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SENSORY FUTURES ETHNOGRAPHY

Sensing at the edge of the future

Sarah Pink

Introducing sensory scholarship and engagement *forwards*

What does the future feel like? How can our capacity to sense possible futures be harnessed to create optimistic modes of going forward in the world? How can we imagine, sense and work toward hopeful futures in relation to the inevitable uncertainty of what will happen next?

In this chapter, I outline sensory futures ethnography and argue that it should underpin a new mode of *doing scholarship and engagement forwards*. I call for a new expanded approach to the social sciences, which can effectively engage in and influence the ways futures are conceptualized and worked toward (Pink, 2022a). Ethnography, including modes of innovative, creative, design-focused, and personal narrative-inspired ethnographic practice, I argue, should be at the core of this approach. Attention to sensory modes of being, knowing, and imagining in the present and in possible futures is essential to such a shift in emphasis. New knowledge about how possible futures could feel is essential for renewed or expanded social sciences to genuinely participate, as science, technology, and engineering disciplines seek to shape our futures.

In this chapter, I demonstrate this through the example of air futures, by discussing how air and breathing figure in the sensorial and non-representational ways futures are anticipated, experienced, and hoped for. This chapter is designed to stand alone and can be read independently. However, it also bears relation to my past methodological work, in *Doing Sensory Ethnography* (2015) and *Doing Visual Ethnography* (2021a), and contributes to ideas developed in two recent works: an article, "Sensuous Futures," which proposes sensory ethnography as a mode of generating trusted futures (Pink, 2021b), and my book, *Emerging Technologies/Life at the Edge of the Future* (Pink, 2022a), which draws on ethnographic practice to discuss possible future life. Sensory futures ethnography contributes to most of my projects because it provides an underpinning sensibility to those dimensions of possibility which are not necessarily ever spoken about or visible.

In the following sections, I first explain why sensory futures ethnography is particularly apt for our present circumstances of the so-called crisis. I next define sensory futures ethnography as a practice. I then demonstrate sensory futures ethnography in practice through the

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example of the future of the air we breathe. To sum up, I reiterate the need for a practical, interdisciplinary approach to futures in the social sciences, which goes beyond simply advancing academic disciplines, to work toward hopeful futures.

Reframing the crisis, sensing forward

The purpose of sensory futures ethnography is not simply to study how the future might feel. Rather, understanding and narrating the sensoriality of possible futures complicates and should moderate existing practices of prediction which are dominated by the high-level analyses of professional futurists and the work of business consultancies who tend to depend on surveys and other data to identify trends, model scenarios, and perform forecasting. Societal knowledge about futures is increasingly derived from predictive data analytics, whereby data scientists seek to know what people are likely to do next based on past behavior. These quantified stories about the future are inevitably incomplete, and therefore unreliable. There is also a politics to their dominance, in a context where anthropologist Tim Ingold calls for us to rethink questions beyond the "predictive horizons" of what he sees as "the relentless expansion of big science, aided and abetted by state actors and multinational corporations," to propose a new starting point in asking "how ought we to live?" (Ingold, 2021, p. 336). Turning attention to how futures are felt, sensed, and imagined beyond predictive quantification enables social scientists to foreground more realistic, fine-grained, and plausible futures. Such new accounts of futures will complicate those of the quantifying sciences by surfacing how the inevitable contingency and improvisation of human everyday life might shape possible futures. However, sensory futures knowledge can also be mobilized toward planning for more plausible and hopeful futures, taking us beyond crisis and carving a new role for the social sciences.

