Stick it in Our Mouths: Towards a Performative Co-Authoring of Food

David Szanto (9553002)
HUMA 889: Performativity, Materiality, and Knowing

April 13, 2011

As we make our way down the concrete ramp to the throngs of celebrants on the beach below, Barbara is already six or seven paces ahead. She stops at the first landing and turns to face me, hands on hips, defiant. "Davide, give me some of that cava." Her inflection is more than usually Germanic. I gesture to the open bottle of Segura Viudas in my hand, from which I have been drinking. "You want some of this cava?" I say. "Ja," she says. Okay. I take a large swig, strut towards her, and lock the back of her head into the crook of my elbow. Planting my mouth on hers, I open my lips and propel a sparkling rush into her mouth. She pushes me away, eyes wide, face flushed. She swallows hard.

Barbara glares at me. "I <u>like</u> that." She grabs the bottle from my hand and jumps down onto the sand next to her equally blond boyfriend, Jan. The slurp-smack-whoosh is repeated, then repeated again by a third couple. Within minutes, a large group of us, gastronomy master students on a study trip to Catalonia, have initiated an unforeseen collective food ritual, previously although unknowingly prepared for during a sequence of 'rehearsals' in the months before. In June 2006, on the Barcelona beach during the all-night Festa di San Juan, the practice of baby-bird cava feeding came into being.

*

Over the last decades, the performative turns taken in anthropology, cultural studies, and science and technology studies have begun to illuminate the ways in which these worlds, and the practices within them, are collaboratively constituted by the very actants of which they are comprised. Humans and non-humans, material processes, hitherto unremarkable pieces of language: all carry a constructive agency in building and affecting the socio-technical space around them, including what comes to be considered truth, meaning, and reality.

As one of the central functions of daily life, the act of eating is both primal and unimaginably complex. The activities, symbols, technology, and institutions that have grown entwined with food since humans were first, well, human, compose a gastronomic space of equal complexity. However, perhaps because the settings in which food is made and eaten are explicitly constituted by the interactions of the plants, animals, people, and phenomena within them, the notion of performance may seem less radical in these food contexts. As to the relatively younger academic food context, with its divergent and branching pathways, a more unified "food studies" direction may be necessary before it is appropriate to start discussing "turns," performative or otherwise.

Regardless of the states of food practice and theory, performance and various interpretations of perfomativity are relevant to gastronomy.* Like the fields noted above, food overall suffers from a framing of "truth" and "reality" that is firmly anchored to stable and restrictive cultural and social institutions. Whether they be schools of culinary practice, multinational seed companies, organic-food policy analysts, or models of recent obesity trends, these dominant institutions perpetuate themselves and act to reinforce existing gastronomic ontologies, constituting what a more foodish Judith Butler might call a Hegemony of the Fork. The result, paralleling Michel Callon's portrait of dominant economic agencies that "become stronger by performing the very world in which they can thrive,"[1] is one of individual dissociation from food practices, an abdication of personal power and responsibility, and a high degree of reliance on these same dominating agents (what I term *food experts*). In real terms, this means critical damage to environmental and human health, spiraling economic and political developments, and humanistically deadening social and cultural conditions. In short, and if I dare speak on behalf of all that is edible (paraphrasing Bruno Latour), humans need to stop treating food like an object.[2]

Faced with this rather blunt perspective on the nature of food in the twenty-first century, I propose that the socio-technical *agencements*† that have brought gastronomy into being can be reconfigured, and that alternately conceived assemblages of people, text, material things, and temporal processes can be co-opted to bring about positive transformation. More specifically, I believe that such reconfigured engagements are already taking place in various spheres, and that a new type of food performativity may be subtly producing destabilizing effects on the dominant paradigms and allowing new possibilities to emerge. Borrowing from performance theorist and theater director Richard Schechner, I label them *co-authored food practices*, and they are the focus of this paper.

So what is the value of discussing performativity in food? As noted above, if there is indeed a restrictive gastronomic hegemony in place, then perhaps a performative analysis can make visible certain possibilities that are either more interesting, more sustainable, or more

* For the purposes of this paper, I will define *gastronomy* as the collection of activities that includes academic food studies as well as those operations within and directly surrounding food production and consumption processes. Gastronomy should therefore be construed to include farming and transportation, food marketing and commodities trading, transformation technologies and culinary arts, and many others. Occasionally the word *food* is also be used to communicate this collection of activities.

† Following Michel Callon's use of the Deleuze and Guattari coinage.

empowering (or some combination of these). That is, through alternative co-authorings of food, possibilities may emerge that contribute to the extension of knowledge and experience, that support a longer and healthier persistence of the assemblies from which food emerges, and that allow agency to move more freely between humans and non-humans, specifically coming to reside in those actors who have been denied power or have not perceived that they possess it.

I am strongly influenced by Félix Guattari's call for a turn towards ecosophic practices in matters of human existence, as discussed in *The Three Ecologies*, and so it is not surprising that this rethinking of food parallels shows parallels to his ethico-political articulation of the three ecological registers.[3] His union of human subjectivity, the (biogeophysical) environment, and social relations forms a tripartite framing that effectively houses my call for food that is more interesting, sustainable, and empowering.

The italicized passage above illustrates one example of the performative co-authoring of food—a situation in which an assemblage of human and non-human actants operated collaboratively and at least partially outside of traditional food practice. Certainly destabilizing to some witnesses around it, the mouth-to-mouth cava passing was also empowering and exhilarating to those who participated in it. But it was neither a sexual experiment nor a bacchanalian debauch: it emerged out of an academic and social context, and represented one of two culminations of a discourse on radicalizing eating/drinking practices that had been taking place within the group. These will be discussed in more detail further on.

Three other potentially reconstructive gastronomic settings will also be examined here, along with the agencements that possibly constitute them, with the aim of understanding how seeing food as performative, and how food can be performatively co-authored, can be of value in both theoretical and practical ways.

THE COMPLEXITY OF FOOD, IN THEORY

Food is a complex system. About 10,000 years ago, humans started controlling the living environment, sustenance, and reproductive practices of plants and animals, and domestication was born. In addition to enabling previously nomadic food-chasers to settle in one place and develop cities, trade routes, and deeper society structure, the practice of domestication started layering new cultural, economic, and political significance into the act of eating, as well as a more dyadic relationship between people and what they ate. Humans and their edible

environment, which had in prior times moved in seasonal and geographic lock-step with each other, were moving towards a more dualistic state. Clearly, while domestication was not the start of food complexity, nor the first moment of duality, it did represent a distinct and transformational step in the evolution of food culture.

As omnivores, humans can and do, for the most part, eat of everything. Sociologist Claude Fischler has asserted that food culture—from farming to processing to cooking to naming to table manners—is humanity's means of overcoming the anxiety that consuming food inherently presents.[4] His "omnivore's paradox" states that our capacity to eat practically anything produces a parallel need to continually seek out new sources of food, which is intrinsically dangerous. We crave and require the new, but simultaneously fear it because of the potential it has to harm us. Embedded in food is the unknown; embedding food in the known, therefore—that is, framing it in a system of symbols that communicate familiarity—renders it safe. From Carême and Escoffier and their delineation of culinary "rules," to Brillat-Savarin's "truth"-bearing aphorisms, to Cuisine R-ÉVOLUTION's Molecular Gastronomy Kit, the scary chaos of food has been put into tidy packages. Food culture equals food security.

As the breadth of our access to food grows, so does the need for cultural food rules and the reassurance they give us. Domestication, a control system, provides rules of husbandry. Processing introduces additional organoleptic and biochemical guidelines. Distribution, marketing, sales, cooking, serving, eating, excreting, and then dealing with the waste from each of these steps entails countless other sets of modalities, norms, legal regulations, and beliefs. The more gastronomy encompasses, the more we need to securitize. The very etymology of the term reiterates this situation: the written law(s) of the stomach expand just as food complexity expands.

Political scientist Thomas Homer-Dixon, in discussing complexity, likens food to other complex systems such as ecology, society, and our ever-deepening information infrastructures.[5] Such disciplinary divisions are perhaps arbitrary, as he says himself, given that one of the defining attributes of complex systems is their lack of distinction between inside and outside, and the bleeding of components and connections back and forth among systems. As noted above, food and society, food and the environment, and increasingly food and information all exchange freely with each other, and one would be hard-pressed to define where food stops and people or the landscapes around them begin.

Another key element of complex systems is the notion of emergence. In the presence of an inordinately large number of variables, the frequency of interaction is enormous, and a non-linear relationship between cause and effect develops. Small events can trigger large-scale effects, and vice versa, thus the predictability of complex system dynamics is unknown. As Homer-Dixon underscores, whereas once "we believed we could predict and often precisely manage the behavior of these systems . . . [now] we have to cope with the vicissitudes of these systems all the time."[6] In these vicissitudes, he goes on to say, are the opportunities for innovation—emergent possibilities that are enacted by "autocatalytic sets" of things (per complexity theorist Stuart Kauffman)[7] that come together in unexpected ways. In the discourse of Deleuze and Guattari, such autocatalytic sets are the analog of socio-technical agencements, the performative assemblages that are the site of emergence. Whether a clear intentionality resides within the agencements or autocatalytic sets of complex systems is not fully determinable, yet they undeniably have effects; similarly, a strongly motivated human actor in one of these sets, intent on creating a specific kind of change, may have no effect. The complex system is non-linear.

