

You Spin Me Round:  
Common Variables  
of Conversion and  
Performative Food Settings

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## *Introduction*

Karl Marx begins his *Grundrisse der Kritik der Politischen Ökonomie* with an extended discussion of the notion of production and, specifically, its relationship to consumption, distribution, and exchange. After arguing for a perspective that views production as requiring consumption, consumption as engaging production, and distribution and exchange as functions fully entwined with both of the former, he closes the introduction with the conclusion that while all four processes are not identical, “they all form the members of a totality, distinctions within a unity.”<sup>1</sup> Almost 150 years later, British economist Ben Fine, publishing in *Sociologia Ruralis*, challenges the application of actor-network theory in agro-food studies, promotes the adoption of greater consumer-centered dialogue in food scholarship, and chastises his critics and colleagues in for not recognizing “that the [social sciences] literature has already sped past the consumption turn that they are already late in making [in food studies].”<sup>2</sup>

Between and surrounding these two writings, questions of food production and consumption have been posed, examined, and answered in myriad ways. Light has been shed on the “social life of food”<sup>3</sup> and the “privileging of human agency...[over] the materiality of foodstuffs,”<sup>4</sup> schools of thought have formed and disbanded on alternative commodity chains, salmon have been turned into alien monsters,<sup>5</sup> and even more questions have emerged. Importantly, such theoretical and practice-based development, related to the interconnectedness of matter, language, and interactions, is currently taking place across the sciences, humanities, and arts, and common threads are starting to become evident that are relevant to food studies, an area of scholarship that is both immanent to and transcendent of these three realms of study. This paper is intended as a tool to connect such work to my own developing ideas about food making and eating, and to understand it within a framing of performativity, emergence, and

intra-activity. Taking *transformation* as an alternative view of the production-consumption system (or duality, or interrelationship, depending on one's point of view), I will discuss how food might be viewed as being in a continuing state of becoming, changing its nature from one situation to another, but remaining *food* throughout, whether in the form of material, discourse, or process. I will also present the idea of what I call *variables of conversion*—those forms of food, broadly speaking, that allow it to be transformed, or translated, across the conceptual boundaries between the settings in which food is treated. These variables may be useful in viewing food's capacity to transform or be transformed, and potentially offer insight into the ways that certain food settings operate. Finally, I will briefly propose what variables might be at play in three very specific food settings—those spaces that I am currently considering as the sites for my eventual field research.

### *Production*

In contemporary food discourse, the notion of *production* is increasingly used to construe not only farming and growing, but also fishing and ranching, foraging and trapping. Even some food processors—cheese makers, chocolatiers, brewers, charcutiers, bakers—are called producers, provided that the degree to which their primary ingredients are altered remains relatively artisanal and/or small-scale. The argument can also be made that home cooks should be thought of as producers, generating meals out of purchased food, while forging familial bonds out of meals. At the same time, popular communications campaigns depict these producers as noble, worthy of respect, critical to human life,<sup>6</sup> and all-too-often ignored by those further along the food 'chain.'<sup>†</sup> Indeed, very often it is the branders, packagers, distributors, retailers, chefs, and the eaters themselves who grab the credit, the money, and the spotlight. In an attempt to focus on the primacy of the producer's role, as well as address the imbalances of social, cultural, political, economic, and environmental power in the food world, new attention has been given to the word itself and its linguistic offshoots, such as the Slow Food–coined “co-producer.”<sup>7</sup> While such a language choice may seek to

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<sup>†</sup> Note that single quotation marks will be used throughout this text to indicate use of a word in a more traditional sense than would otherwise be used in the context of the discussion.

make a supermarket or farm-stand shopper recognize his or her implication in the larger context, it also has the potential to dilute meanings and generate conflict.<sup>‡</sup> Overall, such discursive efforts may do little towards their intended impact, leaving a widespread understanding of the actualities of food production only superficially apprehended. Further, taking a language-based approach may only reinforce the producer-consumer duality and obscure the complex dynamics that emerge when food is at stake.

As noted above, production dualities have been examined extensively by theorists and scholars, both within food studies and from other perspectives. Marx's *Grundrisse*, his journal notes for what would eventually become *Das Kapital* (among other publications), look backward in time at production, recognizing a historic connectedness between the act of making and the act of taking: "Production by an isolated individual outside society...is as much of an absurdity as is the development of language without individuals living *together* and talking to each other."<sup>8</sup> His commentary that political economists might be accused of "barbarically tearing apart things which belong together"<sup>9</sup> speaks to the strength of the unity within which he views production and consumption, as well as the other acts that link these two artificially separated 'ends' of a linear chain. The producing individual, Marx says, is "dependent...belonging to a greater whole"<sup>10</sup> and simultaneously becomes a consumer or a producer even as he or she performs the respective other act. In the same text he refers to the appropriation of nature and the creation of legal relations during the processes of production, further illustrating the entanglement of the biogeophysical environment ('nature') with human constructs ('society'), as well as the false dichotomies brought about by human actors for the purposes of creating economic or political wealth. To this last point,

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<sup>‡</sup> Farmers interviewed during my master's degree research on farmers' market best practices largely responded to the word *co-producer* either with indifference to its potential impact or with frustration about its implication about the equivalencies of producer-consumer roles. For them, the reality of working in a field with plants or animals was very different from the act of buying a bunch of lettuce or a package of sausages. Certain farmers interviewed were insulted at the comparison, and thought it best to keep using the word *consumer* both for clarity and for respect of farm work.

