



THOMAS W. PEARSON
University of Wisconsin–Stout

Transgenic-free territories in Costa Rica:

Networks, place, and the politics of life

ABSTRACT

Several municipalities across Costa Rica have adopted “transgenic-free territory” ordinances, joining similar communities worldwide in declaring themselves free from genetically engineered organisms such as transgenic seeds. Through ethnography of antitransgenic activism, I describe the rise of transgenic-free territories to examine the relationship between transnational activist networks and place-based struggles. I suggest that activist networks and the transgenic-free territory designation respond to processes of globalization that have reorganized the material and discursive relations between capital and nature, and I show why such territories have gained significance as a defense of sovereignty, place, and even life itself. [*transnational activist networks, nature, life, place, environmentalism, Costa Rica*]

Roughly forty or so people assembled at the back of an old meeting hall to attend an afternoon workshop on the risks posed by genetically modified seeds, known popularly in Central America as *los transgénicos*, or transgenics. We listened attentively to Juan Arriaga, the middle-aged, affable director of Sol de Vida, a small NGO that promotes sustainable development in rural Guanacaste, a province of western Costa Rica. Guanacaste is known for its dry, hot weather, maize-based agricultural traditions, and, thanks to recent tourism, white-sand beaches along the Pacific coast that press against a picturesque tropical landscape. Coordinators from a local environmental-justice group had invited Juan to participate in the workshop, funded by outside NGOs to support the International Day of Opposition to Genetically Modified Organisms (April 8, 2006). The transnational coalition behind the designation envisioned a day of global civil-society opposition to corporate agricultural biotechnology, using the Internet and e-mail to coordinate and build awareness through small-scale events around the world. As part of this globally networked event, Juan shared his experiences in the effort to declare the town of Santa Cruz, Guanacaste, a “transgenic-free territory,” at that time, the second Costa Rican municipality to adopt such a status.

Scientists genetically modify organisms by transferring genetic material between two unlike species. In agriculture, a handful of large multinational corporations control most commercialized transgenic seeds, many of which are created to provide herbicide-resistant or disease-resistant crops. Companies have sought for decades to convert seeds into private property through new technologies and legal regimes, tightening their grip on global food production and squeezing profits out of increasingly uniform, large-scale agricultural systems (Kloppenborg 2004). Many environmentalists, farmers, and consumer-rights organizations in numerous countries oppose transgenic seeds and foods, citing concerns about environmental and health risks and challenging the hegemony of private corporations over food production. Some also maintain that no corporation—no one, for that matter—should be toying with the so-called essence of life itself, commonly symbolized by genes or DNA.

At the afternoon workshop, Juan connected transgenic seeds to neoliberal economic reforms, suggesting that private capital had infiltrated the inner workings of biological life. He tailored his critique to the Central American Free Trade Agreement (CAFTA), at that time under debate in Costa Rica and being implemented in other Central American countries. Juan maintained that CAFTA would unleash a flood of cheap agricultural imports from abroad, undermining small farmers, compromising national food sovereignty, and opening the door to transgenic contamination of natural biological diversity. Moreover, he said sharply, “No one knows what they [transgenic organisms] are or where they come from,” casting them as an outside threat to the purity of nature and place. He implored the audience to reclaim the connection between “our seeds, our food, and our health—our sovereignty.”

Battles over genetic engineering in agriculture have surfaced in many countries around the world.¹ Despite their geographical dispersion, such conflicts are often linked by transnational activist networks involving individuals and organizations that share experiences, information, and resources and commonly engage the international policy arena. The campaign against transgenic seeds in Costa Rica has developed cyclically and in relation to transnational activist networks, rising and falling in importance depending on political circumstances and resources available to organizers. Many of the key actors and organizations have roots in other struggles, including the Costa Rican environmental movement, peasant organizing, indigenous rights struggles, the organic agriculture movement, and conflicts over biodiversity and the privatization of genetic resources. At the campaign’s height, its organizers enjoyed funding from a transnational activist network in Central America financed by international donors. Over the years, the Costa Rican campaign has employed numerous tactics to influence government policy in its unsuccessful attempts to ban transgenic seeds. Although they failed to establish a national moratorium, organizers have continued to lobby municipal councils to pass ordinances that declare their *cantones*, or municipalities, transgenic-free territories, an effort envisioned as a grassroots strategy to oppose transgenic seeds from below. To date, eight municipalities have adopted such declarations, joining a wave of similar efforts throughout Latin America, Europe, and other parts of the world.

What is the significance of declaring a territory free of transgenics, and how do such place-based initiatives relate to transnational activist networks? To address these questions, I draw on ethnographic fieldwork among activists who have opposed transgenic seeds in Costa Rica, focusing specifically on the evolution of the campaign promoting transgenic-free territories.² I first outline how regional economic integration has positioned Costa Rica, and Central America more generally, in the global economy in

accordance with free-market, neoliberal criteria, reorganizing the material and discursive conditions of both nature and place. I then describe how the campaign against transgenics developed at the interface of transnational activist networks responding to regional economic restructuring and the situated politics of place-based activism.

Shifting from activist networks to the discursive construction of transgenic organisms as an object of struggle, my analysis also examines how campaign organizers work to define transgenic seeds as an outside threat to sovereignty and sense of place. Individuals such as Juan oppose transgenic seeds for a number of reasons: among others, to preserve local seed varieties; to promote small-scale, sustainable, and organic agriculture as a viable alternative to global agrofood restructuring; or to challenge the privatization of genetic resources. Even though opposition is tied to disparate issues and struggles, I suggest that the anti-transgenic campaign in Costa Rica has also exposed a more fundamental set of concerns increasingly articulated as the “defense of life itself,” connecting new anxieties about the integrity of biological life to unease about loss of national and local sovereignty.

Finally, I compare efforts to declare three municipalities transgenic-free territories to illustrate how subjective understandings of locality, sovereignty, and defense of life are employed within specific actions and place-based struggles, often in vastly different and unexpected ways, depending on cultural and historical conditions. To mobilize popular support, activists commonly rely on national spatial frameworks and cultural imaginaries, but in crucial ways they also combine narratives of national sovereignty with rights-based claims that transcend the nation-state, framing local sovereignty in terms of a global movement to defend humanity, life, and local communities worldwide. By way of conclusion, I summarize the gains realized and pitfalls encountered by activists in Costa Rica promoting transgenic-free territories and highlight implications for anthropological studies of networks, place, and life.

Regional economic integration and neoliberal nature

Since the late 1990s, efforts to spur regional economic development in Central America have relied on the social production of space and nature oriented around the interests of transnational capital. “The conquest and control of space” by capital, as David Harvey notes, “first requires that it be conceived as something usable, malleable, and therefore capable of domination through human action” (1990:254; cf. Harvey 1996; Smith 1984). This discursive and material conquest has reshaped Central America along neoliberal, free-market lines, even though the neoliberalization of national economies and states has unfolded inconsistently

and through uneven geographic development (cf. Harvey 2005).

Images of a spatially bounded Central America have been manifested in regional economic integration and large-scale infrastructure development projects. From 2001 to 2008, megaprojects such as the Plan Puebla Panama focused on developing highways, deep-water ports, electrical grids, and railroads to attract foreign investment to an economic space stretching from southern Mexico to Panama. In 2008, these development projects were reorganized under the Mesoamerica Project, which now includes Colombia (Zunino 2010). Market-based efforts to create regional corridors for biodiversity conservation, such as the Mesoamerican Biological Corridor, have been heavily promoted as the environmental sustainability component of regional infrastructure and free-trade initiatives. With the slogan “Naturally united,” development planners wedded neoliberal, market-based rhetoric to conservation goals, representing Central America spatially as a region united by biodiversity (Finley-Brook 2007; Martínez 2004; Toly 2004). Finally, regional elites have promoted economic growth through liberalization of markets, privatization of state assets and public companies, and the imposition of regional free-trade agreements, such as the United States–Dominican Republic–Central American Free Trade Agreement (CAFTA-DR) and similar trade accords with the European Union and other countries. Such projects are part of a larger vision of Central America maintained among economic elites, technocrats, and development planners who have sought to integrate the region into the global economy through free-market reforms and exploitation of shared resources, such as biological diversity (Renfrew 2011).

In Costa Rica, current patterns of capitalist spatial production took shape in response to the regional economic crisis in the 1980s, when the Costa Rican government defaulted on its foreign debt and became the target of increased U.S. aid, IMF stabilization loans, and World Bank structural adjustment loans (Sandbrook et al. 2007:107–108). International aid and loans were conditioned on fulfillment of specific reforms and austerity measures intended to cut public spending, liberalize the economy, and reduce the country’s expansive social-welfare state. Among other changes, these reforms sought to eliminate small-scale farming of basic grains and to reorient agricultural production around nontraditional exports directed at foreign, non–Central American markets (Edelman 1999:79–81; Sandbrook et al. 2007:108–109). During this period, conservationists successfully established a decentralized national parks system, placing approximately one-quarter of Costa Rican territory in protected reserves. Over the past 25 years, Costa Rica has marketed itself outward as a “green republic,” and, since the early 1990s, tourism has become one of the most significant sources of foreign exchange (Evans

1999; Sandbrook et al. 2007:109). The Costa Rican Tourism Institute has branded the country a pristine ecotourism destination through the slogan “No artificial ingredients.” Aside from tourism, the national parks system has been tethered to the international discourse of biological diversity, which views tropical space as a storehouse of genetic resources and natural capital (Hayden 2003; Martínez-Alier 1996). Private, nongovernmental entities such as the National Biodiversity Institute (INBio) epitomize the market-oriented approach to biodiversity conservation, pursuing bioprospecting contracts with multinational corporations under the logic of conserving biodiversity resources through their sustainable use and commercialization (Rodríguez Cervantes 1993). In sum, restructuring of agricultural production around nontraditional exports, wildlife conservation, the outward promotion of a “green republic” through tourism, and the merchandizing of biodiversity resources constitute key forces in the capitalist social production of space and the construction of nature through new spatial imaginaries in Costa Rica.

