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# Food Security: The Elaboration of Contested Claims to a Consensus Frame*

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ABSTRACT This article demonstrates Gamson's claim that behind the apparent agreement implied by ''consensus frames'' lies considerable dissensus. Ironically, the very potency of consensus frames may generate contested claims to the ownership of a social problem. Food security is a potent consensus frame that has generated at least three distinct collective action frames: food security as hunger; food security as a component of a community's developmental whole; and food security as minimizing risks with respect to an industrialized food system's vulnerability to both ''normal accidents'' as well as the ''intentional accidents'' associated with agriterrorism. We show that each collective action frame reflects internal normative variation identified here with Goffman's ''keying'' concept. These keys suggest power differentials in the endorsement or critique of dominant institutional practices. Each frame and associated keys reflect distinct sets of interests by collective actors, such as demands for substantively different applications of science and technology. The prognostic framing of the community food security movement coincidentally holds potential for reducing not only the accidental risks of productivist agriculture but also the uncertainty induced by the risk of terrorist exploitation of those vulnerabilities. The article explores power differentials and variable levels of oppositional consciousness as mechanisms by which keys generate contentious politics within frames while serving as potential bridges between frames. This contested ownership of food security has implications for the associated movements' and organizations' capacity to influence the structure of the agrifood system as well as the broader socioeconomic organization of rural regions.

*All vogue words tend to share a similar fate: the more experiences they pretend to make transparent, the more they themselves become opaque.*

—*Zygmunt Bauman*, Globalization

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## Introduction

As Bauman (1998) suggests, certain words or phrases become vogue because they are thought to capture the ''essential'' meaning of some experiences, events, or conditions. Their appeal often stems from an ability to be used effectively in a wide variety of discursive contexts. Since meaning is nuanced by the discursive context in which it is situated, the same phrase can be used quite differently by various claims-makers. In the frame-analytic vocabulary this quality has been understood as characteristic of an ''elaborate master frame'' that allows for ''extensive ideational amplification and extension,'' allowing ''numerous aggrieved groups to tap into it'' (Snow and Benford 1992). More recently, Snow and Byrd (2007:130) focus on the active process of ''frame elaboration'' as a means of accenting and punctuating certain beliefs, events, or issues in service of a newly articulated ''alignment of events, experiences, and strands of moral codes.'' We analyze this process of elaboration by examining food security as a particularly potent form of master frame that gives rise to several distinct claims to ownership of this ''social problem.''

The use of the term ''food security'' is commonplace in industry, government, academia, and activist circles. However, like ''sustainability,'' ''food security'' has developed multiple meanings. This elaboration is due, in part, to a resonance that does not immediately engender oppositional claims, making it difficult to mobilize opinion in favor of alternatives. Gusfield (1981) and Best (1990) note, respectively, that it would be improbable to mobilize drunk drivers in opposition to anti–drunk driving campaigns or to proclaim the merits of child abuse in opposition to threatened-children movements. Similarly, framing an issue to favor ''food insecurity'' or ''unsustainable development'' is strategically dysfunctional under most conditions, even for those whose goals might effectively lead to objectively insecure or unsustainable outcomes.

Gamson argues that the nonreflexive consent to the values and objectives signified by terms such as ''security'' and ''sustainability'' can be usefully conceptualized as a ''consensus frame.'' Yet Gamson (1995:101) argues that even ''widespread support for the broadest goals of a movement'' can engender opposition to how those goals are translated into ''action imperatives.'' Given the potency of consensus framings, one might expect the capacity to associate food security with the interests of distinct collective actors to be contested. This article demonstrates the contested ownership behind the apparent consensus on food security, arguing that ''food security'' functions as an elaborate master frame encompassing at least three collective action frames. In revealing the diversity of collective action framings that derive from this

potent concept, we highlight the particular capacity of the framing approach to recognize the dynamic processes underlying discursive work in the field of organizations and social movements (Snow and Byrd 2007). For example, Allen's (2004) already excellent analysis of the problematic, uneasy alignment of the discourses of the community food security and sustainable agriculture movements, both grounded in consensus frames, might have been nuanced by the more systematic frame-analytic conceptual apparatus. Elsewhere, Stevenson et al. (2007:51) call for a frame-analytic approach as they point to the need to ''produce master frames with sufficient mobilizing capacity'' to unify the work of resistance, coalition-building, and reconstruction work that must go into transforming the agrifood system. In the same spirit that Allen (2004) recognizes very real and distinct interests behind various movements within this field, our analysis lays bare the practical problems and prospects associated with such ''false prophets'' of unity.

We further argue that each collective action framing can also vary with the construction of what Goffman (1974) called keying, a process that may yield multiple interpretations within each of these collective action frames. In this case, we focus on keys that carry an evaluative function similar to the variability in frames identified by Fiss and Hirsch (2005) in the discourse on globalization. We illustrate how each framing of food security can, on the one hand, carry what we call a ''flat'' keying that reinforces extant dominant interpretations and practices, usually advanced by power holders; and how, on the other hand, that same word or phrase can carry what we call a ''sharp'' keying that offers critical, alternative interpretations and practices usually voiced by challengers. Thus, we link the contentious politics often associated with social movements as a struggle between institutionalized power and challenging ''outsiders'' to the framing process by this specification of keying.

These food security frames and keys share some elements, and though they are distinguishable, each is used concurrently in a rich political and ideological field. Variation between and within collective action frames associated with food security is fundamentally related to alignments with distinct interests in a multiorganizational field. These interests are further shaped by the specific effects of the globalization, and resistance to that globalization, of food production, distribution, and consumption. This variability is also significant insofar as each food security collective action framing demands distinct forms of scientific research and technological development. Thus, the framings and their subsequent keyings have prognostic implications for the relations of agricultural production, food consumption, and the social organization of rural space.

We first examine the framing of food security associated with hunger and malnutrition, then a second food security framing that elaborates community food security. The third framing we analyze is associated with the risk of ''normal accidents'' (Perrow 1999) as well as the ''intentional accidents'' that agriterrorism presents to industrialized agricultural production. We explore sharp and flat keys within each collective action frame. Finally, we note that shared keys may function as a bridging mechanism between boundaries of distinct collective action frames, for example, the prognostic framing of the community food security movement may serve a latent function as a means of countering agriterrorism.