In some complex systems, a type of intelligence may be seen to emerge. Swarm theory, derived from the observed behavior of colonies of social insects such as ants and bees, predicts that complex systems can generate high levels of success and productivity, not haphazardly but in predictable and repeatable ways. *Swarm intelligence*, as it is called, depends on large numbers of single agents, a high frequency of randomized or distributed interactions, and overall system flexibility and robustness. This model has been extended to communications networks and robotics, and is one path being pursued in artificial intelligence research.[8]

The reverse of the potential upsides of complex systems—innovation and emergent intelligence—is also possible. Because of the large number of variables and interactions, Homer-Dixon says, the system may appear opaque to the observer. Like complex modern car engines, we no longer understand the flows and devices that make up the machine—it still performs, things keep coming out of it, but the opacity of the apparatus prevents us from seeing how it works, and more importantly, from intervening within it. We just can't find the carburetor. In addition, because of this opacity, which we are confronted with in the present moment, we have no sense of how to predict the system's behavior in the future—we are confronted with uncertainty and "unknown unknowns."[9] We don't know what we don't know,

and in this non-linearity, the complex system can suddenly "flip"[10] to a new state, potentially one of breakdown or crisis.

The effect on we humans, when confronted with complex systems of this nature, including food, is to try to impose stabilizing or clarifying mechanisms, or to reiterate those that have been used before and that we have seen to be effective. The agencements that were used when the food system was less complex are sought out again, and supported, and the socio-cultural framing of gastronomic status quo dominates.

Has the food system grown more complex in the last ten millennia? Thomas Homer-Dixon would say yes, as would most leading food theorists.[11] The question is perhaps more rightly, then: Where does complexity in the food system come from? According to Homer-Dixon, "human beings introduce complexity into their social, economic, and technological systems to solve their problems." Domestication, therefore, solves for the challenges of nomadism; trading solves for regional incapacities; salting and drying solves for the counterpoint of yearlong need against once-annual production. Three more subtle sources of complexity exist, however, which Homer-Dixon draws from economist and complexity theorist W. Brian Arthur. These include the "growth of co-evolutionary diversity," in which system niches are both created and filled by the evolution of new species of inhabitants; "structural deepening," the process that takes place at the individual species level, and that leads to modification of species' traits in order to deal with competition; and "capturing software," in which larger systems co-opt or absorb the "grammar"—the submechanisms or devices—of smaller systems.[12] For food, this means, for example, the spread and adoption of global taste, and the correlated demand for product; a refinement and granularization of cultural referents, media types, and regulatory practices; and the assumption of representational language from other systems like literature and music, or production techniques grabbed from assembly-line models. Variables within gastronomy are now tightly coupled and densely bound to each other, as well as to variables in neighboring complex systems, and therefore, by Homer-Dixon's reckoning, the food system becomes vulnerable to cascading failure.[13]

Ecologist C.S. Holling has put forward a model of ecological systems that he and his collaborators call *panarchy*, a term used to describe the "hierarchically arranged, mutually reinforcing sets of processes that operate at different spatial and temporal scales, with all levels subject to an adaptive cycle of collapse and renewal."[14] Complex human-nature systems (as

Holling labels them) include ecology and gastronomy, and viewed within panarchy theory, are both adaptive to their spatial and temporal surroundings, as well as subject to cycles of transformation that operate within nested scales of the system. Thus at any given moment collapse and renewal are taking place, with varying degrees of visibility and impact. Lower-variable systems manifest the cycle more clearly: tree stumps decompose and mushrooms grow; a local bistro closes and the supermarket launches its ready-to-heat counter; Atlantic cod stocks collapse and North Sea shrimp populations recover. Less explicit, however, and potentially more critical, are the meta-behaviors of complex, multivariate systems, especially when humans are involved.

In illustrating the panarchy model, Holling describes the flows within the growth-collapse-renewal cycle as dependent on two properties: potential and connectedness. Potential, in ecological terms, is the accumulated resource of biomass and nutrients in the system;[15] in other complex systems, as Homer-Dixon expresses it, potential is the "possibility for novelty within a system"[16] or the number of variables, actors, things. Connectedness represents the links, dependencies, or relationships between these components. Within the cycle, two types of actors—species, in ecology—play roles. The first is, in ecological terms, r-selected species. R-selected species are capable of acting to exploit resources, rapidly reproducing, and building habitat niches, but have a high mortality rate. (Oysters are an example of r-selected species.) In early stages of ecological succession (the phase of regrowth after a disturbance to a community of species, such as a forest fire), r-selected species reappear first and participate in making the habitat more exploitable by K-selected species. K-selected species are stronger competitors that reproduce less rapidly, but have greater survivorship rates. (Lions are an example of K-selected species.)[17] According to panarchy theory, early in the cycle, potential and connectedness are relatively low, and r-selected species gradually exploit resources, increasing both properties, but creating the conditions for K-selected species to dominate and thereby reducing their own numbers. At the top of the curve, both potential and connectedness are at a maximum, and K-selected species have peaked in number and strength. In ecological language, the system has reached its "climax state," rich in biodiversity, and seemingly stable. In this state, however, the system's resilience, or resistance to disturbance, is low, and the potential for a cascading failure is high. Why? The system's resources are tied up in a relatively small number of K-selected individuals, leaving little for the few remaining, but more innovative r-selected species to exploit. Overall system potential

is high, but available potential for newness is low. Similarly, as the system has matured, it has, in Homer-Dixon's words, "pruned away much of [the] redundancy"[18] by optimizing a few key species and allowing others that perform similar functions to die away. The lack of innovation and redundancy, combined with a high degree of connectivity, sets the stage for disturbance to trigger collapse. When this occurs—as it invariably does in ecological settings—the dominant K-selected species die off, and the potential they have been holding onto is released back into the system for eventual exploitation by the r-selected species. The cycle resets itself and restarts.

What does this have to do with food? Thomas Homer-Dixon, in his depiction of complex adaptive systems involving humans, explains:

> Cycles of breakdown and renewal are normal in modern capitalist economies. Companies go bankrupt, and new ones emerge in their place; established economic sectors disappear, to be replaced by industries driven by new technologies; and recessions shift capital from inefficient firms to productive ones, while helping to purge the excesses of earlier boom times. Joseph Schumpeter, one of the twentieth century's greatest economists, famously called these processes a "perennial gale of creative destruction" that's spurred, in part, by the relentless innovation of entrepreneurs. But elsewhere in our societies, rigidity is the rule rather than the exception. Powerful habits, beliefs, and vested interests hold sway, so things like underlying structures of wealth and power and entrenched patterns of social and consumer behavior don't really change.[19]

Rigidity, as we see, is another variable of the system when people get involved. Successful species, if they have the will to do so, tend to maintain their level of success. Homer-Dixon suggests that in social and political processes, humans try to extend the climax state in perpetuity, delaying breakdown while simultaneously increasing stresses on the system by externalizing problems.[20] He cites carbon dioxide emissions and debt accumulation as two externalities, yet by his own definition of complex systems, boundaries are arbitrary and so the problems aren't really leaving the system. (As everyone from Bruno Latour to ecologically minded nutritionists have shown, there is simply nowhere to externalize to.) Dominant species, resisting creative destruction and "externalizing" waste, make the complex system brittle, says Homer-Dixon, and the predicted result is delayed but more catastrophic collapse.[21]

Arguably, in food, Homer-Dixon's "powerful habits and vested interests that hold sway" manifest themselves as what I earlier and only half-jokingly titled the hegemony of the fork. More granularly, they are represented by such gastronomic establishments as commodities markets, *haute* and *nouvelle cuisine*, and neutraceutical companies. In combination with the agencements constituted of elements across all the sectors that touch gastronomy, and

viewed through the lens of panarchy, these institutions can be viewed as the K-selected species of our climax-state food system. And those externalities? Methane from beef production warms the climate, acidifying the oceans and melting icecaps; factory production and commodity dumping rollercoasters price indices; pornographied images from food media supplants perceptions of normalcy and makes domestic dinners start resembling otherness.

THE COMPLEXITY OF FOOD, IN PRACTICE

Against this theoretical portrait of the food system, then, what does *performance* offer, in terms of dealing practically with the complexities of food?

Many artists in recent (and not-so-recent) years have explored food and performance in a variety of ways, from reconceiving the act of eating to repositioning food as matériel to using food as a trigger in making the human body perform or react, often abnormally.[22] Filippo Tommaso Marinetti's *The Futurist Cookbook*, first published in 1932, proposed a series of dish-performances that sidestep food's specific materiality, instead figuring it as device in the larger conceptual toolkit of a cook-composer-performer.[23] The current swath of food television, edited for drama and featuring larger-than-life chefs staging elaborate visual displays, owes much to Marinetti's rendering of food as prop. Towards the opposite end of the dialectic, industrial-economic literature focuses on performance as *productivity*: how well seeds turn into crops, crops turn into SKUs, and SKUs into dollars. Food as another kind of prop.

With this writing, my aim is to look for food's performativity within the material-discursive assemblages that enable foodish phenomena to come into being. This movement, away from a food-and-human, subject-object duality, does entail some notions of ritual and theater, but also the ways that performativity has been explored in relation to the queering of identity and the quantumizing of physics.