Also noteworthy in this context is a decade-long campaign taking place in the film industry, involving Hollywood's Producers Guild of America trying to limit who can be designated as "producer" in film credits. Citing a dilution of the value of "producer" by the addition of hairstylists and boyfriends to the list of co-producers on a film (without explicitly addressing the implied dilution of profits), the PGA has been campaigning to introduce a "producer's mark" that shows official recognition of a given credited producer's actual contribution to the film. (Madigan, 1999; McNary, 2010)

it is interesting to note that although much is made of the falseness of dualities and either/or framings of 'reality,' when such dichotomies are discursively established they do in fact become real, to the extent that they can have effects that are both material and processual.

Like Marx, contemporary scholars—particularly those with an affinity for actor-network theory or conventions theory—are increasingly attempting to discuss food 'production' and 'consumption' without reliance on the dualities that split food acts artificially from their interdependent processes. American geographer Becky Mansfield, writing about fisheries, invokes Bruno Latour and Donna Haraway, and their two interpretations of *translation*. Less explicitly defined, Mansfield's translation is a means to discuss the interrelatedness of the different geosocial aspects of food making and taking, and the impossibility of clear boundaries between those parts.<sup>11</sup> Similarly, Norwegian anthropologist Marianne Lien and British sociologist John Law discuss *performance* within food settings, and the ways in which food things—both non-human and human actors—are brought into being by the interactions therein.<sup>12</sup> As noted above, a seemingly passionate debate about a "consumer turn" in food studies also appears to be taking place, with Ben Fine in a central role. Although he rejects the actor-network lens that some food scholars employ, apparently finding it "tempting to parody the emergence of a new ANT school in agro-food studies"<sup>13</sup> for its insular nature and lack of openness to the new turns of thought taking place across the rest of the social sciences, he nonetheless considers it necessary to take a more integrated approach to food realms. Food production, he says, must incorporate "the active role of consumers and workers [and place] emphasis upon material culture and the interaction between the subjects and objects of consumption,"<sup>14</sup> as well as acknowledge that ways in which "space and place [are] instrumental in the making of consuming identities."<sup>15</sup>

These and other discussions, in my opinion, address three key issues that the more limited discourse on food production—that which often employs the *chain* motif—helps to obscure. First, production is not a single activity. Rather, it encompasses numerous functions and stages of becoming that are carried out not by single individuals but by complex assemblages of human, non-human, and hybridized actors. Second, production is not a linear process in which foods spring forth from the earth and thence by the hands of an earnest farmer onto

store shelves and into our stomachs. Instead, it encompasses a pandirectional, multiply enfolded, entangled web of interactions, each with its own inputs, outputs, waste elements, and hidden externalities. And third, food (like matter and energy according to the laws of physics) is neither created nor destroyed, but moves through a continual series of transformations. Whether seed, food aid, on-screen recipe, or excrement, food remains food as it moves from one time to another and from one state to another, its form variably converted by the performative environments in which it both acts and is acted upon.

Marx's unity, Mansfield's world of translations, and Fine's interactions between object and subject together comprise what I would call the *web of food transformation*, and parallel the model of terrestrial ecology that shows matter and energy flowing within a complex network of eating and eaten organisms. (This last as an alternative to the ladder-like structure of the one-dimensional, hierarchical food *chain*.) Such a model requires that food be seen as perpetually *becoming*—whether manifesting itself as plant or animal tissue, cultural capital, or policy plank. A view that takes food as object, or as the terminal and temporally stable end of a linear chain, reveals little about the food or from whence it comes, but much about the will and motivation of the framer who puts forward such a view.

### *Performance, emergence*

In order to unpack this conception of transformation-versus-production, it is useful to examine how certain food assemblages enable food to *become*, that is, to transition from one state to others. In these settings, animals transition into commodity and ethics topic and industry spokesfigures, recipes into heritage and screenplays and power device, and banquets into socio-economic value and food laboratories. Such an examination relies on some of the ideas involved in performance and systems theory, as well as the notion of emergence—realities that are engendered through the enactment of material-discursive and biosocial practices, although often not the realities that were designed or intended by the human actors who are involved.

Performativity is frequently traced back to J. L. Austin's work in linguistics, specifically what he called the "performative speech act,"<sup>16</sup> a construct of language that is said to in fact transform reality by being uttered aloud. Austin's *How to Do Things With Words*, a collection of lectures given at Harvard University in 1955 and later published in 1962, eventually gave rise to more extended considerations of how things come into being, or have their beings altered, through the act of other things "doing" them. Performance thereby becomes an important concept to anthropology and sociology, but also to political discourse, sexuality studies, and of course to food. From Austin's mid-century notion that the words "I christen thee" or "I bet you" have a transformative—that is, performative—effect, we arrive at such twenty-first century conclusions as "salmon and nature are performed together"<sup>17</sup> and "there is no normalised potato encounter."<sup>18</sup> Language, technology, acts by people, ocean currents, inscription and display of policies—all these co-mingle to bring about what are often defined as either nature or culture.

