warehouse agriculture; and rely heavily on cheap and often imported and exploited labour. In addition, a significant portion of techno-industrial agriculture is set up not to produce food, but rather to produce animal feed,

6 I use the term 'techno-industrial' in favour of the more common term 'conventional' to denote 1) a form of agriculture that has emerged with and through industrial capitalist-driven technological innovation (Mintz 1986), and 2) that this type of agriculture is a historically recent phenomenon that began to develop its current formation only around 150 years ago (Marchesi 2020; Melillo 2012; Patel 2013). A consideration of the history of agriculture then, suggests that techno-industrial agriculture is rather unconventional. 'Alternative' is used with the recognition that there are not only 'alternatives to' techno-industrial agriculture, but that globally, agricultural foodways formations have existed in various 'alternative' guises for millennia (Graeber & Wengrow 2021).

Figure 1. Purple-less Eggplants in September, northern Italy. Photo Credit: Author.

fibre, and biomass/fuel. Techno-industrial agriculture is formed by and embedded in a socio-politico-economic system that, through abstraction and alienation, requires endless capacities for scalability: standardisation, control, and predictability (Tsing 2012). It has strongly shaped technologies, ways of knowing and knowledges, legal regulations, financial and labour flows, non/human, sensuous, and visceral relationships with food in profound and fundamental ways. Techno-industrial formations have clearly become the dominant agricultural mode, having an outsized impact on the making and maintenance of globalised society while being implicated in myriad environmental and health ills. Consequently, and although my case study is based on agricul-

tural foodways formations in the Global North, resistance to techno-industrial foodways formations is undoubtedly a global phenomenon[7] that is playing out in myriad ways, and is often far more coercive and violent outside of the Global North (see e.g. Borras & Franco 2012; Cáceres 2014; Svampa 2019).

In contrast, a*lternative agricultural formations* comprise distinct (but also overlapping) kinds of technologies, regulations and standards, flows (or lack) of finance, labour, ways of knowing and knowledge, non/human, sensuous, and visceral relations with food. I conceptualise alternative formations as those which: operate under labels such as agroecology, regenerative agriculture, permaculture, market gardening, natural farming, biodynamic, organic, I/indigenous, or other forms of agriculture that have been practiced before the advent of techno-industrial, or else arose in contradistinction to it. Common practices in these alternatives consist of: favouring polycultures over monocultures; zero or significantly reduced pesticide, herbicide and fungicide use; the use of 'green' manure from biomass created on farm, or the use of animal (including human) manure from on-farm or more local sources such as local municipalities or other nearby farms; an absence of uniform concern with yield as the ultimate driver of operation; orientation of sales toward local markets; and less reliance on imported labour[8]. These alternative formations are often, but not only (e.g. market gardening), organised as risk-sharing and community-supported organisations and are primarily focused on growing food for human consumption. From these delineations, and based on my own ethnographic and anthropological experience, I define agricultural foodways formations as: *emplaced formations that may be distinguished by their differing (and often overlapping) sets of knowledges, skilled practices, organisational features, political and economic power relations, and the material, sensuous, and visceral atmospheres of experience — the structures of feeling — that ongoingly make and are made by these relations.*

Theoretical Correspondences: Sensory Ethnography, Sensuous Atmospheres, and the Imagination

Sensory ethnography is defined by Pink (2015, 4–5) as "a critical methodology which…departs from the classic observational approach to insist that

7 For example, in an article on the transnational peasant movement, La Vía Campesina, Martinez-Torres and Rosset (2010) note that "rural organisations and peasantries around the world share the same global problems even though they confront different local and national realities". The "global problems" they refer to are the same that I have identified here regarding techno-industrial agriculture and the socio-ecological, economic, and political power relations it inheres.

8 Instead, many alternative formations rely on volunteer labour, or else frame this essentially unpaid labour as 'educational'. This current state of labour relations can indeed be problematic, and more research is needed in this area.

ethnography is a reflexive and experiential process through which academic and applied understanding, knowing and knowledge are produced". As such, it is simultaneously methodology and theory. Methodologically, sensory ethnography attends closely to the ways that people (and the researchers themselves) apprehend the world in both movement and action beyond language, but also through linguistic and other forms of representation. Conceptually, it builds on the anthropology of the senses/sensory anthropology literature (Stoller 1989; Classen 1993; Seremetakis 1996; Howes 1991; Howes 2005a; Ingold 2000) to presuppose that all experience is always multi-sensorial[9] and imbued with sociocultural meanings and values that are mutually constituted through historical, cultural, socio-ecological, political and economic flows, designs, structures, and customs. Further, sensory ethnography relies on a theory of emplacement, "the sensuous interrelationship of body-mind-environment" (Howes 2005b, 7), in which place is understood as an event, an occurrence, or a meshwork rather than a static point in time and space, and that one's body, as part of the environment "provides us not simply with embodied knowing and skills that we use to act on or in that environment, but that the body itself is simultaneously physically transformed as part of this process" (Pink 2011, 347). The sensuousness of being emplaced, along with the socio-ecological, economic, and political affects that infuse place, invites us into thinking through *atmospheres* (Pink 2011, 2015; Sumartojo & Pink 2019). Finally, sensory ethnography extends beyond the field site to conceptualise also writing and representation as part of the "ethnographic place". This is defined as "the combining, connecting and interweaving of theory, experience, reflection, discourse, memory and imagination" (2015, 48) that occurs during the analytic and writing phases of research, and which is employed here through sensuous scholarship (Stoller 1997).

