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The Illegal and the Dead: Are Mexicans Renewable Energy?

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ARTICLES

The Illegal and the Dead: Are Mexicans Renewable Energy?

Sandy Smith-Nonini

This article reflects on the production of injury and death among Latino workers in the agro-industrial food complex, with attention to systemic relationships between the United States and Mexico in the post–North American Free Trade Agreement period, which has been characterized by waves of new labor migration that directly enhanced US agricultural profitability. The article draws parallels between literatures on labor productivity and new writings on energy and sustainable agriculture. It examines the usefulness of embodiment as a dialectical approach to eco-social theory, and the concept of “body politic,” or a politics of moral ecology, as a means of reasserting the human shape of production systems that have become deformed by the impersonal calculus of neoliberal capitalism.

Key Words: body politic; immigration; neoliberalism; occupational risk; productivity; systems

Each lost farmworker’s name was read aloud—sometimes haltingly, as English-speakers tripped over Spanish syllables—then a bell tolled, and a new candle danced in the brisk breeze behind the flower-strewn altar draped in the purple cloth of Lent.

Like most Americans, I did not know these men personally; I was only half attentive that day in March 2007, busy taking notes, when I heard

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the name Carmelo Fuentes read aloud. It unexpectedly touched a chord. I laid down my pen, thinking back to the critical care unit of the University of North Carolina (UNC) Hospital in the fall of 1998 where I had watched Carmelo's father Porfirio stroke lotion on his adult son's limp legs, then kiss him on the forehead with his eyes welling over. Declared brain dead after a heat stroke, Fuentes' story became the lead in a 1998 report I wrote on farm labor conditions for the Institute for Southern Studies, shortly after the Farm Labor Organizing Committee (FLOC) came to North Carolina.

Those were the early days of the campaign by FLOC, a farm labor union from Ohio, to organize the new influx of Mexican farmworkers that in roughly a decade had displaced the domestic African American workforce that previously supplied labor to North Carolina agriculture. FLOC had focused its campaign on the Mount Olive Pickle Company and the large H2A guestworker program¹—a federal program that allows foreign workers, primarily Mexicans, to obtain temporary seasonal visas to labor on farms. The guestworker program supplied nearly three-quarters of workers to the cucumber farms that made up Mount Olive's suppliers. Tobacco was the main cash crop for most of these farmers, but they also grew crops like cucumbers and sweet potatoes because they fit well into the work schedule of the tobacco season.

In September 2004 FLOC won an unprecedented labor contract in the state's large H2A program. But despite the new access to organize migrants in the guestworker program and heightened efforts to educate farm workers of risks, workers continued to die in the fields in the years that followed. FLOC organized the Lenten ceremony to help make visible the otherwise unnoted tragic and preventable human suffering that our country tolerates on farms.

In the aftermath of the North American Free Trade Agreement (NAFTA), the combinations of tobacco and newly restructured and consolidated pork and chicken industries made North Carolina into a major destination for migrants fleeing the depressed Mexican economy, even as capitalist restructuring simultaneously created higher risks for small-scale farmers and low-wage workers in both countries. In recent years, together with construction jobs, these profitable industries, many based on elaborate long distance migrant labor recruitment strategies, have become major generators of broken and dead bodies. By the late 1990s the state's annual listing of workplace deaths was made up of mostly Hispanic surnames.

This article is a reflection on the production of suffering—of injured and dead bodies, the exhaustion of human energies, and the systemic relationships between state-abetted processes that have impoverished rural Mexico, while stimulating new labor migration and US agricultural profitability in the neoliberal period. My resort to bodies and use of concepts like energy and systems is inspired by the public interest of late in ecology and sustainability. In only a few years, many Americans have become sensitized to the

gross inefficiencies and unsustainable energy dependence of the agribusiness food system, which, through its reliance on fertilizers, machinery, chemical inputs, and long distance distribution networks, expends 8–10 calories of fossil fuels for each calorie of food produced (Pimentel and Giampietro 1994; Manning 2004). While various analysts in the burgeoning sustainable food literature have followed calories from fuel to food (and now with the rise of biofuels, in the reverse direction), few researchers have drawn connections between profitability and the newly flexible flows of immigrant labor that provide the energy behind the growing and harvesting of 85 percent of US crops.

I juxtapose these very different modes of analysis not to offend our sensibilities but to raise questions about why they co-exist with so little cross-fertilization from interdisciplinary exchange. Cultural researchers have long criticized the reductionism inherent to much analysis of biological systems and ecology, which too often leaves issues such as historical precedent, cultural meaning, and social equity to one side in the quest to simplify and quantify ecological relationships. The field of eco-economics has sought to correct the blinders of corporate profit-seeking by quantifying values of externalities such as the energy costs or pollution from corporate processes (Costanza 2001), but such efforts are complicated since values are political and social products are often “incommensurable” with monetary quantification (Martinez-Alier 2005). For example, social costs of low-wage labor seldom enter into discourses of the “added value” claimed by organic food producers. Julie Guthman’s (2004) work on the organic movement in California points up the dependency of new mega-companies like Earth Bound Farms on migrant workers and the relative invisibility of labor in the sustainable farming movement.

Conscious of these caveats, I undertake this exercise to mine the synergy of these overlapping but nonconversant paradigms in the hope that there is common ground between movements for sustainable food and fair labor and that there are gains to be made from pushing them closer together. While both suffering and workers’ struggles over inequitable processes are personal and social phenomena, there is a logic to tracing the outlines of the bodies at the scenes of these neo-industrial crimes. Nancy Krieger (2001) argued that embodiment is a useful concept in eco-social theory, or a multilevel epidemiological framework, because it captures the ways that bodies “literally incorporate, biologically, the material and social world in which we live” (694). Such a dialectical concept could also shed light on the political relationships that link high fructose corn syrup with the incidence of obesity in inner city “food deserts” or multiple parathion applications to farm workers’ shortness of breath and neurological symptoms. Likewise, forms of struggle over the “body politic” are at work in both

the labor union and sustainability movements, in that both seek to reassert the human shape of lives threatened by the impersonal calculus of neoliberal capitalism (O'Neill 1985; Smith-Nonini 2010). Let's begin with the body of Carmelo Fuentes.

