Earlene Smith

WPSA Conference Submission

April 2014

Anti-GMO Campaigns: A Case for Global Social Movements

*Abstract*

*The current literature on social movements is largely rooted in a national-level perspective of contentious behavior. Movement theorists are only now beginning to recognize the importance of studying how social movement behavior is expressed at the global level. This paper examines how global opportunity structures are shaping the current campaign to eradicate, or strictly regulate and monitor, the use and production of genetically modified organisms (GMOs). Using archival material drawn from anti-GMO organizations, I examine how this new global social movement frames its claims and organizes people for action. Furthermore, I explore how the anti-GMO movement is diffusing throughout the western, industrial world. By thoroughly examining the dynamics of one global movement, this paper makes a significant contribution to the newly emerging literature on global social movements.*

**Introduction**

Social movements have long been a part of the historical development of civil society in both the United States and other parts of the world. Historically, successful movements have instigated change in the course of state action and have altered the status quo. Traditionally, scholars define social movements as collective action of a group of people against those in power in order to change the social structure or ideological values of the society (Ash, 1972, p. 1; Tarrow, 2011, p. 9). In essence, when a group of people feels disenfranchised by the current state of the system they rally together around a common purpose and rise up in an attempt to alter the existing status quo to improve their livelihoods. As Tarrow (2011) discusses, social movements can occur in a number of ways and can be either violent or nonviolent, and sometimes both. Petitions, barricades and sit-ins, as well as violent rebellious acts are all potential tactics for social movement groups.

Until recently, social movement literature has focused on the national component of social movements. While the premise of movements has been utilized in various countries to incite movement, each individual movement has focused on changing the course of the national system. For example, the issue of women’s rights evoked movement in a number of countries, but only to change the policies of the individual nation. Furthermore, the “opportunities” that Tarrow (2004) argues are necessary for a movement to take off were thought to develop within the national system. In effect, this means that political changes must occur at the national or state levels, and resources must be derived from within national networks. In the current era, nations have become much more interconnected as the world globalizes politically, economically, and socially. As della Porta and Kriesi (1999) state, “in the globalizing world issues emerge which transcend national frontiers: the internationalization of markets, nuclear fallout, the greenhouse effect, the destruction of the ozone layer, famine, poverty, international migration on a world-wide scale, women’s and minorities’ rights” (della Porta & Kriesi, 21). The expansion of globalized problems and increasingly global interactions leads one to question whether or not traditional definitions of social movements are adequate to describe current trends in social movements. Through this paper, I question how globalization challenges these commonly held definitions of social movements. In order to answer this question, I examine the current movement that seeks to either eradicate or strictly regulate and monitor the use and production of genetically modified organisms (GMOs). The use of GMOs has sparked action in a number of European countries and, more recently, contention in the United States. Initially, I look at whether the GMO movement can indeed be classified a social movement based on the traditional definitions, and then determine whether or not the current definitions need to be expanded to encompass the growing possibility of new forms of social movement conducive to the increasingly global world.

**Methods**

For this study, I draw from classic social movement literature to develop a framework through which to analyze more contemporary forms of social contention, specifically the anti-GMO movement, to determine whether these acts form a cohesive social movement or whether they are just sporadic acts of contention. Using traditional social movement theories, I identify characteristics of the campaigns against the use of and lack of regulations of GMOs in consumer products and compare them with those of traditional forms of social movements. I utilize literature about anti-GMO sentiments in Europe and look at how those movements have been influential in the development of a comprehensive anti-GMO movement in the United States. I specifically look at the goals and tactics of the movement and whether these campaigns focus on common grievances.

**Genetically Modified Organisms**

*What are GMOs?*

As the name suggests, a genetically modified organism (GMO) is any organic material that has had its DNA modified through biotechnology for one reason or another (reasons for modification vary depending on the needs of the organization conducting the modifications). Many food products have been genetically modified in order to engineer products that are resistant to diseases that have historically killed entire crops. Food items are also modified to be more resilient to weather changes, to be toxic to pests, and also to simply grow bigger, more flavorful, and more visually appealing. Since the mid-1900s, GMOs have been utilized in a number of ways to strengthen the agricultural industry and increase the ability for agricultural companies to farm large quantities of crops with minimal loss. Furthermore, “in July 2008, against the backdrop of the current world food crisis, several agribusiness corporations [formed] an ‘Alliance for Abundant Food and Energy’ which makes claims that it will meet the global demand for food and energy through the use of new technologies (biotechnology, genetic engineering) and agrofuel production” (Pojda, 2010, p. 285). According to corporate entities, GMOs could solve the world hunger crisis. Unfortunately, this has yet to happen, and GMOs have been more harmful in many instances than helpful.