Into the Atmosphere(s)

When speaking of atmosphere, people may do so as a kind of shorthand to refer to sensory experience — indeed, what is seen, heard, smelled, tasted, or felt meshes with and configures atmosphere (Sumartojo & Pink 2019). As such, atmospheres are indissolubly sensuous and thus I use the term 'sensuous atmospheres' to emphasise this point. Thinking with, through, and in atmospheres (Sumartojo & Pink 2019) extends the conceptual and analytical power of sensory ethnography in three important ways. First, Sumartojo and Pink (2019, 4) suggest that atmosphere is "a question of attunement and attention to what has to configure for [atmospheres] to exist". This leads us to

9 It is "*neither* dominated by *nor* reducible to a visual [or other sensory] mode of understanding" (Pink 2015, 96, original italics)

consider that both techno-industrial and alternative agricultural foodways comprise policies, practices, knowledges, and financial and material infrastructures related to agriculture that configure its experiential world. Second, Anderson (2016, 746) draws attention to the diffusion of structures of feeling as "an experience of the present that both extends beyond particular sites/occasions and is shared across otherwise separate sites/occasions", which suggests that atmospheres are not place-bound: that global economic and political formations obtain in all kinds of locales regardless of cultural differences. This helps me to focus the present article on a farm in northern Italy, but also to read the sensuous atmospheres that configure the farm as also configuring other, seemingly unrelated places and communities around the globe. Third, thinking atmospherically is also about breaking the boundaries of imagination and possibility when atmospheres are understood as:

> "…emergent and continuously configured [allowing] us to see not only what meanings they might carry and what work they might do in people's lives, but also what they make possible into the future and what they enable us to imagine and know in ways that were not possible before. This provides signposts to the relationship between atmospheres and design, points of potential intervention and the futures that thinking atmospherically might bring into view." (Sumartojo & Pink 2019, 4)

In short, the concept of atmosphere helps in thinking with and through uncertainty and possibility by attending to the primacy of movement and becoming, as well as variations in skill and sensory experience (as opposed to 'culture', see Ingold, 2000) that are entangled with socio-ecological, economic, and political power relations, the weather, climate, and myriad other more-than-human materialities. If thinking in, with, and through atmospheres is an attempt to deal with uncertainty and possibility, then practices of care, following Annemarie Mol's study of the 'logic of care' (2008), are critically important relations. Thinking through uncertainty and possibility, and striving for care-full relations, I contend, can open new horizons for imagining and intervening on behalf of a future that is both liveable and just for all.

Storying Sensuous Atmospheres as a Political Praxis for 'Living Well'

The strategy of storying sensuous atmospheres is intended as a form of praxis for 'living well'. This begins with a mediation on the notion that things are their stories (see page 2), and concludes with the notion that stories themselves are critical tools in provoking the imagination of the possible, which is considered here as a key site of political struggle:

> "...the properties of materials, regarded as constituents of an environment, cannot be identified as fixed, essential attributes of things, but are rather processual and relational. They are neither objectively determined nor subjectively imagined but practically experienced. In that sense, every property [of a material] is a condensed story. To describe the properties of materials is to tell the stories of what happens to them as they flow, mix and mutate." (Ingold 2011a, 30)

Sensuous storying flows from this logic: describing the practical experiences encountered in the sensuous atmospheres of material things is to tell stories of how the constituents of these atmospheres change, mix, or mutate. In doing so, I aim to convey how agricultural atmospheres occur in erratic accordance with their historical and ongoing relationalities, and their future-orientations. This historical-relational view attempts to make visible nuanced qualities and components of agricultural work, its products, and constituents, as a strategy of provoking the imagination of the possible. Making such aspects of life visible, I argue, is essential for birthing new ways of imagining how food systems might be both approached in research and made in practice. This emphasis on imagination is intended to resonate with a long tradition of those committed, in David Graeber's words (2011, 47), "to the idea that the ultimate, hidden truth of the world is that it is something that we make, and, could just as easily make differently".

But how then, is imagination to be excited, provoked, expanded, opened, made rhizomatic, revolutionary? One way, with both Graeber (2011) and Ingold (2022), is to consider the imagination as an immanent principle constituting social reality and lived, sensuous and visceral experience. In a hyper mediated world, popular imagination appears captured primarily by representations of (im)possibility that take the modern world (e.g. neoliberal, capitalist, etc.) as 'natural', while positioning imagination as an abstract, immaterial object. The task of interrupting such representations requires, in part, shedding light on the material, sensuous everyday realities in which imagination is rooted. Academic writing that is committed to sensuous description is one strategy of the imagination and its expansion that is aimed at showing a different world is possible, one in which conviviality and the material well-being of all is the highest priority. Indeed, common among many alternative foodways practitioners and activists around the globe is the endeavour of 'living well', or putting 'well-being' at the centre of society. Greater attention to the sensuous experiences that enfold this world can be a key way to pursue this. Stoller (1997) suggests that fuller attention to sensuousness of experience is necessary to live well, while Porteous (1991) has suggested that a more balanced approach to multi-sensoriality encourages deeper involvement with the world, and that such involvement leads to care.

Drawing from these and other sensory-oriented writers on food, architecture, geography and more (Pallassama 2012; Tuan 1993; Petrini 2001), Pink (2015, 69) suggests that "sensory ethnography has certain congruences with the ethics of those who hope to make the world a better place, seeing greater sensorial awareness as a route to achieving this".

The idea of 'living well', 'making the world a better place', seeking 'well-being for all', or arguing 'another world is possible', may easily be derided as too subjective, arbitrary, or detached wishful thinking. Yet, drawing from the emerging body of literature and activism advancing the Degrowth movement, Schmelzer, Vetter and Vansintjan (2022, 29) explicitly contrast a Degrowth notion of well-being with the normative, capitalist notion of well-being: "degrowth aims at a society in which well-being is mediated less by capitalist market transactions, exchange values, or material consumption, and more by collective forms of provisioning, use values, and fulfilling, meaningful, and convivial relationships". It is in these collective forms of provisioning and convivial relations, and not capitalist relations dominated by exchange value, that a more sensuous, care-full, and sustainable existence may be found. It is therefore one of the tasks of academic research to make visible the sensuousness and care-fullness of such relations so that they might break through the current "horizons of possibility" (Graeber 2011, 62) that are produced through the structures of feeling that radiate from food systems organised toward capitalist growth. It is this Degrowth sense of 'living well' that this article advances.

Storying the Rupture Town Ecovillage: Sensuous Atmospheres in Entangled Agricultures

In the analysis that follows I am primarily concerned to draw attention to the distinct differences in the sensuous atmospheres of the 'techno-industrial' and 'alternative' categories outlined above. These categories, like atmospheres (and indeed 'cultures'), leak, stray, and overlap even as they reveal difference. Although culture can be a useful analytical starting point in some cases, the analysis I make in this article is inspired by Gupta and Ferguson's (1997) critique of the concept of culture as a bounded and static object of study, and aligns with Ingold's critiques of the traditional cultural foci of the anthropology of the senses (see Ingold 2000, 243–287, Ingold 2011b, 2011c), and of course classical approaches to culture in anthropological disciplines broadly speaking. Instead, this analysis reorients attention to questions of power (i.e. historical relationalities), the processes and practices of place-making (i.e. enskillment in, through, and with sensuous atmospheres) and resistance (i.e. sensuous and visceral politics) (Gupta & Ferguson 1997); all of which are better suited than the category of culture for the aims of this article. Nonetheless, I take

localised sensuous atmospheres and visceral experience — mutually constituted by global agricultural foodways formations — as my basis for analysis, understanding the senses as processual forms of knowing and knowledge in their own right (Maslen 2015). Together, these conceptual positions move us toward a more-than-representational approach[10] and the transdisciplinary project of critical sensory ethnography (Pink 2015, 15).

