



# Postmodern conceptualizations, modernist applications: Rethinking the role of society in food security ☆

Edward R. Carr \*

*Department of Geography, University of South Carolina, Columbia, SC 29208, United States*

---

## Abstract

Food security studies, while giving ever more attention to issues of perception and local knowledge in food outcomes, have yet to engage in a *systematic* discussion of the role played by society in food outcomes. While contemporary studies of food outcomes address issues of the social, especially as social structures relate to access to and production of food, this literature lacks an accompanying theory of the social that might lend it broad, cross-contextual coherence.

This article identifies a means of systematically approaching how actors apprehend and negotiate the complex factors and connections from which they fashion food outcomes by applying postmodern theories of power and knowledge to the study of society's role in food outcomes. In developing this approach, I employ postmodern theory not merely to critique current approaches to the study of food outcomes, but to further a modernist goal, a world with less hunger.

© 2005 Elsevier Ltd. All rights reserved.

*Keywords:* Food security; Postmodern; Power

---

---

☆ “A work can become modern only if it is first postmodern. Postmodernism thus understood is not modernism at its end but in the nascent state.” – Jean-François Lyotard from *The Postmodern Condition: A Report on Knowledge*, 1984, p. 79.

\* Tel.: +1 803 777 1854; fax: +1 803 777 4972.

E-mail address: [carr@sc.edu](mailto:carr@sc.edu).

## Introduction

Food security is a dynamic idea that has undergone significant transformations in its conceptual lifetime. Perhaps the most significant of these transformations is the shift from an initial view of food security as a product of reliable supplies of food to the growing contemporary emphasis on food as a single input in diffuse local livelihood strategies. In this contemporary incarnation, food outcomes are best understood through a focus not only on biophysical and economic conditions, but also on socially-conditioned local knowledge and perceptions of those conditions. The contemporary focus on local knowledge and perceptions, however, has not yet resulted in a *systematic* discussion of the role played by society in food outcomes.

This is not to say that contemporary work on food security ignores issues of society in food outcomes; in fact, a great deal of empirical evidence about the importance of society in food outcomes has driven the emphasis on society, local knowledge and perception in this literature. However, this evidence, and the literature more broadly, lacks an accompanying theory of the social that might lend it broad, cross-contextual coherence. While the livelihoods literature (for example Carney, 1998; Ellis, 2000; Bryceson et al., 2000; Chambers and Conway, 1992; Scoones, 1998) and Sen's (for example Sen, 1981) work on entitlements attempt to incorporate the social into considerations of food and livelihoods outcomes, neither body of work presents a systematic means of approaching society in the study of these outcomes. Instead, the contemporary food security literature addresses the role of society in particular food outcomes through something of an inductive tracing of diffuse livelihood strategies and their connections in particular contexts (for example Umezaki and Ohtsuka, 2003; Shriar, 2002; Ruerd and Van den Berg, 2001; Maxwell, 1996a; Maxwell and Frankenberger, 1992; García, 2001). As a result, the contemporary food security literature has not yet addressed how society might be productively understood in a manner that allows for its consideration alongside biophysical/economic conditions in the systematic study of food outcomes.

In this article I identify a means of systematically approaching how actors apprehend and negotiate the complex factors and connections from which they fashion food outcomes by applying postmodern theories of power and knowledge to the study of society's role in food outcomes. In developing this approach, I follow Lyotard's (Lyotard, 1984) suggestion that we treat the postmodern not as that which comes after, and dismantles, the modern, but rather as a step toward a modernist goal, in this case a world with less hunger. I begin with a brief review of the conceptual development of food security from an outcome of global scale, first-order needs to its current status as a single input in complex livelihoods strategies. This review illustrates how food security has undergone a conceptual evolution in the absence of a serious consideration of social dynamics, even in the more particularist literature. I then consider how current readings of postmodern theory in the food security literature approach the potential contributions of such theory to our understandings of society and food outcomes. Turning to an aspect of postmodern theory, Foucault's (1994) later work on the relationship between power and knowledge, I present a new approach to society's role in food outcomes. A rigorous discussion of the relationship

between power and knowledge in society allows for the creation of a general approach to food security that accomplishes two important goals. First, a focus on the relationship between power and society allows us to integrate society, especially local perceptions and knowledge, and biophysical/economic conditions in a manner that both acknowledges the highly contextual causal links between social and material circumstances and livelihood strategies/decisions seen in different parts of the world. Second, by focusing on the social context in which power takes shape and is reproduced, this approach makes such contextual complexity intelligible and comparable across contexts. I conclude with a brief discussion of future directions for study that could extend such an approach.

### **Food security: The development of a concept**

Over the past decade, a number of detailed conceptual reviews of food security have appeared, either as review articles or as parts of larger conceptual discussions (for example Maxwell and Smith, 1992; Maxwell, 1996a, pp. 291–292; Maxwell, 1996b; Kotzé, 2003, p. 113; Davis et al., 2001, pp. 717–718). While constructed for different purposes, the reviews tend to trace a similar pattern of conceptual development from the 1970s through the 1990s. In general, they suggest that food security has its roots in a 1970s-era global-scale concern for food supplies manageable via macro-economic and agricultural policies. Such efforts focused on the supply of food as the determining variable for food (in)security. Therefore, issues such as famine were addressed by augmenting the amount of food available in an area through adjustments to trade, technology or the supply of food aid. Development and aid practitioners looked upon the failures of such efforts to improve food outcomes as products of inadequate local food supplies, aid flows, or agricultural restructuring. As a result, these failures were addressed by more intensive applications of existing efforts to augment local food supplies.