I had only just begun research on farm labor in eastern North Carolina in 1998 when I learned that a Mexican worker had been admitted to a nearby hospital after he collapsed in the fields. Carmelo was in his late twenties, and had begun his season as an H2A guestworker only three weeks before his collapse, which followed a string of 10–12 hour days at the height of a summer heat wave that coincided with the busiest weeks of the season in fields near Clinton, North Carolina. His coworkers later noted that he did not complain about the long hours. An hour of work here earned him more than a day's work in his hometown of San Luis Potosí, Mexico, and he was on a mission to earn enough to pay for medical care for his 20-year-old sister, who had been prematurely blinded by cataracts.

On July 5 Carmelo had phoned home and spoken with his sister Yolanda. "I'm earning good money," he told her, promising that soon he would pay for the operation to restore her vision. His father Porfirio, who I later met in his son's hospital room, took the phone. Hearing that his son had worked seven days in a row, Porfirio recalled begging Carmelo to take a day off to rest.

"I'm fine," Carmelo, told him, "There's too much work to do. I can't take off." Five days later, in 90-plus degree temperatures, Carmelo collapsed in a tomato field. Coworkers dragged him into the shade of a tree to cool off and called the foreman, but hours passed before he summoned an ambulance. By then Carmelo was comatose from heat stroke and dehydration (Smith-Nonini 1999).

This was not an isolated case. A month earlier, during my first meeting with farm labor advocates in June 1998, our agenda had been disrupted by news that a group of workers in Lenoir County had used the cover of a nighttime rain storm the previous evening to flee from the farm of a grower who they said forced them to work for 14 hours with only a half hour break. In later interviews with the men, they reported that they had become angry with their supervisor when one of their colleagues got sick and vomited in the field, but he refused to let the sick man stop and rest.

Although North Carolina's combination of hogs and tobacco had propelled it to the second most profitable agricultural state at the beginning of the 1990s, these benefits had not trickled down to the workforce. What was once a largely African American workforce was transformed by the 1990s into a very different demographic as Mexican and Central American immigrants began to dominate migrant streams. During this period the values of farmworker salaries, adjusted for inflation, had actually decreased

since the 1970s. The average farmworker nationwide earned less than \$8000 per year in 1999.

Migrant farmwork has long been recognized as one of the most hazardous occupations, in part because of the musculoskeletal toll of repetitive work for long hours and weeks and in part due to constant exposure to harsh weather and poisonous pesticides. Federal statistics show dramatically lower life expectancies for farmworkers compared with other Americans. Most North Carolina farmworkers I met in visits to rural areas lived in run-down housing with no heat or air conditioning. Prior studies by epidemiologists at the University of North Carolina showed that many labor camps lacked adequate water or sewage facilities, causing workers the added health burden of intestinal parasites (Ciesielski et al. 1992). Despite the passage of reform legislation on housing and pesticide safety, advocates complained that enforcement of regulations was extremely poor—state agencies had only a handful of inspectors for tens of thousands of farms, and almost no bilingual staff (Smith-Nonini 1999).

While researching a media article I was writing after the Lenten ceremony in March 2007, I gathered data on 14 farmworkers who had died in the fields since 1995 (Smith-Nonini 2007). More undoubtedly went unreported. An alarming six deaths had occurred since the 2004 contract between the union and the Mount Olive Pickle Company, which may have reflected more oversight from union representatives across the state. Nine of the 14 deaths were due to heat stroke. A 2005 study of heat stroke deaths in the state showed that of the 161 deaths from this cause since 1977, 45 percent took place on farms—an average of three per year (Mirabelli and Richardson 2005). Farmworker deaths are routinely undercounted in state Labor Department statistics.

In addition to Fuentes, Pablo Ordaz, 39 years, died of heat stroke in July 2005 on a farm where coworkers reported to state investigators that the foreman failed to provide drinking water and reprimanded workers who stopped for a break—both violations of the law. A year later, a heat stroke killed Juan José Soriano on a Wayne County tobacco farm. The Department of Labor report found in that incident that “12 migrant farmworkers were exposed to heat indices of 105–110 degrees without the opportunity to hydrate or cool down.” Soriano had five children, three younger than 18 years.

Heat stroke deaths often occur when there is a delay between the onset of symptoms and calls for emergency medical aid. Workers often lack access to phones and depend on a foreman or crew leader to call for help or transport them to a clinic or hospital. Subtle forms of racism—beliefs by bosses that workers are shirking duties or that green tobacco illness is a “Mexican disease”—contribute to the neglect (Benson 2008).

BACK TO 'THE JUNGLE'—THE TWENTY-FIRST CENTURY FACTORY FLOOR

Meatpacking is another setting in which capitalist restructuring and expansion has taken place in the surplus labor environment created by new migration. The influx of migrants has rapidly shifted the demographic profile of many rural North Carolina counties as the state saw a four-fold increase in its Spanish-speaking population in less than a decade during the 1990s. Over the past 20 years, more and more small farmers in the state have gone bankrupt or taken up contract farming for consolidators, often incurring high debts for the infrastructure to meet corporate standards (Striffler 2005), while textile manufacturing plants, which long supplied a second income for rural families, gradually closed or moved to Mexico or China. A decade after NAFTA passed in 1994, North Carolina had lost more manufacturing jobs than any state.

