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On the Micropolitics and Edges of Survival in a Technocapital Sacrifice Zone

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ABSTRACT

This article explores the industrial sacrifice zone of Endicott, New York, which in 1924 became the birthplace of International Business Machines Corporation and quickly established itself as an industrial launching pad for the production and innovation of modern computing technologies. Drawing on ethnographic research and taking a micropolitical ecology approach, I consider industrial decay and community corrosion key agents for understanding the sedimentary record of neoliberal “technocapitalism” [Suarez-Villa, Luis. 2009. *Technocapitalism: A Critical Perspective on Technological Innovation and Corporatism*. Philadelphia, PA: Temple University Press]. In particular, I explore here how the flip-side of local narratives of deindustrialization and economic sacrifice are other narratives of coping and navigating community decline. These local sacrifice zone narratives, I argue, expose key dimensions of surviving corporate neoliberal and technocapital sacrifice.

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A term stemming from cold war policy and rhetoric, “sacrifice zone” has been deployed by U.S. government and military officials to describe and mark territories forever alienated in the wake of nuclear testing, production, and waste management. The National Sacrifice Zone, as it was best known, became an iconic term meshing patriotic symbolism and moral-cultural justification, and ultimately provided ideological justification for destruction and reconfiguration of spaces, from entire regions, landscapes, and ecosystems, to townships. This spatial and sociocultural sacrifice, it was claimed, was a necessary step in sustaining democracy, freedom, and “the American way” of life. The expression “sacrifice zone” is now deployed to justify macroscale resource extraction. The lands and peoples of these mass extraction projects are being sacrificed largely in the name dominant national economic and energy logics (e.g. industrial competitiveness, rural jobs, and energy

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independence). Couched in a long history of environmental injustice and racism that conditions the “polluter-industrial complex” (Faber 2008), sacrifice zone has been revived and recycled as a trope used to describe disadvantaged communities and landscapes disproportionately contaminated and neglected in the name of capital accumulation (Davis 1993, 2003). A noteworthy example of this new usage can be found in Chris Hedges and Joe Sacco’s book *Days of Destruction, Days of Revolt*, where it is suggested that this concept helps describe “those areas in the country that have been offered up for exploitation in the name of profit, progress, and technological advancement” (Hedges and Sacco 2014, 1).

But *sacrifice* itself signifies much more than the cold war political-economic conditions from which it emerged. To fully understand *sacrifice*, one needs to look beyond interlinkages between federal land use policy and socio-environmental injustice that helped shape the original intent of the sacrifice zone concept. As Wendy Brown reminds us,

[s]acrifice is a historically and culturally ubiquitous, yet disunified and shape-shifting practice. It has supremely religious, as well as utterly prosaic usages—there are ritual sacrifices of animals and other treasures to god(s), parental sacrifices of time, sleep, and money for children, and strategic sacrifices in games—of a pawn in chess or to advance a runner in baseball ... Sacrifice is a communal ritual that renarrates the community’s origin and expresses its conscious dependence on the sacred, but is distinct from other expressions of devotion or servitude in that we feed the life-giving powers of the sacred with life. (Brown 2015, 214)

On the ground and in the communities where such “national” commerce and defense sacrifice has unfolded, the “social” zone is one marked by continued social production, processing, and negotiation. Beyond abstract national rhetoric and policy, sacrifice zones are physical and emotional spaces and places. They are vibrant spaces of interconnected narratives, affects, discriminations, and consequences. They constitute micropolitical zones signaling transformations and reconfigurations in land and chemistry, economy and subjectivity, possession and dispossession, and profanity and disavowal. Lerner (2010) scratches at the conceptual surface of this approach to the term, offering mostly a perspective that signals a particular location in time and space where one *sees* and *finds* enduring inequality and distress:

Within these sacrifice zones, the human cost of our rough-and-tumble, winner-take-all economic system is brutally visible. Here we see can see the tragic consequences of our discriminatory zoning practices, our inconsistent standards about the health effects of toxic chemicals, and our gap-ridden regulatory system. Here we find Americans who cannot afford to live in a neighborhood where the air and water are clean and who are stuck instead in dangerously sited houses where they are literally choking on the exhaust of our industrial system. (Lerner 2010, 15)

As I will explore here, sacrifice zones involve toxics remainder, infrastructural, and technological decay, as well as embodied responses to economic and corporate sacrifice. While there exist many different types of sacrifice zones—from cold war communities contaminated with radioactivity to urban neighborhoods contaminated with chlorinated hydrocarbons, to once-vibrant industrial towns becoming zones of government subsidized housing—these spaces and places of industrial production and abandonment are as much “about *bodies* of land, human bodies, and the ‘body politic’—now, and in the future” (Kuletz 1998, 85, emphasis in original), as they are about political-economic *technologies* of sacrifice and obsolescence. One can point to various symbols of sacrifice “to dissect the social and cultural intricacies of the urban environment, space, power and capital” (Jaffe and Dürr 2010, 2). Here I argue that attending to the actual lived experiences of people surviving and coping with industrial cycles and ruin (Nash 1989; Mah 2012), and high-tech industrial waste, in particular, helps illustrate the micropolitical ecology of responses to the “pathologies of technocapitalism” (Suarez-Villa 2009, 5).¹