William Safire, in one of his "On Language" columns in the *New York Times*, took a careful look at the often-misquoted aphorism, "the proof of the pudding is in the eating," underscoring that proof, here, is about testing the quality of something—its taste or goodness, or how well it represents the thing that it is supposed to be. Safire traces the saying back to a Middle English phrase written in about 1300 by a certain King Alisaunder: "Jt is ywrite that every thing Hymself sheweth in the tastyng."<sup>19</sup> In both olden and modern iterations, the line suggests that until food is tasted—or cooked, or engaged with in some way—it is not food. That is, in parallel to Marx's explanation that a product only becomes a product when it is consumed, it is *in the doing of something to or with or by* food that plant and animal tissue becomes food. Food becomes food when it is performed.

As stated previously, this lens of transformation-through-performance becomes particularly relevant to food when it can be used to focus attention on transformations that were not intended by the framers of the transformative setting. Because unintended, or unexpected, such moments often go unseen: the apparatus or documentation devices, as designed, are not capable of displaying and recording such phenomena. Alternatively, because the

unexpected phenomena may counter a given status quo, they may even be obscured by those actors to whom the status quo is beneficial.

French economist Michel Callon, one of the leaders in developing ANT, refers to “socio-technical *agencements*” (following Deleuze and Guattari) that are “combination[s] of heterogeneous elements that have been carefully adjusted to one another...[and are] endowed with the capacity of acting in different ways depending on their configuration.”<sup>20</sup> An *agencement*, he goes on to say, is a kind of self-actualizing structure, as it “includes the statement(s) pointing to it, and it is because the former includes the latter that the *agencement* acts in line with the statement, just as the operating instructions are part of the device and participate in making it work.”<sup>21</sup> A dominant *agencement* of the food world might be the assemblage of factory farming, chemical fertilizers, post-War production philosophies, post-modern packaging design, advertising messaging about convenience, cooking shows featuring out-of-season strawberries, supermarket parking lots, and news reports about gasoline prices, among many other elements. As many of the humans involved in such an *agencement* make their living because the *agencement* is in place, they act to keep it stable, including countering any emergent behavior from other assemblages that might weaken or undermine its dominance. What is more, it may be that non-human elements of an *agencement* also act to maintain the dominant structure, because of some systemic inertia that tends to keep its components in consistent states of operation. Because over the overlapping nature of *agencements*, and the flow of interaction across their ill-defined boundaries, elements within *agencements* may operate multiply but stably, and thus demonstrate this inertial agency.

Let us return to the value of performance in food settings. While the successful food *agencements* in place may tend to maintain their dominant status, the performative lens can allow us to see and potentially reinforce those emergent or unexpected or experimental behaviors that are present yet hidden. Food and communications scholar Charlene Elliot, writing about the serio-comic history of margarine in Canadian history, likens the bread spread to a kind of gastronomic “trickster... [that] has functioned as a marginalized figure which, when observed, serves to raise awareness about some of the unique particularities of law and social life in Canada.”<sup>22</sup> Her argument is that the complex assemblage that is

margarine has wielded a performative capacity across nutritional, political, social, and gustatory fields, and in doing so, has transformed both them and itself. It has changed laws and consumer habits and butter-marketer behaviors, just as it has been changed from yellow to white and back to yellow again, while simultaneously occupying market positions as more economic, more dangerous, more healthful, and more unpalatable. Though non-cognitive, margarine's agency has had wide-ranging, performative effect.

Numerous writers in many realms support a performative approach, often in the capacity of making visible that which had been obscured. Adrian Kear, head of Theatre, Film, and Television Studies at Aberystwyth University in Wales, calls performance “an indispensable social irritant whose deconstructive logic decomposes the time-sense of the contemporary moment and releases the inventive energy needed to bring change in the future.”<sup>23</sup> Kear goes on to quote Jacques Derrida on the subject: “[Performance] opens up a passageway, it marches ahead and marks a trail...it produces rules—other conventions—for new performativities.”<sup>24</sup> While Kear is primarily addressing theatrical performance, his point here is about the broader implication: emergence in a moment unplanned can alter and shift the present, and in so doing, shift the future toward un-predetermined possibilities. In a more food-specific context that similarly shows the value of emergence, salmon-fishery researchers Marianne Lien and John Law suggest that attention to performativity helps to “deal with the challenge of home-blindness.”<sup>25</sup> That is, performativity “sharpens our awareness of processes whereby...fundamental ways of knowing are being reproduced in a society which is, at the same time, so familiar to us that there is a constant risk of not noticing the many ways in which realities constantly come into being.”<sup>26</sup>

Where, then, does performance happen? Or perhaps more accurately phrased, where and when and how do we look into a given food setting in order to see performativity at work, in order to shuck off the home-blindness blinders?

British cultural anthropologist Victor Turner divides social spaces and practices into the liminal and liminoid.<sup>27</sup> The former includes the established, dominant institutions of society, such as churches, clubs, and schools, while the latter are the sites of “more idiosyncratic,

quirky [phenomena], generated by specific named individuals and particular groups—‘schools,’ circles, and coteries.’<sup>28</sup> Liminoid phenomena make up the fringe, can be part of social critiques and revolutionary manifestos, and develop “apart from the central economic and political processes, along the margins, in the interfaces and interstices of central and servicing institutions—they are plural, fragmentary, and experimental in character.”<sup>29</sup> If liminoid phenomena are performative, and this description seems to characterize them as such (similar to Kear’s “social irritants”), then performativity may be said to take place in marginal or interstitial spaces. These spaces, “the interfaces between established cultural subsystems,”<sup>30</sup> are where Turner suggests that *meaning* is generated—new or transgressive ideas—even if it is later adopted by larger systems within established institutions.