The conceptualization of food security described above fell by the wayside as, from the late 1970s through the 1990s, the food security focus on food supply failed to identify causal links between the social/material circumstances of particular groups and their experience of food insecurity in events like the African famine of 1984–5 (Maxwell, 1996b, p. 158). Studies of such events revealed that despite broad food shortages, the cause of food insecurity was not the lack of food in a given place. Rather, it was influenced by access and production, both of which related to social roles and status (for example Gladwin et al., 2001; Guyer, 1986; Fapohunda, 1988; Valdivia and Gilles, 2001). The empirical evidence that accumulated from these studies broke down previous assumptions about the causal links between food shortage and food security, suggesting that society, perception and knowledge had much more important roles in food outcomes than was previously imagined. As a result, food security studies shifted their view of food outcomes as the product of a first-order need to a livelihood perspective that treats food as one of a number of goals, resources and outcomes. To better understand the complex character of food outcomes, these studies extended to ever-smaller scales for consideration. Thus, with a

few important exceptions (such as the political ecological work of Watts (1983) linking famine to broader structural issues) food security became an ever-more complex concept seeking locally specific causes of insecurity.

Today there is a general consensus in the literature that food security is not so much an issue of dietary requirements as a much more complex “question of access to food by households and individuals” (Maxwell and Smith, 1992, p. 50). Increasingly, this access is treated as a condition of the broader, diffuse livelihood strategies in which individuals and households engage. As a result, food security is today viewed as part of broad, multi-objective strategies that must be understood and addressed in their complexity, not through a reduction to the amount of food available in a given context. Taking the importance of the local in food outcomes to somewhat of an extreme, Maxwell and Smith (1992, p. 51) argue that household food security is so highly contextual that the imposition of outside objectives to evaluate particular local strategies is problematic at best, and counterproductive at worst. Yet even in food security’s most “localist” incarnation, there is surprisingly little exploration of the role of society in these strategies and their outcomes. As a result, current studies rest on undertheorized or unexamined assumptions about the social as a factor in food outcomes.

A careful reading of this literature highlights the absence of discussions about the role of society in food outcomes. Shriar’s (2002) examination of livelihood strategies and land use and land cover change in Guatemala is a case in point. While he argues for the need to recognize and engage the diversity of local household livelihood strategies to understand land use and land cover change, for Shriar (2002, p. 408) this diversity is not the product of particular perceptions or knowledges. Instead, it proceeds from quantifiable drivers, such as the size of landholding and the percentage of landholding in fallow. In this construction of local livelihood strategies, actors deal with these drivers through a rationale of economic feasibility that appears to lack local context.

Yet Shriar is aware that these quantifiable drivers are not sufficient to produce the variety of outcomes he sees on the ground. To better understand the diversity of local livelihoods strategies that he sees in his research context, he appears to turn to local knowledge and perceptions. For example, he argues that the best approach to understanding the diverse livelihood strategies of a given place is to begin investigations “at the level of the land user” (Shriar, 2002, p. 408), not because of particularistic data available at this scale of investigation, but because it is at this scale that the researcher encounters the “least uncertainty.” This is a clear effort to link complex local strategies with concrete, measurable drivers and outcomes, but it is founded on an epistemological assumption about proximity (social or spatial) and objectivity that has been challenged repeatedly in both the anthropological and geographic literatures (see, for example Clifford and Marcus, 1986; Gupta and Ferguson, 1997a,b; James et al., 1997; Moore, 1996; Marcus and Fischer, 1986).

The contemporary food security literature has raised awareness of the importance of local knowledge and local perceptions of problems and insecurity in understanding the causes (and results) of that insecurity, as in the rural development work of Chambers (1995, 1997), (see also the livelihoods work of Ellis, 2000; Carney, 1998; Scoones, 1998). This awareness, while based in extensive empirical evidence from many different

contexts, has not yet resulted in a new, *systematic* approach to society and food security that places perception and local knowledge into existing efforts to identify causal relationships between environment, economy and food outcomes. To productively insert society into the examination of food outcomes requires a serious engagement with the social in the context of food security. One potential avenue for rethinking these issues lies in a greater engagement with postmodern approaches to society.

### **A postmodern food security?**

There is a precedent for the application of postmodern thought to questions of food security. In a 1996 article, Simon Maxwell argued that the development of a focus within food security focused on the flexibility, diversity and perceptions of local strategies is mirrored by, if not reflective of, a larger movement toward postmodernism in the intellectual world. For Maxwell (1996, pp. 160–161), postmodernism is a rejection of “positivist, scientific methods of inquiry in the social arena,” the empirical tests that are part of these methods, and the metanarratives (broad, overarching explanations) that result from such approaches. Postmodernism, he says, focuses instead on discourse and language in a manner that emphasizes subjective interpretation at the local level. Therefore, postmodernism is a challenge to what he calls “many accepted ways of looking at the world” (Maxwell, 1996b, p. 161).