The social production of space and nature has been directed inward as well, with capital reaching into the molecular spaces of life itself (Cooper 2008; O’Connor 1994). In today’s global “bioeconomy,” private capital drives the creation of genetically modified organisms, pushing for the extension of property rights to genetic processes and materials once considered beyond the reach of market exchange. Although treating seeds as commodity forms is not unprecedented (Kloppenborg 2004), advances in biotechnology and the increasing standardization of intellectual property rights regimes have converted the biological reproduction of living modified organisms into instruments of capital accumulation (McAfee 2003b). Just as neoliberalization at the regional and national levels has been uneven and contested, the production of transgenic organisms in Costa Rica has taken multiple routes and involved a combination of private- and public-sector actors. According to one U.S. businessman and seed breeder with whom I spoke on multiple occasions in Costa Rica in 2006 and 2008, the world’s first transgenic soybean was brought to Costa Rica in the early 1990s (today, the majority of soy cultivated worldwide is transgenic). Under contract with Monsanto, he bred and multiplied the seed as part of the company’s then experimental production of transgenic soybean varieties. This sparked a small but significant “winter nursery,” or counterseason, seed industry, in which North American corporations and research institutes in the public breeding sector send their transgenic seeds to Costa Rica to produce an extra generation of seed increase during the northern winter season. Today, Costa Rican farmers do not use transgenic seeds commercially, but winter nursery companies grow cotton and soybean seeds for export.

In addition to winter nursery seed production, various corporate and public research initiatives have pursued

field trials with other crops, including transgenic banana, plantain, and pineapple.³ In one important project that began in the late 1990s, scientists with the public Research Center on Cellular and Molecular Biology at the University of Costa Rica attempted to develop and commercialize a transgenic rice variety suited to local conditions. The research was conducted through international consortiums and sought to address agricultural problems unique to Costa Rica, such as a viral plant disease that has hampered rice production (Arrieta et al. 2002). Using genetic resources prospected from Costa Rican territory, researchers framed their project as putting the nation's "natural capital" to work in providing a biotechnological solution to social problems such as food security. Unlike the winter nursery seed industry, which positions Costa Rica as an assembly plant for the transgenic seed market overseas, this public-sector research effort imagined a variety adapted to local conditions and problems, an assertion of national control over new molecular technologies. Despite substantial hype in the early 2000s, however, the transgenic rice has yet to be commercialized.

Transnational activist networks

The reorganization of space and nature at regional, national, and molecular scales has amplified ongoing social struggles in which opponents of free-market reforms increasingly pitch their concerns as a defense of place and even life itself. Stemming from these new sites of struggle, opposition to transgenic seeds in Central America has been taken up by diverse sectors, especially environmental groups who are committed to a social critique of neoliberal capitalism and who mobilize campaigns in part through transnational activist networks. The Biodiversity Coordination Network of Costa Rica (Red de Coordinación en Biodiversidad, or RCB) has played a long-term role in sustaining a national campaign against transgenic organisms, linking diverse organizations and individuals who have political antecedents in the Costa Rican environmental movement, rural organizing and social movements, conflicts over biodiversity and genetic resources, the organic agriculture movement, and movements against the dismantling of the social welfare state. The national antitransgenic campaign took shape in the early 2000s in conjunction with a regional network that I describe below.

Central American Alliance for the Protection of Biodiversity

Many environmentalists and others expressed concern about new agricultural biotechnologies in Costa Rica when genetically modified organisms developed into a global controversy in the mid-1990s. An organized campaign, however, was only initiated years later, with support from the Central American Alliance for the Protection of Biodiversity (Alianza Centroamericana de Protección a la

Biodiversidad, or ACPB). The ACPB was formed around 2003 by environmental NGOs, most affiliated with Friends of the Earth International, itself allied with other international NGOs and financial donors. Regional economic integration spurred numerous efforts, in addition to the ACPB, at regionwide organizing and coalition building. This networking connected many of the development NGOs that spread rapidly throughout Central America in the 1990s, especially following the end of Cold War conflicts and political violence. Many filled new civil-society spaces that opened up through the decentralization of state power and the expansion of market "freedoms" associated with neoliberal restructuring (Macdonald 1994). Such efforts also stemmed from or replicated the World Social Forum process, and, starting in 2000, regional Mesoamerican Forums were hosted almost annually in different Central American cities to address such issues as free-trade agreements, privatization of basic services, labor rights, food sovereignty, militarism, and democratization. Related but separate regional gatherings were organized around themes of biological diversity, local seed varieties, and indigenous knowledge and rights.

Transgenic organisms became one of several issues framed by activists as an object of concern, with critiques and counterdiscourses "diffusing" regionally through new organizing networks and, at the same time, giving shape to those networks.⁴ When researchers discovered that transgenic DNA had spread into the genomes of local maize varieties in southern Mexico, the region where maize was first domesticated, international attention was momentarily focused on the potential risks of unregulated transgene flow for Central American biological and agricultural diversity (Kinchy 2010; McAfee 2003a). The ACPB received funding from international NGOs and set out to coordinate opposition to transgenic organisms in the region. According to Javier, an environmentalist and researcher who works in El Salvador for an international NGO and participates in a national network against transgenic organisms, activists began working on the issue out of "regional necessity, to begin discussing and understanding the impacts of genetically modified organisms." A gathering in San Salvador brought together activists from Guatemala, Honduras, and Nicaragua, who created an informal network to exchange information and generate proposals for action. The ACPB was soon established formally, grounded in the Friends of the Earth International network.

The ACPB's initial campaign involved regional biosafety monitoring, a strategy that further reinforced a spatial image of Central America as a field of transnational contention. Using "GMO test kits" purchased from a private genetic testing company in the United States, the network gathered and tested various seed and grain imports in five countries to document the unregulated presence and flow of transgenes in regional agricultural

systems. In February 2005, it held press conferences throughout Central America to denounce the region's "contamination" and to call for creation of strict biosafety measures (ACPB 2005). In this case, the ACPB combined strategic use of international science and expertise with the production and dissemination of popular educational materials such as posters, pamphlets, websites and digital media, and short books about transgenic seeds, explaining in uncomplicated terms their implications for Central American biodiversity, farmers, and local knowledge. The ACPB created some of these materials, and member organizations produced many others, which were then distributed locally and exchanged through the various channels enabled by the regional network. These materials circulate as forms of knowledge and counterexpertise, particularly among NGOs and activists but also among state officials and private agroindustry companies, who closely monitor antitransgenic activism. "The campaign has had good results," emphasized Julio, an organizer based in Managua, Nicaragua. "For example," he said in 2006,

we have a population that is a little more informed about the issue of transgenics than they were before. We have informed the governments about the existence of this and our needs and demands. We have the national legislative assemblies working on laws about the transgenics issue, which before it hadn't even occurred to them to work on. We have the capacity to monitor all of Central America, where transgenics enter and leave.

In addition to monitoring for transgenics and producing alternative educational materials, the ACPB lobbied national and international bodies to create strict biosafety legislation to comply with the UN Convention on Biodiversity (CBD) and its Protocol on Biosafety (also known as the Cartagena Protocol). When proposed legislation moved slowly or not at all in national contexts, the ACPB lobbied officials in the Central American Parliament and the Central American Council of Human Rights Ombudsmen, both of which passed resolutions in support of biosafety regulations.⁵ Consistent with the "boomerang" pattern of transnational activism, the ACPB sought to bypass state channels and cultivate support among regional intergovernmental bodies to pressure national governments from above, a tactic observed among other transnational advocacy and activist networks (Borras 2008:264; Edelman 2008:250–251; Keck and Sikkink 1998:12–13).

Biodiversity Coordination Network of Costa Rica

Opposition to transgenic organisms developed in Costa Rica in the wake of efforts by environmentalists and other civil-society actors to promote local control over biodiversity resources. Although a formal campaign did not

materialize until the early 2000s, its roots extend at least into the early 1990s with the creation of the RCB. In the mid-1990s, several activists and organizations representing environmental groups, indigenous communities, and peasant and small-farmer sectors, as well as public universities, came together to challenge what they saw as the commodification and privatization of public genetic resources enabled by new bioprospecting agreements between INBio and multinational corporations. Civil-society groups drafted a milestone Biodiversity Law to implement the international CBD and create safeguards to protect local knowledge and national sovereignty over genetic resources.