*Brief History of Regulations*

In the United States, the production of GMOs has been relatively un-regulated for a number of reasons. While scientists were initially uncertain about the impact of GMOs on the health of people and the environment and called for strict regulations while tests could be conducted, “initial support of the scientific community for strict regulatory controls was undermined by growing awareness of biotechnology’s commercial potential” (Lynch & Vogel, 2001, p. 5). Corporate entities realized that they could potentially make large profits off genetically modified foods because they could be modified (as previously discussed) to resist destruction by weather, pests, and other diseases. The yield of crops could be improved because fewer of the plants would die from external factors. “The growth of privately-funded experiments made the NIH regulations, which governed only government-funded work, increasingly irrelevant” (ibid.). Private industries funded their own research to produce GMOs that would fit the needs of the agricultural company to turn the most profit. “To date, the biotechnology industry has conducted its research primarily in commodities such as soybeans, corn, canola, and cotton to improve yields and insect resistance” (Pojda, 2010, p. 285). These items are widely used in numerous products marketed both nationally and globally, bringing the agricultural industry huge profits.

Prior to the 1980s, many of the government’s regulations developed to ease public concern about particular issues. Up until the issue of GMOs, the United States was relatively strict in terms of its regulations to protect public health (Lynch & Vogel, 2001). However, the tide turned when GMOs were introduced, and these cautious regulations were never established for GMOs. In 1984, the White House gave the Cabinet Council on Economic Affairs full responsibility for regulating biotechnology, which allowed the White House “to avoid public oversight since the groups’ meetings were not open to public scrutiny” (ibid., p. 6). Essentially, the public had little say over how regulations were established and implemented, and the public was kept mostly in the dark about the science behind the development of genetically modified foods. Little research was conducted to determine whether there were negative impacts of GMOs on human health, and in 1994, the FDA “determined that Calgene, Inc.’s FLAVR SAVRTM tomato was ‘as safe as tomatoes bred by conventional means’” (ibid., p. 7). Because of this determination, other genetically modified foods were no longer subjected to scientific reviews because it was assumed that if the process of genetic modification could produce a safe tomato, then the process was safe for other products as well. “This decision also affected food labeling requirements: the FDA determined that labeling was not required on the basis of the method of food production (i.e. genetic engineering), but only if the new food itself posed safety problems for consumers” (ibid.). This determination remains in place to this day and has made it difficult for concerned consumers to influence policy that would require GMO labeling. In addition, the protests of farmers and the agricultural industry have been influential in keeping other agencies, like the EPA, from imposing their own labeling regulations (ibid.). Hence, agencies that attempt to prioritize public health are restricted from action by the corporations who profit from GMO production and distribution. Furthermore, in 2000 the National Academy of Sciences endorsed the safety of biotech foods, essentially validating the idea that regulations are not necessary (ibid., p. 8). The report did, however, argue that long-term studies needed to be conducted because the increasing use of GMOs could lead to the creation of more dangerous substances than those which were initially developed (ibid.). To the dismay of the anti-GMO groups, this aspect was overlooked by industry and essentially by the government. This scientific support has provided a strong foundation for government agencies to support limited oversight and regulation, including no labeling requirements, of genetically engineered foods. In fact, “the FDA and USDA [both government agencies] actively worked to promote the introduction of GMOs” (ibid., p. 7).

*GMOs Today*

Genetically modified organisms (GMOs) make up a large portion of the food consumers eat today: “By late 1999, it is estimated that approximately 60 percent of grocery-store food in the United States was grown from genetically modified seeds” (Lynch & Vogel, 2001, p. 9). Since their initial development in the mid- to late-1900s, GMOs have been used as fresh produce, as livestock feed, and as ingredients for processed goods. “Between 1996 and 1998, crop acreage using genetically modified seeds had increased fifteen fold in the United States: a third of the American corn and cotton crop and more than half of the soybean crop is now grown from genetically modified seeds” (ibid.). Because of the rapid growth of GMOs and relative lack of regulations, typical consumers remain unaware of the presence of biotechnology in the food they consume. “Indeed as late as August 1999, only 33 percent of Americans were aware that genetically modified foods were being sold in supermarkets, while less than 3% were aware that soybeans were genetically engineered” (ibid.). This lack of awareness combined with growing scientific concern about the side effects of GMO foods (which I discuss later) influenced the organization of an anti-GMO movement.