More than a decade ago, Maxwell (1996:155) identified three ''main shifts in thinking about food security'': ''from the global and the national to the household and the individual; from a food first perspective to a livelihood perspective; and from objective indicators to subjective perception.'' While Maxwell labeled these ''paradigm shifts'' (1996:156), we suggest that their differentiation is not only somewhat less humble but that each of these ''shifts'' might be seen as distinct dimensions of a single shift toward an individualization that privileges a subsequent affinity with, or focus on, livelihoods and subjectivity. The shifts identified by Maxwell are not only substantively different from the collective action frames identified here, but his analysis also points to an evolutionary displacement of prior forms. We argue that each of the collective action frames identified here remain in a field of contested ownership of the concept, reflecting variations in power and shifts in political opportunity structures.

## Conceptual Development: Framing and Keying

Benford and Hunt (2003) contend that social problems are constructed in a ''social problems marketplace'' where insiders have a relative abundance of claims-making resources and strong connections to policymakers. Social movement organizations, in contrast, are often characterized as outsider claims-makers who have more difficulty competing because they have fewer resources and weaker links to policymakers. Discussing the interactions between and among insiders and outsiders, Benford and Hunt (2003) reintroduce Goffman's (1974) notion of ''keying'' to the framing vocabulary. Keying was originally described by Goffman as ''a central concept'' in frame analysis. However, the concept has been neglected in the framing literature. Keying refers to ''the set of conventions by which a given activity, one already meaningful in terms of some primary framework, is trans-

formed into something patterned on this activity but seen by participants to be something quite else. … A rough musical analogy is intended'' (Goffman 1974:43–44). More recently, Snow (2007:385) has reiterated the significance of ''keying'' as a concept that lends a dynamic potential to primary frames.

Consensus frames and potent master frames, such as food security, may generate not only multiple collective action frames but also distinct keyings. Following Fiss and Hirsch's (2005:35) conceptualization of the evaluative or normative function as ''positive,'' ''neutral,'' and ''negative'' frames, we adapt Goffman's concept of keying by developing the concepts of sharp and flat keys. In analyzing the discourse of globalization, Fiss and Hirsch (2005) use the concept of negative frame to connote a framing of crisis and hence a collective action framing that engenders resistance to globalization. A neutral framing of globalization views it as a natural and inevitable development. A positive framing punctuates the benefits afforded by the process. To distinguish this normative function from other framing functions while recovering Goffman's keying metaphor, we define a sharp keying of a frame as critical, suggestive of crisis and a challenge to dominant institutionalized social and discursive conventions. In contrast, a flat keying of that frame tends to reinforce dominant institutionalized practices. Aside from the obvious mixed metaphor of frames and keys, another limit of Goffman's analogy lies in its dichotomous quality. In fact, a range can be found between the sharp and flat keys. Indeed, departing further from Fiss and Hirsch, we note that keys need not reflect polarities at all. Hence, the analogy should be treated as merely suggestive of tendencies, that is, treating frames as ''sharpened'' and ''flattened'' maintains the frame-analytic interest in the dynamic quality of framing activity. Fiss and Hirsch's (2005) ''neutral'' frame suggests an equivalent ''natural'' key as the ''norm'' to which sharp and flat keys are related. However, the natural, inevitable quality of a neutral frame suggests an impotent collective action frame since a sense of inevitability most likely will not invite exceptional activist challenges.

The analysis of boundaries, in some ways, parallels the frame-analytic approach utilized here. Lamont and Molnar (2002:168) define symbolic boundaries as ''conceptual distinctions made by social actors to categorize objects, people, practices, and even time and space. They are tools by which individuals and groups struggle over and come to agree upon definitions of reality.'' Frames, then, even metaphorically, do boundary work in the social construction of conceptual demarcations that enable and constrain collective action. Two points made by Lamont and Molnar regarding the study of boundaries are particularly intriguing for our present purposes. First is their claim (168) that

''focusing on the boundaries themselves may generate new theoretical insights.'' This suggests the hypothesis that, due to the contestation for ownership of the same concept, the boundaries of a consensus frame are relatively porous, giving rise to multiple collective action frames. Second is their claim for a need to explore ''whether identities are defined in opposition to a privileged 'other' or in juxtaposition to a number of possible 'others': Symbolic boundaries may be more likely to generate social boundaries when they are drawn in opposition to one group as opposed to multiple, often competing out-groups'' (174). Thus, our concept of sharp and flat keys may suggest that opposing identities are stronger *within* a collective action frame and, further, that keys may function as bridges *between* collective action frames, for example, an alignment of sharp keys across distinct collective action frames.

## Food Security: The Hunger Frame

> *By widening the use of new high-yield bio-crops and unleashing the power of markets, we can dramatically increase agricultural productivity and feed more people across the continent. … European governments should join—not hinder—the great cause of ending hunger in Africa.*
>
> *—George W. Bush, May 21, 2003*

The initial modern framing of food security as a concern with hunger and malnutrition derives from Malthusian assumptions. McCalla and Revoredo (2001) describe this debate as ranging from pessimists forecasting doom to optimists who argue that creative technology can continue to provide enough food for ever-larger populations. Despite the contrasting views, for many participants this debate remains within a broad framing of food security as encompassing three dimensions identified by Busch and Lacy (1984) as: availability, accessibility, and adequacy. ''Availability'' refers to having enough food to sustain the lives of the entire population. They argue that this sense depends on a system that (1) can produce enough food in the short run, (2) is sustainable in the long run, (3) does not place undue risks on agricultural producers, and (4) responds rapidly to disruptions in the food supply due to natural disasters, civil disturbances, environmental imbalances, or other causes. ''Accessibility'' refers to a food supply that is not limited to effective demand. For Busch and Lacy (1984:2) ''simply making food available is not enough; one must also be able to purchase it.'' ''Adequacy'' refers to the provision of balanced diets for the nutritional needs of various segments of the population and implies that food is free from disease and toxic

substances. Busch and Lacy (1984:2) contend that a ''secure food system should not impose undue social, economic or health costs'' on any particular segments of the population. This encompassing and abstract definition serves well to exemplify an initial master framing of food security. However, the elaboration and articulation of this master frame extended and amplified certain elements in a transformative process of counterframing and reframing by various collective actors with sometimes convergent, and sometimes divergent, interests. This process contributes to a ''repertoire of interpretations'' (Mooney and Hunt 1996) that reflect contrasting sharp and flat keys of a master framing of food security as a problem of hunger.