Though he does display some skepticism toward this mode of thought, Maxwell does not attempt to refute postmodern challenges to contemporary food security approaches. Instead, he seeks points of commonality, illustrating how contemporary uses of food security already embrace many postmodern tenets, in effect appropriating the label of postmodern for the existing state of food security. Maxwell notes that a food security attuned to postmodern parallels, especially the parallels with those postmodern approaches that employ deconstructivist tactics (he does not discuss or cite specific theorists or approaches), has three important, related parts. First, the postmodern influence forces food security studies away from overarching metanarratives of insecurity and toward a consideration of how insecurity takes shape in a given context (Maxwell, 1996b, pp. 162–163). Second, the loss of metanarrative means that food security approaches must move away from top–down planning and toward means of enhancing the choices available for the local negotiation of food insecurity (Maxwell, 1996b, p. 163). Third, food security approaches, like postmodern thought, will have to draw upon different fields and intellectual schools for new ideas and approaches (Maxwell, 1996b, p. 163).

Maxwell’s work on identifying and tracing connections between postmodern thought and food security is best read as a provocative, if preliminary, step toward creating a postmodern food security. Maxwell glosses over an enormous, heterogeneous body of thought under a single heading, “postmodernism”, and under a few general trends. While the description of postmodern thought in such general terms as “anti-positivist” and “discourse-centered” is not entirely inaccurate, it is not complete, either. Most importantly, Maxwell’s thin description of postmodernism does not address *why* many parts of postmodern thought reject metanarratives and focus

on the analysis of discourse. The rejection of the “enlightenment project” that Maxwell (1996, p. 60) identifies as a mainstay of postmodern thought is not an end unto itself, but the byproduct of various efforts to rethink this project and the collectivity or society it produces.<sup>1</sup> Therefore, in many important schools of postmodern thought, the rejection of metanarrative and positivism is not an end unto itself, but rather a means by which we can, among other things, identify and interrogate the power and knowledge that constitute such discourses, themselves part of social systems and practices. In short, what Maxwell describes in his work are symptoms of postmodernism, not underlying projects of this movement.

Though Maxwell explores the possibilities for a fruitful interaction between postmodern thought and food security, his view of postmodernism does not push food security past its current conceptual treatment of the social. Instead, his postmodern metaphors fit food security into existing trends in the larger intellectual world. This engagement with postmodernism, then, is not a retheorization of food security that will enable the systematic examination of the role of the social in food outcomes.

### **Rethinking society and food security**

Maxwell’s treatment of postmodernism in relation to food security is unfortunate given the complementarity of certain aspects of postmodern thought and the current interests in local knowledge and perception expressed in the food security and livelihoods literature (for example Chambers, 1995, 1997; Ellis, 2000; Carney, 1998; Scoones, 1998). A great deal of postmodern thought focuses on how issues of knowledge are always engaged with issues of power (see, for example Foucault, 1972, 1994, 1995; Derrida, 1984, 1988; Lyotard, 1984).<sup>2</sup> While the writings of these theorists explore various ideas on *how* power and knowledge are mutually implicated, there is a broad agreement among them that one cannot address either power or knowledge without a consideration of the other. An engagement with one or more of these theorists and their approaches to power and knowledge facilitates the construction of an approach to the role of the social in food outcomes that takes into account local particularity without abandoning the idea of a generalized approach to society.

Postmodern theory provides numerous perspectives from which to explore the relationship between power and knowledge. I draw upon the later work of Michel Foucault on power and knowledge, specifically his piece “The Subject and Power” (1994), in my approach to society in the context of food security. While his opus is primarily preoccupied with the formation of subjects within society, one aspect of Foucault’s later work focuses on the role of power within a society, and how power exists in a mutually constitutive relationship with knowledge, often shorthand as power/knowledge (signifying their inseparability). In this later work, Foucault argues that

---

<sup>1</sup> To label a thinker like Derrida’s work as “playful” or “pointless” is to forget that his project emerged from his experiences as an Algerian Jew under French colonial rule, a most highly politicized foundation.

<sup>2</sup> Foucault and Derrida are perhaps more accurately labeled poststructural thinkers, a label created by Anglo-American thinkers reworking post-Levi Strauss French critical theory.

power is not something negative and coercive, nor is it held and controlled by individuals, but rather is “a way in which certain actions may structure the field of other possible actions . . . a mode of actions upon actions” (Foucault, 1994, p. 343). According to Foucault, it is the various differences, including status, economic standing, and gender, in a given social group that enable some members of the group to act upon or structure the actions of other members of that group. Acting upon the actions of others, though, also serves to (re)create social categories that lead to social differentiation. Thus, argues Foucault (1994, p. 344), acting upon others’ actions “puts into operation differences that are, at the same time, [power’s] conditions and results.” This is a critical point for food security studies, since it suggests that social differences are not a priori categories with certain characteristics we can deploy to explore a particular context (a mode that dominates the current social analysis of food security). Instead, they are constantly under construction as they are put into practice.