My emphasis on lived experiences of sacrifice and staying put stems from my general interests in micropolitical ecology (Little 2012b), an approach to political ecology that tunes into situated, intersubjective, and micro-level processes of contentious negotiation and tolerance. In other words,

[c]learly, industrial development is a story that unfolds simultaneously at multiple scales, from the local to—increasingly—the international. Thus, it is essential to account for both the macro-level politicoeconomic forces inherent to industrial development and the micro-level processes that influence the forms its encounters take as well as their outcomes. (Horowitz 2012, 5; see also Horowitz 2011)

The micropolitical ecology approach to sacrifice zones I explore here draws inspiration from the established “social production” of nature and space itself (Smith 1984; Lefebvre [1974] 1991; Harvey 1996; Braun and Castree 1998). That said, “sacrifice zone’ is a certain space that can be *read* and interrogated “to expose the actual production of space ... a space [that] implies a process of signification” (Lefebvre [1974] 1991, 16–17).

I focus in particular on the technocapital sacrifice zone of Endicott, New York, which in 1924 became the birthplace of International Business Machines Corporation (IBM) and quickly established itself as an industrial launching pad for the production and innovation of modern computing technologies. The IBM-Endicott plant boomed and busted. In 2002, IBM sold its

¹According to Suarez-Villa (2009, 3–4) “technocapitalism” is used to describe a “new form of capitalism that is heavily grounded in corporate power and its exploitation of technological creativity ... The generation of technology in this new era of capitalism is therefore a social phenomenon that relies as much on technical functionality as on the co-optation of cultural attributes.”

Endicott facility and today the community is home to a mixture of problems, including a contentious hazardous waste site spanning over 300 acres of residential and business properties, a collapsed tax base, and countless environmental public health concerns. Over 500 homes and nearly 1100 residents have been “mitigated,” meaning homes have been retrofitted with venting systems to control for what is called “vapor intrusion,” a process by which volatile organic compounds found in contaminated groundwater sources migrate into overlying buildings. Once a bustling industrial town and proud birthplace of modern electronics, Endicott is now listed under the U.S. Environmental Protection Agency’s (EPA) National Priorities list of hazardous waste sites (or Superfund Sites).

Drawing on ethnographic research findings (Little 2012a, 2012b, 2013a, 2013b, 2014), I consider late industrial decay, toxic solvents, and risk mitigation technologies key agents for understanding the sedimentary record of neoliberal “technocapitalism” (Suarez-Villa 2009). In particular, I explore here how the flip-side of local narratives of deindustrialization and industrial sacrifice are other lived experiences of late industrial decay and community decline, namely self-sacrifice and staying put as key dimensions of surviving corporate neoliberal and technocapital sacrifice. I read the Endicott landscape as not only a contaminated IBM sacrifice zone, a neglected space of corporate dynamism and profanity, but equally as a “new mitigation landscape” (Little 2014). This corporate birthplace, one could argue, is a site of neoliberal fossilization and remainder. According to Gabrys (2011), a natural history perspective on electronics and electronic waste (or e-waste) honors the sedimentary record of this booming industry of obsolescence: “Obsolete objects [land, people, factories, laptops, cell phones] returned to a kind of pre-history when they fell out of circulation, at which time they could be examined as resonant material residues—fossils—of economic process” (Gabrys 2011, 6). This IBM sacrifice zone, in this sense, amounts to “a landscape that registers the terminal, but not yet terminated, life of digital technologies—a space where the leftover residue of electronics manufacturing accumulates” (2011, 2). As I will modestly contend here, we can also witness in a technocapital sacrifice zone the “accumulation” of narratives of survival and staying put. I will argue that by taking a micropolitical ecology approach to sacrifice zone theory and drawing on ethnographic research, we learn that narratives of endurance survive and live on in this community of technocapital neglect and that these narratives offer a critical re-interpretation of the nature and social production of sacrifice itself.

Contamination and Mitigation in IBM’s Birthplace

Endicott, New York, like other deindustrializing Rust Belt communities in the U.S. (High 2003, 2007), has experienced moments of boom and bust, capital

accumulation and “neoliberal creative destruction” (Harvey 2007). IBM, under the leadership of Thomas J. Watson, Sr., made Endicott an early epicenter of electronic modernization by building IBM’s “Plant Number One” in Endicott in 1924 after the merger of nearly fifteen companies, most notably International Time Recording Company and the Computing-Tabulating-Recording Company. What is today the largest multinational computer and IT consulting corporation, IBM started out in the business of punch card machines and other time recording technologies for business operations. By the mid 1930s, Endicott was known as “Main Street IBM” (Aswad and Meredith 2005), helping sustain IBM’s role as a critical American corporation in the creation of 20th century capitalism (Olegario 1997). Under the new corporate tagline “Let’s Build a Smarter Planet,” today IBM manufactures and sells computer hardware and software and provides infrastructure services, hosting services, and consulting services in areas ranging from mainframe computers to nanotechnology and cutting-edge epidemiologic and climate change software.