**Conflict and Disapproval: Start of the GMO Discussion**

It is only in recent years that large groups of people started speaking out about the possible harmful effects of GMOs and their want for transparency through regulations. In a study conducted at Cornell University, researchers found “that the use of a genetically modified Bt-corn variety could kill not only targeted pests, such as the corn borer, but also Monarch butterfly larvae” (Lynch and Vogel, 2001, p. 7). Monarchs are essentially harmless insects that were negatively impacted by the genetic modification of corn. Because science finally proved that there were unintended consequences of some GMOs, people started questioning the legitimacy of other statements that claimed GMOs were safe. While the government attempted to increase and improve scientific research as a result of these findings, little has been done to impose regulations on GMOs or to increase public awareness that they are consuming potentially harmful products. “In 1996 a controversy about genetically modified organisms (GMOs) erupted, but for the first 3 years, the debate focused on the commercial use of GM crops and foods, while field trials remained largely uncontroversial” (Bonneuil, 2008). Therefore, even though concern swelled it was limited to demands for only cursory changes rather than comprehensive changes and relatively ineffective in evoking policy change. Furthermore, concern was relatively localized among small groups of individuals who had little or no impact on the political system, making political progress difficult.

While consumer concern in the United States is still relatively low overall, there have been a number of organizations that have formed to combat the minimal regulations on genetically modified foods in the United States. In 2005, the Natural Grocery Company and the Big Carrot Natural Food Market established the Non-GMO project in order to create “a standardized meaning of non-GMO for the North American food industry” (Non-GMO Project, 2005a). They believed that creating a unified definition would help build a collective movement. Based on the belief that all consumers should be given the opportunity to decide for themselves whether or not to consume GMO foods, the Non-GMO project was formed as a non-profit “committed to preserving and building sources of non-GMO products, educating consumers, and providing verified non-GMO choices” (Non-GMO Project, 2005b). The organization’s website provides facts about GMOs, as well as products that are certified non-GMO so that consumers can decide whether or not they want to eat GMO foods. The organization includes a lengthy document that provides “Truths and Myths” about genetically engineered products (See Antoniou et al., 2012). Other groups have also emerged, such as the GMO Eradication Movement, which is a campaign that attempts to completely eliminate the production of GMOs, and the Occupy Monsanto movement, which actively engages in attempts to block production attempts of Monsanto, “the world’s largest developer, grower and marketer of [GMO] vegetable seeds” (RT News, 2012). While these groups have been largely unsuccessful in building recognition on the national political agenda, groups in California were successful in developing a proposition “that would require the labeling of genetically modified food…as just that, genetically modified” (Helena, 2012). The proposition was so successful that it made it on the 2012 ballot. If Proposition 37 had succeeded, it “would make California the first state in the U.S> to require labeling of most foods made with genetically modified organisms” (Andrews, 2012). The initiative failed to pass, but as Robyn O’Brien argues “rather than consider this [loss] ‘the end’ of the issue, perhaps it should be seen as the beginning of a long-overdue dialogue in the United States, a dialogue that the industry spent $45 million dollars to try to keep from having” (O’Brien, 2012). Even though the proposition failed, people continue fighting for increased awareness and another chance to influence the ballot.

**Defining Social Movements**

As previously stated, social movements are “collective challenges, based on common purposes and social solidarities, in sustained interaction with elites, opponents, and authorities” (Tarrow, 2011, p. 9). This section addresses ways through which the GMO movement embodies characteristics of traditional definitions of social movements as described by authors such as Tarrow (2011), Ash (1972), Snow et al. (2004), and Tilly (2004). In order to determine whether the GMO movement should be labeled a social movement, I analyze it in accordance with the two main aspects of social movements: A collective goal based on common grievances and discontent with the status quo; and Sustained interaction with the authorities/elites. The more minute aspects of social movements are further discussed within these broader characteristics.