The sensory ethnography presented here was undertaken at an Ecovillage and biodynamic-certified farm called 'Rupture Town' over a two-month period in the summer of 2018. It consisted of everyday sensuous participant-observation as a farm labourer on a certified biodynamic farm and Ecovillage community in northern Italy. Two follow-up visits were taken in the autumn of 2018 and the winter of 2019. Although the fieldwork was originally planned as being carried out in an alternative agriculture formation, the biodynamic farm was immersed in a wider landscape dominated by techno-industrial formations, precipitating a significant degree of entanglement between them. Fieldwork activities consisted of classic participant observation, field notes, drawings, spontaneous conversations, and interviews, as well as photographs, video, and sound recordings. A small part of this analysis uses 3rd party documents as supplemental materials. The names, pronouns, and places referenced in what follows have been intentionally changed or obscured to maintain participants' privacy and anonymity. I present the (auto)ethnographic material through a sensuous scholarship (Stoller 1997) centered around a series of photographs, bringing evocative force to academic insight and inviting the reader to sensuously attune with the ethnography. This style is meant to move, entice, surprise, and incite imagination and possibility.

A Rupture in Place

Rupture Town, a radical social project connected with the Global Ecovillage Network (GEN) and Slow Food International, was founded in 2011 following the purchase of an old farmhouse in a small hilltop village in northern Italy. The aim was to create a space for informal peer-to-peer participatory community activism and convivial living. From its very inception, Rupture Town's orientation contrasts with the dominant ways of organising social relations and agriculture under capitalism, seeking instead to create a route to sustainable and harmonious lifestyles that centre the historical roots of the local area through the promotion of social activities. An essential social element at the core of Rupture Town is the notion of food sovereignty, pursued through agricultural cultivation and various food processing and distribution practices.

10 For a sample of more-than-representational theories, see Vannini 2015.

In 2014, the agricultural component of Rupture Town began in earnest when the Ecovillage began renting 8 hectares of farmland to cultivate vegetables, cereals, and fruits. In 2016, Rupture Town co-purchased the farmland — including the attached buildings and old farm equipment — they had been renting, and began the process of bringing the farm more fully under biodynamic production and stabilising the foundation of the Ecovillage.

During the nearly 2.5 months of fieldwork I undertook in 2018, Rupture Town was run by three families (six adults and four children) and at least six associated persons, including two full-time farming apprentices who regularly assisted in the organisation of events, activities, and planning new projects. Volunteers — drawn from online spaces such as WorkAway and WWOOF (World Wide Opportunities on Organic Farms) — came to help from around the world. They were a constant, essential part of Rupture Town's operations. Rupture Town's activities had, up to the time of fieldwork, primarily been concerned with the restoration of the old farmhouses they had purchased, using natural and salvaged materials. The core members had permanently moved into the Main house (on the hilltop) only a few months before I arrived for fieldwork. In this sense the project was early into a new stage of becoming. Despite the primary focus on building renovation, Rupture Town had already begun running several activities, including engaging in activist work with an anti-mafia organisation, hosting pasta-making workshops, Boy Scout farm camps, farming and gardening school courses, and open-farm days to promote their presence and activism in the region. They also had begun baking large batches of sourdough bread both for sale and gifting, and collaborating with local artisans to turn their heirloom cereals into beer, pasta, and flour products. Wine had also begun production, grown from vines at a Rupture Town member's family farm in the adjoining wine region. These products were sold in local farmer's markets, online platforms, local retail shops, and, along with their fresh produce, were purchased by several high-end restaurants in the area.

After finishing fieldwork, Rupture Town's activities have increased in frequency and their number of collaborators has expanded. Rupture Town's agricultural and food production, events, and other projects are of course meant to support the day-to-day running of the Ecovillage, yet these activities should not be seen merely as a means to financial stability. Indeed, such activities comprise the constellation of everyday, socio-ecological relations that can easily be read — as I do here, following Chatterton (2010) — as anti- and post-capitalist modes of making and organising life, even while being subject to capitalist structures in many ways. The production of this alternative space in a rural setting, surrounded by and partly infused with landscapes shaped by capitalist modes of production, produced a strikinlgy divergent

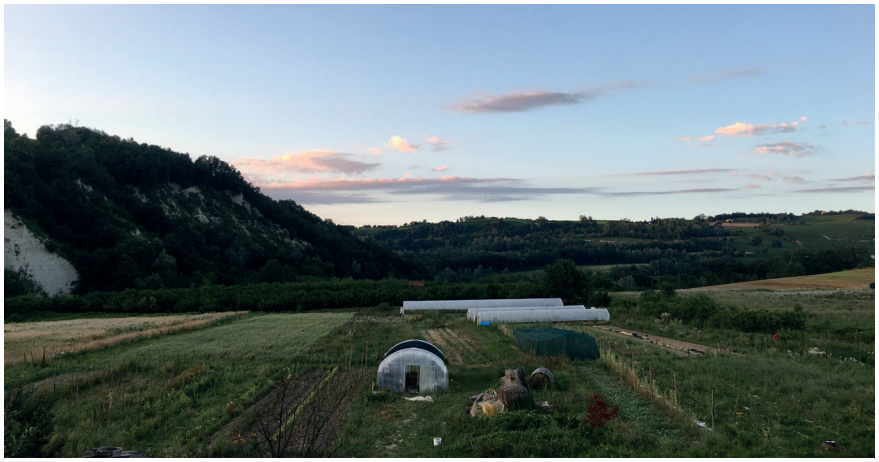

Figure 2. The primary fields of the biodynamic farm: To the far left (north) is an heirloom mixed wheat crop almost ready for harvest. The horizon is seen in the east. Photo credit: Author.

sensuous-atmospheric space, contrasting sharply against, amongst, and despite the dominant organising principles of techno-industrial agriculture in the surrounding landscapes.