As Karen Barad has pointed out in her introduction to *Meeting the Universe Halfway*, "reasoning by analogy can easily lead one astray."[24] My point is not to conclude that queer theory, science studies, ecology, and gastronomy are all analogous, based on a common model, or in some way reducible to one another. I am interested, however, in the many patterns that are illuminated by taking a performative lens to other fields, and in using these patterns, to paraphrase Barad, to better understand food subjectivity, the nature of measurement (and measuring spoons), the nature of nature and humans and the making of food meaning, and the

relationship between discursive practices and the material world.[25] At the same time, I wish to explore how performativity in identity and laboratory practices and language and biogeophysical dynamics *does* have a direct and material impact on food. So tentacly is the domain of food that these others necessarily come into active and lively contact with it.

Momentarily looking back to ecology, and again dancing precariously with analogy, the food settings described further on might viewed as innovative and opportunistic socio-textual assemblages, similar to the rapidly reproducing, but short-lived, r-selected species of the panarchy model. If indeed our current food system is in a brittle climax state, then it would not be surprising that such food settings are few, as they surely lack resources due to domination of the habitat by more competitive assemblages. If, however, the collapse of large-scale food production and celebrity-chef culture is imminent, then it may be useful to know about alternative scenarios when the system resets itself and resources are freed up for innovation. (Another scenario is more likely, in fact, that of "intermediate disturbance," in which a dynamic equilibrium is established between old/heavy and young/feisty assemblages.[26] This is discussed in later pages.)

Whether or not panarchy is a useful notion to gastronomy, innovation and its performative aspects surely are. With its looping cycles of feedback and output that entangle creativity and theory, development and distribution, innovation necessarily requires ongoing input from multiple types of food settings. Cultural, social, economic, political, and environmental bits and pieces all come to play in the food innovation lab. As Michel Callon has pointed out in discussing the performativity of economics, "future societies will probably have to be pluralistic in all of their innovations…. The notion of performation leads to that of experimentation."[27] His sentiment echoes Ian Hacking's call for concurrent engagement in theory and practice, of representing and intervening, both in the physical and social sciences: "Social scientists don't lack experiment; they don't lack calculation; they don't lack speculation; they lack the collaboration of the three."[28] Collaboration among processes, yes, but also *bricolage*, in experimental activities. Gaston Bachelard's proposition, that the apparatus of an experiment may itself produce the phenomena under observation,[29] suggests that by dismantling the experimental equipment altogether and tinkering together an assembly of available odds and ends, we might partially or temporally evade the dominant performativity of gastronomic agencements that reproduce the same, apparently objective, "food reality" year after year. Or, by Barad's thinking, it is a matter of perceiving the inseparability of the

apparatus, the actors, and the processes, and their combinatory agency that allows phenomena to be witnessed.

For most people, evading a dominant agencement is like trying to dodge air molecules. We barely perceive the contours of the corpus of food culture around us, so enmeshed are we within it. How then can we possibly know or understand how to disrupt it? As Judith Butler makes clear, the rituals and gestures that each of us has grown up performing have constituted our food identities so firmly that the pool of other potentialities is nearly invisible.[30] The radical gastronomic act would be to *queer* food and bring into perception the un-queered, eater-food duality, but if you have no sense of what queered food would be, how is it to be enacted? And if you do succeed, will the act be met with the same punitive and social conventions that seek to redress the imagined threats from queer performance?[31]

Rituals, as Victor Turner has written, are a necessary and embedded part of human society, transforming individuals while maintaining collective continuity—what Richard Schechner refers to as "social homeostasis."[32] In and through ritual, we come to learn the rules of society—we are transformed—and can thus go on to participate in future rituals that transform others and maintain social patterns. In the co-authoring of food, there is a transgression demanded of the authors, a *going against* in order to construct new patterns for new social orders. But, as above, the sticking point for collaborative food participants is knowing *how* to transgress. The new ritual comes without a handbook, and so a willingness to improvise, going in, is required. Richard Schechner's own telling of his experiments with environmental theater do well to demonstrate this, including the challenges of expecting an "unrehearsed" group of participants to have the emotional and cognitive wherewithal to uncouple themselves from spectation and participate as co-performers.[33] Even so, his examples offer that elusive glimpse into another way of being, and of the possibilities that co-authored performance has to unleash and redistribute power, as well as enable new meaning to emerge.

GETTING (IT) ON WITH IT

In the sections that follow, I present four settings that I believe demonstrate examples of the performative co-authoring of food. Each blurs one or more gastronomic duality—cook-eater, producer-consumer, expert-naïf, even human-food—and in so doing brings to light the matrix

that frames most food settings and gives a false sense of the "pre-discursively real,"* top-down (or left-right) dynamics of the actors within them. The settings (I avoid here the expression food *realities* for obvious reasons) are selected for their differently performative natures, and although I have labeled them as "cultural" co-authoring, "societal" co-authoring, and so on, the agencements at work are clearly not so tidily delimited. Exploring what those performative powers are is the purpose of this writing, to understand what and who are performing, what enabled that performance to happen, what institutions may have been destabilized, and what potentially productive or new consequences emerged. In other words—those of John Law and Vicky Singleton—I am trying to perceive how the new performances "interact with enactments of older performances—to mimic and reaffirm them, or perhaps to interfere with them and suggest alternatives."[34]

Like the performative "John" and "Vicky," I also need to acknowledge that my writing about these co-authored settings both represents them for the purpose of analysis, but also intervenes upon them,[35] perhaps even inadvertently mis- or re-representing them, which may make them more or differently performative. As an actor in the realm I describe, the choice of my subjects, the act of my writing, even the style and tone that I use—part narrative, part analytical—all become performative themselves. I believe this is necessary and appropriate: the methodologies and approaches to food are still developing (in both theory and practice), and a unique discourse strategy is required. Simply put, I/we don't yet know what that methodology or approach is, and so we/I experiment, observe, measure, retract, remodel, and experiment again. Without overestimating the reach of this paper, perhaps the following pages will contribute in some way to that development. And like "Karen," I also acknowledge that the very writing of this paper is part of an ongoing intra-active process, an "iterative and mutually constitutive working out"[36] of both myself and the ideas I am attempting to demonstrate.

On with the text.

SOCIAL CO-AUTHORING

Central to the religious tenets of Sikhism is the practice of *langar*, the preparation, service, and consumption of food in community kitchens, usually located in within a Sikh temple, or

* Borrowing liberally from Rebecca Herzig (2004).

gurdwara.[37] Langar represents a distinct setting for examining food co-authorship, as it is founded on principles of social equality and communalism, and contains within its framework a number of layers of shared experience and ritual practice based on common understandings and meaning. At the same time, evolutions in the way langar is practiced today demonstrate the fragility of idealism, and potentially the ways in which food performances have the power to change centuries-old belief systems.

Founded by Guru Nanak Dev in the 16th century, Sikhism holds strongly to the notion that all people should be considered equal, rejecting discrimination based on religion, social order, race, age, or sex.[38] In opposition to the dominant caste system of the time, Guru Nanak, and the nine gurus who followed him, "worked to redefine the religious and social values for mankind"[39] and bring not only social and religious equality, but relief from economic disadvantage as well. The notion that these aspects of human life are all related forms an underpinning of the development of langar, and today, in many ways, the purpose of langar is to enact that entangling.

Early in the first guru's teachings and travel, the institution of *sangat* (assembly or congregation) was established, with *pangat* (free communal eating) following in rapid succession and serving as a secular analog to the religious practice of sangat.[40] Pangat, or langar, is thus considered a "cornerstone of Sikhism and a symbol of equity and equality,"[41] bringing together inclusiveness and oneness under the auspices of commensality. All members of a Sikh community are expected to participate in langar, whether through provisioning, cooking, serving, or cleaning, and as such, langar also provides an opportunity for *seva*, the practice of selfless service that is another fundamental Sikh tenet.[42]

The langar space itself is intimately tied to the surrounding gurdwara; it is "inconceivable" that a temple be without its communal kitchen, according to Sikh scholar Parkash Singh.[43] It serves as a location not only for communal eating, but also for social education on practices of seva and etiquette, and as a perpetual reminder of the unacceptability of distinguishing between castes and status. Sikhism's third guru, Guru Amar Das, required that raja and emperor alike had to participate in langar, sitting and eating as equals with the rest of the congregants, before he would grant them an audience.[44] As such, langar is a site of transformation: of Sikh principles into lived practices, and of individuals into equal members of a collective. Notwithstanding Sikhism's explicit rejection of ritualism, langar thus becomes a

highly ritualized gateway, the liminal space described by Victor Turner in which the individual is transformed and through which homeostasis of the larger community is also preserved.

In contemporary langar settings, food is prepared collectively by both men and women, and served (without payment) to both Sikhs and non-Sikhs alike. Food is traditionally eaten while sitting on the ground, in rows, in a room or hall adjacent to the cooking area. All food is vegetarian and ingredients are supplied by members of the community, with no specific credit for a given donation attributed to any one person or family.[45] Individuality is neutralized; the self is given up. (Indeed this is at the very core of the notion of seva: selfless service is not intended to make the doers feel good about themselves, as many pseudo-altruistic acts do, but to be a true giving away of something valued—status, name, time, pride.)