These categories, and the practices associated with them, come to be inextricably linked to local understandings of biophysical and economic processes not through an existing social structure, but through the unfolding of social differences that enable actions, and the actions that create such differences. We can examine this process as a shaper of food security strategies with reference to Fig. 1. Starting from

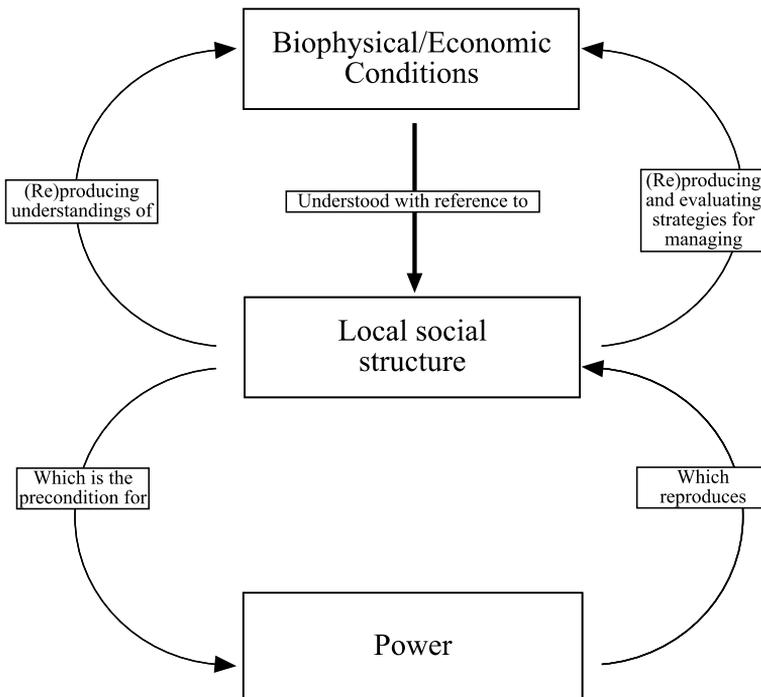


Fig. 1. A schematic of the local decisionmaking and strategy construction that influences food and livelihood security outcomes when one takes power into account. The layout of this schematic is not intended to convey a hierarchy, but instead reflects the limitations of representing a complex relationship in two dimensions.

the top of the diagram, we see that such strategies require an evaluation of the local biophysical and economic conditions with regard to food supply and access. Following the center arrow straight down, we see that such an evaluation (a form of knowledge) relies on social categories (differences) that establish the importance of each person to the social grouping (household, clan, village, etc.) most significant to food access. These categories also determine how much food each person needs, and therefore shape the actions necessary to reestablish food security (e.g. redistribution of existing resources vs. acquisition of new resources). The local “measurement” of the outcomes of these actions, like the initial definition of the problem to be solved, relies upon and therefore (re)produces local understandings of the economy and environment (the upward arrows in the top half of the diagram). When actors make choices about actions to take to manage economic and biophysical conditions, these actions (re)shape the social categories that are both conditions and results of power. This process is represented as the bottom loop of the diagram. It is not surprising, then, to find that local efforts to cope with insecurity tend to work within, and reinforce, local social roles and status systems that facilitate the goals of one group over another, even if such efforts compromise the material standard of living in that context.

Approaching power/knowledge from this particular Foucauldian perspective allows us to create a new understanding of food security that takes the focus on society (in the form of social differentiation, social capital, etc.) seen in much of the livelihoods literature and changes its place in the analysis of food outcomes. Many contemporary approaches to the study of food security begin with the biophysical and economic conditions in a given context, and treat local knowledge and perceptions as outside of, and reacting to, such conditions. The approach to food security I present here argues that our understanding of food outcomes is best constructed from an appreciation of local power/knowledge as inextricably bound up with these conditions by the unfolding of actions in a particular context. Because such actions require as a precondition, and (re)produce in their unfolding, social differentiation and categories, the key points of access to power/knowledge for the researcher are these social relations and categories. Social relations and categories are imminent to local perceptions of insecurity, and therefore influence possible responses to that insecurity. This explains why so many empirically-based food security studies suggest that we must look to local perceptions<sup>3</sup> to understand particular problems and responses. Further, the social differentiation inherent in power/knowledge ensures that power is not uniformly perceived or experienced within a given context, thereby accounting for the variable coping strategies and food supply outcomes we see within regions, villages and households.

By examining how social differentiation and categories are (re)produced with reference to material conditions, we can understand how livelihoods resources are classified, valued and integrated into particular food security strategies. In other words,

---

<sup>3</sup> Foucault would not call this “local perception,” but instead concern himself with the discourses that shape behavior. Here, then, we see the convergence of Foucault’s ideas on power and knowledge with the contemporary livelihoods concern with local perceptions.

we must shift the conceptual point of entry for food security from broad biophysical and/or economic conditions to a focus on the ways in which these conditions are apprehended, and reshape, society and knowledge in particular contexts (Fig. 2). In so doing, we can build a body of generalizable knowledge on the role of society in food outcomes that integrates the social into already complex considerations of the biophysical and economic factors that affect hunger in the developing world.

