*“Methods of Undoing: Integrating ecosemiotic methodologies in food studies”  
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**Abstract:**

Drawing on contemporary work in food studies, this paper develops a methodology of undoing. Scholars in food studies have drawn attention to questions of equity, access, and well-being in the production, distribution, and consumption of food. Yet, as scholars in semiotics and political ecology have shown, the descriptions of and interests in our global food system develop *bounded* understandings of where food comes from and who it benefits. This paper contributes to the conversation by employing a method engaged in recognizing the permeability of boundaries both conceptual and material: a method of tracing the various forces that all at once create, maintain, and make sense of realities that are often held separate conceptually and narratively. In acknowledging that there are points of flexibility that come with permeable boundaries, this paper uses a process of undoing to locate these pliable points as spaces for creative potential *whereby subjects and objects are repositioned in relation to a broader whole.* Undoing, thus, is first a process of identifying boundaries that are meant to contain, regulate, and order and, second, a process of bringing attention to and working with the flexibility of these boundaries.

This method is especially useful in when working to understand the complex realities of food (in)access in urban areas. In the paper, I examine the way food is conceptualized by various communities and individuals in urban spaces and placed into various social, political, and economic relations. Developing a methodology that accounts for the complexity of urban food ecologies is thus a key element in understanding both the struggles and potentials of urban food systems.

**Introduction:**

This paper is grounded in my ongoing interest in research on food in-access in urban spaces. Food access, or lack of access, gets a lot of attention in media, in academic settings, in international, national, and local policy and governance, and in conversations on climate change. And many scholars have critically outlined the ways in which the production, distribution, and consumption of food is interwoven with the development of capitalism, the maintenance of capitalism, and with political power. When we talk about food access, we tend towards these frameworks, which focus on food as commodity, for understanding the root of food (in)access.

At its basis, food is a basic condition for life *in addition* to being a commodity, an energy source for labor, and a political means of support or punishment. Yet, these frameworks have done little to help establish solutions to food in-access that go beyond emergency food strategies. And while emergency food aid is important in that they get food to people who need to eat it (some of the time), it is a reactive treatment that does not address the problem of in-access itself. How might we better address problems of food access?

As scholars in semiotics and political ecology have shown, often descriptions of and interests in our global food system develop *bounded* understandings of where food comes from and who it benefits. This paper contributes to the conversation by employing a method engaged in recognizing the permeability of boundaries both conceptual and material: a method of tracing the various forces that all at once create, maintain, and make sense of realities that are often held separate conceptually and narratively. In acknowledging that there are points of flexibility that come with permeable boundaries, this paper uses a process of undoing to locate these pliable points as spaces for creative potential *whereby subjects and objects are repositioned in relation to a broader whole.* Undoing, thus, is first a process of identifying boundaries that are meant to contain, regulate, and order and, second, a process of bringing attention to and working with the flexibility of these boundaries.

I begin this paper with an examination of three bodies of food studies literature that work to specifically address the rural/urban divide in some way, whether to critique or uphold it. My contention is that these veins of research are similar in their use of boundaries that uphold dominant ways of both conceptualizing and acting within the world, however there are possibilities that are left open within the third body of literature. Often used are frameworks predicated on reified concepts and assumptions that are left unquestioned. In many ways, my foundation for this paper assumes Foucault’s concept of governmentality, which puts forth the notion that governance is a process by which the actions, objectives, and pursuits of individuals are ordered and controlled, thus rendered governable.[[1]](#footnote-1) While research has been conducted that raises questions of power, interests, and order in relation to policies, actions within, and institutions of food systems, there is a significantly smaller body of research on the ways in which food system *concepts* play a role in rendering individuals, communities, and spaces governable and manageable under dominant political food regimes.

Thus, if scholars seek to identify ways in which the current food regime[[2]](#footnote-2) can be changed, there is a need to examine the ways in which a political vocabulary of food interacts with and helps to provided bounded conceptions of the production and consumption of food. As Sophia Buggs of Lady Buggs Farm emphasizes in her work, if we want to understand how food production and consumption affects our lives- if we want to encourage improvements in food access- we must re-define food as greater than the physical substance we put in our mouths for our bodies to digest as a form of substance.[[3]](#footnote-3) ‘Food’ must first be unbound from the conceptual constraints that currently direct our thinking about it. The concept cannot be separated from action.

