Roger Chickering and Stig Förster, editors, *War in an Age of Revolution, 1775–1815*

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Michaela Hoenicke Moore, *Know Your Enemy: The American Debate on Nazism, 1933–1945*

# Nuclear Threats, Nuclear Fear, and the Cold War of the 1980s

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# Atomic Nightmares and Biological Citizens at Three Mile Island

Natasha Zaretsky

At 4:00 a.m. on Wednesday, March 28, 1979, the Three Mile Island (TMI) nuclear power plant, located sixteen miles south of Harrisburg, Pennsylvania, became the site of the worst accident in the history of nuclear energy in the United States. One of two reactors on the island sustained what nuclear engineers call a "loss of coolant accident." A relief valve was mistakenly left open, permitting large amounts of water – normally used to cool the plant's core – to escape. As the containment building lost coolant, temperatures and radiation levels rose. Had the core of the reactor been exposed for too long, it could have overheated and melted, releasing radioactive material into the environment.

This feared "meltdown" did not occur. But radiation did leak out of a small rupture in the plant's auxiliary building. In addition, plant operators released steam into the air that contained detectable amounts of radiation, and they discharged water containing trace concentrations of xenon (a short-lived radioactive gas) into the Susquehanna River. By the third day of the accident, a hydrogen bubble had also developed in the top of the core's container, making it difficult for workers to bring down the core's temperature and stoking fears of an explosion. That evening, CBS news anchor Walter Cronkite told viewers that the nation faced "the considerable uncertainties and dangers of the worst nuclear power plant accident of the atomic age."[1]

The TMI accident was not the first radiation scare in American history. With the escalation of atomic weapons testing in the 1950s, such scares became a routine, if not unnerving, feature of everyday life. Testing sickened and killed livestock, spread radioactive ash and rain, and deposited strontium-90 (a long-lasting isotope that can lodge in the bones) in

wheat and milk. Over the course of the decade, scientists warned that radiation could cause leukemia, bone cancer, and genetic damage. Citizens groups conducted local studies on radiation exposure, and popular magazines described radioactive fallout as "the silent killer."[2] The TMI accident revived these earlier fears of radiation and rerouted them to nuclear power plants. In the process, the accident shattered a set of assumptions that underlay the postwar promotion of civilian nuclear energy: that nuclear power plants could be disassociated from atomic bombs; that the destructive nature of atomic power could be transformed into something benign; and that American civilians could somehow be shielded from the dangers of radiation while its military wielded a nuclear arsenal comprised of missiles, submarines, and doomsday devices.

The 1979 accident also constituted an illuminating moment in the history of declining public trust in US political culture. Over the prior decade, the infamous "credibility gap" of the Vietnam War – the growing disconnect between official reports about the war and its actual progression – had appeared again and again, as the oil embargo and Watergate raised new allegations of government duplicity. The cumulative effect was a sharp decline in trust in governmental institutions over the course of the 1970s. This decline was apparent at Three Mile Island, where the "official story" about the accident would be met with considerable skepticism by both local residents and outside observers. The suspicion that both the utility company and public officials were downplaying the severity of the accident resonated with public responses to the Vietnam War and Watergate. But the accident departed from these prior crises in that it threatened to trigger a radiological health emergency among American civilians. Within days, state and federal officials flooded the area and began monitoring radiation levels in the air, soil, and water, as well as in the bodies of local residents. Like the other upheavals of the decade, then, the accident constituted a crisis in political trust, but in this case it placed the imperiled human body – indeed, the *irradiated* human body – at the center of the story.