Since the Biodiversity Law's approval in 1998, individuals have preserved the RCB to coordinate civil-society representation on government oversight boards such as the National Commission for Biodiversity Management. The RCB has continued to advocate on behalf of indigenous and peasant knowledge and local control of biodiversity resources, monitoring Costa Rica's compliance with the CBD. The RCB has also opposed the application of intellectual property rights regimes to biological life-forms, including the WTO's agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) and the 1991 version of the International Union for the Protection of New Plant Varieties, or UPOV-91 (see Mora Solano 2006). In 2007 and 2008, the RCB helped organize opposition to CAFTA, focusing on its far-reaching intellectual property rights reforms. Since 2003, the RCB has coordinated opposition to transgenic organisms and monitored compliance with the Biosafety Protocol of the CBD, promoting the concept of "transgenic-free territories" as an expression of municipal autonomy in decision making about biological and cultural diversity (García G. 2007; RCB 2008).

An organized, national campaign against transgenics developed in the early 2000s, taking on visibility as members of the RCB collaborated with the regional ACPB. On paper, the Association for Social Ecology (Asociación de Ecología Social, or AESO) and CoecoCeiba—Friends of the Earth operate as focal points in Costa Rica. One of the key coordinators was Fabián Pacheco, a young, spirited environmentalist and university-trained agronomist who, in 2005, also worked with Oilwatch, an international network that opposes the activities of oil companies in tropical countries. In addition to his Costa Rican activism, he traveled extensively to regional social forums and international meetings. In this sense, he represents what Sidney Tarrow conceptualizes as "rooted cosmopolitans": upwardly mobile, well-connected individuals or groups "who are rooted in specific national contexts, but who engage in contentious political activities that involve them in transnational networks of contacts and conflicts" (2005:29).⁶

At the center of the antitransgenic campaign between 2004 and 2006, Fabián sought to build networks not only as a strategy for achieving specific goals of social and

environmental change but also as an ideal, or endpoint, in and of itself. He commonly asserted, “We are building networks,” connections envisioned to endure beyond the specific political objectives of a targeted campaign. During our first meeting, I asked him to describe his role in the regional campaign and the relationship between transnational networking and local activism. Slightly exasperated by my unfamiliarity with many of the organizations involved, he grabbed my notebook and diagramed how key actors relate to each other, sketching a network connecting NGOs, local communities, state authorities, and international organizations. His diagram outlined interactions between different scales, which he labeled “Central America,” “Costa Rica,” and “local,” and identified funding channels between organizations. As a designated focal point, Fabián coordinated funds distributed to Costa Rica and heavily influenced the character of the national antitransgenic campaign in its early years. Aside from this formal role, however, he also described himself as a “facilitator” of specific actions and a “translator” of knowledge between various nodes in the network. Agricultural biotechnology can be a dense and acutely technical topic, and the controversies that surround transgenic seeds often seem hopelessly inaccessible to a novice observer. Fabián saw himself as translating between different forms of expertise and knowledge, working to transform a distant, technical issue, often contested within international politics, into an issue of local concern and place-based relevance.

Early on, Costa Rican organizers lobbied legislators and promoted a visible public campaign that called for a national moratorium on transgenic seeds, in 2004 petitioning the Ministry of Environment and Energy (at that time, the Ministerio de Ambiente y Energía, or MINAE) and meeting with President Abel Pacheco.⁷ The request was rejected but drew media attention because of support from MINAE. In a move that aggravated some government officials, biotech scientists, and industry, an executive order added two civil-society representatives to the National Technical Commission on Biosafety (Comisión Técnica Nacional de Bioseguridad, or CTNBio), the governmental body charged with evaluating requests to import and plant transgenic seeds in Costa Rican territory (Ponchner 2004a, 2004b). With support from the ACPB, activists collected seed and grain samples from markets in San José and at ports along the Pacific and Atlantic coasts. They documented the unregulated entry of transgenic material through corn and soybean imports, holding press conferences and publishing “Transgenic Contamination in Costa Rica: A Reality Confirmed” to denounce the government’s inability to maintain biosafety regulations (ACPB and RCB 2005a; cf. García G. 2010; Rojas Ramírez 2003).⁸ They also denounced the hazardous practices of Delta and Pine Land, a multinational seed company with winter nursery operations in Cañas, Guanacaste. Counterseason production of transgenic

cotton had resulted in numerous cotton plants growing throughout the town and in abandoned fields, underscoring the difficulty of containing the unwanted spread of transgenic crops once they are planted and released into complex ecosystems (see Pearson 2009). In response, the campaign organized a number of public forums and held numerous workshops over the next few years to encourage public discussion about the risks of agricultural and food biotechnology.

With a national moratorium failing to gain traction, activists shifted their work to communities, lobbying municipal councils to adopt resolutions to declare their municipalities transgenic-free territories, with the first municipality adopting that status in 2005. The national campaign continued but throughout 2006 became less centralized. As funding dried up in 2007, the regional ACPB entered a period of disorganization, and members disagreed on strategy or quarreled over resources.⁹ Additionally, throughout 2007 and 2008, the RCB focused many of its resources and considerable time on supporting the movement against CAFTA. Despite these changes, the national antitransgenic campaign has maintained some visibility through the continued establishment of transgenic-free territories, with eight municipalities adopting the status between 2005 and 2010. In addition to the transgenic-free territories themselves, however, one of the most enduring successes of the antitransgenic campaign has been to define transgenic organisms as an object of concern within environmentalist and activist agendas. The following section discusses how activists draw on culturally meaningful discourses about nation and place to frame transgenics as foreign Others and threats to sovereignty.

Transgenic organism as threatening Other

“What can we do?” asked Juan, “Give up and leave, so that they continue doing whatever they want with us?” We continued listening to Juan Arriaga, who spoke at the local workshop held as part of the International Day of Opposition to Genetically Modified Organisms, introduced at the beginning of this article. Serious yet good-humored in tone, he narrated the importance of Santa Cruz, Guanacaste, declaring itself a transgenic-free territory. “No, never,” shouted several people in response to his question. “At this moment,” proposed Juan, “we should invoke the spirit of *don* Juanito Mora. One hundred and fifty years ago, what happened? Do you remember? One hundred and fifty years ago there was a very similar situation to that which we have today.” I sat listening, my digital audio recorder positioned on the chair next to me, an obvious outsider in the crowd. Suddenly, Juan looked in my direction: “You’re North American, right?” Stunned into attention, I nodded hesitantly. “Allow me to introduce a North American friend.”

To chuckles from the crowd, he introduced me as William Walker, a notorious mid-19th-century filibusterer and proponent of the expansionary ideologies of U.S. manifest destiny. Supported by U.S. economic interests, Walker led private military expeditions in Central America and in 1856 installed himself as president of Nicaragua, attempting to control transisthmus trade routes. Walker also rallied support in the U.S. south with proposals to establish a slave state. Today Walker is an iconic figure in the mythologized stories of the past that inform contemporary understandings of Costa Rican nationalism.

Juan invited me to stand next to him, and the audience laughed as he teased me about Walker's imposing physical presence, a reference to my towering six-foot, six-inch height. "Look, this is how the peasants felt 150 years ago. Don William Walker," he said to laughter, sarcastically using the *don* form of address, which conveys familiarity and respect. "Don William Walker had already taken over Guatemala, Honduras, El Salvador, and Nicaragua, and he was the president of Nicaragua. There were some people in Costa Rica, who, since he had already taken over all of Central America, said that we couldn't do anything, and that our country must be handed over to don William Walker." The audience bellowed a resounding "No!"

Juan then asked several women to stand with us, gendering the nationalist narrative that would unfold. "Don Juanito Mora, who can be her," he suggested, pointing to one of the women,

and the Costa Rican army joined together with the armies of Nicaragua, Honduras, and Guatemala, and together, only united, could we on the 20th of March, nearby in Santa Rosa, defeat William Walker. The filibusterer army didn't know that there was a Costa Rican army waiting for it, and we threw them out! We threw them out toward Nicaragua, and the battles continued until William Walker was killed in Honduras! And now we enjoy the Costa Rica that we have today. But today, where is the spirit of don Juanito Mora?

Throughout much of Central America, the defeat of William Walker is a well-known story of independence and anti-imperialist struggle. Stories about Juan Rafael Mora leading Central American forces in battle, and about a soldier named Juan Santamaría sacrificing his life to burn down a fort where Walker's troops took refuge, operate as key elements in Costa Rican narratives of national belonging (Palmer 1993).

Activists utilize such narratives as part of widely recognized "cultural repertoires" that lend meaning to contemporary struggles against seemingly elusive forces such as free trade or transgenic seeds. They ground issues such as agricultural biotechnology within a cultural framework that allows people to interpret new and unfamiliar issues and devise "maps for future action" (Hess 2007:465; cf. Harper

2004). "Although this free trade agreement has been signed in all of Central America, we can resist it, we can resist from each house, from each school, from each community," said Juan, "from that which we eat and that which we plant." To punctuate Juan's story and the performance, the women, representing united Central American opposition to U.S. imperialism, gently pulled me to the ground and then stood over me triumphantly. William Walker was dead.

During the workshop, organized as part of a globally coordinated event, Juan framed a thorny technoscientific issue through culturally salient narratives as an outside threat to Costa Rican sovereignty, proposing the establishment of local transgenic-free territories as a means of resistance. Capturing the tone of the event, one audience member, a man in his fifties, joined in an ensuing discussion, asserting, "My worry is that—when there is a threat, I develop a defense. I think that what the people confronting this threat need to develop is a defense; a defense not of an island, not only on the level of the municipality, but on a national level. They are violating our sovereignty—in our food, and most of all of our Costa Rican being."