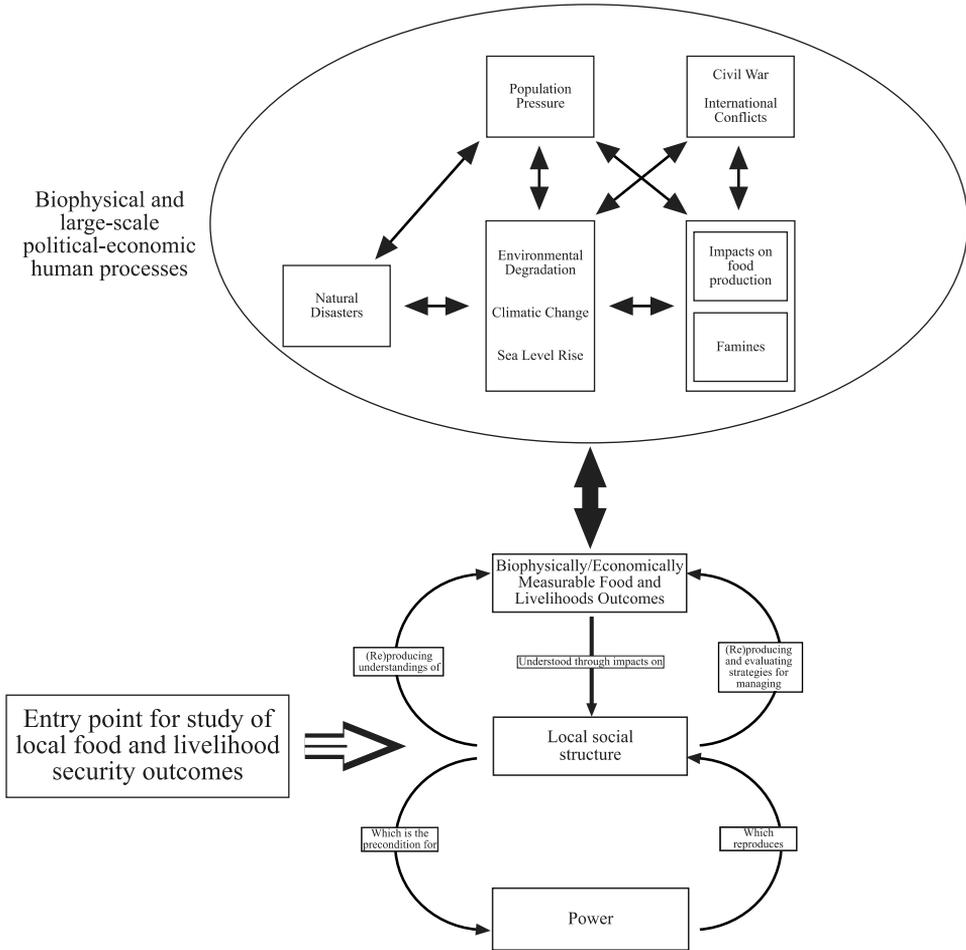


Fig. 2. Schematic diagram of a postmodern approach to food and livelihood security. This approach does not tease out all of the causal relationships among biophysical drivers, nor the causal links between such drivers and large scale human processes, that influence local environmental and economic conditions. The focus of this approach is on local social relations and the role these relations play in understanding local biophysical and economic conditions. This approach grounds power in the environment and economy, while recognizing that the environment and economy, as social constructions, are products of/productive of power.

### **A brief illustration: Ghana's Central Region**

I have been conducting fieldwork in the rural context of Ghana's Central Region since 1997, where local social relations, and the ways they shape local knowledge and perceptions of the environment, have been crucial to food outcomes. For example, Dominase and Ponkrum, two villages I have examined as part of a study on local strategies for managing economic and environmental change at the margins of globalization (Carr, 2002a,b, 2005), underwent dramatic economic and environmental changes in the late 1960s (Fig. 3). These changes, which included the loss of local non-farm employment (NFE), the loss of access to regional NFE opportunity, and the gradual environmental degradation wrought by twenty years of intermittent logging in the area, created a context in which households were completely dependent on declining, unstable farm outputs for their livelihoods. In response to these changes, some 65% of the households in this area moved to new locations where they could regain access to NFE, and thus reestablish previous livelihoods strategies. Yet not everyone left this area, despite the near-universal experience of the above-mentioned problems, which created (among other things) a context of food insecurity.

If we assume that livelihood strategies and their attendant food outcomes are the product of local knowledge and perceptions operating in reaction to the changes in Dominase and Ponkrum, the refusal of some households to move seems illogical and perhaps idiosyncratic (and therefore resistant to systematic analysis). If, however, we examine the decision to move from the perspective of the social structure, and the social differentiations, that framed the local understanding of these changes, a different story emerges, one that reframes the decision to stay as intelligible (Fig. 4).

Before the changes in Dominase and Ponkrum fully impacted this context, farmers were already negotiating the gradual degradation of their farmland. The principal means by which they managed this degradation at the household level was NFE income: a source of income controlled by men. Examination of the agricultural strategies in existence before these changes took place suggests that both men and women were growing crops with the goal of selling a significant portion at market. Thus, in this context, the main strategy for managing gradual environmental degradation was through income gained from engagement with local and regional markets. This strategy, with its focus on market engagement, led to a key social differentiation between men and women in this context that was based on the amount of income each brought to the household. Since men brought in a disproportionately large amount of the household's income, they made claims over women's farm incomes that, while contrary to local economic practice and land tenure rules, pooled the household income in order to manage local environmental degradation. The social differentiation, however, was not based on any biological difference between men and women. Instead, it was constantly created and reinforced by the process of evaluating local environmental issues, defining solutions to those issues, and enacting those solutions. Thus, the local power/knowledge came to link power to the environment through the social structure in a way that met the material needs of the household while privileging the position of men in the household.