**Hunger: The Flat Key**

The specific collective action framing of food security around hunger and malnutrition has focused on less-developed nations. The Food and Agricultural Organization of the United Nations (FAO) (2003) approximates Busch and Lacy (1984) while identifying four major components of food security: stability, availability, access, and utilization. The FAO's Committee on World Food Security (1998) operationalized food insecurity with the most readily measurable variables, such as the proportion of population that is undernourished, per capita gross national product, the share of agriculture in the gross domestic product, food trade balances, food price trends, food supply measured in calories per capita, and so on. Similarly, a World Bank ''Summary of Issues'' (2001:1) reduces food security to a measurement of ''daily calories and grams of protein per capita.'' In such statistical representations, food insecurity among a significant minority within an otherwise well-fed (if not overfed) population in the advanced capitalist societies is often obscured. In short, knowing that there is enough food to go around does not mean that the food does go around.

This diagnostic framing, premised on a ''global food supply'' (FAO 1998:10), facilitates the articulation of a ''free trade'' prognostic framing. A World Bank analysis provides some pros and cons of trade liberalization, noting that this might render food more available but no longer accessible (affordable). However, that document concludes that global tariff reductions and elimination of export subsidies ''will have a positive (albeit small) effect on reducing food gaps and food insecurity'' (World Bank 2001:2).

The United States, especially the Bush administration, has been a vocal advocate of trade liberalization. The United States contends that trade liberalization along with biotechnology as the ''Second Green

Revolution'' is something of a panacea that will increase food security through greater productivity while also decreasing environmental problems associated with chemical usage and deforestation (Hindmarsh 2003). At the ''World Food Summit: Five Years Later,'' the U.S. State Department (2002) claimed that ''biotechnology could help decrease hunger, provide medical benefits to the poor and promote sustainable farming.'' Secretary of Agriculture Ann Veneman's position was that the U.S. pursuit of ''an aggressive trade agenda'' in the World Trade Organization (WTO) could enhance poverty-reduction efforts (McConnell 2002). This flat key of the hunger frame either explicitly or implicitly (through the benign neglect of a challenge) endorses the forces of globalization. Not surprisingly, this framing predominates in the claims of transnational corporations, the World Bank, the United Nations, the U.S. State Department, USDA scientific and technical interests, and other agents of globalization.

An aspect of this flat keying of the hunger frame is the individualization of collective action. This is exemplified by solutions in which individual citizens of the developed world are encouraged to ''adopt'' a poor child from the so-called Third World. Organizations, such as Feed the Children, Love a Child, or Hungry Children propose to ''assist one child at a time'' (e.g., www.hungrychildren.com; see Feed the Children 2004) by sending enough money to feed and perhaps educate an individual child. Feed the Children, for example, sends the sponsor ''an individual history of your special child, a photograph of your child, and a brief description of your child's country'' (www.christianity.com; see Feed the Children 2004). Both the hungry child and the donor are presented as a radically individualized solution to the global problem of hunger.

**Hunger: The Sharp Key**

In contrast, and partly in response, to diagnoses of food insecurity as too little global trade and too little high technology, the dialogue within the hunger framing generated an oppositional diagnosis and remedy. Amartya Sen's *Poverty and Famines* (1981) was among the first to clearly and influentially articulate a sharp keying of the hunger framing by challenging—though Sen's challenge did not go uncontested (e.g., Qudrat-I Elahi 2006) —the simplistic neo-Malthusian association of population growth and famine. Instead, Sen focused on the variable capacity of people to access food: ''Starvation is the characteristic of some people not *having* enough food to eat. It is not the characteristic of there *being* not enough food to eat ''(Sen 1981:1, emphasis in original). More recently, in this vein, Devereux (2001:246) wrote:

''Food insecurity affects people who cannot access adequate food (e.g., because of poverty) irrespective of food availability—a famine can occur even if food supplies are adequate and markets are functioning well. … [T]here is no technical reason for markets to meet subsistence needs—and no moral or legal reason why they should.'' Sen's position (1981:7) that starvation ''is a function of entitlements and not of food availability as such'' contrasts with the flat key's confidence that a free market will assure food security.

In relationship to practical action in the field of North American social movements, this sharp key resonated most influentially in *World Hunger: 10 Myths* (later reprinted in 1998 as *World Hunger: 12 Myths*) by Frances Moore Lappe and Joseph Collins (1982). This framing amplifies beliefs that the productivist model of agriculture is unsustainable and violates environmental values as well as norms of social justice. Extending Sen, Moore Lappe and Collins (1982:7–17) dismantle myths such as the neo-Malthusian claims that: ''People are hungry because of scarcity''; that ''Hunger results from overpopulation''; that ''[t]o solve the problem of hunger the top priority must be on growing more food''; that food security ''can come only at the expense of the ecological integrity of our food-producing resources.'' This sharp key focused not only on the transformation of social structures toward more democratic and egalitarian forms but also on prioritizing national food self-sufficiency with low-cost, low-technology, labor-intensive forms of production. Among their ''Food First Fundamentals'' are ''Hunger is only made worse when approached as a technical problem'' (51) and while ''Export agriculture is not the enemy … agriculture must become, first and foremost, a way for people to produce their food and livelihood and secondarily a possible source of foreign exchange'' (51). This keying has also focused on the role of women in the development process, with subsequent attention to household labor and relations of reproduction.

The Institute for Food and Development Policy (Food First) is an influential organization that continues to sharpen this key directly by challenging, for example, the contention that biotechnology will ensure food security, protect the environment, or reduce poverty (Altieri and Rossett 1999). The Food First framing reflects an alignment of a network of organizations in multiple fields such as those directly concerned with hunger issues (e.g., Bread for the World, FIAN ORG, Primal Seeds), sustainable agriculture advocates (e.g., National Campaign for Sustainable Agriculture, GRACE Factory Farm Project, National Catholic Rural Life Conference), biotechnology ''watchdogs'' (e.g., Council for Responsible Genetics, the Institute for Agriculture

and Trade Policy, the Research Foundation for Science, Technology and Ecology), environmental organizations (e.g., World Resources Institute, Earth Island Institute), and human-rights activists (e.g., Amnesty International, the Catholic Church's Center for Concern).

Nevertheless, the flat key of food security as hunger has not been displaced. Rather, it persists in the contested terrain of the public-problems marketplace. The mainstream flat key tends to be associated with high technology, globalizing, and individualizing tendencies; while the sharp key is more critical, oriented toward regional self-sufficiency, and committed to low-technology solutions. This sharp key has continued as an influential position at the global level, perhaps most effectively in the growth of La Via Campesina's ''Food Sovereignty'' movement oriented toward enhancing more localized control over food and agricultural policy. This key has also been sharpened and extended by reminders that food insecurity, especially in terms of access, is a persistent problem in developed societies. This extension is also aligned with postmaterialist values often associated with new social movements that share antiglobalization and environmental concerns. The amplification of the ''community'' value in this extension transforms the hunger framing of food security to the extent that we can now discern a distinctive ''community food security'' framing.