The human-body-at-risk was not just any body. At the time of the accident, scientists agreed that the pregnant body, the child's body, and the fetal body were especially vulnerable to radiation poisoning. These bodies emerged as powerful symbols of environmental risk throughout the crisis, a symbolism that established continuities between the TMI accident and the earlier radiation scares of the 1950s.[3] But fears surrounding fetal health did not emerge from the accident alone. Disasters can function like x-rays, revealing both tears in the social fabric and powerful – if often



ephemeral – forms of communal solidarity.[4] Building on the concept of "disaster as x-ray," I argue that the local community's fixation on fetal health in the wake of the accident crystallized larger cultural anxieties surrounding reproduction in the 1970s. These anxieties stemmed from the expansion of abortion rights, a heightened vigilance surrounding fetal health with the advent of new reproductive technologies, and the emergence of a pro-life discourse of fetal personhood in American political culture. At the same time, these apprehensions dovetailed with a question first raised by the 1945 dropping of the atomic bomb: what would be the fate of reproduction now that human beings had acquired the technological capacity for self-annihilation and mutation? Prior to the crisis at Three Mile Island, that question had focused largely on atomic weaponry, but the accident raised the possibility that a power plant could mimic a bomb attack in its destructive effects.

This chapter proceeds in three stages. I first trace the accident's history, exploring how and why public fears about its radiological effects came to center on reproductive and fetal health. I then show how these fears endured in the years that followed, as local women, many of whom self-identified as conservative and Christian, borrowed from the antiabortion movement a "grammar of life" that they used to condemn the nuclear industry for prioritizing the profit motive over public safety. Finally, I contend that the accident brought into relief several intersecting features of the political culture of the second Cold War: the unstable relationship between atomic weapons and civilian nuclear power; the centrality of biological health and survival to conceptions of atomic citizenship; the significance of the figure of the unborn as a symbol of existential insecurity in the nuclear age; and the ways in which a "grammar of life" infused disparate movements in the 1970s and 1980s, thus blurring schematic distinctions between left and right.

## The Building of Trust at TMI

The TMI accident was never supposed to have happened. Throughout the 1960s the nuclear industry had waged an ambitious campaign to convince the public that nuclear technology was not only safe but also essentially accident-proof.[5] In 1975 the Nuclear Regulatory Commission (NRC) released the Rasmussen Report, which concluded that a citizen was more likely to be killed by a meteor than by a reactor accident.[6] The report reflected a culture of overconfidence that had pervaded the industry in the years before the accident. As the NRC's Director of Nuclear Reactor

Regulation Harold Denton recalled, "Within the NRC, no one really thought you could have a core meltdown. It was more a Titanic sort of mentality. This plant was so well designed that you couldn't possibly have serious core damage."[7]

This institutional overconfidence trickled down to the local community near Three Mile Island, where the utility company Metropolitan Edison opened Unit 1 in 1974 and Unit 2 in 1978. Robert Reid, the mayor of nearby Middletown, remembered that in the years before the accident, "Everyone was assured by the federal government and by Met Ed that this plant was safe, and there would never be an accident."[8] The community's trust in the plant was a product of the nuclear industry's promotional efforts, but it also emerged out of the political economy of southcentral Pennsylvania. With an economy that combined agriculture with manufacturing, tourism, and government, the Susquehanna Valley was made up of rural landscapes dotted with small towns. In contrast to other parts of the state, devastated by the precipitous decline of the steel industry, the area weathered the deindustrialization of the 1960s and 1970s.[9] The largest city in the region, the state capital of Harrisburg, provided a steady source of government employment. Tourists flocked to the chocolate factory in Hershey and to the Pennsylvania Dutch Country. Lancaster County, located south of the reactor, had some of the richest farmland in the nation. Because of the diversity of the economy, the region had lower unemployment rates than the state as a whole, and its population size was stable.

Still, just as in many parts of the industrial northeast, people in south-central Pennsylvania worried about whether the region could maintain its relevance as the country's economic center of gravity shifted to the Sunbelt. In November 1964 the Department of Defense announced that it was closing Olmsted Air Force Base, a major employer. When Met Ed went public with its plans for Three Mile Island two years later, residents predicted that the plant would help to fill the void left by the closed base. Once in operation, the plant would be a modest employer, providing only about five hundred jobs. But in the short term, the plant required an army of builders and construction workers. The plant was also seen as a cleaner alternative to an old coal-fired plant in Middletown that dumped soot over the town's cars and front porches. In addition, Met Ed promoted the plant as an antidote to rising energy costs. Although the electricity produced by the plant was actually outsourced to other parts of the state, it directly benefited local residents by keeping utility costs down. Thus as an employer, a source of tax revenue, a nonpolluter, and a provider of low-cost electricity, the plant appeared to be a boon for the local community.