During the mid-1990s Duplin County, an impoverished county in southeastern North Carolina, became widely associated with controversies over environmental violations from overflowing hog waste lagoons. As a result of innovations in factory farming, by the late 1990s there were more pigs (10 million) in North Carolina than people (seven million). Duplin was headquarters for Murphy Family Farms, the largest pork consolidator in the state, which at the time of my research had just merged with Smithfield Foods, the largest pork producer in the world. By then, meatpacking plants and contract hog farms had become the primary employers in Duplin, located about 80 miles southeast of Raleigh. The hog industry (and meatpacking in general) had become central to the profitability of the state's agriculture. Unfortunately, much of the wealth being concentrated in vertically integrated industries like these has been extracted from the region by distant corporate owners, and access to immigrant labor has facilitated this process.

Pork producers followed a pattern set by the poultry industry a decade earlier of rapid growth after consolidation by a handful of corporate producers. Central to the restructuring undertaken by the industry was the relocation of factories from northern sites like Chicago and the northeast to states with cheaper nonunionized workforces like Iowa, Arkansas, and North Carolina. Integral to this was a shift from a production system involving skilled workers to a new de-skilled production line in which tasks were divided up into smaller components that could be performed by unskilled workers in a setting with a faster line speed and technology to closely monitor productivity. Worker turnover in these plants sometimes exceeded 100 percent annually (Hall 1989; Gouveia 1994; Grey 1999).

I engaged in a six-month long research project on workplace safety culture in Duplin County during 2000 as part of a collaborative project with

the North Carolina Committee on Occupational Safety and Health (NCOSH) and a new Latino worker organization that NCOSH was assisting, known by its Spanish initials as ASTLANC. At the time, the availability of low-wage jobs, combined with active transnational immigrant family networks, had made Duplin County a major destination for Hondurans fleeing the rural economic devastation in the aftermath of Hurricane Mitch. Two of the Latino organizers I worked with on the project were Hondurans who had worked as union leaders in their home country prior to migrating to the United States.

We carried out a set of semistructured hour-long interviews with 14 individual workers and gained additional insights from several focus groups we convened of Latino employees of chicken and turkey factories in Duplin County. Five of the 14 had suffered injuries from on-the-job accidents. All reported knowing friends who had accidents on the job. All of those interviewed reported musculoskeletal pains and symptoms consistent with repetitive motion disorders, and six reported other health problems they linked to the workplace (Smith-Nonini 2003). All reported cultures of intimidation at work and felt compelled to work overtime when asked. A later *Charlotte Observer* investigation (Hall, Alexander, and Ordonez 2010) of the plant employing most of the workers I interviewed confirmed the hazardous workplace findings. Ten of 50 former workers at the plant interviewed for the news series reported being fired after reporting injuries. The reporters confirmed 31 injuries to workers at the plant, of which 12 were not recorded in plant safety logs, and they documented a culture of complaisance in state agencies where underfunded regulators lacked the state support or political will to enforce workplace safety rules. Both data sets suggested that the combination of a vulnerable workforce and a political climate hostile to unions exacerbated the human toll.

The recent organizing drive by the American Food and Commercial Workers union at Smithfield Pork, the largest hog processing plant in the world, drew back the curtain on this kind of routine production of injured and disabled workers. A study of the Tarheel, NC plant by the Occupational Safety and Health Administration showed a 32 percent increase in injuries from 2003 to 2005, followed by an even steeper jump in 2006. By July of that year the number of injured workers (463) had already surpassed the total for the previous year (Smith-Nonini and Weaver 2006).

The accumulation of inconvenient injured or dead bodies, which US employers and regulators would prefer not to think about, makes it more difficult to dismiss their suffering as incidental or accidental. Increasingly I see structured suffering as a predictable and perhaps even strategic aspect of the massive labor migration north that ensued in response to NAFTA and Mexico's 1994 debt crisis, which was preceded by federal cuts in rural farm credits and loss of protection for the *ejido* after a decade of neoliberal

pressures to pass costs of international debt to the Mexican public (Bartra 1993; Gledhill 1998).

HIDING THE BODIES: RISK SHIFTING AS A SHELL GAME

In epidemiology-speak, we might say that recent Latino immigrants in the farm or food processing industry are at high risk for occupational injury—higher risk than domestic workers who are more likely to know and assert their rights in dangerous settings. But to speak of risk begs questions of agency and preventive measures. Nancy Krieger (1999) argued that to speak of “risk factors” absent of the consideration of social inequality “signals an individualistic, non-contextualized approach to explaining and changing distribution of adverse health outcomes.”

Ulrich Beck’s (1996) description of poststructural capitalism as a “world risk society” is perhaps a more helpful way of thinking about the enhanced occupational risks of newly disenfranchised migrant labor flows. Beck made the ironic observation that industrial systems, which were supposed to enhance quality of life, have increasingly become the primary generators of risk. These new widely, but unevenly, distributed risks, which include phenomena ranging from pollution to toxins in food and social disintegration, arise not from the failure of such systems but from their success. In short, modern industrialization enters a “deep institutional crisis,” and bureaucratic processes, caught up in policy conflicts, redundancies, and irrational forms of normalization fail to even assess or mitigate the new forms of risk. The system itself becomes the problem.

Beck coined the concepts “manufactured uncertainty” and “organized irresponsibility” to describe this diffuse aspect of risk in a culture undergoing rapid change with fragmented institutional guarantees. But to politicize Beck’s (overly liberal) analysis slightly, in the neoliberal business world of the past two decades, one should note that corporate actors such as insurance companies, medical providers, and food processors have developed entire divisions centered around risk management, avoidance, and diversion. Although a US company may hire undocumented workers, it remains liable under the law for workers injured in a dangerous workplace. And so a shell game has evolved to keep workers ignorant about their rights and maintain a level of plausible deniability and invisibility for “illegal” injured bodies. In our interviews we learned that meatpacking companies insist that injured workers come into work even if just to sit all day, rather than allow them to sit out enough days to qualify for workers compensation. During the FLOC campaign, we heard stories of farmers dropping seriously injured workers off at the bus depot rather than the

clinic. Private hospital emergency departments transferred uninsured immigrant patients to public units rather than admit them.