*Collective Goals*

It is clear that common goals exist among the various groups who contest the use of GMOs and the lack of labeling and regulations. As the Non-GMO Project highlights, those who are fighting against GMOs want to increase regulations of GMO commodities and improve public awareness by establishing labeling requirements in the United States (and globally). By examining the websites of various organizations who are anti-GMO, it is evident that concern has grown in the United States, and people are more inclined to fight for GMO regulations. After a brief discussion about the arguments made against GMO labeling, Mikael Klintman (2002) posits, “Regardless of the legislation and the arguments presented above, everyone involved admits that the general public supports mandatory GM food labeling, be it in the USA, Europe, Japan, or any other country” (Klintman, 75). According to a 2000 survey conducted by Penn, Schoen & Berland Associates, “85% of Americans were in favour of mandatory labeling of GM food” (ibid.). This evokes the question of *why*: Why is an overwhelming majority of the general public in favor of labeling GMOs? This question can be answered by reviewing organizational websites of anti-GMO groups. Organizations like Wakeup-World, Just Label It, the GMO Eradication Movement, and Healthy Child Healthy World all discuss the importance of GMO labels in order to maintain the wellbeing of consumers, farmers, and the environment.

In multiple organizations, the primary focus of eradicating or strictly regulating GMOs is to improve the health of the public. According to the Non-GMO Project, GMOs contribute to myriad health problems and are likely to cause other unanticipated health problems. The Non-GMO Project claims that “peer-reviewed studies have found harmful effects on the health of laboratory and livestock animals fed GMOs. Effects include toxic and allergenic effects and altered nutritional value” (Antoniou, Robinson, & Fagan, 2012, p. 37). While these results are concerning in their own right, the publication also addresses the reality that many of the studies conducted by GMO producing companies are not long-term enough to fully realize potential hazards. Short-term trials typically do not allow researchers to see even early traces of long-term health problems associated with genetically modified products. Hence, companies inaccurately and prematurely conclude that the GM foods are not harmful simply because no immediately adverse effects were evident. The movement to regulate GMOs centers on this uncertainty, which allows the perpetuation of minimal regulatory policies. Antoniou et al. conclude that “GM foods tested caused unexpected, potentially adverse effects in GM-fed animals that should be investigated further in long-term tests” (ibid., p. 45). The Millions against Monsanto campaign also fights for labeling in part because of the growing health risks (Organic Consumers Association, n.d.).

Another collective grievance of the movement centers on the detrimental impact GMOs have on the livelihood of local farmers. The ability to legally secure patents on particular genetic modifications of seeds has allowed large corporate entities to exert control over the farming industry, putting small-time farmers out of business. Due to the nature of plants and seeds, genetically engineered seeds patented by corporations, such as Monsanto, drift into nearby farms and contaminate the local farmers’ seed populations. This is destructive to farmers in at least two ways. First, corporations like Monsanto can then sue the farmers for using their patented product even though the farmer was unaware of the contamination. These farmers have essentially no chance against the large corporations who have billions of dollars to dedicate to fighting the lawsuits: “Monsanto has sued, won and put out of business multiple small farmers whose land bordered corn fields filled with Monsanto’s GMO corn” (Ross, 2010). In one case, Schmeiser’s (a local farmer) Canola fields were contaminated by a Monsanto-patented pollen, and when Monsanto sued, they argued that “it doesn’t matter how the contamination took place…Schmeiser [must] pay [Monsanto’s] Technology Fee (the fee farmers must pay to grow Monsanto’s genetically engineered products)” (Organic Consumers Association, n.d.). “The judgment made it clear that Schmeiser was liable to pay Monsanto whether he was aware of the presence of the protected seeds or not” (Cullet, 2004, p. 616). Cases such as this are becoming more and more common, and create a heavy burden on local farm owners who lose the right to the seeds they have used for centuries because of contamination by GM seeds. The second destructive factor that comes from contamination is that suits such as these cause certified organic farmers to “lose their certification [of ‘organic’] and consequently [they] must sell their crops at the lower price fetched by non-organic crops” (ibid.). The impact that these cases have on local farmers often affects entire communities in unforeseen ways, which leads to unified action against GMOs and GMO producing corporations.