While there are multiple interventions that might be made to illustrate the conceptual boundaries of food, in this paper I take up the pervasive rural-urban divide (conceptual and physical) as my focus. I analyze this binary as a way of establishing what might be considered a framework for food studies scholars who want to explore the various ways conceptual and material disruptions can be fermented in local, regional, and national food-ways. My contention is this: if scholars are to take seriously an understanding of the world as dynamic, complex, and entangled,[[4]](#footnote-4) ways of thinking about and writing about the wicked problems of our time require dynamic and complexified vocabularies and theoretical frameworks. In other words, there are conceptual categories that bound and define our understanding of ‘food’ and food systems. These bounded concepts enact specific material realities. These bounded concepts, while not inherently good or bad, are only *one* way of understanding, describing, and bringing into existence food realities, thus these conceptual categories might be (and often are) challenged by a plurality of experiences and actions. I ask, are there ways to unbound food vocabularies as a means of enacting or promoting food relations that are more attuned to specific social and ecological needs?

**The rural/urban divide in food studies scholarship:**

How have concepts of ‘rural’ and ‘urban’ been mobilized in food studies literature to understand the current food system including its downfalls and potentials? I argue that there are three ways food studies literature approach the ‘rural’ and ‘urban’ division. While I acknowledge that my categorization of food studies is neither complete nor the only way of understanding this body of scholarship, I employ these divisions as a means of highlighting veins of literature that express explicitly political understandings of food systems and food access and forefronting the pervasiveness of the rural/urban divide in food studies literature. First, I engage with scholars who mobilize Marxist concepts of alienation in the political economy of food. Second, I look to scholars active in debates on green governance and sustainable urban planning. Finally, I turn to scholars working within the realm of food and social justice.

Some of the key literature that discusses the constitution of food along the rural/urban divide draws on Marx’s understanding of ‘metabolism’ which he used to describe the increasing separation of humans and nature through a bifurcation of countryside and city and the resulting rupture in ecological metabolism of nutrients. However, this analysis pivots around the notion that humans are both different from and thus removable from ‘nature.’ In other words, Marx’s work, and subsequent extensions of his theory of metabolism are beholden to the assumption that the world of the ‘human’ is ultimately different from the world of ‘nature.’ [[5]](#footnote-5) This assumption reaffirms the very schism it deals with (rural/urban) which promotes bounded understandings of how food ‘works’ in rural spaces of production and how food ‘works’ in urban spaces of consumption.

The concept of the metabolic rift was developed by John Bellamy Foster to point to the ecological offerings of Marx’s work. This concept is useful as it describes one way rural and urban spaces are understood as being both conceptually and materially bounded thus separate, and what this means for the ways scholars consider ecological, agricultural, and consumptive practices specifically in relation to food. However, Foster’s theorization of the metabolic rift does not help us to move beyond the bounded spaces of rural and urban in our research, a boundedness that, I argue, needs to be critically re-considered in food studies research. Foster brings Marx back into sociology as a means of intervening into the disciplinary split in socio-environmental literature between anthropocentric approaches and eco-centric approaches. For Foster, Marx’s later work in political economy bridges this theoretical gap in sociology.

The metabolic rift develops Marx’s writing on the soil science of Justus von Liebig, who focused on the nutrient needs of soil in agricultural production. Liebig was a key figure in the development of the fertilizer industry, which occurred during what some call the ‘Second Agricultural Revolution.’[[6]](#footnote-6) Marx writes, “The actual causes of the exhaustion of the land… were unknown to any of the economists who wrote about differential rent, on account of the state of agricultural chemistry of their time.”[[7]](#footnote-7) In short, while political economists of the time were dealing with soil fertility in relation to economic production, there was little critical engagement from these scholars with that observation. Instead, this observation was used as a framework for deciding which lands were best suited for cultivation and agricultural improvement and how the relation of soil fertility to population density, thus labor availability (i.e. the Malthusian dilemma).

Marx rightly observed that the fertility of the soil is not outside of social relations but is very much bound up within them. However, unlike his predecessors, Marx argued that capitalist agriculture would not necessarily motivate an *improvement* in soil fertility, but rather could *harm* soil fertility because of a disruption of the soil nutrient cycle. [[8]](#footnote-8) Thus, Marx draws a connection between the exploitation of the labor of the land and the labor of an individual leading to the ultimate impoverishment of both. Importantly, Marx points to the schism between urban industrial centers and rural agricultural spaces as a source of this dual impoverishment.[[9]](#footnote-9)

Thus, in Marx there is the concept of a disruption in natural processes that humans (and other lifeforms) are dependent upon for survival. This disruption is spatial in its very constitution: it is the ever-present, ever-critiqued rural/urban divide. However, what goes unstated or at least underemphasized by both Marx and Foster, is that this spatial divide between urban and rural is that these two spaces, even through spatial and conceptual bounding, can never be held apart in full. This, perhaps, is the key characteristic of dualistic thinking: that one side cannot exist without the other, as, conceptually, each half requires the other for defining of the self.