The community's faith in the plant could also be traced to the extent to which the area had remained largely – though not entirely – insulated from the social and political upheavals of the era. Dauphin County, where TMI was located, had a predominantly white, rural population.[10] Many of the families that lived near the plant could trace their ancestry back to the German and Scots-Irish immigrants who had settled the region in the mid-eighteenth century. Susquehanna Valley was a Republican Party stronghold in the state, and the people who lived there were politically and socially conservative, possessing an already-paradoxical worldview that combined patriotism and respect for authority with suspicion toward "big national government." One syndicated columnist went so far as to declare the region "the confidence in authority capital of the country."[11] Many local residents were also religious Christians. Dauphin County alone was home to one hundred and thirty Catholic, Evangelical Lutheran, and United Methodist congregations.[12] Like any region dominated by conservatism, there were pockets of dissent. There had been some organized opposition to the Vietnam War in the cities of Lancaster and Harrisburg, as well as on the college campuses that dotted the region. But prior to the accident, the men and women who lived near the plant considered themselves patriots who were loath to question either the authority of the utility company or the effectiveness of government safeguards regarding nuclear power. The community's trust in the plant thus stemmed from several sources: an ambitious campaign to promote the safety of nuclear power, a hope that the plant would secure the region's economic viability, and a homegrown conservatism that militated against any widespread antinuclear opposition.

## The Accident and the Breakdown of Trust

The first forty-eight hours of the accident were marked by confusion, as both the Governor's office and the NRC struggled to gather information from Met Ed. Initially, the company had been overconfident in its statements about the accident, first reporting that there had been no rise in radiation outside the plant. But only hours later, the utility conceded that low levels of radioactive gases had been detected beyond the site boundary. When Met Ed's Vice President Jack Herbein arrived at the plant on Wednesday morning, he told reporters that the problem was only a "minor fuel failure."[13] At a press conference later that afternoon,

the state's Lieutenant Governor William Scranton expressed growing frustration with the utility: "This situation is more complex than the company first led us to believe ... The company has given you and us conflicting information."[14] The confusion left some convinced that Met Ed had engaged in a cover-up. One reporter recalled, "The guys from Met Ed looked conniving, looked like people with something to hide. They had the look of Richard Nixon in '74."[15] For the first time, local residents realized how dependent they were on the company for their safety, and Met Ed's conduct had not been reassuring. As one man put it, "I believe that we as citizens have been lied to about many things that have happened."[16] A twenty-year-old folksinger who lived near the plant poked fun at Met Ed's efforts to downplay the crisis, penning a song with the line, "We're top of the news for the entire week, because of what they call a minor leak."[17] The Watergate scandal loomed over the crisis, as did the political thriller *The China Syndrome*, a film released only twelve days before the accident whose plotline bore an uncanny resemblance to the unfolding drama at TMI. The film told the story of a reporter, cameraman, and plant operator who join forces to expose grave safety problems at a nuclear power plant whose owners are deceptive, reckless, profit driven, and willing to resort to violence to hide the dangers.