Alter-Native Farming

Rupture Town's agricultural director, Jesus, refers to the biodynamic farm in various ways: an organism (*organismo)*, as permaculture, agroecology, natural, indigenous (*agricoltura indigena*)[11]. Jesus's family had farmed in the area for some generations. His university studies in comparative religion — a field saturated in ancient agricultural knowledges — combined with his life-long agricultural experience to inform his philosophy. The farm sits at the bottom of a long, gently sloping hill dotted with techno-industrial wheat fields and hazelnut orchards. The northward hill leads to a small creek before the land rises up abruptly to the north and east into a forested hilltop, where the Main house is located (Figure 2). To the east, the boundary is marked by a techno-industrial hazelnut orchard, with forest beyond that. The farm provides most of the food eaten by Rupture Town members, associates, and volunteers. At the time of fieldwork in 2018, nearly every crop being grown consisted of multiple varieties: 28 types of tomato, two types of tomatillo, four types of zucchini, three

11 Where the Latin indigĕna→gignĕre, means "to generate", while also being suggestive of the revival of ancient agricultural knowledge.

Figure 3. A series of contrasts: An alternative peach orchard (foreground), a barren techno-industrial wheat field, a hazelnut orchard (far left), and a forested hill. The primary fields of Rupture Town's farm are out of frame to the left. Photo credit: Author.

types of eggplant, up to five types wheat, plus multiple varieties of many other crops: legumes, peaches, squash, and more.

At the time of fieldwork there were plans for building a cafe on the ground floor of the Main house, and the construction of dormitories was underway for the housing of additional volunteers. Rupture Town's members saw their project and farm as something much bigger than their own members, and thus were engaged in reviving a rural area whose population had dwindled in the decades following World War II, as has been the case in many so-called 'developed' and 'developing' regions around the world. The results of this phenomenon are felt in atmospheres that are composed of an aging populace, run-down buildings, the relative absences of human social activity, and the rise of monoculture agricultural landscapes owned by large national and multi-national companies.

What's in the Teaches of Peaches? Or, Multi-sensory Enskillment

The sensuous experience of Rupture Town's farm contrasted often with the techno-industrial formations that permeated the area. This can be *seen* rather starkly in Figure 3: a woman harvests peaches at the end of a shabby, messy-looking orchard row belonging to the biodynamic farm. A filter has been applied to the photo to accent the feel of that mid-July day — brilliant blue skies and a blazing hot sun. A variety of grasses, weeds, and herbs are growing all over the peach orchard, trampled under-foot by volunteers sent

Figure 4. Three 'white' peaches, plucked from the tree at the peak of ripeness. Photo credit: Author.

to pluck the ripe peaches for immediate delivery. The bulk of the small orchard grows out of frame to the right, where the bigger peach trees' shadows are only just showing a presence. The unkempt mess of the orchard contrasts sharply with the barren field beyond, now bone-dry under the glaring sun. A few weeks before the photo was taken, the field was host to a monoculture of wheat, all growing about the same height. The field had recently been cleared of all the leftover cuttings, leaving it naked to the sun. The former wheat field not only *looks* desertified, it *feels* desertified: when I walk on it, the ground is extremely hard, impenetrable but for the dry cracks running like a meshwork over the surface. The dry, hot air is especially palpable as the heat radiates back from the surface. With the soil exposed and nothing growing, it was becoming 'dirt' (Montgomery 2012). The feeling is one of desolation, all the more ironic because of the rich agricultural history that is so integral to this land. There is little life to be observed — few insects seen or heard, none jumping about or biting legs and arms. Only a dry air enters your nose, vaguely dusty and hot even in the relative humidity of the day. When a thunderstorm comes through — and several did — the rain does not penetrate into the earth but simply runs off its surface, carrying away top soil with it — erosion.

Picking peaches in the orchard next to the naked field, we feel relatively cool, even when standing in direct sun. The green spongey grass is soft underfoot, a nostril-filling herbaceousness and a hint of moisture hangs in the air and life is positively — and quite literally — buzzing. There are a seemingly infinite number of habitable places and temptations for all manner of insects, lizards, birds, probably snakes too, though we didn't see any. A thunderstorm coming through has a profoundly different effect in the peach orchard compared to the barren field next door. Here, the matted grasses will hold rainwater in, giving a chance for it to penetrate the soil underfoot. The mouth-watering prospect of sinking one's teeth into a juicy peach always loomed large (Figure 4). Jesus encourages us to taste the peaches to learn what a ripe peach looks, feels, tastes, and smells like. This is because the peaches are harvested

at peak ripeness for immediate distribution — picked-to-order. A tree-ripened peach has a significant positive effect on the taste, texture, and aroma of a peach, as it does with many other fruiting crops. This became abundantly clear the first time I ate a peach from the supermarket after leaving Rupture Town: the taste was so bland and disappointing I haven't had another peach since. Atmospheres of taste of course extended beyond the peach orchard as well. Upon returning from a short trip to his home in Brussels, one volunteer I worked with responded to my inquiry about what he ate while back home: "I mostly ate meat when I was in Belgium. Here at the farm when I eat vegetables, it feels like I'm eating *something*. In Belgium, the vegetables just taste like water" (Field Notes, 2018a). The Belgian volunteer points directly to the sensuous experience of an eater tasting vegetables in both kinds of foodways formations: one where meat is preferable because vegetables are tasteless, and another where meat becomes less important because the vegetables are so flavourful. Indeed, my first bite into one the 28 tomatoes being grown made me furious to know that growing up in the Southwestern U.S. — the ancestral home of tomatoes — I had been so ceaselessly subjected to tasteless red spheres of water mass, that I never much cared for the taste of a fresh tomato. Five years after having worked in Rupture town, I still dream about eating fresh tomatoes for 'dessert' with olive oil and a pinch of salt. This was bliss (Figure 5).

Figure 5. Four boxes of freshly picked tomatoes. Six different types of tomatoes can be seen. Can you tell which tomatoes were picked by a new volunteer with 'unskilled vision' (c.f. Grasseni 2010)?