In a 2008 exposé, the *New York Times* helped to make visible the cross-border dumping of severely injured Mexican patients by US hospitals (Sontag 2008a). This was indeed what happened in the case of Carmelo Fuentes, who lay in an intensive care unit of the UNC Hospital for three months in 1998 before the hospital paid for air transport to ship his brain dead body back to San Luis Potosí. His father, Porfirio, praying for a miracle, would not allow health workers to unhook Carmelo from his respirator. Fuentes later died in Mexico.

Times reporter Deborah Sontag followed the case of 35-year-old Luis Alberto Jimenez, a severely disabled undocumented immigrant who worked as a Florida gardener before his injury in a car crash caused by a drunken driver. Jimenez, wheelchair-bound and in need of constant care, was deported against his wishes to a poorly equipped facility in Guatemala by Martin Memorial Hospital, which had obtained an order from a state court, that has since been found invalid.

Sontag reported that hundreds of medical deportations from US hospitals occur each year in response to cuts in charity care and a lack of public funds to cover care for severely injured immigrant patients once they are stabilized in an emergency department. Despite rules that hospitals must arrange posthospital care for such patients, many observers believe that these transnational transfers endanger patients and amount to a death sentence for some. In a later article, Sontag (2008b) reported on the case of a legal immigrant, comatose after a head injury, who was deported to Mexico by a Phoenix hospital despite his parents' objections. The family found a California hospital willing to treat their son, who was repatriated and has made progress recovering from his injuries.

When the *Chicago Tribune* posted an article on these practices on its blog-site in August 2008, inviting public comment, the twin hot buttons of medical inflation and immigration prompted a deluge of responses, the bulk of which tended toward outrage, calls for injured immigrants to be deported or jailed, and an end to expenditure of public resources on undeserving law-breakers. On the positive side, in response to the deportations, the California Medical Association passed a resolution against the practice, and the American Medical Association appointed a committee to study the issue.

TRANSNATIONAL RISK SHIFT: MEXICO'S NEW EXPORT COMMODITY

In 1994 I attended a student protest outside the University of North Carolina Business School where state business leaders met inside with

pro-NAFTA lobbyists, while labor advocates demonstrated outside. Only recently did I learn that the men inside were from USA * NAFTA, a so-called grassroots US business coalition run by 35 “captains,” each from a different Fortune 500 company, charged with whipping up support for the bill in each of the 50 states. Member corporations and business groups sent lobbyists wearing red, white, and blue neckties who swarmed the White House and Congress prior to the vote (Faux 2006).

In the aftermath of NAFTA’s passage, import licenses, tariffs, and other trade restrictions for US farm exports were eliminated, and US corn flooded Mexico, pushing down farm prices and undermining small farmers. Six million Mexicans migrated to the United States over the coming decade, and another million accepted poorly paid jobs in *maquiladoras*—the new foreign-owned assembly plants that sprang up in the 1990s, especially along the Mexican side of the border. More than a million jobs were lost in the Mexican countryside (Faux 2006; Bacon 2008). A study by the Carnegie Endowment for International Peace concluded that nine years after its passing, the pact had “failed to generate substantial job growth in Mexico, hurt hundreds of thousands of subsistence farmers there and had ‘minuscule’ net effects on jobs in the United States” (Dugger 2003).

Lost in the echo-chambers of free trade rhetoric is John Gledhill’s (1998) astute observation that the campaign for NAFTA in the early 1990s—during a classic recession—represented the harnessing of Mexico’s potential pool of cheap labor and its relatively unregulated environment to the task of restructuring the US economy. The profitability of migrant labor for US companies in this period was indeed impressive. Bacon (2008) cited a University of California–Los Angeles study showing that each immigrant pumped \$45,000 into the California economy in the mid-1990s, while earning only \$8840. An earlier study at North Carolina State University found each farm worker’s labor contributed \$10,000 to state agricultural profits.² In the late 1990s, as the share of Mexicans in poverty rose from half to two-thirds, according to the United Nations, it is enlightening to note that revenues of Cargill, one of the lobbyists for the NAFTA accord, rose 20 percent in a three-year period. During this period, entire sectors of the US economy, such as meatpacking, construction, and hotel and restaurant support staffs were restructured to replace higher paid domestic workers with immigrants. Many companies today would doubtless go bankrupt if the United States summarily deported undocumented workers, which, with a population estimated at more than 12 million, is an unimaginable undertaking.

As a capitalist strategy, displacement of rural workers is not new. Privatization of land helped enable England’s industrial revolution and accompanied agricultural modernization in many underdeveloped nations. These trends continued under neoliberal structural adjustment policies,

which socialized countries' foreign debts, offloading them onto the public in the form of currency devaluations (beginning with Mexico in 1982), while privatizing public assets and defunding social services. Our challenge is to view this creative destruction (Schumpeter 1962), "deteriorization" of rural life (Sider 2006), or "production wave"³ as simultaneously a set of systemic responses to periodic capitalist crisis, and a collection of state-abetted, proactive, political policies lobbied for by corporate actors and elites. The neoliberal process—epitomized in Mexico by the fiscal crisis of 1994 that coincided with the passage of NAFTA—officially authorized new cross-border capital flows, privatization of public infrastructure, and restructuring of the country's debt to guarantee continued payments to international banks. The net effect was to simultaneously lower risks for capitalists and other elites while raising levels of debt and risk for small farmers, rural laborers, and peasant unions.

In thinking about immigrant labor, I find it helpful to consider the work that a border does, and for whom. Policing of immigration translates into a special role of the state in disciplining labor, and providing legal grounding for employers to differentiate between citizens and illegal employees (or potential employees) according to their immigration status, not unlike other well-known forms of labor segregation such as gender and race/ethnicity. The "second class worker" status of immigrants in the United States has many similarities to the "dual labor economies" of apartheid in South Africa, to policing of immigrant workers in France (Meillassoux 1981) and to the Jim Crow laws of the American South in which families from the subordinate class of workers failed to earn sufficient income to reproduce themselves in the core economy and became caught in cycles of costly migrations, remittances, and high risks of arrest, theft, injury, or death. But as Sider (2006) noted, unlike the cultural forms of discrimination associated with Jim Crow, this heightened role of citizenship as the differentiating factor in labor can be implemented rapidly and the state's role as the ultimate policer of difference serves as an important subsidy to corporate capital. All of these trends deepen dependencies and undercut potential worker solidarities.