For Juan and others, transgenic material violates what are presumed to be fixed boundaries—assumed biological limits and imagined national borders—and represents dangerous and polluting matter that is "out of place" (Kinchy 2007). Achille Mbembe notes that "perception of the existence of the Other as an attempt on my life, as a mortal threat or absolute danger whose biophysical elimination would strengthen my potential to life and security" constitutes "one of the many imaginaries of sovereignty" (2003:18) set in motion through the modern nation-state. Congruent with modernist visions of territorial sovereignty, which position a foreign Other as an impure, subversive threat to the national Self, activists draw on familiar cultural repertoires to cast transgenic organisms as an exterior menace, threatening to contaminate the biological integrity of the nation. At the level of symbolism, opponents of transgenic organisms generally maintain that genetic engineering transgresses the biological limits of species boundaries, upsetting categories that define the so-called natural order of things (Gusterson 2005; cf. Douglas 1966). Nonhuman bodies, such as the chicken-tomato seen in Figure 1 (frequently displayed at antitransgenic campaign events), visually represent a transgression of physical boundaries. Activists invoke images of mutation, pollution, and contamination to frame biotechnology as a threat to the biological integrity of nature. Metaphors that link the borders of the nation with the boundaries of the body are common, symbolizing transgression not only of species boundaries but of the body politic as well. Juan had tied key metaphors of transgression to well-known stories about defense of the nation.

To redefine transgenic organisms as transgressive, activists in Costa Rica commonly make a conceptual



Figure 1. Activists assemble in the central square of Paraíso, Cartago, for a demonstration. The banner toward the back features a transgenic chicken–tomato. The banner in front calls for a moratorium on the planting of transgenic seeds. Photograph by the author, March 2006.

distinction between “nature” and “biological life,” suggesting that the pure nature of the nation is under threat by potentially contaminating and polluting life-forms. I have heard, for instance, people describe transgenics as “unnatural” biological organisms. “Transgenics are living beings,” one activist asserted, “they do not exist in nature but have been created artificially in laboratories.” Biological life, in this sense, shifts between classifications of natural and artificial. At an event in 2006, an organizer began addressing an audience by asking, “What is a transgenic organism?” “It’s not something natural,” she said, positioning the transgenic organism as an artificial biological entity. “Rather,” she continued, “a transgenic is something produced in laboratories. Transgenics are unnatural because they have genes from other organisms, and because they are ‘produced,’ it is possible to patent them. But the problem is that we are not talking about a machine; we’re talking about life, about living beings, living organisms.”

The very notion of “biology,” Sarah Franklin suggests, is taking on new meanings, increasingly marking “mixtures of the biological and the technical.” Nature, she writes, “is unavoidably present yet increasingly absent” (Franklin 2003:69). Organizers frame transgenic organisms as an “unnatural” threat, positioning “the laboratory” as a technoscientific space where life is fabricated and produced as artifact. By symbolically positioning the laboratory as a space for fabricating life, transgenic organisms are, by consequence, unnatural—indeed, radically external to nature. But the transgenic organism is not simply nature’s Other. It is also biological. At stake, then, are the symbolic distinctions between nature, life, and artifice and the meanings expressed through notions of boundaries and transgression. The next section looks at how these meanings inform the establishment of transgenic-free territories.

Transgenic-free territories

Eight Costa Rican municipalities have adopted transgenic-free territory declarations since 2005, and several more have discussed similar resolutions but have not yet acted on them.¹⁰ Several individuals associated with the antitransgenic campaign have developed a certain level of expertise and facility in drawing up the resolution and then meeting with a given municipal council to promote its adoption. In some cases, it has taken months of lobbying to assure passage, whereas in other cases a municipal council has moved rapidly. In general, such declarations lack extensive grassroots involvement from community residents or organizations, which has been a constant source of frustration for campaign organizers. Nevertheless, the declaration becomes a medium for organizers, local officials, and, in some cases, local organizations to define and articulate the significance of nature, place, and local autonomy.

At the same time that they represent an assertion of local autonomy, those promoting the declaration commonly portray locality and the importance of place not only in relation to the spatial frame of the nation-state but also through claims to support a larger, global movement. The first transgenic-free territory in Costa Rica and in Central America, for instance, was Paraíso, a cantón located in the province of Cartago. An hour-long bus ride from the capital, San José, the region has historically hosted coffee plantations and vegetable production, and a small, green squash, chayote, is one of the main commercial crops (transgenic seeds are not cultivated in the area). Following a chance meeting with organizers of the antitransgenic campaign, a young *regidor*, or elected member of the municipal council, named David Valverde Brenes swiftly achieved passage of the declaration. “More than anything,” David recounted when we spoke in Paraíso in 2006, “the motion passed because of the confidence [the municipal council] had in me, the credibility they associated with me. After an act almost of faith, to support me, and tell me, okay, if it’s fine, we are going to support you with this idea.”

Even though the motion had no impact on daily life in Paraíso, it marked a symbolic victory for the national antitransgenic campaign, and organizers immediately framed and promoted the accomplishment as a grassroots initiative. A press release issued by the RCB stated that the declaration

should not be seen as an isolated incident, if we consider that at this time around 200 jurisdictions in 22 European countries have been declared “transgenic free zones,” in addition to Mendocino county in California, USA, and the municipalities of San Marcos de Córdoba and Bolsón in Argentina. With this visionary declaration, today the municipal council of Paraíso de Cartago positions this municipality at the vanguard of self-management and the

establishment of frameworks—real and effective—of community biosafety. [ACPB and RCB 2005b]

In Paraíso, members of the municipal council articulated their own place-based vision of community biosafety in “A Paradise without Transgenics,” a short article written originally for a community newspaper, *El Paraiseño*. The article relates the declaration to an origin story of Paraíso, explaining that, in 1831, a plague attacked the farming town of Villa de Ujarrás, forcing the population to move to Llanos de Santa Lucía. Because the new fertile lands brought “refuge and salvation,” the place was renamed Paraíso (Paradise). “Today, 174 years later, like all of the towns around the world, Paraíso is being threatened by a new plague called transgenics, which threatens our health, culture, and our freedom.” The article concludes by articulating the broader significance of the declaration, linking it back to the founding of Paraíso, and then looking outward toward a global movement. Paraíso “was declared a transgenic free zone, transforming itself like was done the century before into a place of refuge and salvation for farmers and people in general. However, the plague (transgenics) stalks countries around the world, which is why the decision taken by *los paraiseños* should inspire other peoples within and outside of the national territory” (Valverde Brenes 2006: 27). The short article imagines two audiences: residents of Paraíso, on one hand, and, on the other, a global audience that includes other activists and participants in transnational activist networks. The article appeared two months after its initial publication in *La Bici*, a digital publication produced periodically by environmentalists with funds from ACPB. It was distributed largely through international e-mail contacts and postings on blogs and websites.

Organizers framed the significance of the declaration in Paraíso in relation to similar declarations adopted by communities in other parts of the world, reflecting local expressions of a global movement against genetically modified organisms. Subsequent transgenic-free territories in Costa Rica have also oscillated between a global frame and efforts to assert the meaning and identity of locality, particularly in a context of socioeconomic displacement. Three transgenic-free territories have been established in Guanacaste, for instance, historically a cattle-ranching and farming region that has undergone dramatic changes since the 1980s. Farmers there do not use transgenic seeds commercially, but at least three companies rent land in Guanacaste to grow and multiply transgenic cotton and soy seeds for export to the United States. Researchers have also conducted field trials with other transgenic plants, such as rice.

The identity and meaning of Guanacaste as a place is increasingly contested and in flux. Neoliberal economic policies have shredded traditional agricultural and farming sectors, reconfiguring Guanacaste’s relationship to national

and international markets (Edelman 1999). Tourism industries have grown rapidly, catering to both Costa Rican and foreign visitors. The social impact of tourism is complex and contradictory, spurring economic growth dominated by foreign capital, expatriates, and national elites and generating a small number of jobs in low-paying service and hospitality sectors. At the same time, this growth fuels the construction of commercially fabricated and exclusive spaces—such as beach resorts, retirement communities, town homes, tour companies, ecotourism parks, themed restaurants, and so on—all of which represent a material and symbolic displacement of residents and local cultural forms (Gregory 2007). Over the past decade, foreign interests have scrambled to buy up beachfront real estate at alarming rates. Visitors as well as Guanacastecans often remark on the amazing number of English-language billboards that advertise beachfront, jungle, and wooded land for sale. During a workshop on transgenic-free territories held in Nicoya in 2008, for instance, numerous people remarked on how North Americans are increasingly purchasing land in the region, especially near the ocean or nature reserves. Luxury housing complexes, with their abundant swimming pools and golf courses, put added pressure on scarce resources (such as water) and inflate real estate prices, making the purchase of land inaccessible for many Guanacastecans and setting the stage for new resource conflicts. “We’re becoming foreigners in our own country,” commented one woman, repeating a sentiment that is commonly expressed today.