Back in the orchard we pick countless boxes of peaches. In order to pick the ripest peaches, one needs to become skilled at identification (or become a bird, since the birds seemed invariably to get to the ripest peaches first!). This multi-sensory process required gripping the peach to check for firmness, examining its colour, holding it to your nose to check for that fresh, juicy aroma it should emit, and finally biting into it to confirm if the other sensory aspects equate to that perfectly sweet flavour with a firm but forgiving texture. If a peach that looked ripe was in fact not, you would know it almost immediately after trying to bite into it. The texture would be closer to that of an apple, and the fuzz would give and unbearable acidic feeling that would make you pull away, shivering. Tasting the peach and attending closely to all these sensory cues helped to situate all its sensory qualities in relation to each other, so that when you had become skilled — a two-month process in my case — you finally had a sense that a peach was ripe just by looking at it.

Eating peaches directly from the tree was something we could do, as no toxic sprays of any kind were used on them. The application of pesticides would likely have made it dangerous to taste a peach directly from the tree, rendering the ways of knowing generated through tasting a peach impossible to realise. (One wonders what becomes of birds that eat peaches from pesticide-coated peaches.) Yet the absence of the taste of peaches in the techno-industrial formation is apparently normal, confirmed by a Penn State University agricultural extension[12] guide, which states: "Most peaches are harvested based on firmness and colour" (Crassweller, Kime, Harper 2017, Para. 27). This would indicate that techno-industrial peach orchards specify touch and vision, but not aroma or taste in determining ripeness, effectively eliminating this sensory knowledge from the work. Picking peaches in a techno-industrial formation will depend also on how long the peach is going to be stored. Thus, the colour and firmness will be different to what I learned as the 'correct' colour and firmness at Rupture Town, since peaches in techno-industrial operations are primarily picked while still green, most commonly so that they won't be bruised during long transport.

What other differences in sensuous atmospheres might be found between orchards in alternative and techno-industrial operations? The Penn State University extension is helpful again in regard to peach orchards: "During the summer months, the orchard will require mowing, multiple pesticide applications, and fruit thinning" (Crassweller et al. 2017: Para. 2). One can begin

12 Speaking at a Slow Food International conference entitled "Just Profit, or Sustainability? Comparing Models for the Economy of Tomorrow", one journalist accused U.S. agricultural universities (so-called "land-grant" universities) such as Penn State as having "been thoroughly co-opted by corporate agriculture" (Field Notes 2018b).

to imagine the differences. The peach orchards at the alternative farm were covered in grasses and weeds which had several kinds of ecological benefits and afforded particular kinds of sensuous experiences, as I described above. In fact, Jesus only rarely mowed his orchards. He told me that he wanted grass because it kept the ground covered so that water could be retained and also kept grasshoppers away from the field crops. This was a major contrast to the hazelnut orchards and many vineyards in the area, most of which were neat and tidy, being mowed nearly every week. Commenting on the farmers who kept such places, especially those running vineyards, Jesus routinely remarked "They're crazy". Having too much grass growing is said to compete with the fruit, reducing yield. Not only was there much less grass in the techno-industrial orchards, but pesticides were also sprayed. Pesticides, according to Jesus, became necessary for those who regularly cut their grass because there wouldn't be enough biodiversity to keep the worst pests at bay. For example, the hazelnut orchard closest to Rupture Town's farm (seen in the left of the frame in Figure 3) shows a relative barrenness when compared to the peach orchard. The hazelnut trees are planted in neat rows, which appear neat in part because the grass underneath them is cut down weekly by the tanned and shirtless gentleman on the old mower, cigarette dangling from his mouth, and a broad grin stretched across his weather-beaten face.

The hazelnut orchard did not yield a similar sensory experience to that of the peach orchard, and not only because hazelnuts were growing instead of peaches, but rather because of the atmosphere that was sometimes produced in the hazelnut orchard. Although not a part of the farm, walking through the hazelnut orchard was a regular occurrence, because it was located on the walk between the Main house and the farm. Walking through the hazelnut orchards, one saw groupings of other plants and bushes, but also lots of exposed earth, and it often felt dusty there. Pesticides were sprayed at least twice during my fieldwork. One Ecovillage volunteer alerted me to this, having walked through the orchard and telling me "They sprayed pesticides over there, it's terrible". Later in the day when I walked through, I became keenly aware of it: the presence of the pesticide felt somehow 'sticky', a synthetic, even toxic feeling that permeated the air and imposed a general ill feeling. I could feel it in my teeth for some reason. I recall inhaling only very slowly, and through my nose, pushing out a long extended exhale as I picked up my pace, trying to get as quickly as possible to the shady forest.

What were the forces that helped to configure the sensuous atmospheres of my field experience? In a techno-industrial operation, nearly every action taken is toward the maximisation of yield (see e.g. Crassweller et al. 2017): regularly cutting the grass and spraying pesticides are done in the name of yield, even if that means more inhospitable habitats for other species in the short,

toxic grass; few, if any flowers can be seen, smelled, or used by pollinators; the definition of 'ripeness' (i.e. the best time to pick) will yield a peach that is still inedible—or at least unenjoyable—for the sake of being transported long distances intact; and the ways of knowing peaches occurs through mediated or explicitly reduced sensuous experience. This impoverished, if speculative, sensuous atmosphere would be the result of particular kinds of practices that are enacted for certain ends — to keep labour costs low, to produce food for export, or producing large amounts of peaches[13].

Rupture Town of course hoped to produce enough peaches to earn money from them, even though the peaches don't generate significant income since the scale is small, and only for local markets. Yet the agricultural practices Jesus employs to grow peaches configure, as I have shown, starkly different sensuous and atmospheric qualities compared to techno-industrial ones, while also being associated with more beneficial ecological functioning (e.g. water retention, robust soil biome, biodiversity, etc.). In an alternative formation that is not solely focused on yield, but also on the care and health of more-than-human ecologies, *not* mowing the grass between trees has significant advantages, even if the size of individual peaches might be smaller. In the techno-industrial case we are more likely to find a logic of growth and maximisation of yield and profit—a productionist orientation. In the alternative case something else is happening, a logic of care (Mol 2008) for more-than-human ecologies comes to bear, where peaches (or indeed anything else being grown) are approached in a way that foregrounds longevity, maintenance, or pleasure rather than maximising yield, peach size, or profits in a marketplace competing for the consumers's *choice*.