As I have noted elsewhere (Little 2012b), during the Reagan-Thatcher years, Endicott, like many other industry towns in the U.S. Rust Belt region, became a community of neoliberal restructuring built on a promise to restore the region’s high-tech industry, to sustain the region’s history of technological innovation. This message was made strikingly clear when Ronald Reagan, one of the major architects of neoliberalism (Harvey 2005; Graeber 2010), delivered a speech to a crowd of Endicott residents on 12 September 1984 during a Reagan-Bush rally at the local high school football field:

[T]he computer revolution that so many of you helped to start promises to change life on Earth more profoundly than the Industrial Revolution of a century ago ... Already, computers have made possible dazzling medical breakthroughs that will enable us all to live longer, healthier, and fuller lives. Computers are helping to make our basic industries, like steel and autos, more efficient and better able to compete in the world market. And computers manufactured at IBM ... guide our space shuttles on their historic missions. You are the people who are making America a rocket of hope, shooting to the stars ... Today, firms in this valley make not only computers but flight simulators, aircraft parts, and a host of other sophisticated products. (Reagan 1984)

Amid these neoliberal promises of juggernaut growth and innovation, the IBM-Endicott facility, which at one time employed around 13,000, continued to downsize during the 1980s and 1990s. The plant was officially sold in 2002 to a small IBM spin-off firm, Endicott Interconnect Technologies (EIT), and today it is the headquarters of i3 Electronics, Inc. The closure of the original IBM plant not only left the community with a collapsed tax base but also with a disturbing remainder of electronics manufacturing: toxic contamination. Once involved in “making America a rocket of hope,” many residents of Endicott are now struggling to make a living in a “toxic town” (Little 2014).

Industrial spills at the former IBM plant date back to as early as 1978 (Grossman 2006). The main contaminant of concern has been and continues to be trichloroethylene (TCE), a chlorine-based substance and known cancer-causing chemical that has recently been determined by numerous epidemiological studies to be “carcinogenic to humans by all routes of exposure and [to pose] a potential human health hazard for non-cancer toxicity to the central nervous system, kidney, liver, immune system, male reproductive system, and the developing embryo/fetus” (Chiu et al. 2013, 303). TCE was heavily used as a de-greasing solvent in chipboard manufacturing operations at the former IBM plant, and it is TCE concentrations found in a 300-acre residential area that first raised concerns about the potential for vapor intrusion for residents living near the plant and the need for a comprehensive risk mitigation plan.

Among vapor intrusion experts I have interviewed (Little 2013b), I was told that mitigation is the most “cost-effective” decision, and a decision that has made the mitigation effort at the IBM-Endicott site a model for “good” vapor intrusion risk response. According to the U.S. EPA, installation costs for the active venting systems occupying the IBM-Endicott site and landscape range from \$1500 to \$5000 and the cost of annual operations and maintenance can range from \$50 to \$400 (USEPA 2008). Continued air monitoring and lab costs for analysis per home can range from \$8000 to \$12,000 and can vary with monitoring duration. There is general agreement among environmental scientists and engineers that such mitigation technologies do in fact do a good job of mitigating vapors, but to maintain the “control” of vapor intrusion these systems do require periodic maintenance and cannot mitigate 100% of all volatilized organics in the indoor air. As I have argued in more detail elsewhere (Little 2014), the late industrial landscape of Endicott today is more than a site of “industrial ruination” (Mah 2012); Endicott has become a “new mitigation landscape” (Little 2014), a community appropriated by neoliberal technologies of toxics repair amid enduring socio-economic distress and insecurity.

Narratives of Economic Sacrifice

My ethnographic research in Endicott taught me that local discourses on the IBM spill leaked into discussions of deindustrialization, dystopia, social stigma, and economic sacrifice. For many plume residents I spoke with, the TCE contamination is “just another sign”—as one resident put it—of Endicott falling apart and becoming yet another Rust Belt town to bust after many years of industrial dynamism. Many said that they are witnessing an overall decline in the quality of community life in Endicott, a decline discourse that coupled deindustrialization and contamination processes. For a community that once thrived with families, businesses, and workers, it has now, for

many, lost its lure and become a “welfare community” with growing class- and race-based tensions.

When I began interviewing residents affected by the IBM contamination in 2008, I found they often spoke at length about the local rupture invoked by the “shadow” of IBM deindustrialization and the inversion of Endicott’s socio-economic situation. Residents seemed to largely agree that since at least the early 1990s—when IBM was under the contentious and indecisive leadership of John Akers—Endicott has been gradually experiencing the pressures and consequences of deindustrialization. My neighbor Bill put it this way: “The quality of life here is depressed. The village of Endicott has been in decline here because once the IBM gravy train folded, everything got depressed.” Another resident, when asked “what is your vision of where the community is going?” responded simply with “Down.” The downward turn in Endicott via IBM disinvestment mimics a familiar pattern of technocapitalism. “The decomposition of corporate structures inherited from industrial capitalism is a major feature of technocapitalism. The corporation ... faces a fundamental transformation of its governance and social relations” (Suarez-Villa 2009, 121–122). On the other hand, regardless of ongoing transformations, the very economy in which the technocapital corporation operates is a “paradoxical process of simultaneous complexification and organization, the expansion of network connections and the constitution of these new alliances as part of objective social facts ... [I]t involves the organization of connectivity rather than disintegration” (Konings 2015, 2).