Mexican President Felipe Calderon used similar language in a February 2008 speech in California in which he spoke of two "complementary" economies: the American one, "intensive in capital," and the Mexican economy, "intensive in labor." That phenomenon, he said, "is impossible to stop" (Bacon 2008). These comparisons call up images of the modern machinery of agribusiness that capital and cheap fossil fuels have wrought—the hard technology of corn harvesters and knowledge-based regimes of corporate-licensed genetically modified seeds, pitted against or problematically juxtaposed with the sweaty, sunburned, chronically poisoned, but stubbornly persistent and mobile bodies of former subsistence farmers.

These dynamics deepen rural Mexico's role as a zone of extraction, supplying both the raw materials and the energy (in the form of labor) necessary to the continued profitability of Northern multinationals. The flexibility that migrant labor provides to agribusiness—the migrants' convenient willingness to show up when needed and disappear at the end of the season—is grounded in a substrate of torn muscles, alcoholism, tuberculosis, and heat stroke. It is not incidental that these corporations have long-held status as "legal persons" in the United States, enjoying extraordinary rights to influence political policy through financial contributions to politicians while their immigrant employees are nonpersons.

The damage inside Mexico is also acute. Despite the growth of remittances from migrants (which now approach the level of oil as a contributor to Mexican gross domestic product), these individualized streams of capital into Mexico often exacerbate local inequities and fail to replace Mexican revenue lost to foreign debt payments. Yet to a degree they relieve social pressure on the Mexican state for rural investment and accountable governance, reinforcing the "system effects" of neoliberal economic gradients.

PRODUCTIVITIES OF SURPLUS LABOR: RENEWABLE OR DISPOSABLE?

In the prevalent mainstream discourse of economics this regrettable business of illegal, injured, and dead bodies is an unfortunate by-product of supply and demand in the new competitive global marketplace, which demands flexibility from labor, with little attention to the inflexible requirements for social reproduction of the labor force. "Like the creation of value," Nonini (2009) writes, "social reproduction in the extended sense has to occur *somewhere*" and involves both commodified and unwaged labor in the course of caring for workers and children. Yet, as Sider (2006) noted, in the surplus labor situation of twenty-first century neoliberalism, there is a crisis of social reproduction. Reproduction of the labor force is no longer a bottleneck in the generation of profit; rather it has become a premium for agribusiness to find ways to dispense with people who are no longer needed.

Bray (2003) used the term "productivist farmers" to describe commercial farmers of the neoliberal era who engage in systems of production geared toward economies of scale in highly competitive markets. In economic analyses of efficiencies in such productivist agriculture, human energy becomes interchangeable with fuel used for tractors and chemical inputs. In fact, labor and other costs of production are frequently combined to generate a single measure of productivity in such accounting, erasing agency or

exploitation entirely. James Holt, who lobbies for the Agricultural Coalition on Immigration Reform, used such a calculus in a recent warning to policymakers that reduced immigration or pressure for higher farm wages “will induce domestic producers to reduce . . . production of labor intensive commodities . . . ceding their market share to foreign producers.”⁴ It would, in short, endanger national food sovereignty. Thus, Mexicans are considered a renewable, or at least inexhaustible, supply of energy.

Howard T. Odum’s concept of “energy,” a term used to describe the energy embodied in manufactured products, is probably the best known theory on energy and value. Hornborg (2001) noted that Odum’s energy is similar to Marx’s theory on labor value in that it describes the energy invested in producing a manufactured good. Odum observed that money flows in the opposite direction from flows of both energy and energy through the economic system. He was also attentive to the unequal exchange of both energy and energy between nations and regions, which certainly has its human counterparts in migrant labor flows. In addition, Odum specifically asserted that energy can become degraded as it is transformed, and is therefore not a currency like money (1995). Again, we see the parallels with human labor and the fragility of bodies when labor is reduced to a commodity.

A related concept is exergy, which describes the portion of energy in a production process that is transformed to perform the work itself, as opposed to waste heat, for example, which does not become converted into the product (Gibbs 1931). Exergy expenditure depends not only on total energy available but also on the environment of the production process. Applied to human work, we might think of the speed-up of tightly monitored chicken disassembly lines as an environment re-engineered to maximize exergy, just as the increasingly impoverished Mexican countryside or threats of deportation serve to maximize willingness of Latino workers to exhaust their energies (and sometimes well-being) in such workplace settings.

I am reminded of the research by Daniel Gross and Barbara Underwood (1971) showing how the Brazilian government pushed peasants into giving up subsistence crops to join a new development scheme to grow sisal as a cash crop. Although the peasants had been told they would prosper, sisal prices dropped on the world market, and the small producers suffered economic decline. The authors used a nutritional analysis to track the malnourishment that resulted in the new sisal farmer’s children as their families gave up calories to allow the men to continue their strenuous labor in what became a losing bargain. Similarly, immigrant workplaces of the neoliberal era are literally extracting their pound of flesh. Perhaps we need a new term—I propose “imm-ergy” to capture the ways that migrant streams of men and women on the journey north become devalued by employers who think of them as little more than “embodied energy.”