Atmospheres of wheat

When I first arrived at Rupture Town's farm in early June we had driven by several large monocultures of golden wheat. The barren field in Figure 3 (and many other farms in the area) had been growing wheat, and that classic golden hue revealed its readiness to be harvested. The wheat in these surrounding fields grew just above my own knees, about 65cm high. When I looked

13 Considering that in the case of Rupture Town, as on many other alternative farms, most people work on a volunteer basis in exchange for room and board, meals, or else under the pretence of an education; and that historically, agriculture is infamous for labour exploitation and low (or no) pay, it is clear that any future sustainable food systems must address the significant issue of how to organise labour in non-exploitative ways. An examination of labour conditions in alternative farms, their problems and potentials is sorely needed if alternative agricultural formations hope to be anything more than just 'alternative', as the current agricultural labour regime is thoroughly unsustainable—economically and socially—in the long-term.

Figure 6. A woman stands, leaning over only slightly to examine waist-high wheat ears in a crop of mixed heirloom varietals that are ready for harvest, mid-July. Photo credit: Author.

out over the biodynamic fields for the first time, I didn't recognise any wheat being grown at all. However, what appeared to me at first as a forgotten field of tall, pale green grass was in fact a plot growing several heirloom wheat varietals. It was not a golden field of short grass, but a multi-hued mixture of grasses of different sizes and colours: pale whites, yellows, greens, reds, and even purple flowers. It was a field intercropped with under and cover crops like clover, millet, and other 'weeds' that were flowering. The time difference in the techno-industrial and alternative wheat fields was because heirloom wheat is slower-growing than the techno-industrial type. The short, fast-growing golden wheat is in fact a legacy of Green Revolution wheat breeding technology, so-called 'dwarf' or 'semi-dwarf' wheat. This wheat varietal was developed by U.S. crop scientist Norman Borlaug (who later won a Nobel Prize for his efforts) through field experiments in Mexico in the 1940's and 50's, kick-starting the so-called Green Revolution (Patel 2013). At that time, in a world ravaged by the aftermath of war, and a powerful United States eager to help capitalism appear as a superior system to communism, this wheat was developed ostensibly to 'feed the world'. The ear of this new wheat gave a higher yield without 'lodging' (falling over) and becoming susceptible to yield loss via disease, or making it impossible for harvesting combine tractors to collect it.

Some of the sensory and temporal features of the techno-industrial dwarf wheat, such as its uniform height and the timing at which it ripens, contrast greatly with the ready-to-harvest wheat shown growing in Figure 6. The photo was taken at the height of the taller wheat ears, and the woman is only slightly bent to examine an ear of wheat in her hand, which stands at about 110cm. This angle shows that the ears of wheat are growing to various heights, some taller than the camera position and some shorter. Accents of intercropped green plants and purple flowers can also be seen amongst the wheat crop. The purpose of intercropping and growing wheat varieties of varying height, Jesus tells me, is to develop a robust root system in the field. The intercropped plants and varied wheat heights also act as structural reinforcement against

any would-be lodging due to strong wind, rain, or top-heavy ears. The plant biodiversity of the field is also meant to promote biodiversity (more insects and birds), thus making it less susceptible to pests and disease. One drawback, however, is that heirloom varieties are lower yielding than (semi)dwarf wheat, so that compared to a similar sized techno-industrial plot of modern wheat, the heirloom yield will likely be lower. Indeed, the goal of maximal yield was a key driver in the development of dwarf wheat and other crops of the Green Revolution. Considering that wheat has become something of an oversupplied commodity of productionist agricultural proclivities, this is no trivial matter[14].

Not all techno-industrial agriculture grows only modern (dwarf) wheat, and not all alternative agriculture grows heirloom varietals. Nonetheless, the analysis here is based on an ethnographic experience in which modern wheat was being grown in the techno-industrial fields, while heirloom wheat was grown in the alternative ones. Modern dwarf wheat is the most ubiquitous type of wheat grown in the world today. It is known to contain lower levels of minerals and higher levels of the proteins responsible for celiac diseases as compared to heirloom varieties (van den Broeck, de Jong, Salentijn, Dekking, Bosch et al. 2010; Fan, Zhao, Fairweather-Tait, Poulton, Dunham et al. 2008). According to Jesus modern wheat was bred, in part, with a higher gluten content to be able to withstand the intensity of industrial dough mixing machines. In any case, one of the visceral outcomes of the development of modern wheat can be found not only in the increasing number of people with celiacs disease, but also the rise of gluten intolerance. Although scientists had long maintained there is no (or not enough) evidence to categorise gluten intolerance as a medical issue, there does now appear to be recognition that it is legitimate (Biesiekierski, Newnham, Irving, Barrett, Haines et al. 2011). It moreover seems rather odd that humans have been making wheat-based products for at least 20,000 years (Rubel 2011), but only since the mid-20th century have the number of celiacs and those complaining of gluten sensitivity increased, and rapidly, from the Americas and Europe to the Middle-East and even Asia (Rubio-Tapia, Kyle, Kaplan, Johnson, Page et al. 2009, as cited in van den Broeck et al. 2010).

Viscerally speaking, symptoms of gluten intolerance are reported to include irritable bowel syndrome, bloating, anaemia, abdominal pain, and headaches. These vicissitudes change the nature of relations in something

14 For a mainstream food security take on the global necessity of wheat, see e.g. Reynolds and Braun (2022); c.f. González-Esteban (2017) on why this mainstream take suffers from path dependency. See also Belay and Mugambe (2021) for resistance to the encroachment of modern wheat and maize in Africa led by funding from the Bill and Melinda Gates Foundation.

as mundane as sharing food with friends, and have given rise to a multi-billion dollar gluten-free industry. Visually speaking, techno-industrial agricultural formations are largely responsible for the sight of wheat-filled landscapes that appear neat, orderly, and golden-hued in certain times of year. No doubt, this visual helps to configure a particular atmospheric, what a tourist might refer to as 'the idyllic Italian countryside'. The sight of wheat that contributes to the structures of feeling in the countryside is not made present by some self-contained culture that lives in that place, however. It is made present through the meshwork of historical scientific, socio-cultural, political, and economic developments that gather agricultural practices in knots of globe-spanning knowledges, technologies, flows of capital, and regulations that dictate which seeds are allowed to be purchased, grown, sold, reproduced, or shared for commercial production.