A world in crisis

Decisive statements about the urgent challenges of living in a world in crisis are increasingly visible in the work of influential anthropologists across the world (Pink, 2022a, p. 43). Examples include the conviction that we are in what anthropologist Ghassan Hage calls an "ecological crisis," where hope has been constructed through a vision for the future which depends on "continually extracting from nature" (2016, p. 467). In this situation, anthropologists have expressed the need for new modes of hope, which shift attention away from hoping for a technological or other solution or end point, toward instead a focus on hoping collaboratively or collectively on the ground (discussed in Pink, 2022a). In brief, for instance, for Hage, this means politics of "[c]o-hoping with the other" (rather than at the expense of others) whereby the other might be another human or another species (Hage, 2016, p. 467) and for Ingold hope lies in a commitment to learning from others, "as a form of commitment, of being and letting be, and to find the ontological an ethical force of this commitment as a foundation for hope" (2021, p. 78). This anthropological focus on hope is perhaps not surprising: anthropologists themselves have noted how in moments of economic or political uncertainty and crisis, hope frequently becomes foregrounded (Bryant & Knight, 2019; Cook, 2018; Kleist & Jansen, 2016); and Hirokazu Miyazaki (2004) has proposed "hope as method," whereby hope becomes part of relations of "commonality and difference across academic and nonacademic forms of knowledge" (Miyazaki, 2006, p. 149).

Such modes of hope radically shift dominant narratives about futures, constituted through visions of end points or modeled scenarios. They instead invite us to consider hope as shared, as experiential, and as constituted in relation to other people, other species, and our environments. Thus, hope incomes about and is experienced, in my interpretation, through our sensory, embodied ways of being in and knowing with the world. Hope in this iteration is not pinned on a decisive or predicted moment or point in the future, but rather it is incremental, lived, situated, and *sensorial* as much as it is cognitive. Hope is embedded in the ways we live, in everyday routines, in the mundane artifacts, actions, emotions, and sensations that infrastructure the ways in which we move forward in life. For example, it is inseparable from how people heat and cool their homes, it is implicated in how people keep their families and loved ones safe from airborne viruses and allergens, and it is part of the choices people make regarding the energy they use to power everyday technologies and where they source it. All, of course, within the diversity and limits of the choices any person in any given situation might have. As I explain ethnographically below, these modes of hope are played out in the everyday, in ways that are felt, sensed, and not necessarily always articulated in words. Sensory ethnography practice is, among other things, a way in which to make them visible, accessible to scholars, acknowledged and to drive impact outside academia, and thus constitute new modes of hope.

However, my approach to hope differs from the above invocation of hope as a response to crisis. The modes of co- and collective hope that Miyazaki, Ingold, and Hage have proposed are incisive in their rebuttal of the destructive and extractivist visions of corporate capitalism which have so long controlled and abused the world's resources. However, rather than serving as an antidote to a crisis, I propose that sensory modes of hope are better framed through a narrative of what anthropologist Janet Roitman calls "anti-crisis" (2013). Roitman's intervention is significant because she demonstrates that thinking history (and, I emphasize, futures) through a narrative of crisis and its resolution is simply an after-the-event, or retrospective, mode of understanding how things actually proceed. Instead, I propose social scientists should start *thinking forward*. This also involves *sensing forward*, since if we are to move forward in hope, we must think about what hope will feel like, both at the edge of the future as we go along in life and also in possible futures beyond what we know now. Ethnographically, as I explain later, this means feeling futures on our feet when we are in the creative spaces of ethnographic encounters. Practically, this involves asking how we might find ourselves in futures that feel right and are lived in hope, and what kinds of steps forward are needed.

Bold statements about the need to divert an increasingly urgent crisis—where runaway capitalism, climate change, and technological automation have created a severe problem which requires a solution—are powerful calls for action. Something, of course, does need to be done, given that we find ourselves in a situation of increasingly evident climatic destruction and often articulated dread. However, given that there is plenty of evidence that solutions constructed from above don't usually work (Morozov, 2013), my training in anthropology directs me to look to the everyday, and to ask how life actually proceeds into futures, what people really hope for, and how understanding this can support practical and experiential ways of collective and active hope toward environmentally sustainable, caring, and ethical futures. This is not a solution, rather it is a call to refocus.