The socio-technical assembly defined by langar is of a highly co-authored nature: collective goods and work go into food production; collective physical presence, taste, and dietary restrictions characterize its consumption. Participants know or are quickly informed of the rules that govern the experience, which means that knowledge is collectivized as well. Although a degree of differentiation hovers between cooks and eaters, it is mitigated by the underlying giving up of the self involved in seva. As seen through the lens of performance, therefore (and again referring to Turner's view of ritual practice in which roles are not sharply defined by a performer/spectator split, but unified by a shared understanding of that which is supposed to happen), langar reiterates itself as liminal, integrated, and necessary.

Remarkably, this paragon of sharing and fairness has also become mired in complexity and even violence as the very institutions it is based on—social regeneration and the well being of humanity—failed to adapt to unanticipated situational variables. In 1998, debate within the North American Sikh diaspora over changing practices in langar halls came to a head. Within a global context of shifting Sikh religious politics, a number of gurdwaras in British Columbia introduced into langar the use of tables and chairs. As far back as 1906, Vancouver's Sikh communities had accepted this shift, an adaptation to the Western realities of dress and climate that made sitting and eating on the floor less manageable.[46] Although the symbolic value of a shared and humble posture is seemingly fundamental to the notion of equality that langar embodies, the diasporic community saw tables and chairs as a means to reinforce participation: easier for older people; less foreign to younger people. Compromising on the symbols of the setting was intended to make it more temporally sustainable.

Factions emerged in the 1990s in the B.C. community and elsewhere, and the resulting friction brought about an edict against the seating reforms, issued by the senior Sikh authorities in Amritsar. By 1998 the situation was at a boiling point, the community was divided, and physical violence was starting to erupt during public protests. Then in August, in Florida, an anti-tables-and-chairs Sikh murdered one member of a local gurdwara and injured two others, and three months later in Vancouver, outspoken newspaper publisher Tara Singh Hayer, who supported the tables-and-chairs contingent, was assassinated.[47]

Both the passion and violence connected to the issue of langar seating and equality may be written off simply as symptoms of deeper shifts in Sikh society. In any case, the events were a flashpoint that both media and community chose to focus on. Explicit, however, is that the new usage of tables and chairs in langar, as a collectively constructed and societally anchored food practice, was disturbing. It was a powerful enough destabilizer to the institutions that preceded it that it triggered an emergent rupture. To date, that rupture—or innovation—has not changed Sikh society's central belief in equality, but it has most certainly brought a new way of perceiving and enacting it.

ENVIRONMENTAL CO-AUTHORING

Eighty kilometers north of Sevilla, near the Portuguese border in southwestern Spain, a man named Eduardo Sousa has established a three-way dynamic between humans, animals, and the biogeophysical environment to produce what chef Dan Barber calls "the best culinary experience of [his] life."[48] Sousa is a producer of foie gras, and in 2007, his foie gras confit made Dan Barber consider removing foie gras altogether from his own restaurants' menus.

Sousa's goose farming system is constructed around a pre-industrial model that can almost be considered pre-domestication. Unlike standard foie gras production, which employs *gavage* (force feeding of grain) during the last weeks of the bird's life in order to rapidly fatten and expand the size of its liver, Sousa's method is to create an environment in which the animals self-gorge. He and past generations of his family have planted fruits, vegetables, herbs, and spices in such profusion and in such varieties (that appeal to the geese) that the animals both remain in the unenclosed paddock and fatten themselves of their own accord. In the wild, during the autumn, geese and ducks increase their food consumption in order to prepare for the lean winter months ahead. At Sousa's farm they do it as well, and are free to roam free

for the rest of the year. Sousa's foie gras is therefore only harvested and processed once a year, following the gorging period.

According to a now widely refuted myth, foie gras using gavage was invented by Jewish slaves in ancient Egypt. Having discovered the high-quality, seasonally produced fat that geese automatically generate in the fall, it is said, the Jews adopted it for their own use. Pharaoh learned of its taste and demanded an ongoing supply of fatted liver, prompting the Jews to develop a means of producing it year round. Gavage and "industrial" foie gras was thus born. While this account is likely apocryphal, it illustrates the migration towards the extreme, in terms of human intervention in food production, that is required when continuous demand emerges for a product supply that otherwise rises and falls based on ecological or temporal cycles. Sousa's process, though strongly interventionist, allows for seasonal cycles and resists the demand for constant availability. It acknowledges, accepts, and supports the existent performativity of the goose-season-environment system, while simultaneously resisting the more dominant performative structure of global food economics.

Eduardo Sousa told Dan Barber that his mission, the heritage of four generations at Pateria de Sousa, is "to give the geese what they want."[49] Like all organisms, what they want is to feed, reproduce, and survive, and Sousa's passive farming environment gives them just that. An electrified fence around the open-to-the-sky goose paddock is designed with live voltage on the *outside*, to keep predators away, rather than zapping curious bills and wingtips in order to regulate the geese through control. Abundant food and physical habitat provide the environment in which to thrive and grow the population. As ecological models and observed data show, organisms in a resource-rich environment that is protected from predation will experience productivity rates (growth and reproduction) exponentially larger than without. Once again, Sousa has constructed an apparatus of improvised, environmental co-authoring, in which ecological dynamics are allowed to play themselves out independently and to highly productive effect.

During his time at the Sousa farm, Barber states that he witnessed a flock of wild geese, flying overhead, circle and land in the paddock, called to by the "domesticated" geese. Sousa claims that wild geese periodically do this, not just to visit the environment, but to remain and interbreed with Sousa's animals.[50] While the story is potentially a clever bit of artisanal-food mythmaking, this kind of behaviour is predicted by an ecological model called "ideal free distribution" (IFD), which states that habitats richer in resources will see increased

inbound migration of individuals until equilibrium is established with other habitats. Given the surplus and high quality of the food and space that Sousa provides, the IFD model lends credence to his wild-geese-immigration claims.

Further to the south in Spain, on the estuary of the Guadalquivir river, another human/non-human assemblage is co-authoring a similar food performance. Veta la Palma is an extensive fish-farming facility, annually producing 1,200 tons of sea bass, bream, red mullet, and shrimp.[51] It is also part of the most important bird sanctuary in Europe, a natural water-purification plant, and though human-constructed, an integral element of the successful local ecosystem.[52]

Up until the 1980s, Veta la Palma was a former wetland that had been drained and degraded by an Argentinian beef-production enterprise. Ninety percent of previous birdlife had been wiped out by this transformation.[53] The Spanish food company Hisparroz bought the land in 1982, reflooded it by reversing the drainage system, and stocked the resulting ponds with a variety of marine life. Phytoplankton, zooplankton, and invertebrates thrive in the waters, reproducing and providing fish with self-sustaining prey. In turn, some 250 different bird species—over 600,000 individuals annually—occupy the region, feeding on the fish and fish eggs produced. Some 20% of fish yield is lost to birds, according to biologist Miguel Medialdea.[54] Flocks of pink flamingos, not native to the area, fly in and out daily from their brooding ground 240 kilometers away, just to feed on the shrimp, which according to ecological foraging optimization theory plainly indicates the enormous value of this feeding ground to the birds.

Unlike the socio-technical systems of agribusiness, which are highly dependent on capital, chemistry, and machines, the Veta la Palma arrangement includes minimal human intervention, and only in collaborative coordination with ecological dynamics that improve the pre-existing environment. According to Medialdea, "[t]he point isn't to make use and conservation compatible. The point is to *use* in order to conserve."[55] No fish feed is added to the system (although micronutrients and invertebrates increase during periodic pumping in of estuary water), its success is measured by the health of the predators who feed on the fish produced, and water leaving the system is cleaner than when it came in.[56] Unlike the environmentally depleting practices of intensive farming, with their large quantities of both inputs and outputs, low feed-to-biomass conversion ratios, and massive externalities, the Veta la Palma model is restorative and productive.

With fish stocks around the world depleted by as much as 90%,[57] fish farming is seen as a necessary and unavoidable future, but like their land-based counterparts, aquaculture enterprises often cause ongoing chemical, biological, and genetic pollution that can have disastrous effects on the ecosystems around them. Veta la Palma's revisioning of an environmental-human partnership has allowed for food production to be part of a larger ecological performance—as it otherwise would be when humans are not actively involved. Non–food-focused ecologists have demonstrated that Veta la Palma also benefits the adjacent Doñana preserve (a UNESCO site not involved in production), asserting that "the coexistence of complementary artificial (permanent) and natural (temporary) habitats allows the Doñana wetland complex to support a larger and more diverse community of wintering waterbirds than if the entire area had only a natural marshland."[58] The same study shows that invertebrate biomass at the fish farm's location was higher than at the preserve site, and that wading bird populations were more stable, even as invertebrate prey became more abundant.

CULTURAL CO-AUTHORING

During 2005 and 2006, in the context of a master program in gastronomic sciences, I participated in a series of food events that I now construe as the genesis of this paper's theme of co-authored food performance. Thomas Bean, then a colleague in the program and my partner in the conception of these events, expressed his regret one lunch hour at the distancing effect that utensils produce between eater and eaten. In classrooms and laboratories and production locations, we were studying food from every angle, analyzing and documenting and discussing, looking and smelling and tasting. But when we sat down at the university's refectory tables each midday, we held knives and forks and spoons, and placed our food in the carefully segmented plates that the dining hall provided. Touch, and intimate proximity to the food, were limited by the implements and the arrangement of tables, chairs, glasses, napkins, other people, as well as the kitchen, the serving tables, the conventions of dining, etiquette and manners, the hour of the day, even the light coming through the high, narrow windows. Tom wanted to eat with his hands.