Techno-industrial wheat comprises only a single varietal, and this will be evident in the uniformity of flavour that results. For example, the flavour of a slice of white toast made from modern wheat will be comparable whether you live in the U.S., Finland, or Japan — all countries where I have anthropologically experienced this phenomenon. Such uniformity is of course desirable for any global company for whom, after wheat is crushed into flour and baked, is provided with a consistent, unvarying flavour that can be sold under a certain brand, earning customer loyalty by virtue of being, indeed, consistent. Certainly, other factors can, and will, influence the experience of taste and the haptic qualities of a dough made from modern wheat flour. The famous soft and fluffy 'milk-bread' (*shoku-pan)* that's popular in Japan is one example. And certainly, the techniques used in milling the grain will determine whether it will be 'healthy' whole grain, pasta, bread, pizza or some other flour type. But no matter what steps are taken in the processing of the grain and its outcome, the fact of its unvarying 'wheatiness' will remain. One needs only to try a bread product (or read the tasting notes on any accomplished baker's blog) made from another wheat varietal such as spelt, emmer, einkorn, or kamut, to learn that compared to standard wheat, breads made from these other grains *taste, smell, feel, and look different*. They also behave differently — less gluten means more delicate structuration — in a baker's hands, or in industrial mixing machines, literally shaping the kinds and varieties of breads available for purchase. A piece of bread made with white spelt flour is unquestionably different than a piece of bread made with modern white flour. Thus, decision-making and production involved in wheat-processing operations in techno-industrial spheres appears to lead to a relatively narrow sensuous experience of taste in relation to the world of *possible wheats*.

Figure 7. The combine harvester shoots out winnowed wheat berries into a trailer for drying. Photo credit: Author.

In the alternative agricultural scenario I find a different trajectory. After the wheat was harvested, the remaining straw was left to dry in the field. This leftover straw was used instead of black plastic sheeting (ubiquitous on both alternative and techno-industrial farms) to cover soil around the farm, helping soil to retain moisture. After the straw had dried it was no problem to remove it from the field, as the soil was completely covered in a clover under-crop. The straw was also used to cover up the smelly business of making a soil amendment from manure, ground stone, and fermented 'bokashi' — a Korean-derived liquid ferment thought to be beneficial for soil microbial life, and that is commonly used in alternative farming practices (Kinnunen 2021). The wheat was harvested by a large combine harvester that cuts it from the field, leaving behind the straw. It then threshes and winnows the grain, shooting it out, in this case, into a large open trailer (Figure 7). Just before this process happened, Jesus said to me "Want to see our future beer?" Indeed, future flour and pasta, too. The wheat crop was being used to make a large number of Rupture Town's products: four different types of dried pasta, two different types of flour and their beer, a 'white' India Pale Ale (IPA).

After the wheat was shot into the trailer, I recall Jesus picking up a kernel and biting into, checking the texture with his teeth. In that moment I considered that just like eating peaches directly from the tree, doing such a thing would be potentially hazardous to one's health on a techno-industrial farm in which pesticides or other toxins are present. Jesus says that

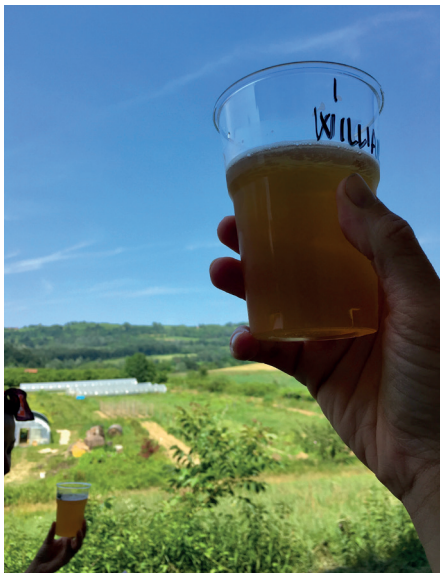

Figure 8. The beer. Photo Credit: Author.

when the grain becomes "hard" it will be ready for processing. I put a kernel of wheat in my own mouth and bite down. It's quite firm, but it can still be chewed. Biting into the kernel just after harvest, then, is a sensuous way to 'measure'. It becomes a way of knowing and a practice that is not likely taking place, nor even possible or necessary, in a techno-industrial formation. Indeed, as Jesus tells me, techno-industrial operations use high-tech machines to not only dry wheat berries quickly, but also to sort the wheat and determine its level of dryness. Thus 'chewing the grain' would appear to be a lost way of knowing wheat, certainly in techno-industrial formations, and possibly even many alternative ones. The reduction of such sensuous moments of experience through the increased use of mediating technologies resonates with a long history of critique about technology as a tool of alienation — a sensuous rift that denotes the emergence of new configurations of experience, knowing, and knowledge. As the grain dries over the next couple of weeks — a process that I help along by raking the grains around and turning the bottom layers to the top of the pile — I continue to sample the kernels of grain, feeling each time that they are indeed becoming harder. When Jesus determines they are dry enough, the kernels are removed and taken to Rupture Town's local milling partner. While this way of measuring the grain surely would stand in contrast to a techno-industrial operation, Jesus's method is indeed indicative of a small operation that practices certain ways of knowing that were perhaps once ubiquitous.

Last Call

I recall the garden party at Rupture Town's farm. It was an 'open-farm' day with a big meal cooked by an anti-fascist vegan chef from the city, and the debut Rupture Town's new (first ever, at that time) beer, a 'white' wheat IPA made from Rupture Town's mix of ancient varieties (Figure 8). Having myself come of age just as the IPA beer trend began to take off in the United States,

I genuinely love it — or at least a particular kind of IPA. I have long preferred the west coast style: piney hop aromas that complement a light, tightly bitter beer that is simultaneously refreshing and hearty, and stubbornly *not* sweet or fruity. But I also never really enjoyed white beers. I had always felt bloated from drinking them, finding them to be, viscerally, rather uncomfortable, and sensuously rather sweet. Suffice it to say, I was skeptical of this 'white IPA' when the party began. However, I was quickly won over. I immediately found my partner to tell them how good it was, then found the Rupture Town members to tell them how amazing the beer was — I simply could not believe this beer wasn't sweet, or that it didn't make me feel bloated. My taste for wheat beer had been changed forever.

Why was the beer so much better tasting than any wheat beers I had tasted growing up in the U.S., and why didn't this one make me feel bloated? I don't know, exactly. Perhaps it was simply due to the way it was made? No matter, these are not the questions being pursued here. What is being pursued is simply the revelation of sensory and visceral experiences that are due, according to a sensuous theory of emplacement and atmosphere, to particular socio-ecological, economic, and political factors that bring places into being, form structures of feeling, and are shaped by the trajectories of certain histories of power, politics, legal regimes, flows of finance, seeds, knowledges, cultural practices, and more. I am not concerned to 'prove' that I enjoyed this beer 'because' it was from alternative agriculture. I am rather concerned to tell a story, with the consideration that stories can reveal things that only quantifying them cannot, and that the phenomenal experience of being alive is *also* valuable knowledge.