## Food Security: The Community Framing

> *The CFSC's definition for CFS … was developed by simply inserting "in a community" to a commonly-cited definition for food security per se, and that has held as the prevailing definition, at least in this country. This implies that "community food security" is similar to conventional "food security", but in practice these are quite different.*
>
> *—(Hugh Joseph, Community Food Security Coalition)*

In the 1990s, the community food security movement gained momentum with a focus on the development of local or regional food supply systems that accented environmental concerns from a sustainability standpoint. This development shared an affinity with the sustainable agriculture movement's broader violation of the traditional boundary between agricultural and environmentalist interests. As with the flat and sharp keys struck in the hunger framing, there is a sharp key reflecting a radical commitment to locale and a conscious resistance to globalization. There are elements of strident criticism of industrial agriculture, advocacy of organic agriculture, and promotion of vegetarian diets (Community Food Service Coalition [CFSC] 2002). The flat key is perhaps best characterized

by USDA's Community Food Security Initiative, in which there has been, to this point, little effective structural challenge to the dominant tendencies of the agricultural political economy.

**Community: The Sharp Key**

The bridging of the sharp key of the hunger frame with the sharp key of food security in the community framing is exemplified by the framing activity of the Community Food Security Coalition. The CFSC (1999: 1, 5) reflected on five years of the organization's existence with a discussion of its successes (such as its influence on USDA's Community Food Security Initiative in 1999) and on the proliferation of the term ''community food security,'' while noting its multivocality has led to ''multiple meanings, creating confusion as to its true significance.''

CFSC describes itself as a non-profit coalition of more than 250 organizations:

> … dedicated to building strong, sustainable, local and regional food systems that ensure access to affordable, nutritious, and culturally appropriate food for all people at all times. We seek to develop self-reliance among all communities in obtaining their food and to create a system of growing, manufacturing, processing, making available, and selling food that is regionally based and grounded in the principles of justice, democracy, and sustainability (Community Food Security Coalition [CFSC] 2004).

Joseph (1999:3) contends that while ''prevailing food security policies and programs in the U.S. focus mainly on individual/household levels of need'' community food security stresses access and availability ''at the community level.'' The objectives of the movement extend beyond merely ''preventing hunger'' and involve enhancing community health: strengthening local economy, revitalizing neighborhoods, conserving natural resources and protecting the environment, developing just, equitable social processes and outcomes, and preserving cultural heritage (Pothukucki et al. 2002:7). This keying suggests a contestation, if not a reversal, of Maxwell's (1996) suggested evolution of food security toward an increasingly individualized conceptualization. How this movement seeks such security continues to evolve, just as Pothukuchi et al. (2002:5) claim with regard to the very definition of community food security. However, there is a value amplification of inclusiveness and collaboration of diverse community actors in a process that challenges ''top down or expert-based decision-making and program delivery'' envisioning holistic sustainable development (Pothukuchi et al. 2002:6). The concrete forms

by which such objectives are said to be met include cooperative ownership of retail outlets, various forms of direct marketing, urban agriculture, community gardens and inner city greening projects, community nutrition education, and community-driven agricultural research (Pothukuchi et al. 2002:24). Maretzki and Tuckermanty (2007: 335) also noted the USDA-sponsored Community Food Projects program that serves as a ''national incubator in which comprehensive, but relatively small scale, food system innovation is taking place community by community.'' This program matches local funding to emphasize nutritional needs of lower-income populations and provides potentially promising programs adapted to local conditions and issues.

By locating the unit of analysis (community as the object of transformation) between the global food system and the individual household, this meso-level approach confronts the (dys)functional compatibility between the relative powerlessness of individualized consumption and the overwhelming power of the global marketplace where transnational food corporations can boast of being ''supermarket to the world.'' Community food security punctuates the root cause of individual household food insecurity as systemic, that is, an aspect of the global food system that the flat key in the hunger frame claims can solve the food insecurity problem. The CFSC (Fisher 2002) claims that the community food security movement is ''squarely within the anti-globalization community'' and is ''building on the concept of national and household food security used in the Global South.''

**Community: The Flat Key**

USDA provides a broad definition of food security in the familiar flat key of the hunger framing. However, when addressing ''*community* food security,'' USDA echoes the CFSC diagnostic framing claiming an interest in better coordinating and integrating policies and programs that parallel CFSC's prognostic framing that punctuates environmental concerns, direct marketing, and social cohesion (U.S. Department of Agriculture, 2008). This change in the unit of analysis from global food system (as in WTO visions) to community food systems alters more than the spatial focus. It also alters the sociological focus from the anonymous trade of a global division of labor to the exchange between members of a community through direct contact with one another, as in farmers' markets, community gardens, community supported agriculture organizations, or community kitchens, which according to USDA's Community Food Security Initiative were promising means of eliminating gaps in community food systems.

However, there is a long history of activist and academic claims that the vast majority of USDA's resources are devoted to institutions and technologies associated with globalizing, monocultural tendencies in agriculture that are incompatible with a collective action framing that emphasizes diversified, community-based food systems. Thus, what must be an uneasy political positioning of this initiative within USDA is itself a very interesting issue, deserving of more extensive analysis than can be provided here. Significantly, and not surprisingly, this initiative, though it apparently still exists in principle (see USDA 2007), was largely unfunded under the Bush administration (A. Fisher, personal communication, 2003).

To use Wright's (1978) phrase, there are ''limits of functional compatibility'' between the sharp, critical key and the institutional embeddedness of USDA. This highlights Steinberg's (1999) point that the structural location of actors limits the available repertoires of interpretation, and subsequently limits strategic choices. USDA's larger institutional interests may lead to rhetorical support of this frame, while empirically constituting collective inaction. While certain programs and individual actors within USDA may have provided moderate support to the community food security movement, the overall structural position of USDA instead has functioned largely to facilitate an agricultural and food production system grounded in a highly technical and productivist logic that contributes to the construction of a third framing around risk. This reminds us that keyings are, as noted above, not so much either/or dichotomies as tendencies toward sharpening and flattening.