This may seem like a rather straightforward claim that perhaps does not need to be stated by Marx or Foster. However, I argue that this point is at the heart of difficulties in this vein of food studies to move beyond this dualistic distinction- to not continue to replicate it- in the framing of agriculture and food related problems and solutions. If the urban sphere remains separate and bounded from the rural sphere in both the processes of diagnosing and treating issues of food production, distribution, and consumption, the heart of the issue, the rift itself, goes unaddressed. It remains irreparable. In this body of literature, rural spaces of production become the primary point of focus, as production is the heart of the Marxist enterprise and rural spaces are centers of food production. One of the fundamental spatial orderings of the industrial-capitalist food regime is upheld in notions of rural as producer, urban as consumer. And if the goal is to disrupt the current food regime- to highlight other possibilities for food systems- the rural/urban divide must be addressed more thoroughly and urban spaces need to be theorized in the process.

Another prevalent line of research, largely located within sustainability studies, accepts this divide as both conceptually and materially true, maintaining the belief that cities are the “spaces where civil society, private actors, and local governments come together to strategize toward more sustainable food futures and experiment with new forms of food governance.”[[10]](#footnote-10) This second body of literature often puts forth arguments and ideas for the ‘greening’ of urban spaces as a means of promoting the abstract ideal of ‘sustainability.’[[11]](#footnote-11) The underlying narrative of this second body of literature is that with good planning and new technologies, we can make efficient use of urban spaces for sustainable practices. In many ways, this is a vein of literature that is reminiscent of the very work Marx critiqued. Specifically, these were the writings of Malthus and Ricardo, who held to the idea that capitalist advancement hand the potential to improve soil fertility through technological advancement. While the arguments in this vein of literature are more nuanced than this and often put forth varied conclusions, it is worth pointing out the underlying assumptions here of linear progress through several avenues: technological advancements, refined use of technology, or increased efficiency of use of space.

It is important to address these arguments for urban greening and urban sustainability because they are often used as the basis for gentrification projects that work to attract outsiders to urban, previously ‘undesirable,’ spaces and often result in higher costs of living which forces previous residents out. This is a line of reasoning similar to that used by Ricardo and Malthus, one that puts forth an assumption of technological advancement and refinement as inherently good and capable of resolving the ecological issues we (collective we?) face.

It is, perhaps, in this vein of literature where the use of discourse analysis comes in, as sustainability is so often enmeshed or co-opted by dominant economic and political ideologies and agendas. Thus, looking at the ways in which ‘sustainability’ is simultaneously used as an ideal, a catalyst, and a measurement helps to trace the various power relations that are interwoven into urban food studies literature that espouse ‘urban greening,’ ‘sustainability,’ and ‘resilience’ as the ideal foci of urban food projects. While the use of sustainability metrics has been critiqued by scholars who are weary of its use at an international level,[[12]](#footnote-12) less attention has been paid to its use in smaller-scale economic-political projects. However, similar critiques of sustainability hold at these various scales and, again, this body of literature maintains the rural/urban divide in its identification of the problem (the unsustainability of cities) and the solutions proposed (for example, greening urban spaces).

Finally, there is a third body of food studies literature that espouses a narrative of food as a human right, food as social justice. I place this body of literature in contrast to the body of work that focuses on sustainability and greening, in a juxtaposition similar to the Malthus/Ricardo and Marx pairing. Food justice literature often focuses in on the community level, where food in-access might be or has been the catalyst for both urban agriculture projects and projects of neighborhood greening (gentrification). Scholars approaching food (in)access in urban areas as questions of social justice highlight the structural and systemic patterns of inequality and the intersections of food access, structural and historical racism, socioeconomic disparities, and gendered disparities.[[13]](#footnote-13) This focus on structural power relations allows this body of literature confronts the tension between urban agricultural projects as liberatory and as gentrifying but there seems to be an attempt to clearly designate between the two. Is this possible? Or are their other ways of considering the dynamics of late capitalism, community wellbeing, and urban agriculture? Finally, are the concepts of “community food security, food sovereignty, and urban agriculture” sufficient in “conceptually linking food, justice, and cities?”[[14]](#footnote-14) Or does food justice still maintain a separation of urban and rural? Can this binary be ignored or does it need to be critiqued?