Four key moments comprise the performative series we constructed. Viewed within a theatre-drama matrix, two of them may be taken as rehearsal, and two as the show itself. Through a social-drama lens, however—more appropriate for the purposes of this

discussion—the "rehearsals" become rites of initiation, or of training, for the community of others who would eventually participate. Given the relative degrees of success and failure that these efforts at co-authoring engendered, neither theatre nor ritual fully applies; the importance of these examples is in their transitional (and transgressive) natures.

February 12, 2006. 11:55 p.m. Tom Bean's kitchen table in Colorno, Italy. Tom, his roommate Cristiano Meneghin, and I have had a long meal of many things, and are questioning, again, the apparatus of dining that performatively engenders both how and what we eat. With spring slowly hinting at its arrival outdoors, we conceive a *persephonnale*—an intimate, non-drunken, meandering food festival to celebrate rebirth and regrowth. We plan a covert event, six to eight of our most experimental colleagues and an assemblage of foods symbolizing fertility and newness. The guests will arrive, cleanse themselves, dress in loose sheets or other non-restrictive garments. They will have brought food. We will eat as an exploration, reclining, feeding each other raw egg yolks and asparagus, thin, light wines, spring greens and fresh olive oil, lamb carpaccio and *neonati* on toasted polenta. A disordered dinner, but not even dinner, just food, co-authored. Palms of hands and fingertips, offerings not service, no tension or eroticism. Simply remaking and recombining ways of eating collectively.

Our event never takes place, but the planning and documenting serves as a workshop for future exploration. Our notes are shared with Taylor Cocalis and Dana Zemel, eventual collaborators.

May 28, 2006. 7:00 a.m. Coach leaving Colorno, Italy, for Dijon, France. An international cohort of gastronomy master students, one study-trip coordinator, and one bus driver. Taylor has brought a yellow layer cake slathered in whipped cream and topped with pert red strawberries in honor of Tom's birthday. By unintentional omission, she has failed to bring either napkins or forks, or a serving device, for cutting and eating the cake. The bus careens around each Italian roundabout, and the top layer of the cake, sitting on a low-resistance pad of cream, slides dangerously first to one side and then the other, before quivering back into place on the straightaways. With no time for the niceties of cutlery, and this being to celebrate Tom, I propose eating the cake with our hands, yea, *feeding each other* cake with our hands. We do. Cream, berries, cake, mouths, hands, smeared and enjoyed. Some shock, some hesitation. Divided and thus eaten, the performative assembly of cake, absence of traditional eating

apparatus, experimental educational context, bus movement, and time of day have transformed the participants. Although some have not cared for the intrinsically destabilizing event, all have been engaged and all have been translated through space and consciousness.

June 24, 2006, 2:45 a.m. Beaches of Barcelona during the Festa di San Juan. With a case each of Segura Viudas on our shoulders, Tom and I, along with a dozen colleagues from the master group, have walked 45 minutes through the night. Irene Bustos Sepulveda, the study-trip coordinator and a native of Spain, has led us to a special section of the beach where a DJ she knows is spinning. Our group does not know the end point of our voyage as we walk, but we trust Irene and we feel, as time wears on, that we are not just moving physically, but also transforming as a society and as individuals. The experimental nature of our school program has already set this intersubjectivity in motion. Our socio-technical context is, at both the macro- and micro-temporal level, liminal. Then, in the wee hours between night and day, this arrangement of elements ushers in a ritual of mouth-to-mouth cava feeding.

Weeks earlier, and hundreds of kilometers to the north, Taylor and Tom, Dana and David discovered that a single green pea can travel, thanks to the Bernoulli principle, several inches through mid-air form one person's mouth to another. The receiver inhales through lips compressed to form a small ○, while the sender holds the pea loosely in a similar ○ while creating an outward air current. The practice was dubbed "baby-birding" and was both remarkable for its physics and its social affect.

By the time the cava was exhausted that night on the Catalan coast, those who participated had moved both themselves and the spectators around them into new states of relationality and potential. At one framing, the co-authorial nature of the event created a new society—those of the cava feeders—with its members transformed and unified. At another framing, it created a rupture within the society that had existed previously—some members of the group had been left behind, by their own choice. (One of them notably said, some days later and in reference to the event, that "god would not have been pleased" with what had happened.) Further extended, in the frame of the hundreds of people surrounding the event, it was theatre rather than ritual, performers and spectators, amusing perhaps, but not immediately transformational. At this framing, as well as that of post-hoc representations (including this writing), the event is perhaps best considered liminoid, in Victor Turner's sense of leisure spectacle.

November 11, 2006, 9:35 a.m. Main classroom of the Reggia di Colorno, Italy. After struggling for a thesis on which to center his master project, Tom Bean has finally reached a conclusion. He is before the review committee, consisting of academics from inside and outside the university, who listen to his short radio documentary, "Jamming with Granny." Tom's audio project is about food techniques and traditions, but ultimately experimentation and the intersubjectivity of gastronomy. Tom's colleagues, the rest of the master group, are also in attendance. As his grandmother's voice narrates the impossibility of making strawberry jam using wartime supplies of saccharine, Tom produces two pot of the product itself, handing one to me. The audio comes to an end, and in unison, Tom and I open our jam, dip in a finger, and turn to the people next to us. Tom's finger moves toward Nadia Olivero, social-psychologist, while mine approaches Taylor Cocalis, newly minted gastronome. Taylor smiles and accepts, takes the jam and repeats the gesture with the colleague to her left. Nadia turns her face away in surprise and shame.

In February, 2011, Taylor recalled for me a number of details about this scene. According to her, as Tom had gotten up to give his presentation, I turned to her and said: "At a certain moment, I'm going to ask you to do something. Just go with it. You'll know what to do."[59] Taylor now says that she remembers feeling excited at that moment, not anxious, assured that something good and valuable was going to happen, and that she was already capable of responding to whatever would emerge.

This series of cultural co-authorings represent what I would call a queering of food. While more usually associated with a rejection of sexual dualism, queerness is an effective way to describe non-normative food practice as well. Food and sex obviously share a great number of different patterns: both encompass activities that are penetrative, necessary, pleasurable, intimate, highly structured by social and cultural framework, and rife with punition when norms are transgressed. Both are also complex systems that permit nearly infinite recombinations of variables, even though relatively few of the potential arrangements are in fact common. While gastronomy may be seen as an open, creative, and welcoming space, true breaks with normativity—whether hand-feeding or molecular cuisine—are more often regarded with suspicion, if not outright accusations of wickedness.

Beyond just queering food a few times, the events carry a sedimentary agency. As iterations of a common theme, and with the dubbing of the practice of "baby-birding," as well

as the retelling of the narrative and re-use of the term (including this writing), they have become inscribed in truth. Not only did the acts happen, but they can be cited and reiterated, referred to and represented. Their truth—however small in reach—has become part of the food truth not only of the participants who took part, but within a series of increasingly expanded orbits around them.

POLITICAL-ECONOMIC CO-AUTHORING

On April 18, 2011, according to website of Food Secure Canada, the People's Food Policy will be "unveiled."[60] The moment, and the way it has been represented in a number of different texts, embodies a telling dichotomy of both the potential and limitations of political-economic food co-authorship.

Created in response to growing food-security* concerns across Canada, and grounded in a history that dates back to 1977, the People's Food Policy Project (PFPP) has been working towards a collectively generated food policy statement for over two years. During 2009 and 2010, the organization coordinated a series of "Kitchen Table Talks" that took place across the country and involved over 3,500 people.[61] Ten discussion papers formed the stimulus for the 2010 Talks, and were collaboratively written by dozens of volunteers, based on policy ideas collected during the first round of Talks in 2009. They are considered by the PFPP to be "a work in progress, a living document."[62]

The economic is deeply intertwined with the political. In many ways, and despite that each system possesses its own internally performative nature, they also act to construct and transform the other, and make emerge certain structures with powerful effects on the individual actors within them. These political-economic structures endure and reproduce themselves due to being advantaged, as Michel Callon says, by their firmly established competencies.[63] Contemporary Canadian farming and fishing policies are thus still largely rooted in a historic model that favored colonial European powers: large-scale exploitation and exportation of resources, which broadly ignores local needs, sovereignty, or traditions. Feminist and social activist Cathleen Kneen underscores this dynamic in a discussion of the genesis of the PFPP:

---

* *Food security* is here used to encompass physical access and economic affordability of healthful foods, a social perspective that views this access as a human right, and increased food sovereignty, i.e. self-sufficiency in production and distribution of food within Canada.

"This export commodity orientation continues to this day in Federal agriculture policy, reality notwithstanding. . . . Meanwhile capital-intensive agriculture across the country is in crisis, with many farmers surviving only on increased debt and off-farm income."[64] Kneen goes on to point out that government policy makers promote the dismantling of such collectivist organizations as the Canadian Wheat Board, preferring one-to-one relationships between farmer-producers and large agribusinesses like Cargill and Archer Daniels Midland. While quasi-collective groups like the Union des Producteurs Agricoles (UPA) use "the language of food sovereignty,"[65] their practices more closely follow large-scale, industrial-export models, leaving smaller assemblages like Union Paysanne and the National Farmers Union in the role of collectivizing the needs and potential of small-scale producers.