## Food Security: The Risk Framing

> *In many ways, attacks on plants and animals may be easy to mount. Agricultural crops and animals are often grown, housed, or grazed in relatively high-density and uniform conditions, which make the spread of disease and infestations more rapid and effective. … Genetic homogeneity, often desirable in agriculture to optimize yields or nutritional content, adds to the vulnerability of crops and animals to epidemics.*
>
> —(*National Research Council*, Countering Agricultural Terrorism)

Among others, Beck (1992) has argued that we now live in a ''risk society.'' Kostov and Lingard (2003:465) contend that ''The rise of the concept of *risk* is related to the provision of *security*. Security is a way of avoiding some risks and accepting others in order to achieve desirable outcomes.'' Kostov and Lingard incorporate Knight's (1921) distinction between *risk* and *uncertainty* as a basis for understanding ''risk

management.'' Thus, risk is ''the case in which there exists an underlying (objective) probability distribution of possible outcomes, and uncertainty [is] the case where no distribution exists'' (Kostov and Lingard 2003:464). *Risk management*, then, is driven by the idea of control: ''shaping the problem and transforming it so that its characteristics are altered in favorable directions'' (467). That transformation demands a simplification that excludes ''the subjective perception of the environmental uncertainty'' such that rational decision making can take place (467). Kostov and Lingard (467) note that, as conditions approach uncertainty, only arational behavior is possible, that is, ''one does not have sufficient knowledge to justify any given course of action.''

Nestle (2003:16–17) distinguishes two cultures of evaluating food safety risk: ''science-based'' and ''value-based.'' According to Nestle (19–22), the science-based interpretive repertoire ''balances risk against benefit and cost,'' counting and calculating cases, severity of illnesses, hospitalizations, deaths, costs of the risk, benefits of the risk, and costs of reducing the risk, and it works on the proposition ''nothing ventured, nothing gained'' in establishing reasonable certainty of no harm. The value-based repertoire evaluates ''risk against dread and outrage'' and assesses whether risk is voluntary or imposed, visible or hidden, understood or uncertain, familiar or foreign, natural or technological, controllable or uncontrollable, mild or severe, fairly or unfairly distributed (21). The value-based model works on the proposition ''look before you leap,'' as reflected by the European Union's precautionary principle, that is, a demonstration that foods are safe before they are marketed.

Nestle (18) quotes the rather succinct summary of Philip Handler (former president of the National Academy of Sciences): ''The *estimation* of risk is a *scientific* question. … The *acceptability* of a given level of risk, however, is a *political* question'' (emphasis in original). The ultimately political character of risk assessment is further elaborated by FDA commissioner David Kessler's comment on the science-based approach: ''Weighing risks against benefits sounds great, but the truth is there is no magic formula, especially when the risks are taken by one group and the benefits by another'' (quoted in Nestle 2003:21). These notions associated with risk provide the conceptual basis for understanding the sharp and flat keys generated by collective actors concerned with food security as risk.

**Risk Management: The Flat Key**

The prognostic framing of the hunger frames' flat key involves a high-technology, capital-intensive food system that is ever more highly

concentrated and centralized at production, processing, and retail levels. In Perrow's (1999) terms, the system moves toward ever tighter coupling and more complex interaction between components. This has, in turn, generated a heightened sense of risk at each level. Cochrane (1979) argues that there is a ''technological treadmill'' for individual farmers in the constant adoption of new technologies as a means of continuously increasing productivity. Similarly, we suggest a parallel ''risk treadmill'' insofar as most technological developments designed to increase production tend to generate new risks, even when these innovations are designed to address the risks engendered by previous innovations. This dialectic of technological development contributes to the practice of risk management. One means of managing such risks is known as Hazard Analysis and Critical Control Point (HACCP), in this case, the use of advanced technology to detect pathogens or other dangers in the food supply by focusing on ''critical control'' points in the production process (Nestle 2003:67).

Thus, the concentration and centralization of food production has, in turn, generated the development of science and technology associated with assuring food safety. In itself, this is merely an aspect of the ''adequacy'' of food security. However, the very determination of what is ''safe'' food has itself become increasingly contested (Nestle 2003). This conflict is quite apparent in the most technically advanced realm of this model: the development of biotechnology and genetically modified organisms (GMOs). The debate on the safety of GMOs and biotechnology is wide ranging. Questions are raised not only about whether such foods are safe for human consumption but also whether such crops are ecologically threatening to the existing food production system through, for example, the unintentional mixing of genetically modified organisms with traditional varieties (adventitious presence), or the generation of herbicide- and pesticide-resistant weeds and pests.

The flat key of food security in the risk frame reflects a confidence that advanced science and technology can regulate the risks or dangers that science and technology bring to food production and processing. For example, if centralized processing and long-distance, even global, transport of foods lead to a need for longer shelf life, then chemical preservatives or irradiation treatment can render these foods ''safe'' for consumption; if pesticide residues threaten human health, then new biotechnologies can eliminate the need for pesticides by inserting pest-resistant genes directly into the plant (Nestle 2003). However, there is awareness that accidents may take place within this complex system of production and processing. Recent outbreaks of hoof-and-mouth and BSE (mad cow) diseases outside the United States drew dramatic

attention to the potential danger to human health as well as the health of the agricultural and rural economy (Donaldson, Lowe, and Ward 2002).

To some extent, the credibility of science itself is rendered suspect as Loseke (2003:51) notes regarding the changing role of scientific expertise in the construction of social problems. Nevertheless, this flat key claims that science and technology can resolve those safety problems that might emerge in the increasingly complex food chains. Further, the science-based repertoire interprets any problem as merely the consequence of an accident, the sort of accident that we in the risk society are increasingly well prepared to accept as ''normal'' (Perrow 1999), in this case, as part of the cost of agricultural productivity. Thus, we refer to this flat key of food security risks as *accidental* with its implication that accidents and the known probability distribution of outcomes can be subjected to risk management strategies.

**Agricultural Terrorism: The Sharp Key**

In post 9-11 America, it is impossible not to recognize the emergence of a new key in the risk framing. Specifically, the present danger to our food production and processing system can no longer be framed merely as the risk of the accidental. We must now consider framing food safety in relationship to what we might call: ''intentional accidents,'' that is, the risk of terrorist attacks on our agricultural and food systems. It would seem that such a framing would be a direct manifestation of the tremendously increased awareness of terrorist threats. For instance, former Secretary of Health and Human Services Tommy Thompson candidly stated: ''For the life of me, I cannot understand why the terrorists have not attacked our food supply, because it is so easy to do'' (Halweil 2004). Such concerns have certainly been amplified by those attacks and America's response. However, attention had been directed at the possibility of agricultural bioterrorism prior to September 2001.