In popular culture, and especially within tourism marketing propaganda, the region’s heritage is closely identified with a Central American “culture of maize,” an identification distinct from that of the cosmopolitan central valley region. Key individuals involved in establishing the transgenic-free territory declaration in Santa Cruz in November 2005 exploited the potent cultural sentiments and political anxieties swirling around tourism-related social change, situating the issue amid struggles over the region’s place-based identity. After one event with municipal council members, organizers drafted a statement that was later distributed via websites and e-mail. It linked nature and traditional foods to expressions of cultural identity, encouraging opposition to transgenics to protect local culture as well as food sovereignty in other countries: “We do not want Guanacaste to continue to be a provider of transgenic seeds for other countries, because we do not want to weaken the food sovereignty and security of our sister communities around the world” (ACPB 2004:9–10). The statement emphasized global solidarity while framing transgenic organisms as a foreign threat to local food sovereignty and native seeds, a menace to the historical and cultural specificity of Guanacaste.

Efforts to narrate the cultural meaning of transgenics as an object of struggle, and as part of wider claims to



Figure 2. Santa Cruz municipal council members receive a wooden plaque that reads “Transgenic Free Municipality.” Photograph by the author, December 2005.

place and nature, were apparent at an activity hosted by Sol de Vida in December 2005, organized to celebrate Santa Cruz’s recent transgenic-free territory declaration. Organizers stood against a colorful backdrop of several clay pots containing unique varieties of local seeds. “On this day, the shortest day of the year,” said Juan Arriaga in reference to the solstice, “people around the world are sharing and exchanging local seed varieties in a celebration of life.” He explained that Santa Cruz became a transgenic-free territory because “we do not want to contaminate our maize and our environment with transgenics.”

Fabián Pacheco, one of the Costa Rican focal points for the regional ACPB network, then presented three regidores with a large wooden plaque that read “Transgenic Free Municipality” (see Figure 2). “This sign is for life,” Fabián declared. “But what is a transgenic?” he continued, shifting into a presentation about the meaning of transgenics.

What is the word that is so strange and seemingly distant from the reality of our daily lives? It may seem distant, but transgenics are already on our kitchen tables! They are products, like plants and ingredients in foods, but they are not natural. Transgenics break from a traditional history of saving and exchanging seeds among indigenous peoples and among peasants. By rejecting transgenics we are saying yes to our native seeds!

Fabián then invited a key municipal council member to address the crowd. “I would like to thank Fabián for accompanying us through this process,” said the regidor. “It has been a long process, involving discussions, workshops, and exchange of information. After much consultation and discussion, the declaration was considered as part of the broader cultural revitalization of the region.” The regidor suggested that the declaration, with its focus on preserving *semillas criollas* (native seeds), traditional foods, and local culture, was also viewed by the municipal council as part of a project to promote local tourism. A 1974 presidential de-

claration designated Santa Cruz the Folklore City of Costa Rica, and today the municipality promotes that image in the context of contemporary tourism through programs to facilitate its “cultural recovery” (*rescate cultural*). “Local culture” and “tradition” operate as key resources in the symbolic economy of tourism, considerations that strongly informed the municipal council’s passage of the transgenic-free declaration. “Santa Cruz has experienced a boom of tourism development. It’s something incredible. Today there is little interest in developing agriculture,” the regidor explained when we sat down for an interview in 2006. “For the most part, the future seems to be in tourism.”

In light of these transformations, the cultural revitalization of Santa Cruz serves both to further brand the city and to appeal to local and place-based concerns about the rapid growth of foreign tourism and perceived erosion of sovereignty. For the antitransgenic campaign, interested in expanding opposition to transgenic seeds and promoting alternatives such as organic agriculture and agroecology, successful passage of the declaration relied on effectively narrating transgenic organisms—unfamiliar and complex technoscientific entities—as a threat to culturally defined traditions and conceptions of place.

Reasserting cultural claims to the meaning of place in a context of socioeconomic displacement and upheaval also informed the significance of the transgenic-free declaration adopted in Abangares, Guanacaste, in May 2008. Abangares was founded in the 19th century as a gold-mining town, and mining was actively pursued through the 1930s by foreign companies such as the Abangares Gold Fields Company. Although mining, especially for gold, has since diminished, the legacies of mining and the interests of transnational capital in extractive industries have shaped local history. The transgenic-free territory declaration in Abangares was a product of lobbying efforts by the Ecumenical Forum for Alternative Development in Guanacaste (Foro Ecueménico para el Desarrollo Alternativo de Guanacaste, or FEDEAGUA), which promotes rural sustainable development and organic agriculture in the region.¹¹ FEDEAGUA has been active since the mid-1990s and successfully lobbied for neighboring Nicoya, Guanacaste, to adopt a transgenic-free declaration two years earlier. Its efforts in Abangares occurred in the wake of a broader popular movement against CAFTA.

CAFTA deepens and solidifies neoliberal, free-market reforms that began in the region in the 1980s and 1990s, many of which have been deeply unpopular, especially among the middle class and other sectors that have traditionally enjoyed the benefits of the welfare state. Despite widespread opposition in Costa Rica, CAFTA was narrowly approved in an October 2007 referendum. Debate over CAFTA galvanized opposition to neoliberal globalization and sparked considerable grassroots mobilization in defense of the social-welfare state. Among other things,

CAFTA required that Costa Rica transform its laws to grant a type of intellectual property right to commercial seed varieties. Opponents argued that such reforms undermine the rights of small farmers to freely save and exchange seeds, further privatizing and commodifying biological life-forms. In this contentious political context, FEDEAGUA lobbied Abangares to become a transgenic-free territory not as an endpoint but as a means to facilitate alternative forms of sustainable development and protect the right to save, develop, and exchange seeds.

News of the Abangares declaration was disseminated through websites and e-mail lists stating that the declaration was part of a new Seeds of Identity campaign (an international campaign supported by SwissAid and other international donors) focused on “the dignity of semillas criollas and rural cultural identity from the perspective of sustainable agriculture and food sovereignty.” Wilmar Matarrita, an organizer for FEDEAGUA, emphasized the symbolic potency of seeds, which, for many, represent genealogy and rootedness. “When we speak about transgenic organisms a lot of people don’t understand the issue,” he explained over lunch in Abangares in 2008. “However, to talk about native seeds is another matter.” In May 2008, a special session of the municipal council was held to formally declare Abangares an “ecological and transgenic-free cantón” (*cantón ecológico y libre de transgénicos*), an important innovation of the transgenic-free territory status that explicitly proposes small-scale agroecology, organic agriculture, and creation of new markets under principles of sustainable development as alternatives to corporate-controlled agroindustries.¹² Tables were set up around the perimeter of the meeting space, and several farmers displayed a variety of organic products, seeds, and medicinal plants. The session was attended by several farmers and at least a dozen representatives from NGOs and municipalities in other parts of the country, invited and brought to Abangares by FEDEAGUA. Each person was given a T-shirt that read “Native Seeds: Take Care of Our Heritage, Our Future,” sponsored by the international Seeds of Identity campaign.

As the session got underway, organizers from FEDEAGUA described the importance of Abangares’s declaration for municipal autonomy, ecological sustainability, the protection of native seeds, and the pursuit of alternative models of development despite the recent adoption of CAFTA. During the session, the municipal council attached a second motion to the declaration, a statement of support for Sardinal de Carillo, whose residents were opposing a development project that would pump local water resources toward coastal areas for use by vacation resorts and golf courses. In addition, the motion called on each municipality of

Guanacaste and the country in general, armed with courage, to go out and defend the right of our peasant

and indigenous families to plant their own food, understanding that native seeds are part of the heritage of humanity. These resources should remain in the hands of our communities and not those of transnational corporations. We ask that following our example, in each municipality of Costa Rica a patriotic spark is lit and each respective cantón is declared “ecological and transgenic free.” Let us assert our municipal autonomy, already constitutionally enshrined. It is time to begin to govern from below, from our communities, from our cantons.¹³

The motion situated the declaration amid a set of concerns that extend beyond the ecological or health risks of transgenic seeds or questions of food sovereignty, defining place in relation to a broader movement to promote peasant and indigenous communities and protect the global “heritage”—native seeds—“of humankind.” Through subtle reference to the anti-CAFTA movement, which was often called the “patriotic movement” (*movimiento patriótico*), the motion invoked a nationalistic vision of municipal autonomy at a historical moment when the Costa Rican state was widely viewed by CAFTA opponents to have relinquished its political and economic sovereignty to the outside forces of free trade. In short, the special session allowed organizers to narrate the significance of the declaration and link a place whose history is shaped by extractive industries to peasant and indigenous concerns, as represented by native seeds.

The special session also amounted to highly scripted political theater organized by NGOs, a social performance that embodied the contradictions and tensions between genuine grassroots organizing and top-down paternalism. Organizers and NGOs themselves are very aware of this tension yet often fall short in their attempts to cultivate a base of support that includes “participation” by “local communities” in the establishment of transgenic-free territories. “It’s our position,” an organizer announced during an event in Nicoya in June 2008, “that the declaration is a process that has to have popular support and has to generate participation and social mobilization. This is not some sort of marketing campaign; it is not some public brand that belongs to anybody. We would prefer not to have a declaration if it is just some empty brand, because to do so is misleading.” She went on to explain that a declaration would merely be “cosmetic” if it is “not an instrument we can apply.”