Kneen's tracing of the events leading up to the founding of Food Secure Canada (FSC) in 2006 (a major supporter of the PFPP), largely plays on this divide between the many-to-one political-economics of the industrial model—supported by the strong agentic nature of federal food policy—and the many-to-many system that efforts like the PFPP seem to strive to enact. She points in particular to the People's Food Commission, which held public hearings in over 70 communities across Canada between 1977 and 1980, driven by the divide created between producers and consumers as the result of rising food prices. Kneen also notes the rise of the organic movement in Canada in the 1960s, which became more broadly active in the 1990s, and the eventual entry of large-scale businesses into the organic market (including processor-distributors of organic food not grown in Canada) and the incipient regulation by federal policies. This combination, she says, brought about a rupture in the direct link between producer and consumer that organics originally fostered.[66] Further responses, such as community supported agriculture groups (CSAs) and other direct-sales settings, increased the number of well-intentioned, small-scale farmers, who saw the economic potential of non-industrial production. Contrary to the common perception that CSAs and farmers' markets reinforce community ties while providing alternative production models, Kneen's position is that they merely support neoliberal beliefs in making a difference "one mouth at a time" or by voting with one's dollars, rather than dealing with the underlying issues of anti-solidarity food policies.[67]

Against this backdrop, and with the emergence of community kitchens, food banks, and parental lobbies against poor-quality food in schools, policy solutions began to come forward out of co-authored settings, including through localized municipal and provincial

networks. National coordination including French-English exchange, however, only came about with the launch of FSC in 2006. And even then, an implicit tension remained: How to rationalize cross-Canada coordination of distinctly different local needs, and how to bring together the history of marginalization with the contemporary mainstream?

A key element of the FSC model is to engage actively with First Nations people, echoing what Kneen perceives as the value that early Canadian settlers sought in alliances and marriages with indigenous people.[68] This, she says, in opposition to the "European Enlightenment attitude towards the 'other',"[69] represents a means to create policies that integrate respect, difference, and "a profound understanding of interdependence."[70]

It remains to be seen what emerges on April 18, 2011, when the veil is removed. In spite of the apparent morality and collectivism presented by the People's Food Policy, the question must be asked whether it is possible to extract policy from hegemony. Can there be co-authorship in such a setting, even though it engaged thousands of Kitchen Table Talkers and co-writers? A policy is necessarily a top-down system of rules, imposed by the few (10 or 3,500) on the many (33 million), and intended to define a dominant agencement. Perhaps the PFP will be gently despotic.

CO-AUTHORING, WORKSHOPPED

In originally putting forward the idea of a "performative co-authoring of food," I wanted to explore what might emerge—resonance, meaning, innovation—in certain food settings that seemed somehow to have evaded the dualistic norms of gastronomy. The notion has its genesis in descriptions of theatrical stagings that have ruptured the performer-spectator dyad, such as those of Richard Schechner's environmental theater, as well as those of other artists. Shechner's interpretation of Indian *rasa* theory describes a performance that is co-created and that "exists *between* performer and spectator and is shared by them,"[71] while the retelling of his experience with/in Douglas Dunn's piece, *101,* portrays a performance that is as much his own as it is Dunn's. While Dunn lay unmoving, costumed, made-up, and positioned on top of a stack of shipping skids, Schechner meandered around him, observing but also (inter)acting, creating his own performance around the corpse-like artist.[72] Dunn, though his staging and lack of explicit activity, induced a performative power in Schechner, not by handing it to him implicitly, but by gently putting it down, while also having made it possible for him to pick it

up for himself. Schechner and other "spectators" acquired the power to perform, although both Dunn and his crate-filled loft still retained their own performative roles. Another kind of performance induction is depicted in Erika Fischer-Lichte's description of a 1975 staging of *Lips of Thomas*. Here, the kind of audience empowerment that artist Marina Abramović deployed was far less gentle. The self-torturous acts in which she engaged were not so much a putting-down of power, but a thrusting-outward, like tossing a live baby at an unsuspecting crowd and yelling "catch!" Her spectators, through moral and empathetic reactivity, were forced into grabbing hold of the wriggling airborne power launched at them and to perform with it as best they could.[73]

Whether invited, induced, or compelled to act, the spectators in these examples became co-authors of the performance they were ostensibly there simply to witness and, thus transformed, were as much performers themselves as the artists and their environments. As social experiments, these settings acted to break an existing duality and to cause something new—perhaps even *good*—to emerge. Importantly, these experiments should be seen as the performative assemblages that they are, taking place within theatrical laboratories that comprise a panoply of apparatuses and actors and processes.

Turning to Karen Barad's discussion of scientific practice, the same patterns are observed, though framed with a considerably further-reaching analysis of the way matter and meaning are constituted, as well as the necessity of decentralizing the human actor. Phenomena, Barad says, must be described in terms of the measurable properties that are observed, but also the apparatuses, the processes of observation, and the observers as well—that is, "all relevant features of the experimental arrangement."[74] Scientific phenomena are thus the performative result of an arrangement of multiple variables, rather than observation-independent objects. Furthermore, as one of those variables, humans are not to be considered central and objectively observing actors in the arrangement. They themselves, their boundaries and materiality, are co-constituted during the intra-actions* in which they engage. Like the apparatuses they manipulate and which manipulate them in return, humans are "part of the world-body space in its dynamic structuration."[75]

Through these two lenses taken on the co-constitution of an effect (be it theatrical, scientific, or gastronomic), the question of performatively co-authored food settings must

* per Barad.

broaden to interrogate not just human intra-activities, but the centrality of humans themselves, the material agency of food (assuming no prerequisite of intentionality for such agency to exist), indeed the entire apparatus involved, its temporal and spatial surroundings, and the processes and meanings assumed. In short, in the contexts of the PFPP, baby-bird feeding, a couple of food production sites in the south of Spain, and langar, what is being performative, and how? Moreover, why care?

PLAYBILL

The People's Food Policy Project is an admirable effort to bring a much broader diversity of voices into policy planning, as well as to incorporate a more principled process and, perhaps, an appreciation of the ecological continuity between people and their environments. In all probability, for the PFPP organizers, the phenomenon they were after was a policy document that might help bring about a healthy, happier, more economically and ecologically sustainable future of food. To get there, they assembled 3,500 Kitchen Table Talkers and volunteer writers, an email campaign and a frequently updated website, a robust set of backing organizations, and some keen minds with the drive to keep on keeping on with it. Consider, however, the many other bits and pieces involved in crafting food policy, those that dominant agencements in the politico-economic sphere engage with: government, lobby, and industrial players, economic models, commodities traders, shipping routes, food scares, and political campaigners. Is the PFPP experiment more likely to fail or succeed by having rejected a big-ticket apparatus, complete with foam padding and wheeled carrying case, opting instead for a tinkered-together apparatus of twine, chewing gum, and web servers? Perhaps more relevantly, is the eventual effect observed out of the PFPP going to be 3,500-plus transformed Canadians who, having wrested a modicum of performative power away from the usual actors on the food policy stage, shake things up enough to make ongoing, productive change? In either case, it is explicit that this level of co-authorship remains firmly in the humanistic. *Things* don't appear to have been broadly engaged in the policy-development process.

Baby-bird pea- and cava-feeding, and whipped cream and jam eaten finger-to-mouth were both performance and performative situations. The performance, for most spectators, was either titillating or disruptive; the performativity, as posited for PFPP participants above, lay in the transformation of the human actors. Taylor and Tom, Dana and I, perhaps also

Barbara and Jan and Cristiano, all acquired, in our various performative moments, an alternate viewing of what we had until then taken to be the reality of food: of eating, of drinking, of behaving socially. In Erika Fischer-Lichte's terms, the performance-performative coupling opened up the possibility of a gastronomic "perceptual multistability" and created an "oscillating focus between [our] specific corporeality and the character[s] portrayed."[76] We, and perhaps others, witnessed ourselves in rapidly alternating transition between our presence as experimenters and our representations as baby-birders—suddenly shifting perceptions that were the source of destabilization and transformation. These food performances—queered, co-authored, emergent—showed us the malleability of the world, and continues to demand our querulous attention to the fixities of the food realms around us.

Langar, founded on the Sikh principle of social equality, is itself an apparatus that enacts a state of equality for its participants. This equality extends beyond the gurdwara itself, making langar a space of intra-activity through which Sikh society and Sikh individuals, and even the concepts of equality and Sikhism itself, are produced. The entire assembly of people, food, space, gurus, history, (absence of) tables and chairs is performative. When that assembly expanded to include the presence of tables and chairs, along with debate, edicts, guns, media coverage, and a whole new gang of observers at an orbit considerably larger than before, the phenomenon that emerged was no longer simply equality. Even the "simple" addition of furniture altered the performativity of langar—the apparatus was not just "langar with tables and chairs," it ceased to be langar as previously named.