Echoing Turner’s location of meaning’s emergence within the wrinkly folds hidden from explicit societal attention is science and technology studies theorist Andrew Pickering. His “mangle of practice” seeks to encompass what happens in the space-time of scientific work, and the “dialectic of resistance and accommodation”<sup>31</sup> between people, things, processes, and time. More engagingly put (in British geographer Peter Atkins’ words), Pickering “sees society’s institutions muddling along and adapting to the messy situations that arise.”<sup>32</sup> Pickering’s image of the mangle conjures up a device that brings together human and material agencies under pressure both physical and discursive, as well as the transformation of both within that singular crushing moment. The mangle wrings out those “messy situations,” and attempts to “com[e] to grips with the themes of temporal emergence and posthumanism and their interrelation in the sociology of science.”<sup>33</sup> These two issues, the temporally emergent nature of phenomena, and the decentering of the human subject in favor of a “displacement of our interpretive frameworks”<sup>34</sup> relate directly to the performative approach. And although his focus is specifically on *scientific* practice (whatever dualistic cut that implies), this sentiment is equally expressed by food studies writers as well.<sup>35</sup>

*Object, linearity, stasis*

As stated earlier, and highlighted in Pickering’s elaboration of the mangle, effective analysis of

the practices of food making and eating requires a framework that shifts from considering food as object (fuel for the human subject), as linear (derived from a one-to-one, direct relationship of production), and as static (temporally fixed). Bruno Latour, in a posthumanist plea for attention to the assemblage nature of non-human entities, suggests that in order to understand the processes of design and creation, we should stop treating *things* like *objects*.<sup>36</sup> I would say the same for food, which must be acknowledged to be an assemblage of the largest proportions.

As example, consider *terroir*, a concept oft-discussed in circles of both food scholarship and food marketing. From the marketer's point of view, *terroir* is fixed, an environmental given, and determined by regional geography, local topography, climate, soil chemistry, and inscribed human practices. It is thus employed as a unique selling angle for wine or cheese or other transformed food products conventionally associated with a specific place. Yet a closer examination of *terroir* reveals that its contours were defined by earlier marketers, those "19th- and 20th-century European elites demonstrat[ing] their own hegemonic entrepreneurship precisely by putting narratives about land and tradition to use to exert their own control over profitable comestibles."<sup>37</sup> As *American Anthropologist* guest editors Deborah Heath and Anne Meneley also outline in their introduction to "The Techne and Technoscience of Food and Drink," New England cheese makers have adopted *terroir* for their own purposes, but transposed the process of transformation: "In the words of one cheese maker, they 'reverse-engineer the *terroir*'...aiming to recreate traditional production practices *de novo*." Here, then, food products cause *terroir* to emerge, rather than vice versa. As food and *terroir* become mutually constitutive, object, subject, nature, and society irrefutably blur.

Becky Mansfield, citing Marxist theorist Raymond Williams, addresses the importance of seeing the simultaneity of both the material practices and practices of signification at work when food is treated, effectively merging my questions of objecthood and linearity. "[It] requires seeing objects not just as inert things; in Raymond Williams's words, 'we have to break from the common procedure of isolating the object and then discovering its components. On the contrary we have to discover the nature of a practice and then its conditions.'"<sup>38</sup> Neither object nor isolated thing, food is multiple in its moments of

becoming, occupying many states at once and potentially transforming thereafter into several new ones. A quick glance at the patterns of eating and being eaten that are demonstrated in representations of biophysical ecology, and the overlapping web of ingestion relationships that is traced, shows this multiplicity in other terms. At any moment, a plant or animal might be eating a number of other plants or animals, and subsequently (or simultaneously) be eaten itself by one or more creatures. Its states of becoming, through its own consumption, are concomitant with its power to transform, by being consumed. What is more, its material nature may be imperceptible to the common observer, yet nonetheless present and charged with potential: as alluded to in Kear's quote on performance, certain biological actors (such as fungi and bacteria) act as decomposers, sending energy and materiality out into the system for others to take up and compose into new forms. In ecological terms, a massive quantity of (relatively) formless biomass exists in a state of potential, nearly impossible to measure and yet fundamentally determinant in what life forms and practices emerge next.<sup>39</sup>

For the final issue of temporal non-fixity, I draw from anthropologists Rebecca Cassidy and Molly Mullin, and their work on domestication. Domestication, which can be defined as the human control of the feeding, reproduction, and physical environment of plants and animals, is widely considered to be the foundation on which economic patterns and modern civilization is based.<sup>40</sup> It is, perhaps, one of the great dominant agencements of the food realm, intricately linked to the majority of other food practices on earth. It is also viewed as a stabilizing process, a means to fix plants and animals into a state of productive value. (Large-scale producers of plant and animal tissue rarely want surprises in the organisms they process.) Yet, as viewed by Cassidy and Mullin, domestication is far from static: "We must acknowledge what has always been the case—that domestication is an ongoing and unruly relationship, and that failing to appreciate it as such risks confusing what is contingent...with what is inevitable."<sup>41</sup> Transformation of humans and of our discourse about domestication is inevitable, even as we try to prevent further transformation among our domesticated plants and animals. As Lien and Law demonstrate, domestication is a two-way process: even those animals defined as 'domestic' have ongoing uncertain and unpredictable effects, altering humans' geophysical living environments as well as what humans themselves eat.<sup>42</sup>