In 1998, USDA-ARS, the FBI, FMI Scientific Laboratory, the Department of Defense Veterinary Service Activity, the American Veterinary Medical Association, and Louisiana State University held the International Conference on Food and Agricultural Security. The focus was on possible terrorist attacks on the U.S. food system, that is, the intentional creation of food insecurity. Among the more chilling presentations was by Kenneth Alibek, the former first deputy chief of Biopreparat, the civilian branch of the Soviet Union's antipersonnel biological weapons program. Alibek contended that the Soviet program, code-named ''Ecology,'' was composed of three categories: anticrop, anti-livestock, and combined

antipersonnel/anti-livestock. Alibek (1999:19) concludes that much of this work was halted because ''while suitable for terrorist use and particularly for disrupting the target country's economy'' such weapons were not seen as useful in ''the global war scenario.'' According to Alibek (2000:178), the ''size and scope of the program were enormous'' employing over 60,000 people, producing ''hundreds of tons of various agents annually,'' stockpiling ''anthrax weapon formulation'' along with ''dozens of tons of smallpox and plague.''

In 2000, Anne Kohnen published ''Responding to the Threat of Agroterrorism: Specific Recommendations for the United States Department of Agriculture.'' Kohnen (2000:11) notes the ''two most common'' possible sources for terrorist attacks on agriculture as being ''anti-GMO'' activists who have ''attacked university and corporate research sites in at least 18 incidents throughout seven states in the past year'' and ''the profit motive,'' through which, for example, the introduction of a pathogen could trigger export restrictions of immediate benefit to global competitors, and ''people who speculate on the futures markets could profit from their knowledge of a pending change in U.S. prices.''

More recently, the National Research Council (NRC) report *Countering Agricultural Bioterrorism* (2003) reflects this sharpened, crisis-ridden keying of agriterrorism after 9–11. Though the NRC had convened the committee under the auspices of USDA-ARS prior to 9–11, the committee was still in deliberation at the time of the attack. The final report reflects a strong sense of food ''insecurity'' with respect to the heightened concerns about terrorism from exogenous, rather than domestic, forces. Indeed, the ''key finding'' of the report is that ''The United States is vulnerable to bioterrorism directed against agriculture'' (NRC, 2003:95).

Countering the keying of the risk frame as accident, the report argues that ''A system designed for unintentional threats is not sufficient for defending against intentional threats'' (41). The significance of this distinction is also reflected in the food industry framing. Representing the National Food Processors Association, Applebaum (2002) distinguishes ''food safety'' from ''food security'' as reducible to the difference between accidents and intentional threats: For Applebaum, food security deals with intentional threats. Food safety deals with accidents. Significant here is that both other framings of food security in terms of hunger and community are absent. Food insecurity is associated with intentionality.

Of course, intentional acts may masquerade as accidents. The fact that agriterrorist attacks may first appear merely as accidents renders rapid response more difficult. Thus, it is important to further distinguish between those bioterrorist acts that can be immediately

recognized as intentional actions and those that are characterized by a lengthy time lag between the intentional introduction of a pathogen and its detection. There seems to be a consensus that considerable economic damage could be done by individuals or groups with limited technical knowledge or skills and that risks to human health are minor relative to the possibility of enormous economic costs (NRC 2003:3).

In a reversal of late-twentieth-century tradition for Republicans to deregulate food safety and inspection, the Bush administration pushed for increased funding to strengthen food safety and agricultural protection systems, some of which now comes under an increasingly well-funded ''Food and Agriculture Defense Initiative.'' This has led to increased scrambling among academic/scientific research interests and intergovernmental agency conflict (e.g., between USDA and FDA) over access to those funds as well as calls to consolidate all agencies monitoring the safety of the food system. Secretary of Agriculture Ann Veneman in 2003 noted that ''The President cares deeply about ensuring a strong food safety system and the protection of agriculture against potential threats'' (USDA, Office of Communications 2003:1–2). The USDA press release noted its affiliation with the Office of Homeland Security and rather uncharacteristically referred to its role in protecting the food and agricultural sector from potential threats. Ordinarily, under the hunger and community food security framings, the USDA rarely raised the specter of, nor drew attention to, the possibility of such ''threats'' to the food system.

## Discussion

This analysis has demonstrated the fluid and contested nature of the consensus frame: food security. Table 1 reflects the diverse set of actors, policy positions, and interests grounded in this single frame. Food security can be framed as hunger and played in a flat key consistent with insider interests in continued processes of globalization. Indeed, among the most powerful proponents of this view are the U.S. State Department, the USDA, the World Bank, the United Nations, and some global-level relief agencies. The scientific and technological directives associated with this frame's diagnostic function tend toward dependence on global capital resources and their fundamental interests in reproducing or intensifying the existing relations of global food production and consumption (e.g., Buttel 2006; Lyson 2000; McMichael 2007; Wright and Middendorf 2008).

Ironically, this globalizing character is also associated with an individualistic diagnostic framing in which the problem of hunger is

**Table 1. Diversity of Actors, Policies, and Interests Exemplifying Contested Claims to Food Security**

| Collective Action Frame | Keying | Exemplary Actors | Key Policy Positions | Typical Interests |
|---|---|---|---|---|
| Hunger | Flat | World Bank, WTO, UN-FAO,USDA, State Department, transnational corporations, some charities | Free trade, support for genetic-engineering technology, individualized ''adoption'' of poor children | Increased productivity, increased trade, globalization, focus on less developed nations |
| | Sharp | Food First, sustainable-agriculture movement, environmentalist movement, biotech ''watchdog'' groups, human-rights groups | Land reform, support for low-cost technology, labor-intensive production practices, empower women in production decisions, environmental protection | Socioeconomic equalization, democratization, land reform, antiglobalization, food sovereignty, focus on less-developed nations, social justice |
| Community | Flat | USDA | Subsidize local production and poverty-amelioration programs | Legitimation of otherwise productivist and globalizing agenda |
| | Sharp | Community Food Security Coalition, sustainable agriculture movement, family-farm advocates | Increase direct marketing, farm to school distribution, farmers markets coupons, community food projects, advocate for healthy diets | Increase ''civic agriculture,'' local food systems, focus on developed nations, reinforce traditional and indigenous production practices, local knowledge |
| Risk | Flat | USDA, FDA, consumer groups, food-industry production and marketing associations | Subsidize research on risk-assessment technology | Safe food, risk management, control of normal accidents, science-based management |
| | Sharp | Homeland Security, FBI, Department of Defense | Subordinate and consolidate food safety regulation to homeland security | Counterterrorism, law enforcement, control of ''intentional accidents'' |

to be solved with the adoption of new technologies by entrepreneurial producers willing to take enough risk in the global marketplace to increase their productivity in the pursuit of profit, with the alleviation of hunger presumably following as a latent function. This has been the promise of agricultural science and technology for more than a century, with the Green Revolution now being succeeded by the latest in genetic engineering, even while agricultural policy in the developed core has commonly focused on subsidizing reduced production. At the level of consumption, too, the problem tends to be standardized and individualized. Employment-growth strategies, nutrition education, and detraditionalization of indigenous eating habits (the substitution of infant formula for breast milk as a most striking case) exemplify the lack of attention to structural conditions that reproduce the problem of hunger. There is perhaps no better example than those solutions based on ''adoption'' of poor children in less-developed societies by well-intentioned individuals in the more developed societies in exchange for the possibilities of receiving letters of gratitude and a sense of having done something to make the world a little bit better, child by child.