Conclusion: Imagining for a Different World

I began the article with a critique of narrow demand-side solutions for sustainable food systems and the underlying assumptions that continue to maintain them. Instead, I sought to attend to the sensuous and visceral experiences of place, emplacement, and atmosphere "to invite [the audience] to imagine themselves into the places of others, while simultaneously invoking theoretical and practical points of meaning and learning, and to be self-conscious about [my] own learning" (Pink 2015, 49). To do so I began by asking: what kinds of stories are the 'sensuous atmospheres' of techno-industrial and alternative agricultural practices made of, what kinds of stories do they tell, and how might they help to imagine new horizons of possibility in the making of more sustainable food systems? Answering these questions is a decidedly more messy task than making neat categorisations that policy makers can fit into bureaucratic administrative structures. Yet this messiness forms part of

the transformative approach I have tried to develop here, and is ultimately aimed at the creation of a world that doesn't require everything to fit neatly into one-size-fits-all policy prescriptions. Indeed, to do so would be to develop an analysis that follows in the footsteps of the "project of control by classification" (Ingold 2011a: 174) that has been the mode of organising under colonial regimes and continues under the coloniality of global food systems (Figueroa-Helland & Aguilera 2018).

Taking the imagination as a key political participant in the struggle for a more just and sustainable world, I have attempted to bring the reader with me in following the flows, attending to fluxes of materials in their medium, their historical trajectories, and the sensations and visceralities they afford, even and especially in their mundaneness. Principally, I sought to make the sensuous atmospheres of the wheat fields and peach orchards visible as the immanent substance that socio-ecological, political, and economic formations take; to intervene in the imagination by crafting a story that reveals the heretofore unnoticed or unseen; to highlight entanglement, messiness, and contradiction; and to push the horizons of imagination and possibility that might unfold as prospects for intervention, design, and activism. Through this process I hope to have told a story that might move the reader, even in the smallest way, to imagine new horizons of possibility for a world not yet realised.

In recognising the indissolubility of atmosphere and sensation — by tying or 'grounding' atmosphere to sensation through a theory of emplacement — it was possible to engage with sensuous experience *as knowledge* in its own right, approaching sensation in terms of its "contexts, acquisition processes, and applications, like any other knowledge source" (Maslen 2015, 53). This conceptual move, I suggest, forms part of a 'sensory sustainability science', one that is perhaps better suited to understanding this anthropogenic era (Heinrichs 2019a; Heinrichs 2019b; Heinrichs & Kagan 2019). The hope is that such a science might move us toward designing research, economic, political and socio-ecological interventions that can properly account for the skilled practices of care that more-than-human ecologies require, instead of continuing to incentivise individual behavioural change while keeping the status quo intact.

I have described instances in which particular kinds of atmospheres are configured through historical, economic, political, and socio-ecological relations at a farm in northern Italy, and how these relations can alter sensuous experiences of working in and eating from alternative agriculture and techno-industrial agricultures. However, the agricultural foodways formations I refer to are found not only in northern Italy, but all around the world, config-

ured by very similar — if not *the* same — political, economic, and institutional flows of power that shape global food systems. So although I have drawn from fieldwork experience in northern Italy, and precisely because of the standardisation and control required by a globalising techno-industrial regime, the sensuous atmospheres they configure (e.g. the sight of monoculture wheat fields) necessarily disperses the analysis beyond any specific or static place. This is why, for example, I have discussed the history of modern wheat in terms of the Green Revolution, rather than the particular circumstances, for example, of why *this* wheat has become prevalent in *those* northern Italian landscapes.

Limitations and Futures

There are of course many limitations to the work presented, perhaps especially from a more traditional social scientific lens. Indeed, this article is not meant to offer concrete solutions or fix for the problems it deals with, but is rather intended as a way of intervening in how one might (re)think about the problems it deals with. The ethnographic materials were 'cherry-picked' because they spoke the loudest in memory and feeling and offered fruitful possibilities for the analysis that I found to be important, but I did not carry out a systematic analysis and develop categories for explication of a particular problem in a particular place. As an article which purports to intervene in the imagination of making the world a better, and very different place, I have attempted to stay true to this purpose, even if it may yet be unusual. Certainly there is a need for more sensory ethnographic research in both techno-industrial and alternative agricultural formations. There is also a need for more sensory ethnographic work in various other parts of the foodways associated with these formations, for example, the labour question in alternative foodways. Such work would also help to expand the story that I have picked up here, crafting a bigger and more complex understanding of how the phenomenal experience of (un)sustainable foodways intersects and changes along with wider socio-ecological, technological, or geopolitical processes and events.

Another World is Possible/Questions for Another World

The story above is itself meant to be a form of political praxis aimed at expanding the horizons of possibility and imagination. I propose that the stories generated from the encounters described — at once theoretically engaged and sensuously communicated — could contribute to more nuanced understandings of how more sustainable foodways might become part of the fabric of everyday life, and what that fabric might look, feel, smell, or taste like, or how slowly the fabric gets woven into the future. To drive this point, I leave

the reader with a series of speculative questions meant to incite serious consideration of a very different world than the one currently unfolding.

I ask the reader to take out a pencil and paper. Below, you will see a set of speculative conditions and questions to ponder. Please spend one moment to consider seriously the implications — sensuous, visceral, socio-ecological, economic, political — of a world in which alternative agricultural formations predominate. For now, simply write down one idea in response to each of the questions. After writing out your initial answers, leave the task and carry on about your life. Let the questions and your answers stay with you for a while before coming back to your pencil and paper. Update the answers as you please, or let them filter into your thoughts as you go about your day.

First, some speculative conditions under which to ponder the questions. In this world, skilled agricultural labour, food processing (cooking, fermentation, etc.), and distribution are the largest, most important, and most valuable fields of work globally; 70% of all the food you consume comes from within a 500km radius; no food is produced solely or even primarily for profit. Now, considering such conditions, what kinds of answers might you give to the following questions: How might education be organised differently under such conditions? How might your relations with food, landscapes, your work, and your time, be different than compared to now, and in what ways? Please, let your imagination run wild.

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