But if Met Ed had sustained the most serious damage to its credibility, the NRC had not emerged from the accident unscathed. The first days of the accident had been marked by communication problems between the state, the utility, and the federal agency, demonstrating just how weak the NRC was as a command center.[18] TMI was, in the words of the NRC's Harold Denton, "the most serious accident in the life of the reactor program," and it had taken the commission by surprise.[19] The combined causes of the crisis – mechanical malfunction, design flaws, and human error – had also exposed the NRC's hubristic belief that advanced design could eliminate the possibility of a serious accident. As Denton later recalled, there had been a pervasive belief that machines could be so well designed that they "would not place a lot of demands on operators."[20] By shattering that belief, the crisis provided a paradigmatic example of what Charles Perrow has called "normal accidents" – accidents that emerge out of the multiple failures and vulnerabilities inherent in any complex technological system.[21] More broadly, the accident had punctured a hole in the carefully cultivated image of nuclear power as a clean, sophisticated technology. One commissioner recalled her shock during a postaccident tour of the plant: "I was rather horrified to find we had



these large pipes with rags around them and yellow markings on the floor which said 'Contaminated Water.' I had had an image of a high, clean technology that was well looked after and well run, and I found something that really, frankly, looked like the underside of a 100-year-old house that I once owned."[22]

The accident also revealed something troubling about the post-1945 political order: the extent to which elected officials were dependent on unelected technological experts. From the time he learned of the accident, Governor Richard Thornburgh had sought to create what he called an "island of credibility" to which citizens could look for reliable advice.[23] But this proved difficult. The poor communication between the utility and the state and federal agencies meant that Thornburgh was confronted with what he called a "kaleidoscope of signals." In addition, TMI was emerging as the biggest news story of the year, and some media reports coming into the governor's office were alarming. The problem, as Thornburgh later described it, was "sifting out fact from fiction, hyperbole from analysis, cant from candor, and guesswork from solid reporting."[24] But the challenge of distinguishing between credible and erroneous information was compounded by the fact that the governor knew little about nuclear power. Prior to the accident, Thornburgh's only source of information on the topic was a 1975 book called *We Almost Lost Detroit*, which detailed a 1966 accident at Fermi-1, the first commercial breeder reactor in the United States.[25]

Thus the three institutions most directly involved in the accident – the utility company, the NRC, and the governor's office – all faced a series of distinct but overlapping challenges: Met Ed appeared unreliable, the NRC appeared unprepared, and the governor's office appeared dangerously dependent on these compromised organizations for vital information. But underlying these challenges was something more elemental: no one could see inside the reactor core to assess the damage. Nuclear engineers could rely on instrumentation to gauge the core's temperature and could analyze water samples to determine approximate radiation levels. But because both temperatures and radiation levels were so high within the core, the containment building was too dangerous for visual inspection. Indeed, it would not be until late July 1980 – almost sixteen months after the accident – that two engineers, clothed in protective gear, would enter the building to get their first look at the core.[26] The accident thus constituted a crisis of visuality in which engineers, public officials, reporters, scientists, and the public were hungry for information about something that they could not see. The inability to see the evidence – that is, to see

into the reactor – simultaneously intensified the public's hunger for objective knowledge and deepened their disappointment in official sources.

The accident constituted a crisis of visuality in a second sense. The most serious threat posed by the accident – the release of large amounts of radioactive material into the environment – was not visible to the naked eye. Radiation defied sensory perception altogether. As one NRC official later recalled, "You can't see radiation, you can't smell it, you can't feel it, you don't know when it's coming."[27] Unlike floods, fires, and earthquakes that upend the landscape and claim lives, the accident left behind no immediate destruction. This invisibility differentiated the technological crisis at TMI from two hurricanes that hit the region in 1972 and 1975 and flooded the Susquehanna River. Some residents equated the risks of living near a nuclear reactor with those of living near a flood-prone river, but most felt that the dangers posed by the plant were more frightening, in no small measure because the release of radiation provided them no visual or audible warnings.