**Methods of Undoing in Ecosemiotics and Political Ecology: Foundations for food studies research**

These seem to be the primary forms that research on urban food systems take. What are scholars missing? As feminist thinkers have pointed out, the acts of ‘doing’ and ‘undoing’ is an important focus for scholars wanting to understand the dynamics of change, resistance, and power in political and social spheres.[[15]](#footnote-15) I also draw on the work of design theorists who forefront the design of contexts and spaces as acts of demarcating/bounding human action within these spaces. Thus, I argue that there is room to consider these theories more broadly, to unbound design theories from thinking about distinctly built spaces to thinking about constituted spaces where a plurality of beings, things, and ideas are at work in defining spatial and conceptual possibilities.[[16]](#footnote-16) This work is the partial foundation for my research, where I locate practices of conceptual undoing and doing at the center of political change, especially as it relates to research on food systems and food access. How do we account for possibility and emergence in designs of food-specific spaces and practices?

Of course, as with any research that moves to challenge assumptions in our thinking, this process is not an instantaneous overhaul of methods, vocabularies, and engagements. Instead, I consider it to be an exploration of sorts, where disciplinary and conceptual boundaries are first identified and then tested for points of flexibility. To put it simply, this is a process of asking, “what might we miss when we define the world, conceptually and materially, in these terms?” Thus, I draw heavily on research in ecosemiotics, where language use is a primary means of apprehending (describing, understanding, knowing, and creating) the world(s) we occupy.

In this section I explore 1) how we might understand ecosemiotics as putting forth a method of undoing, 2) how this relates to political ecology, and 3) how this then can be understood in relation of food access in urban spaces. Ecosemiotics, I argue, develops concepts and methodologies in a way that avoids the rural/urban divide that is so pervasive in food studies literature. Thus, starting here offers a means of overcoming or circumventing food access strategies that re-entrench dualistic distinctions and the normative meanings associated with them. These dualisms work to constrain/bound/restrict the ways scholars identify and solve problems. Ecosemiotics offers a means of undoing these conceptual and material constraints.

Ecosemiotics, broadly defined, is “a branch of semiotics that studies sign processes as responsible for ecological phenomena (relations between species, population patterns, and structures). In particular, it studies the role of environmental perception and conceptual categorization in the design, construction, and transformation of environmental structures.”[[17]](#footnote-17) Importantly, ecosemiotics acknowledges that meaning making, signification, and control/creation is not fully a pursuit of humans. It is always only partial, even in what might be considered non-natural or artificial settings,[[18]](#footnote-18) like urban spaces. Notably, this approach allows for an acknowledgement of the various capacities of beings and things to co-constitute their worlds in a way that holds beings apart, as they *are* different and importantly so, but not in a hierarchical sense.