### *Common variables of conversion*

In order to rationalize performative settings, transformation, and a de-objectified, pan-directional, and temporally active sense of food, I have evolved the notion of *common variables of conversion*. This conception is intended to provide a way of seeing a given material-discursive form of food as belonging to multiple food frameworks concomitantly in time, space, and materiality. Stated otherwise, these variables are translators, or better, food in translational forms, which exist in the interstices or interfaces between food systems, potentially serving different roles in the different systems, as well as being viewed and represented quite differently in each. Numerous possibilities exist: the calorie, for example, is a unit of energy in food chemistry, a unit of food guilt in diet-product packaging, a unit of metabolic processes in nutrition, and a unit of human work potential in the field or office. Quality, alternatively, may reside within sensory analysis, packaged-food labeling, discourse around terroir, dinner-table emotions, and visceral responses to social food movements. Thus viewed, such variables become material-discursive constructs that exist because of the interactivity between ‘nature’ and ‘society,’ and which belong to many natureculture worlds simultaneously. Importantly, and in my framing as variables of *conversion*, they also allow multiple phases of food transformation to be in meaningful and ‘productive’ contact with each other through the commonalities that they enact.

It is likely that the most explicit, common, and complicated of all variables of conversion has already been identified, examined, and discussed to such a degree that it transcends my relatively simple framing. I speak of course of money, that “imperishable commodity”<sup>43</sup> that is an almost universal translator between food realms. Used daily, it is familiar and apprehensible in the extreme, and yet also the subject of ongoing decoding and analysis. If indeed money does fall into my category of variable of conversion, then it should be said that what I wish to address here are those variables that are more veiled, those less commonly played with, and those more likely to reveal still-hidden meanings.

A potentially vast series of variables present themselves for consideration. *Quality* and *the calorie* have already been noted; others may be such forms as biomass or the feed-

conversion ratio in measuring animal farming and economics, appetite in the performance of cooking and food media, or social indebtedness in creating ritual and political stability. While it is not my intention here to identify every possible variable and explain how it works (were that even possible), I do wish to understand whether this notion can illuminate what is often obscured in the systems of food—shadowy or ignored inputs, outputs, and processes. If so, then analyzing a variable of conversion might identify an opportunity to explore that variable's setting(s) performatively, and from there uncover additional meanings or insights into food transformation.

*Celebration – indebtedness – stability*

Feasting, and other ritual practices involving food, have often been discussed in relationship to the demonstration of wealth and the construction of social class.<sup>44</sup> The visual display of plenty, the symbolic representation of knowledge and taste, and the physical and emotional well-being that may come from having more than enough to eat create differences between individuals and a stratification of groups. As has been pointed out by anthropologists and archaeologists, however, the consumption of excesses of food during celebratory events where one or more clans are hosted by another can also induce social or political stability.<sup>45</sup> In this case, the process involves the circulation of indebtedness from one clan to the next, and the requirement that the 'gift' of the feast be repaid eventually, which further requires that the clans involved remain in social or political harmony, at least to the degree that allows them to meet and refeed in future. In this framing, I propose that *debt* is the variable of conversion that exists between the system of food-based celebration and the system of social bond making. The state of being in debt, collectively, to another group, exists as an abstracted form of food—performative and temporally instable—that alters each group's reality as well as their capacity and need to interact.

Performance theorist Richard Schechner, in discussing social and theatrical drama, links food to the process of transformation that happens to each individual and to the society as a whole when eating or drinking take place within a ritualized setting.<sup>46</sup> His description of a pig

kill and roast in New Guinea interweaves war play between two tribes, including stylized attack by the visitors, retreat by the hosts, domination and victory, and eventual equalization through sharing of the hosts' food. The social bonds and distributed debt are not created exclusively by the act of eating together, but in the interactions that precede and make possible the eventual distribution of one-sided (private) property.<sup>47</sup> Here, the entire cosmology of debt and repayment is enacted in a single, though extended event, nonetheless requiring that the roles reverse at the subsequent gathering in order to perpetuate the cycle.

Canadian ethnoarchaeologist Brian Hayden has discussed the evolution of celebrational food consumption as the result of technological advances in agriculture that gave rise to surpluses. Surpluses, in turn, enabled “aggrandizer strategies that transformed egalitarian bands into transegalitarian complex hunter-gatherers replete with socioeconomic inequalities, hierarchies, and economically based competition in which feasting played a key role.”<sup>48</sup> Feasting thereby became a means of dealing with a surplus production of food without letting those resources go to waste, while also putting the excess towards reduced social risk instead of just stored body fat. While a certain amount of extra grain or vegetable matter could be put to use as animal feed—an equivalent resource-storage strategy to “putting money in the bank”<sup>49</sup>—too much surplus (or a resulting surplus of animal tissue) might eventually spoil. Feasting, with other members of the micro or macro community, not only addresses this issue, but banks the surplus and reduces long-term risk by building “social safety networks.”<sup>50</sup> Feasting distributes the caloric wealth among a human network of bodies, and simultaneously creates a social network of required future repayment: that is, debt. This system, Hayden has also said, “generates powerful forces that intensify and increase resource production of luxury foods as well as staples.”<sup>51</sup> The celebration-stability cycle can also be seen as performative and self-sustaining, enacting its own future because successful feasting benefits both reproduction and survival rates, which in turn drives the desire for increased production and eventual ongoing feasting.