My ethnographic research in Endicott also included a household survey of residents living in IBM’s toxic plume (see Little 2014). The survey questionnaire included several questions focusing on local understandings of the impacts of deindustrialization in Endicott. For many residents, the mixture of the IBM deindustrialization and industrial contamination has made Endicott a less “desirable” place to live, with most residents surveyed (60.8%, or 48 out of 79 respondents) blaming the IBM pollution for impacting the quality of life in Endicott. When asked if local industrial pollution has made Endicott a less desirable place to live, the majority of plume residents surveyed say they “strongly agree” (47.5%, or 38 out of 80 respondents) or “somewhat agree” (42.5%, or 34 out of 80 respondents). Residents were also asked to rank the degree to which they felt the decline of local industry had made Endicott a less desirable place to live, to which over half (53.8%, or 42 out of 78 respondents) selected “strongly agree.” One resident’s narrative points to the fact that the declining appeal of Endicott “had nothing to do with the spill.” Instead, the disinvestment in the IBM plant and the disappearance of local industry amounted to the now-usual processes of neoliberal rationality and restructuring that are transforming communities *everywhere*. As this former IBM software engineer put it,

It is just an economy thing. When we first moved here it was great. IBM was going great. They were like smoking guns. Everybody was busy and a lot of things were going on. It was a great community to be in. But when IBM slowly started going down and down and downsizing and downsizing, of course, naturally, that hit the economy of the area. Washington Avenue used to be a booming street for business. Now you look at Washington Avenue and you say “Uh.” I mean it is nothing like it was when we first moved here. There are still business there, but not like it was. Of course, with IBM out of here the job market here has just gone down the tubes. The jobs just went away ... What happened when IBM started to move out was that both software and hardware people were either relocating, retiring, or taking early buy outs and things like that. But, as the jobs went away, people moved and all the satellite companies that were selling wares to IBM, they just disappeared because with IBM gone their market was gone. It really affected the area and that had nothing to do with the spill. It was just the fact that they were moving out of the area. Basically IBM was picking up and moving out ... So it's just one of those things that is happening in many places across the country where you get a big company in a town that moves out ... it is just going to change that community big time.

One former IBMer and current Endicott village trustee explained that “We’ve got Endicotts all over the place.” After reminding me that “we live in a classic Rust Belt area,” this resident shared with me his perspective on what he feels is the root cause of deindustrialization, economic troubles, and exodus in Endicott and New York State as a whole:

This is a northern community that was heavily dominated by a manufacturing industry that dates back to the early 1900s, and a lot of that industry has left. Ok. The scars of what that industry was doing have been left behind. Upstate New York is a classic example of this. We’ve got Endicotts all over the place. To see where industry has left a big scar on the landscape, go to Buffalo’s Niagara Falls. They’ve got real problems up there. They have had tremendous industry up there that just polluted the hell out of the land and [they] walked away. A lot of those industries just don’t exist anymore. So a lot of the problems that they left behind are still there and the people are living there ... So what has happened to the economy? Upstate New York is in serious trouble. New York state is very unfriendly to businesses. A lot of heavy taxes and heavy requirements in terms of insurance. Utilities are very high and gas and electric are much higher than the national averages. High taxes. To start a new business here is tough. You see a lot of them start and then fold. Start and fold. Start, fold. For example, one guy had a small business here, and I forget what it was exactly, but he moved just south across the border to Pennsylvania because of the costs. The workmen compensation costs in New York were just way too high. To stay afloat he went across the border ... We need to cut government, not increase government. It’s a no-win scenario. We are in a situation in our state where the taxes go up every year because the cost of labor continues to go up. Unions are very expensive. The costs are going up and everybody is packing their bags and leaving.

This narrative of economic “sacrifice” and the undoing of Endicott by means of neoliberal instrumental rationality is rooted in the politics of Endicott’s

largely White working-class majority. Other residents turn to corporate greed and the problem of corporate capitalism when trying to make sense of the causal agents of deindustrialization and political-economic transformations at local and national levels. For this resident, whose father was a successful IBMer, the issue is more about a problem of capital being favored over labor, about IBM deterritoriality and broader national and global political-economic trends:

Whatever the corporation [IBM] told them to do, they did. Like wind-up toys who had been programmed, you know. Puppets. Like whatever the company says, the company is right. I don't think much of the corporate world and know it is being proven out nationwide and worldwide that workers are nothing but a number. They really don't matter to the company ... Today everybody is downsizing, cutting jobs and benefits, and squeezing their workers. If you ask for a raise, they will just get rid of you and hire somebody on the street. The outsourcing is happening everywhere and not just here in Endicott. In Michigan nearly half a million auto-industry jobs were lost. Michigan is in a serious depression and so is Endicott. There is a whole globalization of the workforce [going on]. Your job has been outsourced for 70 cents an hour in China [laugh]. Corporations profit from this. Do they lower their prices 100 or 200 percent? No. They drop them a little bit and they grab market share.