The organizers of that event invited representatives of distant rural communities in hopes of spreading the idea of transgenic-free territories to other parts of the country. One participant, Mauricio, traveled several hours over two days by multiple cramped buses. I asked him why he had come, assuming he would only endure such a demanding trip out of genuine interest in the antitransgenic campaign. Mauricio looked at me quizzically and then said, “Well, because they invited me here.” Moments later, I was pulled

aside by the representative of a San José-based NGO who had overheard our conversation. “You see,” he insisted, making implicit reference to transportation, food, and lodging costs that were covered by campaign organizers, “half these people are only here because it’s all paid for by the campaign. What kind of participation is that?” Although, in this case, questions were raised about the form and meaning of participation, such networking nevertheless achieves diverse outcomes. The same event allowed organizers from FEDEAGUA to cultivate a close relationship with a municipal official from Talamanca, Limón, a coastal province along the Caribbean. A few months later, Talamanca became the next transgenic-free territory, marking another success of the broader antitransgenic campaign.

Conclusions

Transgenic-free territories have caught the attention of private industry (including subsidiaries of multinational corporations) as well as biotech researchers and government policy makers in Costa Rica. When Paraíso became the first transgenic-free territory in 2005, for instance, a national association representing the food industry unsuccessfully pressured municipal council members to retract the declaration, threatening legal measures and accusing them of passing an unscientific and unconstitutional ordinance against biotechnology. Biotech researchers in public and private institutions have not reacted with one voice, but various individuals have sought to delegitimize anti-transgenic activism as the “irrational” and ideological ploy of radical environmentalists who supposedly oppose scientific progress. Government biosafety officials and policy makers, by contrast, periodically embrace civil-society involvement in agricultural biosafety, and at public conferences I have heard officials cite transgenic-free territories as an example of public participation in biotechnology regulatory policy (Pearson 2009). For the most part, however, the state ignored the expanding series of transgenic-free territories until June 2008, when MAG commissioned legal analysis of the declarations. Government lawyers maintained that the declarations hold no weight, asserting that existing national legislation grants the national government exclusive jurisdiction to regulate all activity related to transgenic material.¹⁴ The legality of a transgenic-free territory status, however, has not been ruled on by the courts and remains open to dispute. The RCB (2008) has crafted a response emphasizing constitutional protections of municipal autonomy.

Transgenic-free territories raise important questions for anthropological studies of transnational networks, place, and the politics of life. As I described at the outset, regional economic integration has reorganized the relationships between capital, space, and nature, sparking the creation of transnational activist networks that seek to re-

sist broader political-economic processes that increasingly fuse biological reproduction with capitalist accumulation strategies. Networks such as ACPB have responded to regional patterns of restructuring by sharing information and distributing resources across borders, waging transnational campaigns that incorporate original scientific research, and engaging arenas of international politics and policy (Keck and Sikkink 1998; Tarrow 2005). New communications technologies, ease of international travel for those with means, and the emergence of NGOs as political actors have all facilitated the rapid expansion of transnational civil-society networking (Edelman 2005, 2008; Gill 2009). Activists rooted in national contexts but working among transnational networks deploy tactics at multiple spatial scales to pressure state authorities from above and from below.

Such networking, however, entails more than a new organizational structure or shift in the landscape of political opportunities for organizing. The RCB, for instance, connects a range of actors who work with multiple organizations, on multiple issues, engaged in different forms and scales of activism—often simultaneously. Activists participate in networks and coalitions that range in density and durability, at times with overlapping membership. At one moment, they may be engaged in oppositional politics and, at another, actively involved in government commissions or policy work within existing institutional channels. Some activists shift scales regularly, moving between local, national, and international arenas of struggle. Others are linked to transnational networks and coalitions through participation in regional gatherings and digital communications such as e-mail lists but do not necessarily perceive their activism as having transnational objectives. Under these circumstances, it is difficult to classify the RCB and its organizational structure, ties to other networks, or ideological vision. Indeed, it is not a singular actor and rarely operates as such. In this sense, contemporary civil-society and activist networks are guided by new “aesthetic forms” (Riles 2001) or “cultural logics” (Juris 2008) in which the ideal of the decentralized network becomes both the means and the goal itself. Among many Costa Rican environmentalists and antitransgenic activists, networking involves promoting cultural principles that shape their self-understanding and political imaginary as they operate across various spatial scales while maintaining a strong commitment to notions of territory and locality. The forms and practices of networking guide activists as they work to tap into transnational networks and connect with grassroots or community-level actors.

As anthropologists have traced networking from local to global scales and used the concept of “network” to comprehend new social and cultural patterns, the significance of place has also taken on renewed importance, especially among anthropologists studying environmental problems and the capitalist restructuring of space and nature

(Escobar 2008; Ferradás 2004; Renfrew 2009; West 2006). Early anthropological participation in debates around globalization sought to deconstruct assumptions about place as a rooted, static opposite of “the global.” Anthropologists grappled to develop a fluid conceptualization of place as “deterritorialized” while still insisting that scale, use of space, and social production of place remain central to how we interpret social and cultural experience (Gupta and Ferguson 1997a, 1997b). In Costa Rica, environmental struggles waged in defense of place are rarely, as Aletta Biersack puts it, defined as “globality’s Other.” Rather, specific campaign tactics and accomplishments such as the establishment of transgenic-free territories represent the momentary outcome of ongoing “local-global articulation and interaction” (Biersack 2006:16), a dynamic, multidimensional process involving a range of social actors and forces: environmentalists and other activists, NGOs, municipal council officials, and state authorities as well as political-economic transformations. In other words, transnational networking and place-based struggles are not oppositional but reflect social practices that register simultaneously in transnational and local fields of struggle.

Localism, or “localist movements,” to use David Hess’s (2009) term, thus comprises strategies within ongoing campaigns and civil-society networks to build alternatives grounded in principles of community autonomy and self-determination. Organizers frame transgenic organisms symbolically as an outside “threat,” drawing on metaphors of bodies and border crossing to suggest that life itself—in some cases, the biological integrity of the nation—is at stake. From the perspectives of campaign activists and network actors, transgenic-free territories represent a defense of life and, by extension, a defense of sovereignty, the assertion of place against the uncertainties of both transgenic organisms and neoliberal capitalism. As it draws on the symbolism of national borders and cultural repertoires associated with national histories, this assertion is also often made by emphasizing that transgenic-free territories are part of a global movement of communities defending rights that transcend the nation-state.

Limitations of this network model of activism and its associated politics of place and life abound. Environmentalists and NGOs maintain the ongoing campaign against transgenic seeds and hope to piece together corridors of local opposition. Born of resolutions adopted by individual municipal councils, however, transgenic-free territories have questionable legal authority in relation to existing national biotechnology policy, lacking a feasible means of enforcement.¹⁵ The majority of the local population is generally unaware that such declarations exist in their communities. The declarations usually result from the efforts of a handful of municipal council officials who work closely with networks of environmental activists or NGOs that have embraced localism as a strategy of national and re-

gional campaigns. These diverse actors encompass diverging political objectives and sometimes-contradictory understandings of what their efforts mean. Although the pattern of transgenic-free territories represents an important accomplishment for the national antitransgenic campaign in general, the initiatives often remain documents filed away in municipal government offices with no impact on daily life in communities where they are established. Mindful of this dilemma, organizers struggle to facilitate meaningful participation by community members.

Despite these limitations, transgenic-free territories have multiplied annually since 2005, often tied to specific place-based struggles. The Abangares declaration, described above, became one of many moments of contention in a broader social movement against CAFTA. Santa Cruz was established as a transgenic-free territory as a gesture of support for local farmers and native seeds but also as a means to assert the identity of place against the historical forces of economic displacement, represented most recently by international tourism. In Paraíso, a youth environmental organization that formed only a few years ago regularly invokes the 2005 transgenic-free territory declaration, organizing an Ecological Festival in March 2010 to commemorate the declaration’s five-year anniversary and raise community awareness about organic agriculture, environmental sustainability, and environmental justice. Although they risk remaining nothing more than “cosmetic” achievements, the declarations also establish an important precedent and tradition of activism, both symbolically and in municipal legislation, and link local communities to a global movement for transgenic-free territories framed around claims to rights that belong to everyone, regardless of nation-state boundaries. The meaning and gains of transgenic-free territories are best evaluated not in isolation but in relation to other forms of popular mobilization, especially currents of social activism and environmentalism that push for democratic, socially just, and ecologically sustainable futures.

Notes

Acknowledgments. Research was supported by the Wenner-Gren Foundation, the Latin American and Caribbean Area Studies (LACAS) program at Binghamton University-SUNY, and the University of Wisconsin-Stout. I thank Carmen Ferradás, Deborah Elliston, and Doug Holmes for feedback on an earlier version of this article as well as the anonymous reviewers from *AE*, who provided many helpful suggestions. I am extremely grateful to the members of the Red de Coordinación en Biodiversidad of Costa Rica for their ongoing support and encouragement.

1. For recent discussions and analyses of such conflicts from anthropological and related social science perspectives, see Gusterson 2005; Harper 2004; Heller 2007; Heller and Escobar 2003; Kinchy 2007, 2010; McAfee 2003a, 2003b; Newell 2008; Pearson 2009; Schurman and Munro 2003; and Scoones 2008.

2. I conducted fieldwork from late 2005 through mid-2006, from August 2007 to August 2008, and during the summer of 2010. Research involved formal and informal interviews; participation in meetings, workshops, demonstrations, and informal outings; and monitoring of websites and participation in electronic mailing lists and blogs. When I am not in residence in Costa Rica, I continue to follow the antitransgenic campaign through websites, blogs, online social networking, and news reports.