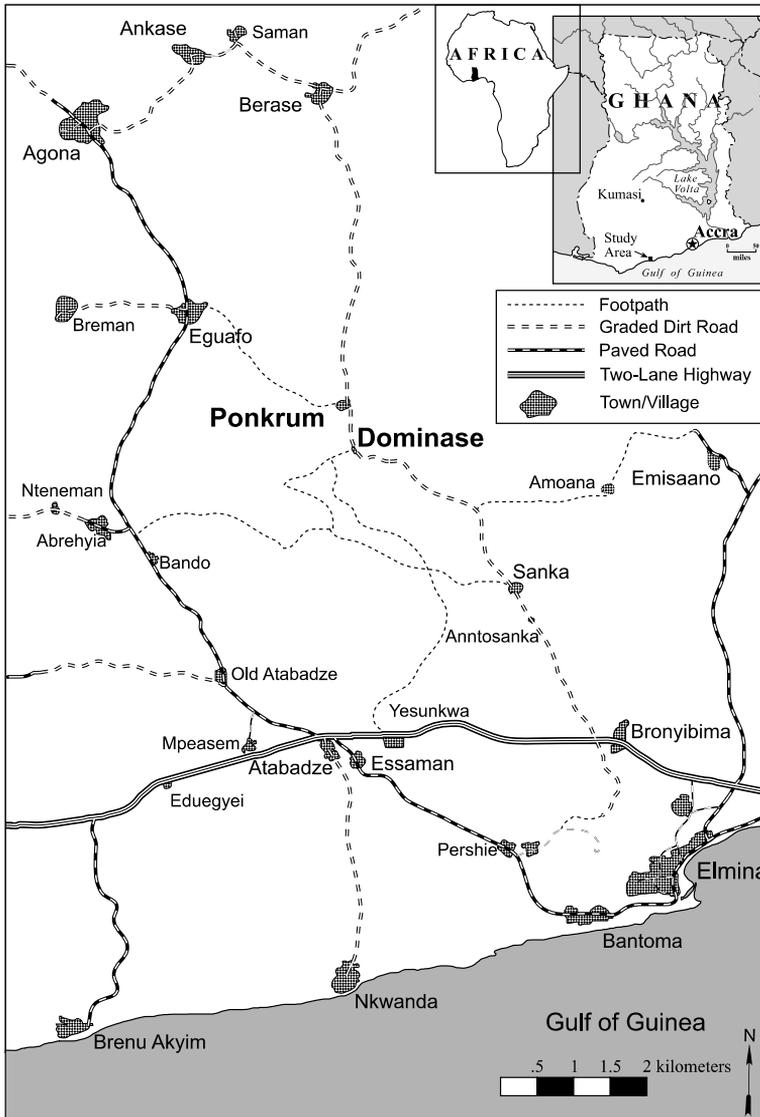


Fig. 3. Locator map of the research area highlighting the villages of Dominase and Ponkrum at center.

Given this power/knowledge, we can start to understand the decision of some households to stay in place despite increasing food insecurity. The loss of local and regional NFE in these villages compromised men's NFE incomes, creating two issues. First, there was no longer a steady source of income that could support the local strategy of market engagement as a way to manage environmental degradation. Second, the loss of NFE stripped men of their economic status, since without NFE men's incomes were often very similar to those of their wives. Thus, both the eco-

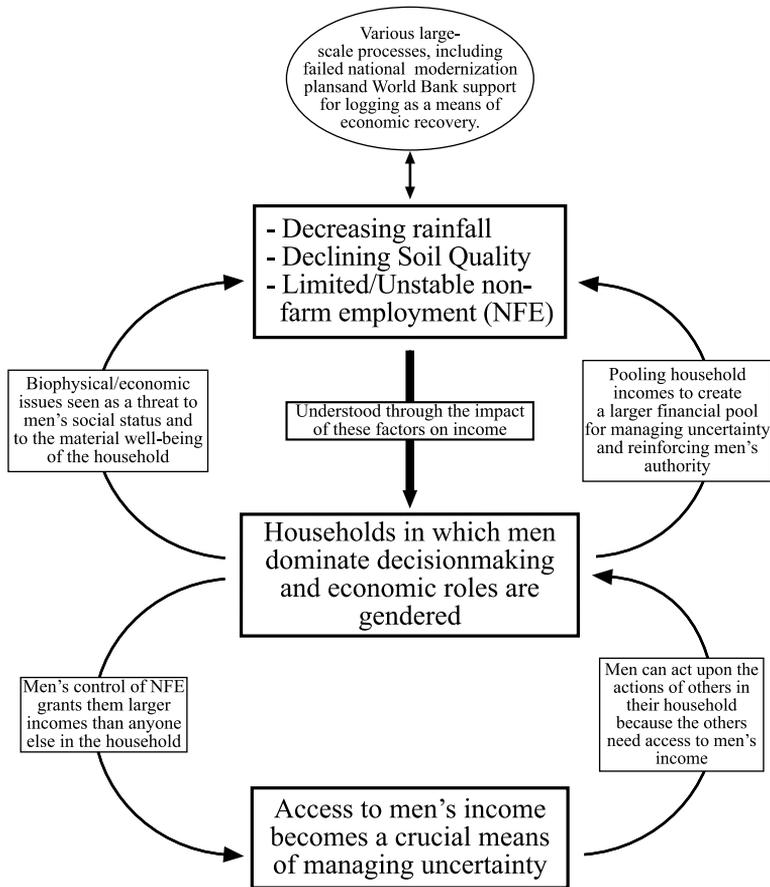


Fig. 4. Following Fig. 2, a schematic of the local decisionmaking and strategy construction that influenced food and livelihood security decisions in Dominase and Ponkrum.

conomic strategy that called for the pooling of household incomes into a single pot, and the means by which men came to control this pot, were called into question by local economic changes.