He lit a cigarette and continued with his dystopian vision of what this political-economic trend is leading to:

I feel sorry for the generation today going into the workforce ... I feel sorry for the children ... they are going to have problems in the future. I see a future generation of people with pensions and people without pensions. There is going to be a big rift between government workers and big companies ... I see this happening in the next 30 years. I'm not real optimistic about the way things will go"

This resident's narrative helps illustrate the force of "place imaginings" (Mah 2012) in zones of industrial legacy and decay. As Mah (2012, 199) rightly contends, "Legacies of industrial ruination and urban decline are embodied in local people's experiences, perceptions and understandings, and emerge in unexpected, indirect, or diffuse forms: as uncertainty, as ambivalence, as nostalgia, as trauma, as endurance, and as imagined futures." The above narrative also speaks to the "contemporary 'economization' of subjects by neoliberal rationality" (Brown 2015, 33), a sticky situation that begs the question: "How does the distinctive form of reason that is neoliberalism become a governing rationality saturating the practices of ordinary institutions [e.g. IBM] and discourses of everyday life" (2015, 35).

One mother of two boys explained that "My children just know they aren't going to come back to Endicott. There is just nothing here for them." Youth disinterest in making a living in Endicott and the outmigration of educated youth were common themes to surface in interviews with residents, and others simply point to the fact that living in Endicott

means you are “dealing” with multiple struggles. “I may not know what I am talking about, but I know what I am dealing with,” were the wise words of one resident. This gets to the heart of the matter. Endicott residents are *dealing with* various concerns and stressors, including, but not limited to, racial tensions, unemployment, health problems and, for some, stigmatization. “I can’t enjoy my house anymore because of the stigma. Stigma is just the word I use for it, but this is how I feel. It has marked my house. I tell people I live in a toxic dump,” was the response of one elderly resident. The TCE turbulence, as we see here, has created a “mark” on this resident’s sense of self and her sense of her home. People and property, in this sense, share the stigmatization; both are victims of IBM contamination. Not only people and their homes, but even certain streets can be “marked”: “Its got a real negative connotation because of this area. You know, anybody that hears were you live in it, it is all like ‘You guys live over in the IBM spill?’ You don’t go around bragging and sayin’ ‘Yeah, I live over there on McKinnley Ave.’”

For others, industrial “sacrifice” is personalized as well as extended to the community experience at large: “I am sacrificed and so is everyone else in the plume.” This is *technocapitalism* “in the Web of Life,” as Moore (2015) would have it. While sacrifice may be personalized, it is socially contextualized and couched in and by a broader web of nationwide pathologies. For instance, in addition to the local pollution struggle are the looming problems that have marked the U.S. a failing industrialized nation. As Hedges and Sacco (2014, xvi) remind us, out of all industrialized nations, the U.S. has, among other problems: the highest poverty rate, both generally and for children; the greatest inequality of incomes; lowest government spending as a percentage of GDP on social programs for the disadvantaged; the lowest score on the United Nations index of “material well-being of children”; the highest infant mortality rate; the highest consumption of antidepressants per capita; the highest carbon dioxide emissions and water consumption per capita; the largest international arms sales; and, last but not least, the largest prison population per capita.

Making Sense of Self-Sacrifice and Survival

Just because IBM has left town, jobs have dried up, community degradation has continued, and stigmatization flourishes, does not necessarily mean people do not stick around and stay on living in this technocapital sacrifice zone. As I have tried to show in this article, sacrifice zones are both landscapes of ruination and landscapes of survival; sites of fossilization and continuation. Lived experiences of self-sacrifice and staying put continue amidst plant closures, creative destruction, toxic intrusion, and corporate-state risk mitigation efforts. Lerner (2010) does in fact engage the primacy of “life” and the ethical

in sacrifice zone debates: “To learn about *what life is like* in these fenceline communities requires traveling off the beaten track and venturing beyond the centers of affluence and power” (Lerner 2010, 15, emphasis added). Similarly, discussions of state-market-based sacrifice zones, of sacrifice itself, like “life itself” (Rose 2006), simultaneously attend to people’s everyday “affective expressions” (Fassin 2010) of *survival* itself:

Certainly, powers like the market and the state do act sometimes as if human beings could be reduced to “mere life,” but democratic forces, including from within the structure of power, tend to produce alternative strategies that escape this reduction. And people themselves, even under conditions of domination, manage subtle tactics that transform their physical life into a political instrument or a moral resource or an affective expression ... But let us go one step further: ethnography invites us to reconsider what life [in a sacrifice zone] is or rather what human beings make of their lives [in a sacrifice zone], and reciprocally how their lives permanently question what it is to be human. (Fassin 2010, 93–94)

It is a mistake to conclude that residents feel Endicott has entirely lost its lure, that IBM contamination and deindustrialization has totally transformed peoples’ sense of place and security. Many residents I spoke with—even those who were highly critical of IBM, responding government agencies, and the abandonment tendencies of corporate capitalism—still enjoy living in Endicott. Some desperately want to move. Some want to stay while wishing the community could return to what it once was. Some sustain while observing the accumulation of signs of corrosion or the accumulation of extinction (McBrien 2016). Some witness irreversible changes at the local level. Some want their children to stay and raise their families in the home they grew up in, while knowing their kids have little interest in being responsible for a “polluted” property. For many, there is residual charm. As one resident put it, “Endicott still has its carousels and a great high school.” People stick around and “roll with the punches” because this is their home:

I think a lot of people are stressed these days. I don’t think Endicott is the only rough place to live. I still think this is a great country to live in. I would not want to be in Zimbabwe. There is a lot of places I’d rather not be. This is probably better than 10,000 places. Even with the pollution and the small traffic jams we have here, it is still a nice place to live. The future of business here does not look too rosy though. Corporations know that it is too expensive to run a business here. They know that they can just go elsewhere whenever they need to keep up with business ... You have to have a little bit of sense of humor to survive. I just try to roll with the punches. I like living here. I was born here. I have a sister who still lives here and a brother who does not want to have anything to do with me, but I still like this area. I don’t want to live in a big city.