Indebtedness, then, may be viewed as a common variable that converts surplus resources and sharing and celebration into social requirements and sustained relationships and interaction on multiple planes. This is of course only one interpretive slice of these two

systems, which not only can be sliced otherwise, but necessarily also have linkages and common variables with other systems. Debt, too, may play out as a variable for other pairs or groups of systems, as I have proposed in my discussion of the non-linearity of food. Before moving on to my second example of a variable, I will take a brief tangent into one other directionality of the indebtedness variable.

The feasting example above demonstrates a performative cycle that benefits social stability. Another case of eating cycles may be seen in contemporary Western practices among what some authors call “neoliberal” food consumers<sup>52</sup>—the new ‘progressive’ practices of buying local, organic, and/or artisanal food. While shifts towards these patterns may indeed exist, the large-scale food-retail system remains generally dominant, requiring a majority of eaters to consume from within it. This may create an oscillation for the neoliberals, a shifting between their ‘ethical’ behaviors and those required by their modernized, westernized shopping availabilities. Organic and local then become a means to erase the debt of conventional and global, just as supermarket food perpetuates the cycle. Taken more cynically, such practices may be, in Slavoj Žižek’s words, a kind of “pseudoactivity...[doing] things not so that something will change but to make sure that nothing changes...just to postpone the moment when we really have to do something.”<sup>53</sup> This notion of Žižek’s, about the general state of practices that are conventionally viewed as more environmentally sustainable, shows that debt also plays a conversion role in behaviors intended to do better for the world, as well as those associated with memory and guilt. As he says of material waste: “I think our obsession with recycling is part of the same phenomenon as debt in collective ideology, or restitution, repaying the old debts, collective crimes.”<sup>54</sup>

### *Cooking – appetite – media*

Drawing on Gilles Debord’s *Society of the Spectacle*, media studies scholar Signe Hansen has declared that the real product of the phenomenon of chefs on television is NOT celebrity, but the consumer of spectacle.<sup>55</sup> Her argument transposes Nietzsche’s proposition that there can be no spectators without a spectacle, and that, as in other contemporary media, “the

pressing question concerns our position as spectators and understanding the nature of our craving to consume.”<sup>56</sup> She thus figures *appetite* as the variable common to the systems of food media and of cooking performance, where the appetite to consume actual food is converted into an appetite for more food representation. Here, the conversion function pivots on the perpetual lack that the mediating panel of the TV screen creates: the food demonstrations in the television studios stand in for food that we know is edible, but which remains out of reach of our hands, mouths, noses, minds, and stomachs. That hunger is then replaced with the bodily unsatisfying un-substance of food television, which is provided to the spectator in copious amounts. While the celebrity him- or herself may last only one season, “what remains is the audience...the success of the eternal spectacle points to an ideological hunger that is never satisfied because its driving force is *lack*. The spectacle relies on deprivation, and food TV gives substance to the saying that our eyes are often bigger than our stomachs.”<sup>57</sup>

Emma Govan and Dan Rebellato, both British theatre studies lecturers, consider the changes in food celebrity since the 1940s, starting with radio chefs, to the period starting in the 1990s, when an explosion in volume and variety took place. They note that today there are “a remarkable number of different chefs, working in different formats, with new ingredients and attitudes...[and each] with his or her own hypertrophied personality, which flamboyantly locates the food as coming from a recognizable source.”<sup>58</sup> This increased granularity of food media also sharpens the hunger for distinct spectacles—a fragmentation of appetite into cravings for unique media offerings, in parallel to the non-mediated urges we also have for specific foods. We now have a very focused lack, in Hansen’s words, a new and more defined gap or void that can only be filled by more of the same. This lack is dependent on the techniques and medium of food television, which include, according to Govan and Rebellato, processes of ceremony and distancing that keep the spectator at arm’s length.<sup>59</sup> Although appetite here clearly bears similarities to indebtedness, unlike the participative rituals of feasting and social interaction described above, food-media consumption remains more individualized.

More broadly, and perhaps more ideologically speaking, the textual and visual phenomenon of food porn<sup>60</sup> also depends on the unsatable appetite. Idealized representations of food and drink, consumed through the eyes only because of the mediation of paper or electrons, leave the lived experience of eating unfulfilled. My purpose here is not to dive into the extensive debate surrounding food porn,<sup>61</sup> but to show that its consumption, whether as vicarious stand-in for actual edibles or legitimate process of independent incorporation of images, also depends on a switching back and forth of the appetite variable.