The fish- and foie-production ensembles at Veta la Palma and Pateria de Sousa most closely represent what Karen Barad might call "posthumanist food co-authoring." The highly decentralized role of people in these settings underscores how effectively the biogeophysical environment can perform as an apparatus when simply left to itself. Phenomena emerge in abundance and with great productivity. Perversely, Barad's writing, as well as Bohr's, Hacking's, Schechner's, and pretty well that of all performance theorists seem redundant when the earth itself is seen as one big laboratory. Of course there are no boundaries. Of course there is no duality. Of course the apparatus and all of its processes are the site of the emergence of phenomena. Then humans step in with their representations, intentionality, and self-centrism, along with their modes of substantial situational disturbance, and the "of courses" of ecological performance no longer apply. A less reductive consideration becomes necessary in order to discuss both the intra-actively constituted phenomenon of gastronomy,

as well as the matter of humans and matter. Regarding the performativity of these settings, it is perhaps most telling to simply observe their beneficial output within and around their own environments, as well as the inspiration of gustatory awe in the likes of Dan Barber.

CURTAIN UP

I return again to C.S. Holling's panarchy model and the dynamics of complex adaptive systems that Thomas Homer-Dixon has discussed. Taken together, they predict a food system—in fact, multiple, linked gastronomic sub-systems—dominated by a small number of actors that clearly define the landscape and support a high level of diversity, while also binding up most of the available resources. Little innovation is permitted to the less dominant, rapidly emerging, and short-lived actors. Those that dominate seek to stave off collapse due to "outside" disturbances, while simultaneously externalizing waste or other accumulative problems into that same arbitrarily defined "outside." So far, this is a pretty fair macro-portrait of the global food situation.

However, even in his own description of his theory, Holling himself asked whether it is valid and/or relevant: "Is panarchy . . . a consequence of the way analysts and modelers make convenient modeling decisions and simplifications, or is it an accurate depiction of the way ecosystems, industry, and management actually organize and function?"[77] Coupling this warning with Karen Barad's caution against the excessive use of reflective analogies in examining observed phenomena, and her more subtle notion of a "diffractive methodology . . . [that commits] to understanding which differences matter, how they matter, and for whom,"[78] it becomes more interesting to consider why our by-now extremely brittle food systems have not utterly broken down into disorder. Why does the system *not* reset? Does the model not fit? If so, where and how? Or are there other important variables still to account for? Most importantly, what does a diffractive viewing of panarchy and gastronomy offer in terms of seeing where the differences matter, and where they can be used to advantage in moving towards a more ecosophic food world?

First, as noted above, when people enter the picture, even a complex model such as panarchy will cease to predict behavior completely. Perhaps the most adaptive system of all is the human capacity to survive in the short-term and deny our inherent embeddedness in a temporally extended and biogeophysically evolving environment. (Given the mass of discourse

around philosophy, performance theory, ontologies and epistemologies, we clearly have a lot of duality baggage to overcome.) This kind of adaptation—increasingly technocratic and rapidly implemented—may mean keep our complex systems teetering perpetually on the edge of collapse. Like a space ship parked at a gravitational Lagrange point, the dueling forces of panarchy and remediation keep us precariously, but stably stationary.

Second, as briefly mentioned earlier, it may be that gastronomy is in a state that is subject to ongoing, local, low-level, or specialized disturbances, which neither induce complete breakdown nor permit widespread innovation. Again, a seemingly stable but precarious balance is established. In ecology, the "intermediate disturbance hypothesis" suggests that complex systems that are subject to neither cataclysmic destruction nor complete tranquility become more diverse, dynamically shifting, but around an equilibrium point. Dominant species, felled by small-scale habitat disruption, free up resources for innovative species to exploit. Fewer numbers of these stronger competitors mean that the more rapidly reproducing species can spread and compete because of larger populations. Eventually, the system becomes more static, but then another intermediate disturbance comes along and redistributes resources again.[79] It seems very likely that these kinds of patterns are taking place constantly in gastronomy—small, local redistributions of power, limited in their economic, geographic, cultural, or social reach, and contributing to the avoidance of a widespread cascading failure.

Judith Butler has discussed the nature of matter in terms of a "process of materialization that stabilizes over time to produce the effect of boundary, fixity, and surface,"[80] and that identity emerges through a "stylized repetition of acts,"[81] acts that are shared within a society, historically constituted, and above all, performative.[82] I extrapolate these themes to the matter and identity of gastronomy, and believe that our repeated acts within food settings serve to sediment the foodish memes that eventually come to dominate through naming, citing, and the ongoing reiteration of both. A representational reality gets locked in—a reality that becomes, in fact, *real,* because of the mass perception of its boundaries, and the inherent omnivoric fear of seeing it any other way or of questioning its fixity. This is where dominance emerges: we interact with the representations of that which we have created, which reproduces the sedimentation of their reality; the representations keep us from direct intra-action with the referent, and in the absence of this intra-action, neither humans nor food can be temporally re-configured.

ENCORE (RE-PASTEURIZING)

As described by Bruno Latour, Louis Pasteur's successes in scaling and leveraging his experiments on the anthrax bacillus provide a possible starting point for finding a path forward. Pasteur's process of gaining widespread buy-in and usage of his products included first capturing the attention of others, and then constructing an effective lever that coupled the intense activity of his lab with the broad reach and visibility of the field.[83] The naming and inscribing of what he produced provided the opportunity for a new kind of citationality, one that acted to sediment a new reality—a new materiality of bacteria and disease, of antibacterials and disease prevention.

I believe that my four examples of performative, co-authored food settings embody nascent Pasteurian labs, localized hotspots of food activity that have the potential to be leveraged outward and have a positive impact on gastronomy. Within them are examples of dubbing and re-dubbing, bricolage and indeterminately bounded apparatuses, queering and destabilization, and reshufflings of the power, agency, and discursive practices that more ordinarily characterize food modalities. Yet they also demonstrate the intersubjectivity of human and non-human actants within a given network and, moreover, that through their interactions, these actants constitute and re-constitute each other. Through Karen Barad's agential realist reading, these settings comprehend "causal intra-actions . . . [in which] 'marks are left on bodies': bodies differentially materialize as particular patters *of* the world as a result of the specific cuts and reconfigurings that are enacted."[84] While Barad's agential realism may be a finer-grain approach than is strictly necessary in addressing fish farming and community kitchens, it does provides a valuable angle of inquiry. The bodies of Eduardo Sousa and the generations that preceded him did not materialize because his geese were interested in staying in their well-stocked paddock, nor did the confit of their foies take the European grand prize because plants and animals have a seasonal growth cycle. The fence around their domain was not electrified on the inside one day, and then suddenly reverse orientation because wild geese flying overhead decided to land and stay, nor did those geese stay because Sousa's grandfather had seeded the ground with truffles forty years earlier. All these effects (or causes) must be viewed as a mutually constitutive system, which, through their intra-actions mark and re-mark one another in a continual process of becoming. Sousa, the geese, the patterns of seasonal

production, the taste of the foie gras, and the market he sells into all reconfigure themselves in each moment of their encounters with each other, into new states of being, and because of their intra-actions.

In the course of scaling experimental cases into larger application, the key difference from the Pasteurian strategy will be to make visible—and modifiable—the process, the rules of play. Unlike scientific knowledge that springs fully grown from the brow of scientific gods, inscribed, guidelined, and perfectly functional, co-authored food knowledge is only valuable if its messy and unpredictable (that is, experimental) underpinnings are explicit. The ways to engage and the access to the privilege of engaging, the permission to queer and the freedom from punition, the value of the pay-off and its extensibility—all must be part of the package that is presented. Critically necessary, as well, is the extension of the transformation, the congealing, the reconfiguring of each actant, as the orbits of co-authoring expand outward from the original site of experimentation. Pasteurian leveraging is replaced with viral reconfiguring, so that the performative potential is reproduced, not just its material representations. The purpose of expanding co-authorship is not to replace the dominant institutions of gastronomy with other, newly dominant institutions (whipped up in my private food co-authoring lab). Rather, food performativity provides the means to perceive the impermanence of what we believe to be reality, to replace *truth* with *becoming*, and to seize the opportunity to foodishly intra-act, to co-author, to self-empower, and thus slip free of the furry handcuffs of gastronomic pre-determinacy.