Social sciences in crisis

I end my book *Emerging Technologies/Life at the Edge of the Future* by envisioning a commencement rather than a solution, and making a call to "do scholarship differently and do

it in a new temporality and on a greater scale" (2022a, p. 141). In this chapter, I take this point up, to suggest how sensory futures ethnography offers an opportunity to engage with the practice of *doing social science forward*, the development of which I believe is a priority. As women anthropologists have recently emphasized the discipline "risks becoming an anachronism" (Knox, 2021, p. 124) and "needs rewriting" (Mahmud, 2021, p. 354). The 2022 #thatarticle retraction of an ethically inappropriate article in the journal *Qualitative Research*, edited by British sociologists, likewise raises the question of *what sensory ethnography is for*. My argument is that sensory ethnography must be harnessed to support work toward ethical, inclusive, safe, trusted, and hopeful futures, and this involves revising what academia can be and how it can be active in the world.

What is sensory futures ethnography

Future has recently become a focus for social scientists, as anthropologists and sociologists seek to understand various facets of how we might encounter the as yet unknown. Most recently, the work of Amanda Bryant and Daniel Knight has called for an anthropology *of* the future (2019) in order to study the anticipatory modes of the present. The futures anthropology movement which I participate in (Lanzeni et al., 2022; Pink & Salazar, 2017; Salazar et al., 2017) is however centered not simply on the study *of* the future, but studies *in* and *with* futures, as well as methodologies for investigating futures (Pink, 2021a, 2021b, 2022b; Pink et al., 2022). It is also an interdisciplinary practice in which I have collaborated with designers, for whom futures are inevitable to their practice (Akama et al., 2018). This includes turning away from critiques of the dystopian possibilities of capitalism toward what I call doing *anthropology forward* through innovative ethnographic practice and future-focused theory and concepts (Pink, 2022a, 2023), and by implication *doing social sciences forward*.

Sensory futures ethnography has a different agenda to existing anthropologies of futures, and to avoid confusion, my approach differs from Bryant and Knight's (2019) "The anthropology of the future" which understands the present as coming about in relation to our orientation to the future, and analyzes everyday mundane life as a place of anticipation constituted by human actions (Bryant & Knight, 2019, p. 18). In contrast, sensory futures ethnography leads with anticipatory concepts like hope, trust, and anxiety (explored in Pink, 2021b), in order to investigate experiences—or sensory and affective feelings—of the indeterminacy of the present and the future. Anticipatory concepts are therefore engaged to invoke the sensoriality and affect of possible futures, rather than to describe or represent them. Human geographers have fiercely critiqued practices of mapping space (Massey, 1995) and we should be equally cautious about mapping futures, instead we must gain an understanding of what possible future sites could *feel* like, and how people would like to *feel* in these possible futures. This, I propose, offers a route toward comprehending how to orient our hopes and modes of going forward into futures. Thus, sensory futures ethnography, like futures anthropology, is not concerned with the anthropological or sociological study *of* the senses or of the future, but involves moving forward through experiential worlds, right up to the *edge of the future* and asking what it would feel like experience the as yet unknown to follow (Pink, 2021b, 2022a).

In the remainder of this section, I outline two facets of this shift, selected because they lie at the core of how ethnographic practice has been shaped over the last 50 years: *reflexivity forward* and *collaboration forward*.

Sensory reflexivity forward

Sensory ethnography (Pink, 2015) is reflexive in the anthropological sense that it obliges us to situate ourselves as researchers in the complex spatial, social, and temporal circumstances of our practice. However, "earlier urges toward reflexivity have focused on the past" and thus, "applying the same reflexive gaze to our imagined and sensed futures is a methodological step toward connecting to other people's ways of sensing what might happen next" (Pink, 2021b, p. 200). This is not just a methodological point that helps ethnographers to produce "better" research, but is also a mode of engaged research since: "to intervene in the world, in collaboration with others, we need to attend to what these interventions might feel like and to the ways that the circumstances that might emerge from them will feel" (Pink, 2021b, p. 200).