#### *Fisheries – quotas – biomass – FCRs – nature*

Likely because of the tight intersections of food, biogeophysical processes, human practice, and discourse that ocean fisheries represent, a great deal of writing exists on this very fluid milieu.<sup>62</sup> Indeed, the environments of fish ‘production’ may be some of the best examples of performed and performative food settings, emergent realities that are uniquely enacted through interactions of wilderness and technology, biology and society.

Although the section head above lists quotas, biomass, and feed-conversion ratios (FCRs), the mass of relevant literature suggests that many more common variables exist—perhaps best summarized by the single notion of *fishing*. By the conservationist’s reckoning, fishing transforms unbounded ocean into geographically delimited rights zones, hull shape and diesel-fuel usage into quota overages and underages, and community collaboration into industry self-policing.<sup>63</sup> At the fish farm, FCRs transform pellets made of fish meal and oil into biomass, which then converts to averages, efficiency, and economic profit.<sup>64</sup> In the circle of discourse, the fish farm’s actions leverage the scale of the oceans to convert non-farmed fish into ‘wild’ fish, while those that historically took place off the Grand Banks of Newfoundland transformed marine carnivores into collapsing cod stocks, and oceanic predation webs into proposed ecological conservation models.<sup>65</sup>

Lien and Law focus a good deal of their attention on the common variable of biomass, which is “a way of making live salmon visible to the company...[and] has also become a regulatory

tool.”<sup>66</sup> Because the salmon farm that the authors visited is just one of a number owned by a central management company, biomass is for them also the means of converting the multiple nature of individual fish in many different marine cages at many different sites into a singular figure that can be combined with the singular figures from other sites. Biomass is thus a variable between biological being and total production when viewed at a single location, or a variable between comparative productivities when viewed across the geographic dispersion of a number of locations. It converts between the many and the unity, and is “essential in the translation between the ecology of aquaculture and its economics.”<sup>67</sup> Curiously, biomass cannot be measured directly itself, but is *produced* by a package of computing software that itself is fed estimates of inputs and outputs. It is therefore both a variable that transforms, and a variable that is transformed by the web of variables around it. To the fishery administrative offices, however, “biomass is what farmed Atlantic salmon is. All the rest is noise.”<sup>68</sup>

The attitude that takes “all the rest” of a complex food system to be noise is common in the conventional framework of that views production as a chain. This framing sees inputs and outputs, but only those that are intentionally introduced or harvested by the hand of the system designer. As most watchers of climate change or cancer-rate increases know, however, a great number of externalities are normatively introduced into the environs of a productive system, and they represent a variable that is most often neither noticed nor counted. In Thomas Homer-Dixon’s depiction of complex systems, externalities are “stresses [that] accumulate because the system learns to displace a lot of its problems to its external environment—quite simply, it pushes them beyond its boundaries. The system might become increasingly competent at managing everything within its loose boundaries, but it pushes away things it can’t manage well.”<sup>69</sup> As Homer-Dixon points out, however, one of the key characteristics of complex systems is that they tend to bleed into ‘neighboring’ systems—that is, the boundaries we discursively construct around them are largely that: language-based abstractions. The notion, then, that externalities get “pushed beyond” means that they simply go into another system and, because of the easy flow of elements across abstract boundaries, are unlikely to remain external for long. There is no ‘outside.’

The marine environment, as ecologists know, is extremely fluid, both literally and in terms of causality. Just as complex systems' boundaries are abstract, so are the lines that humans draw around the waters that they fish. Externality in fish production then, is a no-go notion from the start; nothing can be considered "noise." As Lien and Law point out, escaped farmed salmon—ostensibly a domesticated breed—do not return to the holding pen eventually, in the same way that cows might do when they become hungry or want to be milked. The externality of those few (or many) escapees becomes a new variable that forms an interface with the 'natural' environment of spawning grounds, where deposited wild-salmon egg sacs may sit in attendance of fertilization by 'domestic' salmon. A new and self-reproducing form of salmon is enacted, and potentially expands the original externality into a wholly unpredictable and emergent reality.

Becky Mansfield, in her discussion of surimi (fish paste), chooses to focus on the geographic metaphors of *distancing* and *entanglement* in order to discuss how production involves the construction of both foodstuffs as well as their symbolic representations. "Production is about both meaning and materiality, and the ways that cultural processes of meaning construction are not limited to consumption, but are integral throughout production and trade as well."<sup>70</sup> Like Lien and Law's salmon, whose bodies were reduced to a collective biomass and then reconstructed into economic value devoid of escapees or altered environments, Mansfield's surimi is a complex reconstruction of myofibrillar protein (extracted from minced pollock, bream, and whiting) into definitions of texture, quality, and nation-specific naming.

Surimi is the fish paste, or gel, made from the proteins in fish muscle tissue, a first-level transformed product that is often processed at sea onboard factory trawlers, immediately after catching the fish, and then sold to surimi *seafood* producers. It is these manufacturers who mix the gel with other ingredients, both material and discursive, to form the products that consumers recognize as comestible—*kamaboko* (fish cake) in Japan, Sea Legs (fake crab) in North America, and numerous others ranging from snack food to luxury gift.