Another resident I interviewed, who was born in Endicott in 1971 and makes a living as a baker, bought his home in the IBM spill area in 2008 for \$55,000.

He was happy with his “affordable” home and his job. He explained that in addition to the area’s excellent hunting and fishing, there are other things that keep him in Endicott, even though he noted that IBM exodus has certainly left the community with a “hurtful” unemployment situation:

We are hurting for jobs ... There was a bunch of them [companies] here. Of course, IBM was here. They [corporations] just move them over here and move them over there, you know. This is how the businesses work and now Endicott is hurting for jobs. My family is the only thing that keeps me here. My mom, basically. She has emphysema and is not doing good. Basically, I just wanted to be close to her. I always grew up here. I know people who stayed here. I moved out of here once, with my first wife, and lived in North Carolina, but this is where I grew up. I plan to pretty much stay in this area.

Endicott residents “stay with the trouble,” as Haraway (2011) would put it. According to this resident, staying around comes down to being close to a loved one who needs care, not economic opportunity. It means living in a community that is experiencing socioeconomic change and the so-called “troubles” of a neoliberalism that “entails not the dismantling but the reengineering of the state” (Wacquant 2012, 71); a neoliberalized Endicott with a landscape re-engineered with corporate-funded and state-monitored risk mitigation technologies above an ongoing contentious industrial hazardous waste site.

The experience of struggle in an industrial sacrifice zone is complex and entangled in a broader web of micro- and macro level problems of economy and ecology.² What seems to be a defining feature of this manifold struggle is to better understand how and in what ways “freedom has been converted to sacrifice in the current iteration of neoliberalism in the North” (Brown 2013, 1). As Brown rightfully points out, this moment of conversion, this tilt toward sacrifice thinking and practice, has been, among other things, a moment of the

[r]eplacement of the figure of the human as a scene of sovereignty and interest with the figure of the human as self-investing human capital. More than a reduction of the person to price ... the contemporary era features a replacement of the subject who chooses its ends and means with one who must engage in rational self-investment and has only one end, namely to enhance its value as human capital, to self-invest in ways at once responsible and lucrative. This replacement challenges the Kantian figure of human dignity and Lockean figure of human rights long considered to be at the heart of the democratic subject. It even challenges the creature of raw interest articulated by the classical liberals and of pleasure maximization by the utilitarians. (Brown 2013, 1)

She adds that “[t]his hugely consequential transformation is also what makes us available for sacrifice in novel ways today.” While the “national sacrifice

²Jason Moore, for example, has radically rethought the economy–ecology relationship, suggesting that “‘The economy’ and ‘the environment’ are not independent of each other. Capitalism is not an economic system; it is not a social system; it is a way of organizing nature” (Moore 2015, 2).

zone” was originally set up as a code for federal justification for commerce, energy, and defense-based sacrifice, the living subjects of sacrifice have a story of survival that needs to be heard. This is especially important if we are indeed living amid “neoliberalism’s stealth revolution” (Brown 2015), and living within an economy that is “producing not coherent social norms and institutions but parasitic entities, forces that turn against the very social life that produced it, Frankenstein-like” (Konings 2015, 4). The “sacrifice zone,” in this sense, is yet another iteration of capitalist colonization, but at the same time that depiction also misses the challenge explored here, which is to ask: How do narratives of survival in a sacrifice zone rewrite or rework our theories and narratives of economic sacrifice? Seen as a manifold system of ever-intrusive forms of instrumental rationality that empower and give moral authority to government agencies and industries capable of micro- and macro level socioecological devastation, the synthesis of “sacrifice zone” ideology and capitalist logic is part and parcel of an imperialist agenda of economic, political, and cultural hegemony. IBM’s neglect and birthplace abandonment of Endicott is a good example of a state-approved process of sacrifice that smacks of neoliberal “creative destruction” (Harvey 2007), but how neoliberal reason (and abuse) is experienced, navigated, and even modestly tolerated by living subjects of economic sacrifice is another matter.

This article has engaged some ethnographic findings from one sacrifice zone in the global North. It showed how this electronics industry birthplace and bust-place can be read as a technocapital landscape of contentious toxics exposure and erasure, of neoliberal destruction and mitigation, and of residual insecurity and survival. It explored the experiences of subjects of industrial sacrifice with the hope of encouraging a perspective on the lived politics—the micro-level biopolitics—of industrial disaster survival that goes beyond the economic determinism of original “sacrifice zone” conceptualizations. In other words,

[d]oes capitalism, in its current neoliberal mutation as state of exception (that is, ‘crisis’), inevitably interpellate us today as subjects of economy and subjects of competitive economic struggle for survival? ... [It] is relevant to consider and offer non-economic and uneconomic perspectives on contemporary politics. It seems to me that the challenge today is to better understand how the normativity of the economic in its neoliberal guise is inevitably and fundamentally linked to the reproduction of gender, sexual, kinship, desire, and biopolitical (that is, biocapital, human capital) normativity. (Butler and Athanasiou 2013, 42)