This leap to future-focused reflexivity challenges some of the basic principles of ethnographic practice which, conventionally, are ethically and theoretically focused on the present as it slips over into the past. Such a reliance on the past tense for the ethical validation of ethnographic practice emerged, or became mainstreamed in academia in the 1980–1990s. The reflexive commitments of ethical research conduct thus situated researchers and participants in research in the past, seeking to remain loyal to something that has happened and to how people were placed in those circumstances. As a response to the 1980s critique of anthropology as an objectifying practice, this approach evaded the problematic crystallization of people who were at the time called ethnographic "informants" into a continuous present (see Pink, 2021a for a discussion). However, it simultaneously set ethnographic practice in a past-oriented mode, which has wholescale impeded ethnographic scholars across the social science disciplines from participating in the futures spaces that currently dominate the narratives of industry and government, and are now influenced by professional futurists, the consultants and engineers. To be able to participate in this space, I propose a new future-focused and reflexive sensory ethnographic practice.

Sensory collaboration forward

Reflexive ethnographic practice often places an emphasis on collaboration, whereby ways of knowing created through research relationships are respected as just that, rather than the objective knowledge of the ethnographer. It is, therefore, surprising that social scientists still frequently present their work as the *anthropology of* or *sociology of* some or other theme, rather than *anthropology with* or *sociology with.* This is, of course, a tricky situation for social scientists however collaborative they are in their fieldwork practices, since the dominant mode of participation in or contribution to the evolution of an academic discipline is to have proclaimed that one has undertaken, or even has established, for instance, *The Anthropology of the Future*, or *The Anthropology of the Senses.*

But these titles are too determinate for sensory futures ethnography. *The Future* or *The Senses* do not actually exist externally to the living world or emanate from it in such a way that they leave it. The former is contingent on human imaginaries and multispecies unconscious modes of preparation for what might be next. The latter depends on sensory perception and knowing. Sensory futures ethnography directly challenges this stance, in that it treats future and senses as emergent from and part of the ongoing process of life, rather than as objective categories that ethnographic practice can provide an empirical or evidential basis for. The anthropology or sociology of the future or of the senses undertakes the study *of* societal and

social phenomena. By this I mean that ethnographic practice that is focused on discovering the actions, experiences, and relations of people, things and processes, and in describing them is performing a study *of* them. Some such studies are collaborative, or seek to perform ethnography "with" rather than simply an ethnographic study of people, but in such cases ethnography "with" still often leads to the disciplinary study or discovery *of*. I next consider sensory futures ethnography in practice through the example of air futures.

The future of air is tense

Air is a visceral, encompassing, and inevitable element of everyday experience and knowing. It is a materiality that we know *about* and know *in* and an inescapable element of how we experience past, future, and present. There is an excellent existing body of anthropological research concerned with air, reviewed elsewhere (Pink, 2022a), but while respectfully acknowledging its contribution, here my concern is different: to demonstrate sensory ethnography through the example of what air futures could feel like.

Air has emerged at the center of my research agenda precisely because it has become increasingly visible in contemporary future imaginaries (see Pink, 2022a). At the risk of oversimplifying, the airborne virus of a global pandemic, the smoke of increasingly wildfires across the globe, asthma thunderstorms, frequent extreme temperatures, and the enduring presence of asbestos fibers in buildings are becoming part of everyday life, making air a concern from two perspectives. Governments, organizations, and people are seeking and establishing new ways to protect themselves, their families, employees, and citizens from the air that carries these threats. There is a growth in the market for domestic air purification and filtration systems, schools and organizations are installing new air filtration and circulation systems. But while such technologies might keep people safe from the air, the resource extraction and energy costs implied in their production and transportation, the energy demand they create, the data storage and processing they require, and their possible future as e-waste have the potential to damage the air further. Thus, creating the conundrum of how we might *go forward* in such a way that we can protect both our future selves and our future air, rather than proceeding in such a way that our very urge to protect ourselves from the air could damage it still further. The future of air is tense, because it is characterized by this tension: between planetary, societal, and individual care.