A third unifying grievance of the GMO movement is the concern for stunted agricultural development and environment prosperity. Philippe Cullet (2004) argues “Possible environmental harm [from GMOs] includes: dangers linked to the instability of further changes in the genetically modified organisms, the transfer of genes to other organisms and the potential for transgenic varieties to outperform other varieties leading to the displacement or disappearance of wild species” (Cullet, p. 615). A study conducted in the United Kingdom found that GMO crops could limit plant varieties, reducing the “availability of seeds important in the diets of some birds” (ibid., p. 616). Other studies have had similar results, indicating that GMOs may impact other aspects of the environment in unforeseen ways. Furthermore, when plants displaced because of contamination by GMOs are basic food crops, “their disappearance may have negative consequences for the fulfillment of basic food needs” for those communities who rely on local crops for survival (ibid.). Organizations like the Organic Consumers Association structure their activism around this problem and work towards changing regulations so that these issues are resolved. Another problem with GM foods on agriculture has to do with the engineering of GM crops to withstand high doses of RoundUp (a herbicide developed by Monsanto). According to the Organic Consumers Association’s “Millions Against Monsanto” campaign, “scientists are warring that the RoundUp itself ‘may have dire consequences for agriculture such as rendering soils infertile, crops non-productive, and plants less nutritious” (Organic Consumers Association, n.d.). So not only are the GM plants themselves harmful, the increased used of pesticides harms agricultural production and the health of agricultural lands.

Collectively, the aforementioned grievances allude to the fact that increasing groups of people are discontent with the status quo. In the United States, the status quo has remained relatively in support of genetic modification. “To date, the FDA has imposed no labeling requirements for any genetically modified foods” (Lynch & Vogel, 2001, p. 7). In order to achieve their goals of limiting production and increasing regulation of GMO foods, anti-GMO groups must change the relatively stagnate policy (or should I say lack of policy) decisions. “While issues regarding the safety and environmental impact of GM foods and seeds continue to surface in the United States, to date their policy impact has been remarkably modest” (ibid., p. 11). Efforts to change the lack of regulations are increasingly prominent in the United States, but there has been little headway to change policy in large part because GMOs have been accepted as the norm. However, as Klintman (2002) argues, while the status quo supports GMOs, the cultural attitudes are still skeptical (as seen through the statistics that show the majority of the public thinks GM products should be labeled: “the ‘pro-GM alliance’, although endorsing a legislative *status quo* in the USA, nevertheless has to struggle to change the broader *cultural climate* so that GM foods will be normalized (or even labeled) as ‘organic’ (suggesting ‘better products’)” (Klintman, p. 72, *italics in original*). The movement is in essence fighting to overturn the status quo while also ensuring that the large corporations and the pro-GMO activists are unsuccessful in turning the cultural norm to adopt GM products as “organic.”

*Sustained Interactions with those in Power*

A major component to Tarrow’s (2004) definition of social movements is the time component: “Sustaining collective action in interaction with powerful opponents marks the social movement off from the earlier forms of contention that preceded it in history and accompany it today” (Tarrow, 2011, p. 12). As many social movement theorists address, contentious action occurs relatively frequently; however, social movements are rarer. In order for contentious politics to develop into a “social movement” by definition, contentious behavior must be sustained over a period of time. While some would argue that it has only been in recent years that anti-GMO groups have formed, the “fight to get GMO foods labeled is not something new. [It] has been in the works for a couple decades and now it’s the citizens saying it’s time to label it” (Abramson, 2012). Contention over genetically modified products has been around essentially since biotechnology was first developed:

While many people associate opposition to agricultural biotechnology with the public controversies of the 1990s, the movement initially developed in tandem with the technology. In 1974, only a year after two California biologists developed the technique of ‘recombinant DNA’, or gene splicing, a few North American scientists and citizens began to worry about the health and environmental risks associate with these new technologies. (Schurman, 2004, p. 251)

At the outset of opposition, there was little interaction with political elites, but more recently, the movement has moved into direct conflict against the very large opposition. “Activists [at a California Prop. 37 rally] say they are fighting back against big money by raising awareness in the communities” (Abramson, 2012). Large corporations are essentially the authority figures that maintain the status quo of GMO acceptance because of their influence on policy making in the United States. Schurman (2004) states, “Given the size of corporations that comprise the core of the agricultural biotechnology industry and the encouragement they have received from powerful Northern governments (especially the United States) it is not surprising that genetically engineered crops were hailed as the next agricultural revolution when they entered the market in 1996” (Schurman, 2004). It is no secret that corporations directly influence many policies in the United States, and corporations have been largely the problem in the development of GMO regulations. Today, anti-GMO groups frequently protest the government’s lack of oversight and corporate lack of concern. A feature in the *Chicago Tribune* states “While last winter [2010] brought an unprecedented wave of genetically modified crop approvals from the U.S. government, this fall [2011] has brought an unprecedented wave of protests aimed at getting genetically modified foods labeled in the U.S.” (Eng, 2011). These protests have been sustained throughout the year, especially in order to support the California Prop. 37. While the proposition did not pass, the dialogue has not died out and protests continue.