While re-thinking “sacrifice zone” theory in relation to ethnographic accounts of self-sacrifice, survival and “rolling with the punches” may fall short of fully discerning actually existing dispossession and the “biopolitical normativity” of sacrifice itself, these narratives *do* help illustrate new micropolitical ecologies of technocapital sacrifice and social life. Maybe political ecological critique of sacrifice zones needs to simultaneously work with and reconstruct the

interconnections between “narratives of dispossession” (Brosius 2006), ideas of “industrial ruination as a lived process” (Mah 2012, 11), and even possibly industrial “necropolitics” (Mbembe 2003), to augment our theories of the nature and social production of sacrifice.

It is equally important to remember that while an ethnographically grounded micropolitical ecology approach to technocapital sacrifice may offer a new and much needed critical angle on sacrifice zone debate today,

there are modes of critical thinking that disempower or lead to intellectual dead ends. If all we have to work with are romantic or apocalyptic environmental narratives of generic ‘humans as environmental degraders,’ pessimistic leftist narratives of a catastrophic runaway capitalism which will only be tamed by global insurrection or highly academic celebrations of ‘vital natures’ and ‘lively objects’ that leave hybrid human subjects passive and reactive, we are left with poor resources to think creatively about contemporary action, future-oriented possibilities or the prospect of social ecological flourishing. (White, Rudy, and Gareau 2016, 214)

It is easy to caricature the “sacrifice zone” as an extension of neoliberal rationality, an iteration of capitalist colonization and decolonization, but rendering the *living* in a sacrifice zone as simply a sacrificed population misses something. This caricature misses the actually exiting social production of and experience with economic sacrifice. In many ways it misses not just what it means to be sacrificed but it also what the actual flourishing of sacrifice itself can be. Exploring the micropolitics of survival emerging in a technocapital sacrifice zone is but one possible “intervention strategy” (Serres 2011). As Serres (2011, 20) would have it:

Every intervention strategy, in the final analysis, meets [a] constraining play of limitations: whether it’s a question of theoretical intervention in a theoretical field, of theoretical intervention in an objective field or of practical intervention in a practical field. There are edges for all strategies.

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References

- Aswad, Ed, and Suzanne M. Meredith. 2005. *IBM in Endicott*. Charleston, SC: Arcadia.
- Braun, Bruce and Noel Castree, eds. 1998. *Remaking Reality: Nature at the Millennium*. London: Routledge.

- Brosius, J. Peter. 2006. "Between Politics and Poetics: Narratives of Dispossession in Sarawak, East Malaysia." In *Reimagining Political Ecology*, edited by A. Biersack, and J. B. Greenberg, 281–322. Durham: Duke University Press.
- Brown, Wendy. 2013. "Neoliberalism, De-Democratization, Sacrifice." *La Clé des Langues*, February 21. <http://cle.ens-lyon.fr/anglais/neoliberalism-de-democratization-sacrifice-181089.kjsp>.
- Brown, Wendy. 2015. *Undoing the Demos: Neoliberalism's Stealth Revolution*. Brooklyn, NY: Zone Books.
- Butler, Judith, and Athena Athanasiou. 2013. *Dispossession: The Performative in the Political*. Cambridge: Polity Press.
- Chui, Weihsueh A., Jennifer Jinot, Cheryl Siegel Scott, Susan, L. Makris, Glinda, S. Cooper, Rebecca, C. Dzubow, Ambuja, S. Bale, et al. 2013. "Human Health Effects of Trichloroethylene: Key Findings and Scientific Issues." *Environmental Health Perspectives* 7 (13): 1–4.
- Davis, Mike. 1993. "The Dead West: Ecocide in Marlboro Country." *New Left Review* 1 (200): 1–20.
- Davis, Mike. 2003. *Dead Cities: And Other Tales*. New York: New Press.
- Faber, Daniel. 2008. *Capitalizing on Environmental Justice: The Polluter-Industrial Complex in the Age of Globalization*. New York, NY: Rowman & Littlefield.
- Fassin, Didier. 2010. "Ethics of Survival: A Democratic Approach to the Politics of Life." *Humanity: An International Journal of Human Rights, Humanitarianism, and Development* 1 (1): 81–95.
- Gabrys, Jennifer. 2011. *Digital Rubbish: A Natural History of Electronics*. Ann Arbor: University of Michigan Press.
- Graeber, David. 2010. "Neoliberalism, or the Bureaucratization of the World." In *The Insecure American*, edited by H. Gusterson, and C. Besteman, 79–96. Berkeley: University of California Press.
- Grossman, Elizabeth. 2006. *High Tech Trash: Digital Devices, Hidden Toxics, and Human Health*. Washington, DC: Island Press.
- Haraway, Donna. 2011. "Love in a Time of Extinctions and Terminations: Staying with the Trouble." Welles Library Lecture. Critical Theory Institute, University of California, Irvine. May 3.
- Harvey, David. 1996. *Justice, Nature, and the Geography of Difference*. Oxford: Blackwell.
- Harvey, David. 2005. *A Brief History of Neoliberalism*. Oxford: Oxford University Press.
- Harvey, David. 2007. "Neoliberalism as Creative Destruction." *The Annals of the American Academy of Political and Social Sciences* 610: 22–44.
- Hedges, Chris, and Joe Sacco. 2014. *Days of Destruction, Days of Revolt*. New York, NY: Nation Books.
- High, Steven. 2003. *Industrial Sunsets: The Making of North America's Rust Belt, 1969–1984*. Toronto: University of Toronto Press.
- High, Steven. 2007. *Corporate Wasteland: The Landscape and Memory of Deindustrialization*. Ithaca, NY: Cornell University Press.
- Horowitz, Leah S. 2011. "Interpreting Industry's Impacts: Micropolitical Ecologies of Divergent Community Responses." *Development and Change* 42 (6): 1379–1391.
- Horowitz, Leah S. 2012. "Power, Profit, Protest: Grassroots Resistance to Industry in the Global North." *Capitalism Nature Socialism* 23 (3): 21–34.
- Jaffe, Rivke, and Eveline Dürr. 2010. "Introduction: Cultural and Material Forms of Urban Pollution." In *Urban Pollution: Cultural Meanings, Social Practices*, edited by E. Dürr, and R. Jaffe, 1–29. Brooklyn, NY: Berghahn.