I next develop an example from the process of the making of the documentary film *Future Air*. *Future Air* is developed within the Digital Energy Futures project, and draws on a review of 64 reports (Dahlgren et al., 2020), 72 online ethnographic encounters with participants in their homes (Strengers et al., 2021), the experience of making the *Digital Energy Futures* documentary (Pink, 2022), 10 Design Ethnography workshops with 42 householders, and a design ethnographic foresighting analysis (Pink et al., 2022).

Air futures at home

In Australia (and other sites in the world), everyday life in the home is experienced in circumstances of increasingly extreme weather, accompanied by visceral, sensory, and affective manifestations of climate change. These include climate and weather events that impact the air we breathe, in the form of deathly asthma thunderstorms, bushfires whose smoke spreads and travels great distances to fill even the cities that seem safe from the fires themselves, indoor allergens, dust, and mold, and airborne viruses such as COVID-19. These threats to

our air become (unevenly and inequitably distributed) experiential realities, invoking new materialities, technologies, and systems. As experiential realities, they are represented in the visceral and affective sensing of pollution, heavy air, thick or smoky air, the feeling of fabrics across one's face and the anxieties around invisible and unfelt airborne viruses. Materially and technologically, they include mask wearing and the introduction of air filtration and purification or insulation technologies and systems. These sensory, material, and technological realities also become what I call anticipatory infrastructures (Pink et al., 2023); that is, they inform knowledge ideas or concepts upon the basis of which possible futures might be imagined. They enable us to imagine future experiences, technologies, and materialities. They are part of how we generate both representational descriptions and sensory modes of knowing how we would want futures to be composed and *how we would like to feel in the future*—and of course also the converse and more dystopian visions of futures where the way we feel is shaped by relations of power, climates, and materialities that have uncomfortable sensorial and effective consequences.

Fred's air story

Yolande Strengers and I visited Fred and his family in their home on a rainy spring day in 2022. Yolande had met Fred in our online ethnography during the pandemic and we invited him to participate in the film due to his interest in technology and energy and environmental awareness. Fred told us he had started to become conscious of air quality when he first sensed the change in the air as he rode his motorbike into the city. This experience led him to

Figure 7.1 Yolande Strengers and I visited Fred at home to film for the Air Futures documentary in the southern hemisphere spring in 2022. Image by Sarah Pink, ©Digital Energy Futures 2022.

Figure 7.2 Fred is committed to electric vehicles, plans to convert an existing car to electric, and keeps his motorbike and skateboard in his garage. Image by Sarah Pink, ©Digital Energy Futures 2022.

increasingly reflect on the quality of the air at home, and hence air purification and filtration technologies increasingly became part of his family's life.

Fred's story of moving toward air technologies was filled with description of how his sensory experiences had shaped the decisions he made. Please read his words and imagine how his sensory and affective experiences were interwoven with actions, materialities, and shifts toward air technologies. He told us:

> I was not concerned about air quality, I didn't have hay fever, like my wife doesn't get it, and it just wasn't something that was on the top of our mind being so far out from the city. . . . [W]hen I was going for a walk, with the dog, or just cycling around, I just felt it was easy to breathe. But whenever I rode my motorbike to the city, it was like, *I could feel it*, as soon as I entered closer to the city, my breathing would be a little bit more, um, not like difficult, but you feel that you're getting less oxygen for some reason, by breathing the same rate, and you just weren't as relaxed. Um, so when I started going to the city and coming back, I thought that that might be one of the reasons to start getting air purification at home, and then Covid hit as well two years ago, and we started, not hoarding but getting whatever we thought was right for the house . . . for air quality.

"Breathing easy and feeling better" was at the center of Fred's story. Air is our life source, the experience of breathing is central to feelings of comfort and safety, in the present and as people plan for their futures. However, as noted earlier, the objectives of sensory ethnography go further, to investigate what possible futures may feel like, beyond simply understanding how people anticipate their futures and the anticipatory actions they take.