In response to this situation, many men moved their households to new contexts in which they had access to NFE, and therefore a means to reestablish the previous power/knowledge that granted them control over the incomes of their households (hence the large percentage of the local population that moved from the area). Older men, however, were not likely to be competitive for new jobs in the regional NFE market; consequently migration was not an attractive option (older men commonly make this observation about their own situations today). On the other hand, these older men had control over local farmland through their clans. As a result, they were able to exert control over other households through the assignment of this land, and in so doing also gather income. While income generated through the assignment of

land did not replace the lost NFE, it did provide enough money to partially offset the impact of gradual environmental degradation on farm outputs, and to ensure that these men had a somewhat higher income than the other members of their households. Thus, I argue that the decision to stay in place was a way for these men to manage a threat not only to their material well-being, but also to their social status. The declining food security of these households (only partially offset by the income from the land controlled by the male head of family) cannot be explained through biophysical drivers alone. Nor can it be explained through an acontextual economic rationality. Rather, it is the product of a particular understanding of the local environment and economy, conditioned by the local social structure.

This example illustrates how, by employing an approach such as the one presented in this article, we can examine the local social structure, and the ways in which that structure integrates power, environment and economy into local power/knowledges. This approach moves beyond an ad hoc or inductive means of studying particular sites without giving up an attention to locally specific issues. These locally-specific issues are instead considered through a systematic approach to the social that allows not only for the rigorous incorporation of society, perceptions and local knowledge into the study of food outcomes, but also incorporates the social into the study of food outcomes in a structured manner that allows for cross-contextual comparison.

### **Conclusion: strengths, limitations, and future research directions**

The development of a systematic approach to the role of the social in food outcomes builds upon current understandings of food security that emphasize local perceptions, diffuse strategies, and variable outcomes, giving an explicit conceptual structure to a previously unstructured, empirically-driven literature. The “postmodern” food security presented here makes explicit the ways society plays a role in food outcomes. In doing so, it gives theoretical coherence to diverse empirical observations about food security strategies, such as the often observed case where a local strategy or decision reinforces the existing social structure, even to the detriment of measurable food outcomes.<sup>4</sup> Access to food and secure livelihoods are but means to the end of power in all but the most dire of circumstances, though such dire circumstances might themselves be the products of earlier decisionmaking that placed social power above sustainable food supplies and livelihoods resources.<sup>5</sup>

<sup>4</sup> Moseley (2001) and De Waal (1989) note that households may make short-term sacrifices to maintain the viability of a particular livelihood. What I am arguing here is different, that decisionmakers within a household might cause the household to make both short- and long-term sacrifices to maintain the authority of the decisionmaker, not the viability of the livelihood.

<sup>5</sup> Though I am concerned with the ways in which power conditions local understandings of economic and environmental change in ways that tend to perpetuate existing social hierarchies, successful challenges to the use and abuse of authority occur *within* particular power/knowledges, for example as documented in Schroeder’s (1999) work on market gardens in the Gambia.

In interrogating the link between material conditions and society, the approach to the study of food security presented in this article serves to organize the examination of food outcomes around a central principal without reducing current studies, or future work, to the search for quantifiable, oversimplified drivers. By focusing centrally on local power/knowledge as an entry point into the study of food security strategies and outcomes, the heterogeneity of food security strategies around the world can gain the coherence necessary to inform policy. As I have illustrated through the example of Dominase and Ponkrum, this coherence is not founded on the quantification of resources and strategies via external assumptions, but on perceptions and resources as they are understood within particular systems of power.

While this presentation of a “postmodern” food security is intended to open up new research via conceptual avenues, there are important methodological issues that remain unaddressed that will also contribute to the development of food security as a useful tool in the assessment of development contexts. Most critical among these is the need for alternative means of identifying and modeling insecurity and coping strategies, such as through the development of actor-based models that can deal systematically with qualitative data (for example Ziervogel, 2004). While the “postmodern” approach to food security presented in this article lends conceptual coherence to the study of food outcomes, the way we enter data into this conceptualization will require continuing refinement if we are to realize the full potential of this powerful idea and ensure its enduring policy relevance.

## Acknowledgments

I thank Paul Kingsbury, Greg Carbone, Melanie Feakins, Kirstin Dow, Therese Gleason Carr and four anonymous referees for their comments on and editing of earlier versions of this paper.

## References

- Bryceson, D.F., Kay, C., et al., 2000. *Disappearing Peasantries? Rural Labor in Africa, Asia and Latin America*. Intermediate Technology Publications, London.
- Carney, D. (Ed.), 1998. *Sustainable Rural Livelihoods: What Contribution Can We Make?* Department for International Development, London.
- Carr, E.R., 2002a. *Human Ecological Security in Coastal Ghana: The Social Implications of Economic and Environmental Change in Development Contexts*. Department of Geography, University of Kentucky, Lexington, KY.
- Carr, E.R., 2002b. Managing uncertainty: Environmental and economic security in coastal Ghana, 1970–2000. *Regional Development Dialogue* 34 (1), 20–36.
- Carr, E.R., 2005. Placing the environment in migration: Economy, environment, and power in Ghana’s central region. *Environment and Planning A* 37 (5), 925–946.
- Chambers, R., 1995. *Rural Development: Putting the Last First*. Addison-Wesley Publishing Co., Harlow, UK.
- Chambers, R., 1997. *Whose Reality Counts?: Putting the First Last*. Intermediate Technology, London.