NOTES

[1] Callon, 47.
[2] Latour, 10.
[3] Guattari, 19.
[4] Fischler.
[5] Homer-Dixon, 2011, 2.
[6] Homer-Dixon, 2011, 2.
[7] Homer-Dixon, 2011, 6.
[8] Bonabeau et al., xi.
[9] Homer-Dixon, 2011, 7.
[10] Homer-Dixon, 2011, 7.
[11] Belasco.
[12] Homer-Dixon, 2011, 4.
[13] Homer-Dixon, 2011, 7.
[14] Holling et al. 3.
[15] Holling et al. 5.
[16] Homer-Dixon, 2011, 8.
[17] Pianka, Parry.
[18] Homer-Dixon, 2011, 11.
[19] Homer-Dixon, 2007, 289-90.
[20] Homer-Dixon, 2011, 10.
[21] Homer-Dixon, 2011, 10.
[22] Kirschenblatt-Gimblett.
[23] Berghaus.
[24] Barad, 23.
[25] Barad., 24.
[26] http://en.wikipedia.org/wiki/Intermediate_Disturbance_Hypothesis, referenced 4/9/2011.
[27] Callon, 50.
[28] Hacking, 249.
[29] Rheinberger p. 23? Bachelard 1984 p. 8?
[30] Butler, 519.
[31] Butler, 527.
[32] Schechner, 192.
[33] Schechner, 82–88.
[34] Law and Singleton, 774.
[35] Law and Singleton, 768.
[36] Barad, x.
[37] Singh.
[38] en.wikipedia.org/wiki/Sikhism
[39] Singh, 1.
[40] www.allaboutsikhs.com/introduction/fundamentals-of-sikhism.html
[41] Singh, 2.
[42] Ahluwalia-Lopez, personal communication.
[43] http://www.sikhchic.com/article-detail.php?id=2142&cat=22
[44] http://www.allaboutsikhs.com/introduction/fundamentals-of-sikhism.html
[45] Ahluwalia-Lopez, personal communication.
[46] Taylor, Swami, About.com
[47] Swami.
[48] Barber, TED.com
[49] Barber, TED.com
[50] Barber, TED.com

[51] Abend.
[52] Kloskowski et al.
[53] Barber, 2010.
[54] Abend.
[55] Abend (my emphasis).
[56] Barber. 2010.
[57] Worm and Myers.
[58] Kloskowski et al.
[59] Cocalis, personal communication.
[60] http://foodsecurecanada.org/, referenced 4/1/2011
[61] http://foodsecurecanada.org/, referenced 4/1/2011
[62] http://peoplesfoodpolicy.ca/policy/peoples-food-policy-discussion-papers, referenced 4/1/2001
[63] Callon, 47.
[64] Kneen, 230.
[65] Kneen, 230.
[66] Kneen, 231.
[67] Kneen. 231.
[68] Kneen, 233.
[69] Kneen, 233.
[70] Kneen, 233.
[71] Schechner, 260 (emphasis in original).
[72] Schechner, 226.
[73] Fischer-Lichte, 11.
[74] Barad, 120.
[75] Barad, 185.
[76] Fischer-Lichte, 147.
[77] Holling et al., 6.
[78] Barad, 90.
[79] Dial and Roughgarden.
[80] Butler, 1993, 9.
[81] Butler, 1988, 519.
[82] Butler, 1988, 530.
[83] Latour, 1983.
[84] Barad, 176.

REFERENCES

Abend, Lisa. 2009. "Net Profits." *Time International (Atlantic Edition)* 173 (24): 43.

About.com: Sikh Controversies - Chairs. http://atheism.about.com/library/FAQs/sikh/-blfaq_sikh_debate_chair.htm.

Bachelard, Gaston. 1984. *The New Scientific Spirit*. Trans. Arthur Goldhammer. Boston: Beacon Press.

Barad, Karen. 2007. *Meeting the Universe Halfway*. Durham: Duke University Press.

Barber, Dan. 2008. *Dan Barber's Foie Gras Parable*. Web video. TED.com/Taste3.

Barber, Dan. 2010. *Dan Barber: How I fell in love with a fish*. Web video. TED.com.

Belasco, Warren. 2008. *Food: The Key Concepts*. New York: Berg.

Berghaus, Günter. 2009. "The Futurist Banquet: Nouvelle Cuisine or Performance Art?" *New Theatre Quarterly* 17 (01): 3.

Bonabeau, Eric, Marco Dorigo, and Guy Theraulaz. 1999. *Swarm Intelligence: From Natural to Artificial Systems*. New York: Oxford University Press.

Brown, Cheryl, and Stacy Miller. 2008. "The Impacts of Local Markets: A Review of Research on Farmers Markets and Community Supported Agriculture (CSA)." *American Journal of Agricultural Economics* 90 (5): 1296-1302.

Butler, Judith. 1988. "Performative Acts and Gender Constitution: An Essay in Phenomenology and Feminist Theory." *Theatre Journal* 40 (4): 519-531.

Butler, Judith. 1993. *Bodies That Matter: On the Discursive Limits of "Sex."* New York: Routledge.

Community Farm Alliance. 2003. "Creating Positive Changes in the Food and Farm Economy." *BioCycle* 44 (11): 10.

Cone, Cynthia Abbott, and Andrea Myhre. 2000. "Community-supported agriculture: A sustainable alternative to industrial agriculture?" *Human Organization* 59 (2): 187.

Dial, Roman, and Jonathan Roughgarden. 1998. "Theory of Marine Communities: The Intermediate Disturbance Hypothesis." *Ecology* 79 (4): 1412-1424.

Duggan, Lisa. 2004. *The Twilight of Equality?: Neoliberalism, Cultural Politics, and the Attack on Democracy*. Boston: Beacon Press.

Fischer-Lichte, Erika. 2008. *The Transformative Power of Performance*. New York: Routledge.

Fischler, Claude. 1990. *L'homnivore: le goût, la cuisine et le corps*. Paris: Éditions Odile Jacob.

Gateway To Sikhism. http://www.allaboutsikhs.com/.

Guattari, Félix. 2008. *The Three Ecologies*. London: Continuum.

Hacking, Ian. 1987. *Representing and Intervening*. Cambridge: Cambridge University Press.

Herzig, R. 2004. "On Performance, Productivity, and Vocabularies of Motive in Recent Studies of Science." *Feminist Theory* 5 (2): 127-147.

Hinrichs, C. Clare. 2000. "Embeddedness and Local Food Systems: Notes on Two Types of Direct Agricultural Market." *Journal of Rural Studies* 16 (3): 295-303.

Holling, Crawford S., Garry D. Peterson, and Craig R. Allen. 2008. "Panarchies and Discontinuities." In *Discontinuities in Ecosystems and Other Complex Systems*. New York: Columbia University Press.

Homer-Dixon, Thomas. 2007. *The Upside of Down*. Toronto: Vintage Canada.

Homer-Dixon, Thomas. 2011. "Complexity Science." *Oxford Leadership Journal* 2 (1): 1-15.

Kirshenblatt-Gimblett, Barbara. 1999. "Playing to the Senses: Food as a Performance Medium." *Performance Research: on Cooking* 4 (1): 1-30.

Kloskowski, Janusz, Andy J. Green, Marcin Polak, Javier Bustamante, and Jaroslaw Krogulec. 2009. "Complementary Use of Natural and Artificial Wetlands by Waterbirds Wintering in Doñana, South-west Spain." *Aquatic Conservation: Marine and Freshwater Ecosystems* 19 (7): 815-826.

Kneen, Cathleen. 2010. "Mobilisation and convergence in a wealthy northern country" in "Linking farmers' movements for advocacy and practice," edited by Eric Holt-Giménez, *Journal of Peasant Studies,* 37: 1, 203–236.

Latour, Bruno. 1983. "Give Me a Laboratory and I Will Raise the World." In *Science Observed*, ed. K. D. Knorr-

Cetina and M. J. Mulka. Beverly Hills: Sage Publications.
Law, John, and Annemarie Mol. 2002. *Complexities: Social Studies of Knowledge Practices*. Duke University Press.
Law, John, and Vicky Singleton. 2000. "Performing Technology's Stories: On Social Constructivism, Performance, and Performativity." *Technology and Culture* 41 (4): 765–75.
Lockie, Stewart. 2008. "Responsibility and Agency Within Alternative Food Networks: Assembling the 'Citizen Consumer'." *Agriculture and Human Values* 26 (3): 193-201.
Marinetti, Filippo Tommaso. "The Manifesto of Tactilism." http://www.peripheralfocus.net/poems-told-by-touch/manifesto_of_tactilism.html.
Marinetti, Filippo Tommaso. 1989. *The Futurist Cookbook*. Trans. Suzanne Brill. San Francisco: Bedford Arts.
Parry, Gregory D. 1981. "The meanings of r- and K-selection." *Oecologia* 48 (2): 260-264.
People's Food Policy. http://peoplesfoodpolicy.ca/home.
Pianka, Eric R. 1970. "On r- and K-Selection." *The American Naturalist* 104 (940): 592-597.
Singh, G. "Socio-economic Aspect of Langar." Presented at the International Conference on Religions & Cultures in Indian Civilization, New Delhi. 2008. www.sikhreview.org/pdf/september2008/pdf-files/sociology1.PDF.
Singh, P. 2011. "Langar, The Sikh Refectory. Part Two The Temple of Bread." http://www.sikhchic.com/article-detail.php?id=2142&cat=22.
Stagl, Sigrid. 2002. "Local Organic Food Markets: Potentials and Limitations for Contributing to Sustainable Development." *Empirica* 29 (2): 145-162.
Swami, Praveen. 1998. "The War of the Jathedars." *Frontline*, September 12. http://www.hindu.com/fline/fl1519/15190390.htm.
Taylor, Timothy. 2009. "Showdown on Scott Road." *The Walrus*, September. http://www.walrusmagazine.com/-print/2009.09-religion-sikh-youth-daaku-Indo-Canadian-timothy-taylor/.
Veta la Palma. http://www.vetalapalma.es/index2.html.
Wikipedia: Intermediate Disturbance Hypothesis. http://en.wikipedia.org/wiki/Intermediate_Disturbance_Hypothesis.
Wikipedia: Sikhism. http://en.wikipedia.org/wiki/Sikhism#Ceremonies_and_customs.
Wikipedia: Veta La Palma. http://en.wikipedia.org/wiki/Veta_La_Palma.
Worm, Boris, and Ransom A. Myers. 2003. "Meta-Analysis of Cod–Shrimp Interactions Reveals Top-Down Control in Oceanic Food Webs." *Ecology* 84 (1): 162-173.