Figure 7.3 Fred and his dog Taco showed us the air purifier in his study. Image by Sarah Pink, ©Digital Energy Futures 2022.

After talking through his air technology story, we asked Fred to show us how air technologies had become part of the materiality of the home he shared with his wife, young daughter, and dog.

Fred showed us their smart air purifier in the bedroom and a large air purifier in their shared study, telling us he "loved" what he could learn from them, for example, in the bedroom

> [I]t will give me an alert if the air quality is poor, and I didn't believe in any of this until, like we'll be cooking and then my wife will turn the fan on for the central and it will pump air from it into all of the rooms, just to get rid of the it from the kitchen and I'll get an alert that the bedroom's got a low air quality, and I'm like, that must know, like it must actually sense the air quality from the cooking . . . through the house. And the fact that it can travel so far, and still be poor air quality and still be measured, and still tell me. I thought "wow, this is actually like a great indication of actual air quality."

While filming with Fred, we learned about how he experienced air outdoors and in his home, how he traveled, changing from his electric motorbike to his car due to the pollution he sensed. We also learned how he had increasingly started using air technologies at home, and how this intersected with his values, and his commitment to protect the environment as well as to care for his family. For Fred, there was a tension between the question of protecting his home environment and damaging the environment and he actively sought to use his home air technologies in ways that were environmentally sustainable.

As an ethnographer working on the ground, I started to form hunches, based on what Fred described and what he had shown us. Sensory ethnography is not simply a matter of

Figure 7.4 The bedroom air purifier, set by the bed alongside electric device charging technologies. Image by Sarah Pink, ©Digital Energy Futures 2022.

doing the fieldwork first and the analysis later, and the sensory futures ethnographer needs to think on her feet, to bring on-the-spot analysis into the ethnographic encounter. Everything I was learning with Fred enabled me to start to create ideas for speculative discussions about his future and to further explore the tension between protecting his family and protecting the environment.

First, however, we wanted to understand what Fred's ideal future air technology would be. What would he imagine for the future on the basis of the possibilities that he had experienced? Fred envisaged new technologies which would access predictive weather and temperature data and make decisions that would keep his home at the right temperature, without him even having to think about it. As regards air quality, he wished this system "would just always keep it right but notify you when the outside air quality's low."

Thinking back to my research into air filtration and purification technology, I remembered the automated electronic face masks which had emerged on the market; for instance, one prototype mask uses sensors to detect harmful air particles and activate the device's pump (Coxworth, 2021). But I realized that to introduce this as a probe through which to speculate further, I needed to first understand how Fred felt about masks, sensorially and emotionally. Fred said that during the pandemic, he "was comfortable wearing a mask." He felt that it would benefit others if he wore a mask, since he said "if I got covid I'd spread it less" and he also "felt safer if everyone was wearing one." He saw the "downside was the less healthy aspect of breathing your own air again."

I suggested the idea of an automated face mask to him, which would filter and purify the air when needed, and reflecting on the technology, he said, "that's so cool but so . . . I can't imagine how that could ever be fashionable." So I then returned to the beginning of our conversation where he had told us that he had first engaged with air quality technology when

riding his electric motorbike into the city. I asked him what he thought about the possibility of a motorbike helmet with a filtration system in it:

> That's a great idea, I've never thought about that to be honest, being prompted with that now, that would be awesome because I would choose motorcycling, . . . any day. The only that stops me going to the city with it is essentially that, feeling that you're not getting the right air quality, so if there was a helmet that could like, filter out all the, that, even if it's not cost effective, I would pay for that, take my money, like that's amazing if that's an option.