Such reductionism is the very kind of analysis that cultural anthropologists usually seek to deconstruct. Yet often analysts achieve this feat of integration by resorting to the microanalysis of cultural life and bracketing out or greatly abstracting the gradients of corporate profit and international debt that shape the dynamics of labor migration. In contrast, analysis of capitalists' control over production and how these relations are mystified in labor contracts (that are legitimized through the state) provides the power behind neo-Marxist analyses of Gledhill (1998), Sider (2006), and Nonini (2009). The Clinton Administration's blitzkrieg campaign for NAFTA shortly after the fall of the Berlin Wall took place during a period of capitalist triumphalism. This was also the period of postmodern, hyper-reflexive cultural analysis, which often expressed empathy with exploited groups while rejecting forms of analysis that shed light on systems of exploitation. Many insights flowed from such innovation in cultural analysis, but one legacy in anthropology has been a tendency to overemphasize agency and forms of difference, which can lead scholars to underestimate the power of systems effects.

Meadows (2008) referred to systems effects as resulting when a set of actors and relations become interconnected in such a way that they produce a pattern of goal-oriented behavior that persists. Over time the functioning of the system reinforces the dynamics and resilient aspects of the system's behavior. As Nonini (2009) observed, while there is no historical guarantee that capitalism as a system will be reproduced from one period to the next, "nonetheless large numbers of people are induced and at times coerced in everyday life by their place in capitalist relations of production, exchange and consumption to seek to reproduce or improve their own class positions within the system" (2).

An example of a more systemic approach to hunger, for example, is the new "food regime" analysis promoted by Phillip McMichael (2009), which advocates a shift from thinking in terms of food as a commodity to a focus on commodity relations. Connections between food, energy, and transnational markets gained visibility in 2007–2008 when rapid rises in energy prices coincided with new federal policies offering incentives for production of corn-based ethanol. Development specialists warned that such policies risked diverting essential food crops into fuel production and, indeed, by mid-2008 food riots had taken place in dozens of countries. In Mexico—one of the countries affected—despite falling corn prices in the aftermath of NAFTA, tortilla prices had already tripled by the end of the 1990s and doubled again by 2007 in part due to political cuts in food subsidies and the monopoly control of tortilla processing by two companies, one partially owned by Archer Daniels Midland, which also profited from corn ethanol (McMichael 2008). Both the food regime analysis and my discussion of

migrant labor exploitation as a production regime illustrate strengths of integrating a social justice analysis with systems thinking. When applied to capitalism, a systems analysis emphasizes the dynamic aspects of labor flows, which, like capital flows, tend to persist over time and are proportional to the steep trajectories of control over production and class position in capitalist markets. In 1998 I encountered this dissonance while writing a conclusion to a documentary report on farm labor conditions in North Carolina. It felt satisfying to end my article quoting the farmworker brother of Carmelo Fuentes, the guestworker who died of heat stroke. An H2A guestworker himself, Carmelo's brother had told me defiantly, "I will never come to this state to work again." But my editor pointed out that by ending my article with his quote I failed to reflect the political reality that farmers would continue to easily recruit Mexican immigrants who would continue to be caught up in the system.

Labor leaders rapidly become experts at linking the moral outrage of their supporters to forms of material leverage such as boycotts and strikes precisely because they know such levers are needed to effect change in the system's dynamics. Hence, successful social movements for change often also take advantage of structural weaknesses or fragile political alliances. Union strategies couple moral pressure with heightened risks of costly work stoppages as well as loss of key markets or key corporate or political allies. Such a "corporate" campaign directed at the stock holdings of a Philadelphia bank allied with the Campbell Soup company was essential to the victory of FLOC in its campaign against that company's labor practices in the late 1980s.

In contrast, too often policy reforms aimed at labor regimes based on tinkering with just one or two regulations fail as capitalist players adapt. Even large reforms, for example, the 1986 immigration reforms, had many unanticipated consequences as employers continued to hire undocumented Mexican immigrants and the Internal Revenue Service failed to crack down on most workplaces because of the political consequences for politicians who needed the approval of the business sector to stay in office (Heyman 1998).

Another strength of attentiveness to systems is the way such analysis forces integrative thinking across boundaries. I am recalling a conversation with my dental hygienist who asked about my research and then commented, "Well I just wish they (illegal immigrants) would pay taxes like the rest of us." This led us to a discussion of the responsibilities of employers who hire immigrants as well as the factors that push Mexicans to immigrate north. In teaching, it is important to humanize marginalized populations like farmworkers. But I have noticed in teaching that there is another key moment when students begin to gain a new perspective, and that is when they appreciate how Mexican small farmers lost their livelihoods to policies

like NAFTA. The reflexivity of systems thinking helps flesh out simplistic accounts that fail to cross borders or that leave out social or ecological repercussions of restrictive immigration policies.

Labor struggles and environmental justice movements tend to arise from place-based conflicts, but transnational solidarity and Internet communications have fostered new forms of moral reasoning around issues of neoliberal globalization, resource constraints, and the rights of future generations. The global nature of the system of transnational corporate logics has pushed resistance movements to widen their analysis. The goal in applying systems thinking in such situations is not to reduce human interactions to an arbitrary denominator such as price or calories but to trace such currencies as a means of illustrating the inter-relationships that are mystified in day-to-day representations of the marketplace.

Valuation is a political act. Robert Costanza, one of the most widely read scholars on ecological economics, argued that “one cannot state a value without stating the goal being served. Conventional economic value is based on the goal of individual utility maximization. But other goals, and thus, other values, are possible” (2001:24). Specifically, such goals might include policies to assure the future sustainability of Mexican small farms or a system of food sovereignty that insures communities can survive breakdowns in supplies of fossil fuels. It is vital that productive work on alternative economics take place through social experiments in which theory and practice become intertwined.

Joan Martinez-Alier, an ecologist who has actively worked to incorporate issues of equity into eco-economics, argued that “there is no such thing as a set of right prices because first, values of environmental resources and services, and of externalities, always depend on the property rights endowment and the distribution of income” (Martinez-Alier and O’Connor 1996:177).