1. Tania Murray Li, “Governmentality,” *Anthropologica.* Vol 49, No. 2 (2007), pp. 275-281. [↑](#footnote-ref-1)
2. I follow Eric Hole-Giménez (2019, p. 30) in his definition of the current food regime, the “corporate food regime,” in which “the global food system is governed according to a small number of corporate interests.” This regime follows several others including the colonial food regime and a Keynesian food regime, but it is important to note the interrelations between these various shifts and framings of food systems. They are not paradigms that are completely overthrown in favor of a newer one, but instead maintain various legacies and assumptions in their various iterations. In reading changes in food systems as a lineage of various food regimes, one is able to forefront the ways in which food has been and continues to be a means of ordering political, social, and economic relations. In other words, Holt-Giménez’s description of food regimes helps to see food systems as a practice of governmentality. [↑](#footnote-ref-2)
3. Sophia Buggs, OEFFA Conference, 2022 [↑](#footnote-ref-3)
4. Erika Cudworth and Stephen Hobden, *Posthuman International Relations: Complexity, Ecologism, and Global Politics.* Zed Books, 2011. Karen Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning,* 2007. [↑](#footnote-ref-4)
5. Karl Marx, *Economic & Philosophic Manuscripts of 1844.* Edited by David Riazanov. Moscow: Progress Publishers, 1959. John Bellamy Foster, *Marx’s Ecology: Materialism and nature.* New York: Monthly Review Press, 2000, David Wachsmuth, “Three Ecologies: Urban Metabolism and the Society-Nature Opposition.” *The Sociological Quarterly* 54, no. 4, (2012): 506-523. [↑](#footnote-ref-5)
6. John Bellamy Foster, “Marx’s Theory of Metabolic Rift: Classical Foundations for Environmental Sociology.” *American Journal of Sociology* 105, no. 2 (1999), p. 373 [↑](#footnote-ref-6)
7. As quoted in Foster (1999) p. 373. [↑](#footnote-ref-7)
8. John Bellamy Foster, “Marx’s Theory of Metabolic Rift: Classical Foundations for Environmental Sociology.” *American Journal of Sociology* 105, no. 2 (1999), p. 375. [↑](#footnote-ref-8)
9. Marx offers two passages specifically on this matter. The first is from Capital Volume 1, 1976, p. 637-638, where he states, “Capitalist production collects the population together in great centres, and causes the urban population to achieve an ever-growing preponderance. This has two results. On the one hand it concentrates the historical motive force of society; on the other hand, it disturbs the metabolic interaction between man and the earth, i.e. it prevents the return to the soil of its constituent elements consumed by man in the form of food and clothing; hence it hinders the operation of the eternal natural condition for the lasting fertility of the soil… But by destroying the circumstances surrounding that metabolism… it compels its systematic restoration as a regulative law of social production, and in a form adequate to the full development of the human race… All progress in capitalist agriculture is a progress in the art, not only of robbing the worker, but of robbing the soil; all progress in increasing the fertility of the soil for a given time is a progress toward ruining the more long-lasting sources of that fertility… Capitalist production, therefore, only develops the techniques and the degree of combination of the social process of production by simultaneously undermining the original sources of all wealth- the soil and the worker.”

   The second passage is from Capital, Volume 3, p. 949-950. Marx states, “Large landed property reduces the agricultural population to an ever decreasing minimum and confronts it with an ever growing industrial population crammed together in large towns; in this way it produces conditions that provoke an irreparable rift in the interdependent process of the social metabolism, a metabolism prescribed by the natural laws of life itself. The result of this is a squandering of the vitality of the soil, which is carried by trade far beyond the bounds of a single country. (Liebig.) . . . Large-scale industry and industrially pursued large-scale agriculture have the same effect. If they are originally distinguished by the fact that the former lays waste and ruins the labour-power and thus the natural power of man, whereas the latter does the same to the natural power of the soil, they link up in the later course of development, since the industrial system applied to agriculture also enervates the workers there, while industry and trade for their part provide agriculture with the means of exhausting the soil.” [↑](#footnote-ref-9)
10. Astrid C. Mangnus, et al. “New pathways for governing food system transformations: a pluralistic practice-based futures approach using visioning, back-casting, and serious gaming,” *Ecology and Society* 24, no. 4 (2019): p.1. This idea is a continuation of the normative associations that have long been identified with the rural/urban divide. Namely, that urban spaces are sites of invention, progress, modernity, whereas rural spaces are sites of history: outdated, stagnant, old-fashioned. [↑](#footnote-ref-10)
11. Aniek Hebinck, et al. “Beyond food for thought- Directing sustainability transitions research to address fundamental change in agri-food systems.” *Environmental Innovation and Societal Transitions* 41 (2021). [↑](#footnote-ref-11)
12. Ingmar Lippert, “An Introduction to the Criticism of Sustainable Development,” Brandenburg University of Technology Cottbus. 2004. 1-51 [↑](#footnote-ref-12)
13. Megan Horst, et al. “The Intersection of Planning, Urban Agriculture, and Food Justice: A Review of the Literature.” *Journal of the American Planning Association* 83, issue 3 (2017). [↑](#footnote-ref-13)
14. Nik Heynen, et al. “Food Justice, Hunger, and the City. *Geography Compass* 6, no. 5 (2012): p. 304 [↑](#footnote-ref-14)
15. Judith Butler, *Undoing Gender*. Routedge, 2004 [↑](#footnote-ref-15)
16. Ann M. Pendleton-Jullian and John Seely Brown, *Design Unbound: designing for Emergence in a White Water World,* Volume 2. MIT Press,2018. [↑](#footnote-ref-16)
17. Timo Maran, Kalevi Kull. “Ecosemiotics: Main principles and current developments.” *Geografiska Annaler Series B Human Geography* 96, no 1 (2014): p. 41 [↑](#footnote-ref-17)
18. ibid p. 42 [↑](#footnote-ref-18)