Imagining a future electric motorbike helmet tech helped Fred to resolve the tension that informs the film, and which he raised himself: he would be able to care for the environment, and enjoy traveling by riding his electric motorbike (rather than by driving a fossil fuel powered car), and care for himself by wearing a helmet with its own air filtration and purification system, meaning he could breathe air that felt clean while riding. While this future imaginary does not solve the conundrum of saving the environment versus saving oneself, it is exemplary because it shows how the sensory knowing and experience that informed the very decisions that Fred initially made to invest in new air technologies also participated in the way his future sensory imaginary was constituted. The example is didactic in that it directs us to ask ourselves, and participants in our research to what the future could feel like, and how certain sensorial and affective states—that state of "feeling right"—might be constituted through particular future trajectories.

How can sensory futures ethnography constitute hopeful futures?

This chapter develops one sensory ethnographic example in depth in order to foreground how sensory futures ethnographic knowing emerges and enables researchers to collaboratively know possible futures with participants. It is designed to foreground how everyday life values become invested in possible future scenarios—rather than to predict futures. Its significance lies in its ability to show us how people's future priorities, values, and practices come about and how they can shape everyday life in the future. Therefore, we would not predict that in the future Fred and others who share his values will all ride to work on electric motorbikes wearing electric air filtering and purifying helmets. However, if our wider group of participants coincided with Fred in their future visions, then we may argue that everyday futures will be shaped by a desire to balance the relationship between protecting oneself and family and protecting the environment. From this, we might then consider how this balance may tip in relation to the contingent circumstances of everyday life as it emerges in possible futures. As such, sensory futures ethnography engages with the possible future sites where everyday hope—for example, hope for a safe air future for one's family, and hope that we can protect our air—might be lived out. Fred's example shows how a speculative approach to sensory future ethnography can invoke imaginaries where hope can be sensed.

However, there is another dimension to the role of sensory anthropologists in creating hopeful futures. In the current process of climate change, it is urgent that we not only hope that people, large-scale, will act to reduce carbon emissions in their present and future everyday lives. Rather, anthropologists might actively work toward this possibility in tandem with shifts in policy and new interdisciplinary science where the social sciences are as important as the STEM sciences. As we move toward and into these futures, there is no time for

the defense of traditional past-oriented anthropology and no place for theoretical jousting. Instead, it is the moment for a practical theory of sensory futures, one which allows us to use theoretical "what ifs" ethically and expediently, in ways that support us moving forward adeptly into uncertainty. Such an approach must be respectful of the historicity of people, environment, planet, and ideas, but departs from the historical traditions of academia.

Sensory futures ethnography makes a contribution to advancing academic disciplines in new directions, away from the sustained focus on the past. It opens new theoretical and methodological questions, and the opportunity to generate new ways of knowing. But it is not simply an academic endeavor. Sensory futures ethnography opens up an alternative route to exploring possible futures, and importantly it enables us to *research forward* with hope. It invites us to consider the question of what possible futures might *feel like*, and on that basis to connect hopes for planetary, societal, and individual futures. In my own practice, sensory futures ethnography is part of a wider move to a more engaged, interventional contemporary mode of addressing futures in scholarship and practice. This, I argue, is required precisely because of the dominance of and dependency in government and industry on predictive data analytics, professional futurists, and consultancies to advise on what the future will hold. Social scientists should be bold in the ways we reframe dominant visions of the future. We need to generate new methods of research and powerful modes of engagement, since (particularly in the future technology field) we need to speak in an arena where the loud voices of engineers and consultancy companies have conventionally held the stage.

I advocate for an approach that reserves no privileges for academic elites and disciplinary traditions, which is rooted in integrity, has an ethical commitment to futures, and that treats scholarship and engagement as part of the same practice. Like Futures Anthropology as expressed in the manifesto of the Futures Anthropology Network (FAN) of the European Association of Social Anthropologists (in Salazar et al., 2017), sensory futures ethnographers should get their hands dirty and take risks. Sensory futures anthropology doesn't stop at critique but gets in there to collaborate and seek to bring about change, sometimes in places where many anthropologists would never go.

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