It is correct to state that noticeable contention with elites is relatively new in the United States. Sustained action and political recognition is only just beginning for the U.S. movement; however, contention in Europe has been around since the 1970s and 1980s. Because of the increasingly global world, spillover of contention from Europe has started to seep into the United States. This leads me to question whether or not this relatively new component of social movements (globalization) should change traditional social movement definitions. In the following section, I explore this idea in more detail.

**Opportunity Beyond Nations**

The previous discussion compares the GMO movement to the traditional definitions of social movements. However, one component has been somewhat overlooked: the need for opportunity. Tarrow (2004), along with other social movement scholars, argues that social movements occur when a group gains access to resources and finds the opportunity to utilize them. He states “Contention increases when people gain access to external resources that convince them that they can end injustices and find opportunities in which to use [acquired] resources” (Tarrow, 2004, p. 160). However, the literature tends to focus on national opportunities, which are definitely still important (just look at the vast difference in GMO regulations between Europe and the United States), but in a continually globalizing world, opportunities may not necessarily need to be strictly internal. Opportunities abroad can convince groups that they can end injustice. In the case of the GMO movement, the opportunity for groups in the United States to rise up against the lack of GMO regulations emanated from the success of contentious movements in Europe. Europe created the opportunity for contentious discussion pertaining to genetically modified products. The expansion of the Internet has allowed for communications across the globe, creating multiple levels of political influence at the national level. Open lines of communication helped increase awareness and concern in the United States even though both government and corporations alike supported biotechnology and actively promoted its use. Because of the United States’ tactical and economic relationship with European countries (particularly Great Britain), it is not unusual that a movement in the United States would draw from the successful petitions in Europe. Anti-GMO activists in the United States appeal to arguments made by the European movement to legitimate their own national cause. Globalization, supported by international cooperation, has allowed for the European movement to provide opportunity for movement in the United States. This change in dynamic among countries questions whether future social movements will also be influenced by global opportunities, and whether traditional definitions will still apply.

To understand how the European social movement could be applied in the U.S., I provide a brief discussion of the movement in Europe. In Great Britain, the government was much more cautious of GMOs, so regulations were developed in conjunction with the new technologies and strictly enforced. Public protests erupted, leading to legislation that required the labeling of products, which were either genetically modified or were made with genetically modified products (Lynch & Vogel, 2001, p. 11). Many European governments also faced increasingly negative public perception of GMOs, such as in Germany where “over 80% of the public expressed a negative opinion of GMOs” (ibid., p. 12). Food companies in Europe began voluntarily labeling their products as genetically modified, and even producing products that do not contain GMOs at all. Overall, European countries and the European Union have remained responsive to public perception and maintained strict regulations for GM products.

Because of the growth of globalization and a global market, the policies of Europe create an impact on the United States. Labeling requirements and GMO restrictions in Europe influence U.S. exports. Because of stringent restrictions and regulations in Europe, “The American share of European maize (corn) imports dropped from 86% in 1995 to 12% in 1999, largely because while the US has approved eleven varieties of this crop, the EU has approved only four. Losses due to blocked export opportunities for maize from the US are estimated at approximately $200 million per year” (Lynch & Vogel, 2001, p. 15). The corn industry was not the only industry impacted by European regulations; the soy, beef, and dairy industries were also targeted. This creates a new potential for GMO contestation because of the economic hindrance it presents to the United States. In addition to the economic burden international trading of GMOs created for the U.S., “the arrival of GM soy and corn from the United States at the end of 1996 and the beginning of 1997 attracted considerable media attention and significantly increased public awareness and concern throughout Europe” (Lynch & Vogel, 2001, p. 11). Europeans, already cautious about the use of GM products, disliked the lack of regulations in the United States because it allowed for unlabeled GM products to enter the European market. “These twin pressures—the applications for internal marketing of GMOs and the increasing production of genetically-modified crops—led to increased demands for the labeling of GMOs foods sold within the EU” (ibid., p. 11). Increased restrictions further impacts international trade, causing more political opportunity for contention in the U.S. Based on the new international dynamics that allow social concern in one country to impact the economies of others, social movement theories should be broadened. In order to explain the emergence of new social movements which seek global change, researchers need to look beyond national boarders and national systems.