By advocating the redistribution of productive assets, the Food First organization exemplifies the outsider challenge to food-assistance programs that fail to contest existing local and regional power structures. This sharpened key of food security as hunger counters both the globalizing tendencies as well as the individualizing tendencies of the flat key. Food First exemplifies this prioritization of domestic production for domestic consumption over the export agriculture that is the engine of agricultural globalization. Collective action focuses on infrastructural development at a community or regional level with the relationship between production and consumption being shaped more by the visible hand of community relationships than by the invisible hand of global market forces. In opposition to the flat key's view of traditional ways of production as an obstacle, this framing instead considers indigenous ways and traditions as holding potential for resolving local food security and often attributes the failure of such means to the intervention of global market forces.

Sharing an ''oppositional consciousness'' (Mansbridge 2001) that challenges both individualization and globalization, the sharp key of community food security aligns with the sharp key of food security as hunger. This alignment is consciously articulated by its spokespersons and reflexively adapts lessons drawn from the developing world and problematizes socio-spatial relationships of food production and consumption in the developed societies. Both of these sharp keys also reflect a self-consciousness of their outsider status.

Not surprisingly, USDA's meager attempt to develop a community food security program is being swamped by support of the development of biofuels and a bioeconomy in which food security is being sacrificed for energy security (a point we will consider further below). USDA has long been implicated in the detraditionalization of the farmer, pushing aside such practices in the process of agricultural modernization. The USDA bureaucracy is organized to individualize problem solving. The history of our agricultural policy and the absence of coherent rural policy are testimony to this function. There is no reason to expect that these insiders' substantive and formal organizational interests, embedded in decades of productivist technology and globalizing forces of export agriculture, would give way to an alternative technology developed largely outside this system and delivered with an orientation to community-level interests.

For its part, CFSC in its prognostic framing remains focused on advancing its agenda through Washington. Perhaps a sharper keying of community food security could, at most, hope to neutralize the bias of federal subsidization of agricultural concentration and centralization. Hinrichs and Barham (2007:350–51) suggest the possibility that ''lack of substantial government support has stimulated self-reliance at the grassroots level.'' This reflects an even sharper keying, the contention that community food security can only be accomplished as a ''third way'' in civil society: *without* political dependence on a state that has never shown sustained and substantive commitment to a diversified agriculture and *with* a commitment on the part of consumers to the extra-economic political, ideological, and environmental values that underpin a sharpened keying of community food security. Such a commitment may necessitate the expenditure of more of the consumers' food dollars. Hence, the significance of Allen's (2004) attention to maintaining the value amplification of social justice in the community food security frame. These costs may be mitigated by the recognition that other costs of agricultural concentration (e.g., environmental damage, diminished food quality, absence of local control, draining of local surplus value) are no longer externalized. This is implied by Lyson's (2000:2) notion of ''civic agriculture'' and also by some understandings of a multifunctional countryside that recognize the opportunity costs of an unrestrained agricultural productivism (e.g., Buttel 2006; Holmes 2006).

Perhaps not all keyings of collective action frames are so clearly polarized as the above cases of food security as hunger and as community interest. The collective action framing of risk does not fit so neatly into this scheme. Nevertheless, the framing of food security as a risk management problem claims that science and technology can

minimize and control the threat of ''normal accidents'' in exchange for highly productive agriculture. Science and technology are here heavily oriented toward ensuring that food remains safe to eat after chemical applications, long-distance transport, or extended shelf life. At the production and processing levels, surveillance takes the form of sampling crops and animals at various junctures with increasing technical sophistication. Indeed, late-twentieth-century concerns about agriterrorism were primarily focused on activist challenges to these new technologies. These concerns in the twenty-first century are focused on terrorist efforts to shift conditions of risk toward uncertainty. The effect is to increase arational decision making insofar as rational decision making depends on confidence in the estimation of probable outcomes. Terrorism's crisis-level potential for disrupting an agricultural political economy based on hyperrationalized risk management strategies exploits a sharper, more critical diagnostic and prognostic framing than the risk management frame.

This analysis also suggests that the community food security framing may provide a latent prognostic function in relation to the diagnosis of agriterrorism, the best defense against which may well be a more diversified and localized agriculture that diminishes the food system's vulnerability to both ''normal'' and ''intentional'' accidents. Perrow's more recent work (2007:299–300) explicitly recognizes this vulnerability of agricultural concentration: ''But the simplest method is to reduce the size of the targets; terrorists would not find them as attractive, and industrial accidents would be limited to harming fewer people.'' Indeed, this may no longer be simply an ideological or value-preference issue, but a (policing/military) strategic concern, and a contest over action imperatives pitting two insiders: national security interests against global corporate interests. In this case, it is only in the extreme outsider status of the terrorist that the consensus framing of food security breaks down such that food insecurity can become an objective. The risk management strategies of a highly centralized and rationalized food and agricultural production system, intended to secure those critical control points that enable the prediction of risk against uncertainty and that are intended to create food security, could themselves provide a structure of opportunity to create food insecurity.

Goffman's frame analysis provides an analytically useful scheme for mapping the field of movement as well as the distinctive technologies that derive from these contested claims to ownership of the problem: food security. However, such metaphors are best utilized in the manner of ideal types. In the case of food security, the framings we have just described are not, of course, mutually exclusive. Indeed, some specific

phenomena clearly reveal alignments that bridge these frames. Recent developments around biofuels, for example, can be analyzed from the perspective of each frame.