- Konings, Martijn. 2015. *The Emotional Logic of Capitalism: What Progressives Have Missed*. Stanford, CA: Stanford University Press.
- Kuletz, Valerie L. 1998. *The Tainted Desert: Environmental and Social Ruin in the American West*. New York, NY: Routledge.
- Lefebvre, Henri. [1974] 1991. *The Production of Space*. Translated by Donald Nicholson-Smith. Oxford: Blackwell.
- Lerner, Stephen D. 2010. *Sacrifice Zones: The Front Lines of Toxic Chemical Exposure in the United States*. Cambridge: MIT Press.
- Little, Peter C. 2012a. "Another Angle on Pollution Experience: Toward an Anthropology of the Emotional Ecology of Risk Mitigation." *Ethos* 40 (4): 431–452.
- Little, Peter C. 2012b. "Environmental Justice Discomfort and Disconnect in IBM's Tainted Birthplace: A Micropolitical Ecology Perspective." *Capitalism, Nature, Socialism* 23 (2): 92–109.
- Little, Peter C. 2013a. "Envisioning the Political Ecology of Mitigation in A Microelectronic Disaster Setting." *Journal of Political Ecology* 20 (13): 217–237.
- Little, Peter C. 2013b. "Vapor Intrusion: The Political Ecology of an Emerging Environmental Health Concern." *Human Organization* 72 (2): 121–131.
- Little, Peter C. 2014. *Toxic Town: IBM, Pollution, and Industrial Risks*. New York, NY: New York University Press.
- Mah, Alice. 2012. *Industrial Ruination, Community, and Place: Landscapes and Legacies of Urban Decline*. Toronto: University of Toronto Press.
- Mbembe, Achille. 2003. "Necropolitics." *Public Culture* 15 (1): 11–40.
- McBrien, Justin. 2016. "Accumulating Extinction: Planetary Catastrophism in the Necrocene." In *Anthropocene or Capitalocene? Nature, History, and the Crisis of Capitalism*, edited by Jason W. Moore, 116–137. Oakland, CA: PM Press.
- Moore, Jason W. 2015. *Capitalism in the Web of Life: Ecology and the Accumulation of Capital*. London: Verso.
- Nash, June C. 1989. *From Tanker Town to High Tech: The Clash of Community and Industrial Cycles*. Albany: State University of New York Press.
- Olegario, Rowena. 1997. "IBM and the Two Thomas J. Watsons." In *Creating Modern Capitalism*, edited by T. K. McGraw, 351–393. Cambridge, MA: Harvard University Press.
- Reagan, Ronald. 1984. *Reagan-Bush Rally Speech*. Endicott, New York: September 12.
- Rose, Nikolas. 2006. *The Politics of Life Itself: Biomedicine, Power, and Subjectivity in the Twenty-First Century*. Princeton, NJ: Princeton University Press.
- Serres, Michel. 2011 [1974]. *Betrayal: The Thanatocracy. Hermès III: La Traduction*. Translated by Randolph Burks. Paris: Éditions de Minuit.
- Smith, Neil. 1984. *Uneven Development: Nature, Capital, and the Production of Space*. New York, NY: Blackwell.
- Suarez-Villa, Luis. 2009. *Technocapitalism: A Critical Perspective on Technological Innovation and Corporatism*. Philadelphia, PA: Temple University Press.
- USEPA (U.S. Environmental Protection Agency). 2008. *Indoor Air Vapor Intrusion Mitigation Approaches*. Office of Research and Development, National Risk Management Research Laboratory. EPA/600-R-08-115. October.
- Wacquant, Loïc. 2012. "Three Steps to A Historical Anthropology of Actually Existing Neoliberalism." *Social Anthropology/Anthropologie Sociale* 20 (1): 66–79.
- White, Damian F., Alan P. Rudy, and Brian J. Gareau. 2016. *Environments, Natures and Social Theory*. London: Palgrave.