3. Detailed records about transgenic organisms approved in Costa Rica for counterseason seed production or research field trials can be found at the international Biosafety Clearing House (BCH) website for Costa Rica (see BCH n.d.), maintained as part of the Cartagena Protocol on Biosafety.

4. On the notion of “diffusion” as a process of transnational contention, see Tarrow 2005:32–34, which defines diffusion as the “transfer of claims or forms of contention from one site to another.”

5. Parlamento Centroamericano, Resolución AP/4-CLXX-2005, “Para Proteger la Salud Humana y Reducir las Amenazas a la Diversidad Biológica y al Medio Ambiente Provenientes del Uso Inadecuado de la Biotecnología,” Guatemala City, March 18, 2005; Consejo Centroamericano de Procuradores de Derechos Humanos, “Declaración, XXIX Reunión del Consejo Centroamericano de Procuradores de Derechos Humanos,” Antigua, Guatemala, February 23, 2005.

6. Many observers have described activists similarly positioned within fields of collective action, the world of NGO activism, or social movement organizing, often strategically situated as cultural or intellectual “brokers” between local organizations and sources of international funding, support, and prestige (see Edelman 2008:232; Tarrow 2005:29). Such individuals are usually university educated, enjoy linguistic skills in two or more languages, have accumulated significant amounts of social and cultural capital within the world of international NGOs, and are otherwise upwardly mobile or middle class.

7. Fabián Pacheco is the son of Abel Pacheco, president of Costa Rica from 2002 to 2006.

8. The Biotechnology Program of the State Phytosanitary Service, under the Ministry of Agriculture and Farming (Ministerio de Agricultura y Ganadería, or MAG), regulates transgenic organisms in Costa Rica, including transport, production, research field trials, and potential commercial use. Anyone wishing to use transgenic organisms for research or commercial purposes must request approval from MAG and undergo formal biosafety risk assessment. CTNBio, which includes representatives from various government ministries, the national academy of sciences, and civil society, evaluates all requests to work with transgenic organisms. Once approvals have been granted, government-accredited biosafety auditors (*auditorías en bioseguridad agrícola*) must be contracted to oversee risk management procedures. As mentioned in the text, to date, all requests submitted to the CTNBio have been for research field trials or as part of counterseason seed production. Transgenic seeds are not yet used on a commercial basis in Costa Rica because, MAG officials explained, no one has made a request to do so. Recently, however, the multinational Del Monte, through its subsidiary Pindeco, requested permission to plant field trials of transgenic pineapple on a “semicommercial” basis, provoking an outcry from environmentalists and renewing public discussion of transgenic organisms and foods (Vindas 2011).

9. In general, although the creation of transnational coalitions and networks in Central America gained momentum in the early 2000s, funding priorities and political concerns commonly rise and fall in importance, contributing to the fate of such networks (cf. Edelman 2005, 2008).

10. Paraíso, located in the Cartago province, became the first transgenic-free territory in March 2005, followed by Santa Cruz in

November 2005 and Nicoya in December 2006, both located in the Guanacaste province. Intense public debate over CAFTA, approved by referendum in 2007, focused attention, among other things, on the deterioration of Costa Rica’s social-welfare model of development and the consequences for food sovereignty and rural livelihoods. Several municipalities, including San Isidro, Heredia (May 2007); Abangares, Guanacaste (May 2008); Talamanca, Limón (November 2008); Moravia, San José (January 2009); and Barva, Heredia (April 2010), have since embraced the transgenic-free territory status as an expression of alternative forms of socially just and sustainable development.

11. FEDEAGUA is a member of another umbrella network, the Coordinator for Organizations with Alternative Development Projects (Coordinadora de Organizaciones con Proyectos Alternativos de Desarrollo, or COPROALDE).

12. Proponents of organic agriculture in Costa Rica have opposed transgenic seeds for some time, viewing transgenic material as a form of contamination. Jaime E. García G. (2005), for instance, argues that transgenic seeds are incompatible with the principles of organic agriculture, a view shared by the Costa Rican Organic Agriculture Movement (Movimiento de Agricultura Orgánica Costarricense, or MAOCO). New agrobiotechnologies such as transgenic seeds have developed within models of corporate agriculture that presume large-scale monocultivation of lucrative export crops. Critics argue that such models decrease genetic diversity and rely heavily on chemical inputs such as herbicides and pesticides. A 2007 law created to promote and regulate organic agriculture in Costa Rica prohibits the use of transgenic seeds by certified organic farmers (Ley No. 8591, Desarrollo, Promoción y Fomento de la Actividad Agropecuaria Orgánica).

13. Consejo Municipal de Abangares, “Declaratoria de Abangares Cantón Ecológico y Libre de Transgénicos,” May 15, 2008.

14. Ministerio de Agricultura y Ganadería (Costa Rica), AL 241–2008, “Letter to Alex May Montero, Programa de Biotecnología, Servicio Fitosanitario del Estado, from Gerardo Castro Salazar, Asesoría Legal, Servicio Fitosanitario del Estado,” June 9, 2008. This letter contains the legal analysis of the transgenic-free territory status adopted by Abangares, commissioned by the Biotechnology Program of the Ministry of Agriculture and Livestock. The analysis was likely requested because transgenic seeds are thought to be cultivated nearby as part of the winter nursery seed industry. When the municipality of Moravia, a town just outside of the capital of San José, adopted a transgenic-free territory declaration in March 2009, CTNBio sent the Moravia municipal council and all other transgenic-free municipalities copies of the legal analysis initially created in response to Abangares.

15. In Abangares, organizers with FEDEAGUA assisted in drafting secondary legislation to regulate and implement the transgenic-free territory declaration, attending to such details as how to monitor and enforce the ban on transgenic seeds. The draft regulations have not yet been approved by the municipal council, however, and none of the other transgenic-free territories have considered specifics regarding implementation. In addition, although MAG releases detailed information concerning transgenic organisms that have been approved for seed production or research purposes, it rarely reveals where these activities are taking place, making it difficult, though not impossible, for community members to undertake informal monitoring (cf. Pearson 2009).

References cited

Alianza Centroamericana de Protección a la Biodiversidad (ACPB)
2004 Alianza Centroamericana de Protección a la Biodiversidad:

- Documento de posición. Managua, Nicaragua: Oficinas del Centro Humboldt.
- 2005 Presencia de transgénicos en Centroamérica y El Caribe: Documento de posición. Managua, Nicaragua: Oficinas del Centro Humboldt.
- Alianza Centroamericana de Protección a la Biodiversidad (ACPB) and Red de Coordinación en Biodiversidad (RCB)
- 2005a Contaminación transgénica en Costa Rica: Una realidad confirmada. San José, Costa Rica: Cosmovisiones.
- 2005b Municipalidad de Costa Rica se declara libre de transgénicos. News release, March 28. <http://www.grain.org/h/?id=70>, accessed April 29, 2011.
- Arrieta, Griselda, Tania Quesada, Erwin Gamboa, Elena Sánchez, and Ana M. Espinoza
- 2002 Transgenic Rice and Gene Flow Assessment to Wild and Weedy Rice Species in Costa Rica. *In* LMOs and the Environment: Proceedings of an International Conference. Craig R. Roseland, ed. Pp. 69–79. Paris: Organization for Economic Cooperation and Development (OECD).
- Biersack, Aletta
- 2006 Reimagining Political Ecology: Culture/Power/History/Nature. *In* Reimagining Political Ecology. Aletta Biersack and James B. Greenberg, eds. Pp. 3–40. Durham, NC: Duke University Press.
- Biosafety Clearing House (BCH)
- N.d. CIISB/BCH Costa Rica. <http://cr.biosafetyclearinghouse.net/>, accessed October 20, 2011.
- Borras, Saturnino M., Jr.
- 2008 La Vía Campesina and Its Global Campaign for Agrarian Reform. *Journal of Agrarian Change* 8(2–3):258–289.
- Cooper, Melinda
- 2008 Life as Surplus: Biotechnology and Capitalism in the Neoliberal Era. Seattle: University of Washington Press.
- Douglas, Mary
- 1966 Purity and Danger: An Analysis of the Concepts of Pollution and Taboo. Baltimore, MD: Penguin Books.
- Edelman, Marc
- 1999 Peasants against Globalization: Rural Social Movements in Costa Rica. Stanford: Stanford University Press.
- 2005 When Networks Don't Work: The Rise and Fall and Rise of Civil Society Initiatives in Central America. *In* Social Movements: An Anthropological Reader. June Nash, ed. Pp. 29–45. London: Blackwell.
- 2008 Transnational Organizing in Agrarian Central America: Histories, Challenges, Prospects. *Journal of Agrarian Change* 8(2–3):229–257.
- Escobar, Arturo
- 2008 Territories of Difference: Place, Movements, Life, *Redes*. Durham, NC: Duke University Press.
- Evans, Sterling
- 1999 The Green Republic: A Conservation History of Costa Rica. Austin: University of Texas Press.
- Ferradás, Carmen Alicia
- 2004 Environment, Security, and Terrorism in the Trinitational Frontier of the Southern Cone. *Identities* 11(3):417–442.
- Finley-Brook, Mary
- 2007 Green Neoliberal Space: The Mesoamerican Biological Corridor. *Journal of Latin American Geography* 6(1): 101–124.
- Franklin, Sarah
- 2003 Re-Thinking Nature-Culture: Anthropology and the New Genetics. *Anthropological Theory* 3(1):65–85.
- García G., Jaime E.
- 2005 Contaminación por transgénicos y agricultura orgánica. *Ambientico* 146:7–8.
- 2007 Cultivos genéticamente modificados: Las promesas y las buenas intenciones no bastan. *Revista de Biología Tropical* 55(2):347–364.
- 2010 La contaminación silenciosa. *Biocenosis* 23(1):38–49.
- Gill, Lesley
- 2009 The Limits of Solidarity: Labor and Transnational Organizing against Coca-Cola. *American Ethnologist* 36(4): 667–680.
- Gregory, Steven
- 2007 The Devil behind the Mirror: Globalization and Politics in the Dominican Republic. Berkeley: University of California Press.
- Gupta, Akhil, and James Ferguson, eds.
- 1997a Anthropological Locations: Boundaries and Grounds of a Field Science. Berkeley: University of California Press.
- 1997b Culture, Power, and Place: Explorations in Critical Anthropology. Durham, NC: Duke University Press.
- Gusterson, Hugh
- 2005 Decoding the Debate on “Frankenfoods.” *In* Making Threats: Biofears and Environmental Anxieties. Betsy Hartmann, Banu Subramaniam, and Charles Zerner, eds. Pp. 109–134. Lanham, MD: Rowman and Littlefield.
- Harper, Krista
- 2004 The Genius of a Nation versus the Gene-Tech of a Nation: Science, Identity, and Genetically Modified Food in Hungary. *Science as Culture* 13(4):471–492.
- Harvey, David
- 1990 The Condition of Postmodernity. Malden, MA: Blackwell.
- 1996 Justice, Nature, and the Geography of Difference. Oxford: Blackwell.
- 2005 A Brief History of Neoliberalism. New York: Oxford University Press.
- Hayden, Cori
- 2003 When Nature Goes Public: The Making and Unmaking of Bioprospecting in Mexico. Princeton: Princeton University Press.
- Heller, Chaia
- 2007 Techné versus Technoscience: Divergent (and Ambiguous) Notions of Food “Quality” in the French Debate over GM Crops. *American Anthropologist* 109(4):603–615.
- Heller, Chaia, and Arturo Escobar
- 2003 From Pure Genes to GMOs: Transnationalized Gene Landscapes in the Biodiversity and Transgenic Food Networks. *In* Genetic Nature/Culture: Anthropology and Science beyond the Two-Culture Divide. Alan Goodman, Deborah Heath, and M. Susan Lindee, eds. Pp. 155–175. Berkeley: University of California Press.
- Hess, David
- 2007 Crosscurrents: Social Movements and the Anthropology of Science and Technology. *American Anthropologist* 109(3):463–472.
- 2009 Localist Movements in a Global Economy: Sustainability, Justice, and Urban Development in the United States. Cambridge, MA: MIT Press.
- Juris, Jeffrey S.
- 2008 Networking Futures: The Movements against Corporate Globalization. Durham, NC: Duke University Press.
- Keck, Margaret E., and Kathryn Sikkink
- 1998 Activists beyond Borders: Advocacy Networks in International Politics. Ithaca, NY: Cornell University Press.
- Kinchy, Abbey J.
- 2007 Genes Out of Place: Activists, Experts, and the Politics of Biotechnology. Ph.D. dissertation, Department of Sociology, University of Wisconsin–Madison.

- 2010 Anti-Genetic Engineering Activism and Scientized Politics in the Case of "Contaminated" Mexican Maize. *Agriculture and Human Values* 27(4):505–517.
- Kloppenborg, Jack
2004 *First the Seed: The Political Economy of Plant Biotechnology*. 2nd edition. Madison: University of Wisconsin Press.
- Macdonald, Laura
1994 Globalising Civil Society: Interpreting International NGOs in Central America. *Millennium: Journal of International Studies* 23(2):267–285.
- Martínez, Hepzibah Muñoz
2004 State, Capital, and "Second Nature": Re-Territorialization and the Plan Puebla Panama. *Capitalism, Nature, Socialism* 15(1):6–81.
- Martínez-Alier, Joan
1996 The Merchandising of Biodiversity. *Capitalism, Nature, Socialism* 7(1):37–54.
- Mbembe, Achille
2003 Necropolitics. *Public Culture* 15(1):11–40.
- McAfee, Kathleen
2003a Corn Culture and Dangerous DNA: Real and Imagined Consequences of Maize Transgene Flow in Oaxaca. *Journal of Latin American Geography* 2(1):18–42.
2003b Neoliberalism on the Molecular Scale: Economic and Genetic Reductionism in Biotechnology Battles. *Geoforum* 34:203–219.
- Mora Solano, Sindy
2006 Costa Rica y el "combo de la propiedad intelectual." *Cuadernos de Sociología* 6:91–95.
- Newell, Peter
2008 Trade and Biotechnology in Latin America: Democratization, Contestation and the Politics of Mobilization. *Journal of Agrarian Change* 8(2–3):345–376.
- O'Connor, Martin
1994 On the Misadventures of Capitalist Nature. In *Is Capitalism Sustainable? Political Economy and the Politics of Ecology*. Martin O'Connor, ed. Pp. 125–151. New York: Guilford Press.
- Palmer, Steven
1993 Getting to Know the Unknown Soldier: Official Nationalism in Liberal Costa Rica, 1880–1900. *Journal of Latin American Studies* 25(1):45–72.
- Pearson, Thomas
2009 On the Trail of Living Modified Organisms: Environmentalism within and against Neoliberal Order. *Cultural Anthropology* 24(4):712–745.
- Ponchner, Debbie
2004a Comisión con nuevas voces. *La Nación* (Costa Rica), October 18: 12A.
2004b Minae apoya moratoria de cultivos transgénicos. *La Nación* (Costa Rica), October 18: 12A.
- Red de Coordinación en Biodiversidad (RCB)
2008 Lineamientos jurídicos que fundamentan las decisiones municipales en defensa de la diversidad biológica y cultural contra los organismos genéticamente alterados (transgénicos). *Revista Biocenosis* 21(1–2):37–45.
- Renfrew, Daniel
2009 In the Margins of Contamination: Lead Poisoning and the Production of Neoliberal Nature in Uruguay. *Journal of Political Ecology* 16:87–103.
2011 The Curse of Wealth: Political Ecologies of Latin American Neoliberalism. *Geography Compass* 5(8):581–594.
- Riles, Annelise
2001 *The Network Inside Out*. Ann Arbor: University of Michigan Press.
- Rodríguez Cervantes, Silvia
1993 *Conservation, Contradiction, and Sovereignty: The Costa Rican State and the Natural Protected Areas (1970–1992)*. Ph.D. dissertation, Department of Sociology, University of Wisconsin–Madison.
- Rojas Ramírez, Isaac
2003 *Situación de los transgénicos en Costa Rica*. San José, Costa Rica: COECOceiba Amigos de la Tierra Costa Rica, Asociación de Ecología Social (AESO), and HIVOS.
- Sandbrook, Richard, Marc Edelman, Patrick Heller, and Judith Teichman
2007 *Social Democracy in the Global Periphery: Origins, Challenges, Prospects*. Cambridge: Cambridge University Press.
- Schurman, Rachel A., and William A. Munro
2003 *Making Biotech History: Social Resistance to Agricultural Biotechnology and the Future of the Biotechnology Industry*. In *Engineering Trouble: Biotechnology and Its Discontents*. Rachel A. Schurman and Dennis Doyle Takahashi Kelso, eds. Pp. 111–129. Berkeley: University of California Press.
- Scoones, Ian
2008 Mobilizing against GM Crops in India, South Africa, and Brazil. *Journal of Agrarian Change* 8(2–3):315–344.
- Smith, Neil
1984 *Uneven Development: Nature, Capital and the Production of Space*. Oxford: Basil Blackwell.
- Tarrow, Sidney
2005 *The New Transnational Activism*. Cambridge: Cambridge University Press.
- Toly, Noah J.
2004 Globalization and the Capitalization of Nature: A Political Ecology of Biodiversity in Mesoamerica. *Bulletin of Science, Technology and Society* 24(1):47–54.
- Valverde Brenes, David
2006 Paraíso sin transgénicos. *La Bici* 4: 27. <http://www.rallt.org/PAISES/LATINOAMERICA/COSTA%20RICA/LABICI4alerta.pdf>, accessed October 20, 2011.
- Vindas, Leticia
2011 Del Monte realiza investigación para sembrar piña transgénica en Costa Rica. *El Financiero* (Costa Rica), March 4. http://www.elfinancierocr.com/ef_archivo/2011/marzo/06/negocios2702675.html#, accessed April 20.
- West, Paige
2006 *Conservation Is Our Government Now: The Politics of Ecology in Papua New Guinea*. Durham, NC: Duke University Press.
- Zunino, Mariela
2010 Integración para el despojo: El Proyecto Mesoamérica, o la nueva escalda de apropiación de territorio. Chiapas al Día: Boletines de CIEPAC (Centro de Investigaciones Económicas y Política de Acción Comunitaria) 583–585. <http://www.ciepac.org/boletines>, accessed June 22.
- Thomas W. Pearson
Social Science Department
University of Wisconsin–Stout
Menomonie, WI 54751
pearsont@uwstout.edu