Hunger framing once again dominates as concerns are expressed about the rapidly increasing diversion of crops and cropland from the production of food to the production of energy, the subsequent increases in food prices, and, in turn, the potential for increased food insecurity (e.g., Brown 2008; Hinrichs and Barham 2007; United Nations 2007). Mol (2007) argues that that while biofuel development was initially strongly grounded in communities of place (often, for example, by cooperatives), the longer-term development is likely to be standardization, concentration, and incorporation into a ''globally integrated biofuels network'' (GIBN). In this case, the very communities producing food/energy crops may find themselves with neither food security, nor energy security, nor even, ultimately, income security. Against this, and quite reminiscent of community food security politics, there are already embryonic movements calling for certification schemes to assure ''protection of the local environment, food sovereignty, adequate conditions for labour and biodiversity'' in the development of this new bioeconomy in rural regions (Mol 2007:309). In terms of risk framing, Brown's (2008) framing of food security as hunger, noted above, aligns with his framing of biofuel development as a policy that prioritizes energy security over food security. Further, Mol (2007) notes that the development of the biofuel economy could transform the terrain on which the struggle against genetically modified organisms has been waged—that is, the risk of producing GMO crops for fuel will not generate the ''dread and outrage'' (Nestle 2003) that have inspired much of the opposition to the production of GMO crops for food.

Other environmental risks can be associated with increased incursion into currently uncultivated regions (e.g., forests) and marginal lands (e.g., those vulnerable to erosion) to put them into production, both of which may, in turn, increase the risk of serious flooding, as for example, Iowa and Missouri experienced again in the summer of 2008. There is considerable irony in these latter concerns insofar as an initial impetus to the development of crop-based fuels had roots in environmental concerns. Mol (2007:307) notes that the GIBN will likely ''tackle the environmental worries and problem definitions of the cosmopolitans (such as climate change) rather than those of the locals (who are concerned with water and soil degradation),'' pointing to Brazil, where biofuels improve the quality of life of the urban cosmopolitans (through lower air emissions from traffic) at the cost of those in the

rural areas. Just as we have noted above with respect to the ''technological treadmill'' in which such problems produced by science can be solved with more science, there already exists an argument that the next generation of biofuels will not carry the same environmental and food security risks. However, the higher capital investment in these more advanced technologies may diminish the current comparative advantage of developing countries in this field (Mol 2007).

## Summary and Conclusion

This analysis demonstrates the ironically elaborate quality of a consensus frame, food security, and suggests the need to explore the potency of consensus frames as a category. We have identified and outlined three substantive collective action frames, each of which also manifests normative ''keys.'' This gives rise to a ''repertoire of interpretations'' (Mooney and Hunt 1996) associated with various mobilizations around food security, each with its own policy implications. Throughout this work, we have been flirting with the framing of collective action as a parallel construction of food security in the form of a multidimensional ''social problem.'' Again, while nearly everyone will agree that food insecurity is a social problem, that very consensus generates contested claims to defining the problem within the ''social problems marketplace.'' These contested claims incorporate both substantive and normative dimensions as mechanisms of boundary maintenance. Framing and keying are grounded in the mobilization of different constituencies that seek to define this social problem around their particular value and normative structures. This points to interesting possibilities for the application of frame-analytic concepts to the construction of social problems. In this case, the framing vocabulary shows potential for analyzing contested claims to the ownership of food security as a social problem, yielding not one but several interrelated, yet distinguishable, social problems.

This analysis also addresses several concerns raised by Benford's (1997) still pertinent ''insider's critique'' of the framing perspective. First, it contributes greater conceptual clarification and precision by reintroducing and specifying the concept of keying as a dimension of framing activity. Second, rather than focusing on a single movement or organization, by locating framing activity in a multiorganizational field, we reveal a dialogue among collective actors. The resulting multivocality (Steinberg 1999) lends fluidity and dynamism to framing processes and alignments. This impact is evident not only between collective action frames but even more clearly in the sharp and flat keys that are often direct reflections of such a dialogue with one another.

Third, Benford and Hunt admit that their more recent contribution (2003:176) ''has not illustrated how the drama of contested meanings unfolds in public problems marketplaces.'' This study begins to address that shortcoming by breaking down a consensus frame and revealing the multiple meanings and interests lying within. The framing and differential keying of a single highly potent consensus frame reveals some of that multivocal, dialogic complexity that frame analysts (e.g., Snow and Byrd 2007; Steinberg 1999) claim as an advantage over the analysis of ideology. Thus, this analysis also attends to Benford's (1997:422) concern with the neglect of the ''multilayered complexities … laminations, and frame transformations identified by Goffman that are part and parcel of political culture and the social movement arena.'' This article clearly addresses his suggested need to analyze ''the negotiated, contested dimensions of movement framing processes'' (424). Again, the concept of keying, as specified here, does not generate a simple plurality of framings, as might be suggested by Maxwell's (1996) postmodern approach, but locates this process within an ordered, yet contentious, multiorganizational political field of differential power wielded by various insiders and outsiders.

We might conclude by hypothesizing that it is precisely this field of power that drives the alignment processes among these various frames and keys. The association of the insider/outsider distinction with the sharp and flat keying reflects differential ability to mobilize resources at an objective or empirical level. This is reflected in the comparatively institutionalized character of insider organizations as contrasted with the contentious social movement politics more likely associated with challenging outsiders. At the subjective level, these power differentials are reflected in the association of the sharp keys sharing a common oppositional consciousness (Mansbridge 2001). This suggests that the boundaries within frames may be more firm than the boundaries between frames. In other words, oppositional consciousness, formed as a sharpened keying, may bridge collective action frames while simultaneously functioning to reinforce the boundary maintenance function within each collective action frame. Thus, sharing an oppositional consciousness, the sharp keying of food security as hunger facilitates a bridging alignment with the sharp key of the community food security. Similarly, the various flat keys share not only a lack of oppositional consciousness but also certain substantive characteristics, such as an extreme confidence in markets or technology to resolve problems associated with productivity, socio-spatial relations, or risk. While such alignment between the sharp key of risk and its associated sharp keys is less apparent, we might recall that prior to 9–11, agriterrorist concerns

primarily focused on the contentious political protest by outsiders against these new agricultural technologies associated with powerful global agribusiness and statist interests. That more domain-specific aspect of the concern with the risk of agriterrorism is, only in retrospect, diminished by present concerns with the general threat of global terrorism's broader challenge to modernity itself.

These latter suggestions call for further and more systematic research into the proposition that sharp and flat keys provide opportunities to breach the boundaries of a family of collective action frames that have been generated by a common consensus frame. Further research could more fully map the range and depth of mobilization around food security in terms of diagnostic, prognostic, and motivational functions with attention to comparative analysis of food security mobilization in different societies as well as the global intersection of those national fields of movement and organization. Insofar as each distinct diagnosis entails distinct prognoses, further research on respective demands for distinct food and agricultural science and technology, as well as social policy, is also needed. Thus, the continual adjudication of these contested claims to defining food security directly impacts the technological and political restructuring of agriculture and the socio-spatial organization of rural regions.

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