- Chambers, R., Conway, G., 1992. *Sustainable Rural Livelihoods: Practical Concepts for the 21st Century*. Institute of Development Studies, Sussex.
- Clifford, J., Marcus, G.E., 1986. *Writing Culture: The Poetics and Politics of Ethnography*. University of California Press, Berkeley.
- Davis, C.G., Thomas, C.Y., et al., 2001. Globalization and Poverty: Lessons from the Theory and Practice of Food Security. *American Journal of Agricultural Economics* 83 (3), 714–721.
- De Waal, A., 1989. *Famine that Kills*. Clarendon Press, Oxford.
- Derrida, J., 1984. *Margins of Philosophy* (A. Bass, Trans.). University of Chicago Press, Chicago.
- Derrida, J., 1988. *Limited Inc.* (S. Weber, Trans.). Northwestern University Press, Chicago.
- Ellis, F., 2000. *Rural Livelihoods and Diversity in Developing Countries*. Oxford University Press, Oxford.
- Fapohunda, E.R., 1988. The nonpooling household. In: Dwyer, D., Bruce, J. (Eds.), *A Home Divided: Women and Income in the Third World*. Stanford University Press, Stanford.
- Foucault, M., 1972. *The Archaeology of Knowledge* (R. Swyer, Trans.). Pantheon Books, New York.
- Foucault, M., 1994. *The Subject and Power* (J.D. Faubion, Trans.). The New Press, New York.
- Foucault, M., 1995. *Discipline and Punish: The Birth of the Prison* (A. Sheridan, Trans.). Vintage Books.
- García, V.V., 2001. Coffee production and household dynamics: The populus of Ocotal Grande, Veracruz. *Agriculture and Human Values* 18, 57–70.
- Gladwin, C.H., Thomson, A.M., et al., 2001. Addressing food security in Africa via multiple livelihood strategies of women farmers. *Food Policy* 26, 177–207.
- Gupta, A., Ferguson, J., 1997a. *Anthropological Locations: Boundaries and Grounds of a Field Science*. University of California Press, Berkeley.
- Gupta, A., Ferguson, J., 1997b. *Culture, Power, Place: Explorations in Critical Anthropology*. Duke University Press, Durham, NC.
- Guyer, J.I., 1986. Intra-household processes and farming systems research: Perspectives from anthropology. In: Mook, J.L. (Ed.), *Understanding Africa's Rural Households and Farming Systems*. Westview Press, Boulder, CO, pp. 92–104.
- James, A., Hockey, J., et al., 1997. *After Writing Culture: Epistemology and Praxis in Contemporary Anthropology*. Routledge, London.
- Kotzé, D.A., 2003. Role of women in the household economy, food production and food security. *Outlook on Agriculture* 32 (2), 111–121.
- Lyotard, J.-F., 1984. In: Bennington, G., Massumi, B. (Eds.), *The Postmodern Condition: A Report on Knowledge*. University of Minnesota Press, Minneapolis.
- Marcus, G.E., Fischer, M.M.J., 1986. *Anthropology as Cultural Critique*. University of Chicago Press, Chicago.
- Maxwell, D.G., 1996a. Measuring food insecurity: the frequency and severity of “coping strategies”. *Food Policy* 21 (3), 291–303.
- Maxwell, S., 1996b. Food security: a post-modern perspective. *Food Policy* 21 (2), 155–170.
- Maxwell, S., Frankenberger, T., 1992. *Household Food Security: Concepts, Indicators, Measurements*. United Nations Children's Fund – International Fund for Agricultural Development, New York.
- Maxwell, S., Smith, M., 1992. Household food security: A conceptual review. In: Maxwell, S., Frankenberger, T. (Eds.), *Household Food Security: Concepts, Indicators, Measurements*. United Nations Children's Fund – International Fund for Agricultural Development, New York, pp. 1–72.
- Moore, H.L., 1996. *The Future of Anthropological Knowledge*. Routledge, London.
- Moseley, W.G., 2001. African Evidence on the Relation of Poverty, Time Preference and the Environment. *Ecological Economics* 38 (3), 317–326.
- Ruerd, R., Van den Berg, M., 2001. Nonfarm Employment and Poverty Alleviation of Rural Farm Households in Honduras. *World Development* 29 (3), 549–560.
- Schroeder, R., 1999. *Shady Practices: Agroforestry and Gender Politics in the Gambia*. University of California Press, Berkeley.
- Scoones, I., 1998. *Sustainable Rural Livelihoods: A Framework for Analysis*. IDS Working Paper 72. IDS, Sussex.
- Sen, A., 1981. *Poverty and Famines*. Clarendon Press, Oxford.
- Shriar, A.J., 2002. Land Use, Deforestation, and Food Security in Northern Guatemala. *Food Policy* 27 (4), 395–414.

- Umezaki, M., Ohtsuka, R., 2003. Adaptive Strategies of Highlands-Origin Migrant Settlers in Port Moresby, Papua New Guinea. *Human Ecology* 31 (1), 3–25.
- Valdivia, C., Gilles, J., 2001. Gender and resource management: Households and groups, strategies and transitions. *Agriculture and Human Values* 18, 5–9.
- Watts, M., 1983. *Silent Violence: Food, Famine and Peasantry in Northern Nigeria*. University of California Press, Berkeley.
- Ziervogel, G., 2004. Targeting seasonal climate forecasts for integration into household level decisions: the case of smallholder farmers in Lesotho. *The Geographical Journal* 170 (1), 6–21.