**Campaigns, Not Social Movements**

Now that I have addressed how the GMO movement upholds social movement theories and evokes the question of possible expansion of the traditional definition, I would like to address the argument against classifying the GMO movement as a social movement. Some scholars argue that while the GMO movement embodies some characteristics of a social movement, it has not necessarily reached the level of “social movement” status. Nicholas Freudenberg (2010) argues that “current mobilizations to modify health-damaging corporate practices do not yet have a consistent voice in Washington, the media, or the mainstream political parties” (Freudenberg, p. 437). According to his article, movements in public health (such as the GMO movement) are more appropriately labeled as “campaigns” because they “are often ‘confined within the state rather than the expression of a social movement against the state’ (Stevenson & Burke, 1992), calling into question whether these activities meet the usual definition of a movement” (Freudenberg, 2010, p. 437). While many public health movements may occur at the smaller scale, the GMO movement is taking place at a much larger scale. As previously discussed, the GMO movement in the United States has built off contention against GMOs internationally. While individual laws are currently only being proposed at the state level (such as Proposition 37 in California), the movement seeks to ultimately influence Washington, and opposition groups are continually working to get GMO regulations on the national agenda. Currently, many organizations petition the national government (in particular the FDA), and it will simply take a moment of opportunity for the cries of the people to influence policy at national and state levels. Freudenberg posits that “Rather than affix a binary label (movement vs. nonmovement)…it may be more helpful to consider these activities [of public health campaigns] on a continuum from episodic and fragmented campaigns on one end to a coherent social movement with a defined agenda at the other” (ibid., p. 441). In this regard, I would tend to agree. Because of systematic changes in the modern era, social movement definitions should expand and adopt this idea of a continuum of social movement activity. The GMO movement (or campaign) may not have yet evolved into a strong social movement in the United States, but it is definitely further along than a mere campaign effort, and the mass movement in Europe adds to it. Freudenberg himself defines the essential characteristics of social movements (based on the works of Snow et al., 2004 and Tilly, 2004) as “multiple campaigns at local, regional, national and/or global levels that seek to achieve some common goals; articulated grievances; individuals and organizations recognized as national leaders; a developed political agenda; and a national presence in media and other public settings” (ibid., p. 437). He does not think the GMO movement exhibits these traits, but I disagree. I argue instead that the GMO movement does in fact exibit these characteristics, specifically at the global level.

**Conclusion**

Social contention has historically been utilized by the oppressed to fight against oppression and challenge the status quo. When social contention becomes prolonged and attains some form of loose organization, it becomes a social movement. As the world has changed and political systems change, social movements have also changed so that they are more effective in the current systems. Many scholars argue that even with systematic alterations, social movements still exhibit the same characteristics as those that preceded them. While there is some truth to this idea, social movements must continually adapt to their current systems in order to be successful. In today’s world because of the changes in international relationships due to globalization, international trade, and improved technology, social movements are no longer confined to the national stage. Opportunities can be created internationally, as is that case with the GMO movement and resources can be pooled from nearly any location in the world. Scholars like Freudenberg (2010) argue that movements like the GMO movement cannot be considered or labeled “social movements” because at the national level there simply are not enough sustained acts of contention. However, I postulate that due to the global nature of the world, tradition definitions of social movements must be expanded to account for these new types of global social movements which are currently emerging around the world. I would like to end with a quote by Frances Fox Piven and Richard A. Cloward (1977): “People experience deprivation and oppression within a concrete setting, not as an end product of large and abstract processes, and it is the concrete experience that molds their discontent into specific grievances against specific targets” (Piven & Cloward, 20). Based on the evidence provided throughout this essay, the GMO movement exhibits specific, concrete experiences that have shaped collective discontent about explicit grievances against a definite opponent.

References

Abramson, D. (2012, September 14). San Diego activists say no to GMOs. *The Examiner*. Retrieved from http://www.examiner.com/article/san-diego-activist-groups-say-no-to-gmos

Andrews, J. (2012, July 11). California GMO labeling law named Prop. 37. *Food Safety News*. Retrieved from <http://www.foodsafetynews.com/2012/07/california-gmo-labeling-law-named-prop-37-for-november-ballots/>. Accessed November 26, 2012.

Antoniou, M., Robinson, C., & Fagan, J. (2012). *GMO myths and truths: An evidence-based examination of the claims made for the safety and efficacy of genetically modified crops*. London: Earth Open Source. Retrieved from <http://www.nongmoproject.org/wp-content/uploads/2010/08/GMO_Myths_and_Truths_1.31.pdf>. Accessed November 25, 2012.