Alf Hornborg, in his book *The Power of the Machine* (2001), departed from Odum’s efforts to assign a value to energy, arguing that confusion of energy and value is at the root of ecological and economic reductionism. He reminds us that value is negotiated as a product of social relations. The key, Hornborg argued, is understanding how unequal transactions are misrepresented as reciprocal ones. The fetish that permits this deception is the concept of market price, which in neoliberal economics often takes the form of inflated interest rates. Mexico was responding to such a hegemonic misrepresentation when, in 1982 and again in 1994, it negotiated the resolutions to debt crises by “socializing” the country’s foreign debt to US banks through a systematic reduction in evaluation of local currency and domestic labor.

It is speculative fluctuations in interest rates on such debts that allow risks of globalized transactions to be misrepresented as the fetish of newly

spun technological value, which is dangled before the public and policy-makers. The 2008 stock market crash in the United States presented us with an unwelcome object lesson on the grotesque public risk tucked into the small print of our Federal Reserve that legalized the inflation of what David Korten called “phantom wealth” (2009:7). But this oscillation of the value of labor and goods is an ever present reality for Mexican immigrants and their families, which plays out in the form of hunger, disease, and crushed life opportunities. The fetish obscures for Americans a range of public costs such as the price we all pay for farm subsidies that benefit corporate growers and the costs of medical care for comatose heart stroke victims, which are not weighed against corporate profit margins.

Just as price often obscures social value, the epidemiological notion of “risk factors” as something that accompany individuals or minority groups obscures the way risks are shifted. The leveraging of power and wealth that NAFTA enabled allowed financial risks of speculative investments to be off-loaded onto the Mexican state, small businesses, and the rural sector of both countries, including the wives and mothers of the men who become disabled in Northern fields and factories. For example, North Carolina is the largest state with farmworkers that does not guarantee workers’ compensation. In the case of Carmelo Fuentes, who because of his guestworker status was one of the few farmworkers entitled to workers’ compensation, his family had to mount a legal suit to obtain a pitifully small settlement and nearly lost their farm, which had been mortgaged to send Carmelo north to work.

As the financial crisis of 2008–2009 demonstrated, valuation in late capitalism cannot be teased apart from the processes of representation and disguise of risks. Issues of legal status for immigrants increase the risks not only for workers but also preclude forms of family insurance. FLOC contracted with American Income Life to obtain death insurance coverage for its members, most of whom are legal guestworkers. But the company failed to make good on its advertised offer because its lawyers declared the company would not issue payouts to family members outside the United States. FLOC president Baldemar Velasquez told the stories of the dead workers and their families in a speech at a student rally in Ohio, and it was Toledo school children, not the insurance company, who came through to help FLOC raise funds for the widows. The children began a campaign to pool their lunch money and raised \$1000 each for three widows of workers who died in the fields.⁵

Beck (1996) pointed out that risk is ultimately a moral problem, and discourses on danger can lend themselves both to systems of intimidation as well as to formation of new solidarities. For example, many of us were surprised by the backlash to the campaign for immigration reform in 2006, which revealed the deep anxieties US workers feel about job loss to

globalization. Narratives shape new forms of political and moral capital. They can empower new communities (place-based or transnational) to evaluate and re-imagine how the machineries of commodification can be recast in a more humane design. But to achieve such goals, political and humanitarian narratives must be conjoined with a social science on how to transform exploitive systems into systems that support life. "In a global capitalism that is constantly forced to reduce distances," writes Alf Hornborg, "a crucial question must be our moral reach. How far does our consciousness extend? How far our solidarity?" (2001:52).

As we now face our melted-down capital markets, and we expand our moral compass to consider the limits of globalized resources and energy, there is a strong urge to turn inward and work on lifestyle changes. The bodies of exhausted workers do not fit well in those small utopias that we invent. As we shop the aisles of Whole Foods, we would rather not know Guthman's (2004) findings on the human costs of our organic strawberries and mixed greens. But as we evolve our "system consciousness" in the quest to learn how humans in both our countries can insure a future for our children, we will need to factor in the flows and limits to human energy. And we will need to extend our moral reach.

NOTES

1. The H2A program, the most commonly used name for the US federal guestworker program, is named for the abbreviation of the statute that established it. There is also an H2B program for foreign laborers who receive temporary visas for nonfarm labor.
2. Study conducted by Steve Sutter, 1988, North Carolina State University, cited in Student Action with Farmworkers fact sheets on farmworkers.
3. Saskia Sassen, Lecture in "Global Studies" class, University of North Carolina, Spring 2008.
4. Statement by James S. Holt on behalf of the National Council of Agricultural Employers before Agriculture Committee, House of Representatives, Washington DC, March 29, 2000.
5. Baldemar Velasquez, personal communication, Fall 2008.

REFERENCES

- Bacon, D.
2008 Uprooted and criminalized: The impact of free markets on migrants. Backgrounder, The Oakland Institute, Fall:1-20.
- Bartra, R.
1993 *Agrarian Structure and Political Power in Mexico*. Baltimore: Johns Hopkins Press.
- Beck, U.
1996 World risk society as cosmopolitan society? Ecological questions in a framework of manufactured uncertainties. *Theory, Culture & Society* 13(4):1-32.