Surimi then, as a ‘raw’ ingredient, offers a more tangible variable of conversion, although still comprising numerous intersections of production systems. The Alaska pollock fishery on which it is largely based is the largest in the world,<sup>71</sup> still robust unlike many others, yet pollock is generally considered bland and of low economic worth despite. Surimi thus converts these fishing grounds into a viable source of high-quality, high-value commodity, mediated by industry and consumer discourse about sustainability. It becomes entangled with meanings and constructions of commodity chains, yet in its material nature, it is distanced from the animal that in fact produced it. As Mansfield says, “regardless of how firms advertise their product or how an individual consumer uses the product once they buy it, surimi seafoods are no longer pollock—they are no longer ‘fish’. Instead they are ‘seafood’, or perhaps even ‘shellfish’. Thus, the cultural-economic act of production is simultaneously about transforming both the material form and the meaning of surimi as a commodity.”<sup>72</sup> In Mansfield’s framing, surimi seafoods, which are the more-processed products made with the base form of surimi fish paste, also serve as a translational device.

The material existence of [surimi seafood], as opposed to other products, is intimately connected with cultural constructions of taken-for-granted notions of class, nationality and what counts as a normal food. In its material production, surimi seafood links the deli counter with the North Pacific Ocean, Japan, and the history of relations between the United States and Japan and the relations that construct the “West” and the “Orient.”<sup>73</sup>

Originally Japanese, and ranging widely in taste and texture, as well as in price point and perceived value, surimi became American and European in the 1980s, but only in the limited form of imitation crab. Technology had enabled larger-scale production of surimi in the material sense, but the discourse to make it ‘good to think’ in western terms had not yet been constructed. As these markets evolved, however, through the layering in of discourses of both *self* (American) and *other* (‘Oriental’), surimi articulated itself into a larger spectrum of products, similar to that available in the Japanese market.<sup>74</sup> A key moment in surimi seafoods’ status as a variable of conversion may have been in 1987 when the Alaska Fisheries Development Foundation used an altered version of Norman Rockwell’s Thanksgiving-feast

depiction, *Freedom From Want*, on its project summary report. The turkey-laden platter in the original was replaced by an arrangement of many-shaped forms of surimi.<sup>75</sup>

### *Multi-variable variables*

As was somewhat predictable, an examination of the shifting waters of ocean-based food production reveals that common variables of conversion may in fact be meta-variables, each composed of several sub-variables, but not strictly reducible to any singular notion. So too might it be said for debt, appetite, fish, biomass, protein gels, or wildness. Like money, these transformative and self-transforming constructs may be inextricably entangled with too many other intra-active systemic elements to be effectively categorized as variables. Nonetheless, seeking to identify and/or understand the potential variables of conversion in a given food setting can be a useful process in uncovering what is interesting and potentially hidden about that space, and about the “meanings, norms, and conventions [that] are embodied and enacted”<sup>76</sup> within it.

For my eventual field research, I have proposed to examine three such sites, potentially employing my notion of variables as a device to help uncover hidden performative realities. These locations are the University of Gastronomic Sciences in Pollenzo, Italy, Vignoble Les Pervenches in Farnham, Québec, and Café Paradiso in Cork, Ireland. Based on my current understanding of each, they are each composed of a variegated assemblage of actors and, possibly through some performative quality, have had transformative effects on both themselves and on the networks of which they are part. Probing their possible variables of conversion—uncertainty and self-doubt (perhaps), micro-climate and taste, (maybe) economic failure and vegetarianism (or not), and others yet to be discovered—will, I believe, offer an investigative methodology to help explicate how food and food settings both manifest and obscure themselves.

## Conclusion

Concomitant revelation and obfuscation, in the theatre, is called “being present in the moment.” An actor who achieves this state shows to the audience both him- or herself and the character being represented. It can be a powerful moment on both sides, one which German theater studies scholar Erika Fischer-Lichte characterizes as a “perceptual multistability..., an oscillating focus between the actor’s specific corporeality and the character portrayed.”<sup>77</sup> Simultaneously exciting and destabilizing, the twinned perception is similar to that intended in the representationalism of Orthodox icons (seeing god and man in one), or the conceptual oneness of the wave-particle nature of electrons. In probability, like the example of the electron, that which is seen is dependent on the cuts or framing that the viewer makes and then chooses to engage with. But in the moment before the cut, the virtuality of two (or more) possible actualities may enable a radical sense of ‘reality.’ This is why I believe that a variables-of-conversion approach can be useful.

Gertrude Stein wrote that “the thing seen and the thing felt about the thing seen not going on at the same tempo is what makes the being at the theatre something that makes anybody nervous.”<sup>78</sup> Adrian Kear discusses this nervousness in terms of syncopated temporalities and their “attempted realignment”<sup>79</sup> by the spectator, but I believe it extends to materiality and meaning as well. Trying to bring alignment, connection, and de-syncopation to a world that is continuously re-becoming itself is what humans have been trying to do for ages. We call it control, dualization, and framing, and the illustrations of how this plays out in food, as described above, demonstrate that it is a false and often damaging effort.

Peter Atkins, calling for a renewed focus on food itself, highlights the error of placing humans at the center of food. Through his discussion of materiality, but also genes and trust and interaction, he makes his argument wisely and, most of all, clearly, citing “the resistances of foods themselves...the bloody-mindedness of certain [foods] with regard to exchange.”<sup>80</sup> Maybe, then, food’s syncopation and transformability and nervousness-inducing multistability is simply food being obstinate, resisting being traded, and saying *No, you human, get your hands off of me.*

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