Ash, R. (1972). *Social movements in America*. Chicago, IL: Markham Publishing Company.

Bonneuil, C. (2008). Disentrenching experiment: The construction of GM-crop field trials as a social problem. *Science, Technology, & Human Values*, *33*(2), 201-229.

Cullet, P. (2004). Towards a redress regime in biosafety protocol. *Economic and Political Weekly*, *39*(7), 615-617.

della Porta, D., & Kriesi, H. (1999). Social movements in a globalizing world: An introduction. In D. della Porta, H. Kriesi & D. Rucht (Eds.), Social Movements in a Globalizing World (pp. 3-22). New York, NY: St. Martin's Press, Inc.

Eng, M. (2011, October 21). Anti-GMO protests heat up this fall. *Chicago Tribune*. Retrieved from <http://articles.chicagotribune.com/2011-10-21/features/chi-food-policy-antigmo-movements-heat-up-this-fall-20111021_1_gmo-fda-food-safety-division>. Accessed November 24, 2012.

Freudenberg, N. (2010). Campaigns to change health-damaging corporate practices. In W. Wiist (Ed.), The Bottom Line or Public Health (pp. 423-449). New York: NY: Oxford University Press.

Helena, K. (2012, September 12). Prop 37 and Monsanto: What you need to know. *Examiner*. Retrieved from <http://www.examiner.com/article/prop-37-and-monsanto-what-you-need-to-know>. Accessed November 25, 2012.

Just Label It. (2012). *We have a right to know if our food has been genetically engineered*. Retrieved from <http://justlabelit.org/>. Accessed November 29, 2012.

Klintman, M. (2002). The genetically modified (GM) food labeling controversy. *Social Studies of Science*, *32*(1), 71-91.

O'Brien, R. (2012, November 07). [Web log message]. Retrieved from <http://www.healthychild.org/blog/comments/next_steps_gmo_labeling_movement/>. Accessed November 28, 2012.

Organic Consumers Association. (n.d.). *Millions against Monsanto*. Retrieved from <http://www.organicconsumers.org/monlink.cfm>. Accessed November 28, 2012.

Lynch, D. & Vogel, D. (2001, April 5). The regulation of GMOs in Europe and the United States: A case-study of contemporary European reguatory politics. *Council on Foreign Relations*, Retrieved from <http://www.cfr.org/genetically-modified-organisms/regulation-gmos-europe-united-states-case-study-contemporary-european-regulatory-politics/p8688>. Accessed November 25, 2012.

Piven, F. F., & Cloward, R. A. (1977). *Poor people's movements*. New York: NY: Vintage Books.

Pojda, J. A. (2010). Food and agriculture industry. In W. Wiist (Ed.), The Bottom Line or Public Health. New York, NY: Blackwell Publishing.

Ross, S. (2010, January 12). Monsanto: Are they killing us?. *The Examiner*. Retrieved from <http://www.examiner.com/article/monsanto-are-they-killing-us>. Accessed November 24, 2012.

RT News. (2012, September 14). 9 arrested as anti-GMO activists block Monsanto site in California. *RT News*. Retrieved from <http://rt.com/usa/news/occupy-monsanto-blockade-california-123/print/>. Accessed November 25, 2012.

Non-GMO Project. (2005a). *History of the Non-GMO Project*. Retrieved from <http://www.nongmoproject.org/about/history/>. Accessed November 25, 2012.

Non-GMO Project. (2005b). *Who we are*. Retrieved from <http://www.nongmoproject.org/about/who-we-are/>. Accessed November 25, 2012.

Schurman, R. (2004). Fighting "frankenfoods": Industry opportunity structures and the efficacy of the anti-biotech movement in Western Europe. *Social Problems*, *51*(2), 243-268.

Snow, D. A., Soule, S., & Kriesi, H. (2004). *The Blackwell companion to social movements*. Ames, IA: Blackwell Publishing Company.

Tarrow, S. G. (2011). *Power in movement*. (3 ed.). New York, NY: Cambridge University Press.

Tilly, C. (2004). *Social movements*. Boulder, CO: Paradigm Publishers.

Weber, J. A. (2012, March 19). [Web log message]. Retrieved from <http://wakeup-world.com/2012/03/19/oneness-in-action-the-gmo-eradication-movement/>. Accessed November 28, 2012.