- Benson, P.
2008 Good clean tobacco: Phillip Morris, biocapitalism, and the social course of stigma in North Carolina. *American Ethnologist* 35(3):357–379.
- Bray, F.
2003 Genetically modified foods: Shared risk and global action. *In Risk, Culture and Health Inequality: Shifting Perceptions of Danger and Blame*. B. H. Harthorn and L. Oaks, eds. Chap. 9, Pp. 185–208. Westport, CT: Praeger.
- Ciesielski, S., J. Seed, J. Ortiz, and J. Metts
1992 Intestinal parasites among North Carolina's migrant farmworkers. *American Journal of Public Health* 82:1258–1262.
- Costanza, R.
2001 Visions, values, valuation and the need for an ecological economics. *Bioscience* 51(6):459–468.
- Dugger, C.
2003 Report finds few benefits for Mexico in NAFTA. *The New York Times*, November 19.
- Faux, J.
2006 NAFTA: Who got what? *In The Global Class War*. J. Faux, ed. Pp. 126–154. Hoboken, NJ: Wiley.
- Gibbs, J. W.
1931 [1873] A method of geometrical representation of thermodynamic properties of substances by means of surfaces. *In Gibbs, Collected Works*. W. R. Longley and R. G. Van Name, eds. New York: Longmans, Green.
- Gledhill, J.
1998 The Mexican contribution to restructuring US capitalism. *Critique of Anthropology* 18(3):279–296.
- Gouveia, L.
1994 Global strategies and local linkages: The case of the US meatpacking industry. *In From Columbus to ConAgra: The Globalization of Agriculture and Food*. A. Bonanno, L. Busch, W. H. Friedland, L. Gouveia, and E. Mingione, eds. Pp. 124–148. Lawrence: University of Kansas Press.
- Grey, M.
1999 Immigrants, migration and worker turnover at the Hog Pride Pork Processing Plant. *Human Organization* 58(1):16–27.
- Gross, D. and B. Underwood
1971 Technological change and caloric costs: Sisal agriculture in Northeast Brazil. *American Anthropologist* 73:725–740.
- Guthman, J.
2004 *Agrarian Dreams: The Paradox of Organic Farming in California*. Berkeley: University of California Press.
- Hall, K., A. Alexander, and F. Ordonez
2010 The cruelest cuts: The human cost of bringing poultry to your table. *Charlotte Observer*, June 25.
- Hall, R.
1989 Chicken empires. *Southern Exposure* XVII(2):12–17.
- Heyman, J. M.
1998 State effects on labor exploitation. *Critique of Anthropology* 18(2):157–180.
- Hornborg, A.
2001 *The Power of the Machine: Global Inequalities of Economy, Technology and Environment*. New York: Altamira.

- Korten, D.
2009 *Agenda for a New Economy: From Phantom Wealth to Real Wealth*. San Francisco: Berrett-Koehler.
- Krieger, N.
1999 Sticky webs, hungry spiders, buzzing bees and fractal metaphors: On the misleading juxtaposition of “risk factor” vs. social epidemiology. *Journal of Epidemiology and Community Health* 53:678–680.
-
- 2001 A glossary for social epidemiology. *Journal of Epidemiology and Community Health* 51:693–700.
- Manning, R.
2004 The oil we eat. *Harpers Magazine*, February:37–45.
- Martinez-Alier, J.
2005 *Environmentalism of the Poor: A Study of Ecological Conflicts and Valuation*. New Delhi, India: Oxford University Press.
- Martinez-Alier, J. and M. O’Connor
1996 Ecological and economic distribution conflicts. In *Getting Down to Earth: Practical Applications of Ecological Economics*. R. Costanza, O. Segura, and J. Martinez-Alier, eds. Pp. 153–183. Washington, DC: Island.
- McMichael, P.
2008 Roots of the world food crisis: The food regime at large. Presented at “The Fate of Food,” a University of North Carolina Mellon-Sawyer Seminar conference, Chapel Hill, April 25–26.
-
- 2009 A food regime genealogy. *Journal of Peasant Studies* 36(1):139–169.
- Meadows, D. H.
2008 *Thinking in Systems: A Primer*. White River Junction, VT: Chelsea Green.
- Meillassoux, C.
1981 *Maidens, Meal and Money: Capitalism and the Domestic Community*. Cambridge: Cambridge University Press.
- Mirabelli, M. C. and D. B. Richardson
2005 Heat-related fatalities in North Carolina. *American Journal of Public Health* 95(4):635–637.
- Nonini, D. M.
2009 Theorizing transnational movements in the current conjuncture: Examples from/of/in the Asia Pacific. Paper presented at the Canadian Anthropological Society annual meeting, Vancouver, CA, May 2010; forthcoming in *Migration in the Twenty-First Century: Ethnography and Political Economy*. P. G Barber and W. Lem, eds. New York: Routledge.
- Odum, H. T.
1995 Energy systems concepts and self-organization: A rebuttal. *Oecologia* 104:518–522.
- O’Neill, J.
1985 *Five Bodies: The Human Shape of Modern Society*. Ithaca, NY: Cornell University Press.
- Pimentel, D. and M. Giampietro
1994 Food, land, population and the US economy. Executive summary, Carrying Capacity Network, Washington DC. <http://dieoff.org/page40.htm>.
- Schumpeter, J. A.
1962 [1942] *Capitalism, Socialism, and Democracy*. 3rd edition. New York: Harper & Row.

Sider, G.

- 2006 The production of race, locality and the state: An anthropology. *Anthropologica* 48:247–263.

Smith-Nonini, S.

- 1999 Uprooting Injustice: A Report on Working Conditions for North Carolina Farmworkers and the Farm Labor Organizing Committee's Mt. Olive Initiative. Durham, NC: Institute for Southern Studies.

-
- 2003 Back to "the jungle": Processing migrants in North Carolina meatpacking plants. *Anthropology of Work Review* XXIV(3–4):14–20.

-
- 2007 Farmworker protection, not just memorials. *Independent Weekly*, March 14. <http://www.indyweek.com>.

-
- 2010 *Healing the Body Politic: El Salvador's Popular Struggle for Health Rights from Civil War to Neoliberal Peace*. New Brunswick, NJ: Rutgers University Press.

Smith-Nonini, S. and S. Weaver

- 2006 At Smithfield, work hurts. *Facing South*, blog of the Institute for Southern Studies, Oct. 13. <http://www.southernstudies.org/2006/10/facing-south-report-at-smithfield-work.html>.

Sontag, D.

- 2008a Immigrants facing deportation by US hospitals. *The New York Times*, August 3: A1.

-
- 2008b Deported in coma, then saved in US. *The New York Times*, November 9: A1, 34–35.

Striffler, S.

- 2005 *Chicken: The Dangerous Transformation of America's Favorite Food*. New Haven, CT: Yale University Press.