Its invisibility made the task of radiation monitoring especially urgent. Initially, it was Met Ed that was tracking radiation releases, but soon state and federal officials descended on the area. In the process, the landscape of central Pennsylvania was transformed into the ground zero of the atomic age, and local residents had to confront the possibility that they had sustained radiation contamination. One reporter described the scene as something out of a science fiction story.[28] Civil defense coordinators handed out yellow Geiger counters to volunteers. The FDA, Met Ed, and the NRC placed approximately two hundred thermal luminescent dosimeters within a twenty-mile radius of the plant. The Department of Energy sent up helicopters to take aerial measurements of radiation; respirators were shipped into the area for everyone coming and going from the Island. The NRC and the state's Department of Health brought in portable detectors for the full-body scanning of local residents. Officials took samples of soil and milk from farms near the plant and tested them for iodine-131 (a radioactive isotope that can accumulate in the thyroid). Residents traveled to nearby Hershey Medical Center to have their thyroids checked. And the FDA ordered the shipment of 259,000 bottles of potassium iodide, which can block the thyroid's absorption of iodine-131.[29]

The accident thus temporarily recast local residents as what anthropologist Adriana Petryna has called "biological citizens" – that is, citizens whose relationship to the state is mediated through either a potential or actual assault on health. Biological citizenship revolves around the need



for information. In the first days of the accident, the men and women who lived near the plant had questions. Both the governor's office and local radio stations were flooded with phone calls. Should people leave their homes? If they did leave, would they ever be able to come home? What were the symptoms of radiation sickness? If there were a meltdown, would the fallout be as bad as it was at Hiroshima? How long would food and water supplies be contaminated? Some callers wanted to know if the rumors circulating throughout the community were true: Would a meltdown render the area uninhabitable for one hundred years? Would people be able to retrieve money from their savings accounts? Had radiation contaminated the gasoline supply?[30]

The threat of radiation exposure confronted the governor with the essential task of protecting the citizens of central Pennsylvania from bodily injury. On midday Friday, March 30, Thornburgh issued an advisory urging (not requiring) all pregnant women and preschool-aged children within a five-mile radius of the plant to leave the area. He described the decision as a precautionary measure. Radiation monitoring indicated no imminent threat to public health, but if the situation deteriorated, those citizens deemed most vulnerable to radiation exposure – pregnant women, young children, and the unborn – would be outside the immediate vicinity of the plant. The advisory was premised on the scientific consensus that fetuses and young children were particularly susceptible to both the teratogenic and carcinogenic effects of radiation. Exposure to high levels of radiation could lead to fetal miscarriage, birth defects, mental retardation, and intrauterine growth retardation. In addition, fetuses and infants were at higher risk for radiation-induced cancers because their thyroid glands were more sensitive to the accumulation of iodine-131. By the late 1970s, these findings were well-established within the medical field, and in the early days of the accident, both scientists and state officials were reiterating them in the public sphere.

The governor's decision placed the reproductive female body, the child's body, and the fetal body at the center of the TMI story. That decision, combined with extensive news coverage about radiation's threats to the unborn, alarmed expectant mothers, who began calling local radio stations, state agencies, and hospitals to find out if their fetuses were in danger. The calls were so persistent that one regional NRC administrator quipped, "We have heard from every pregnant woman in the area."[31] Photojournalists documented young mothers and children leaving their homes. Appearing in newspapers and on television screens throughout the country, these images would take on an iconic status:

mothers holding towels and blankets over their children's faces in a makeshift effort to protect them from radiation exposure; pregnant women temporarily housed in the Hershey Center, one of the mass care centers established by the Red Cross; and mothers loading their children into station wagons and driving away, with the reactor's towers ominously looming in the background.

Why did reproductive female bodies, children's bodies, and fetal bodies take on such a freighted symbolic role? At one level the reason is obvious: because Thornburgh had directed his advisory toward pregnant women and preschool-aged children, mothers and children were more likely to evacuate the area than men and thus assumed a more prominent role in news coverage.[32] In addition, "mothers and children" have often figured prominently in news coverage of modern disasters, reflecting a chivalric ethic that calls for the protection of women and children over able-bodied men during states of emergency. But the bodies of the pregnant and the very young were not the only – or the most – vulnerable bodies throughout the TMI crisis. That distinction belonged to the (overwhelmingly male) operators and engineers at the plant, who were working around the clock as radiation levels inside the reactor soared. So it is worth asking: why some bodies and not others? Why the child's body and not the worker's body? Why the woman's body and not the man's body?

The answer lies in the centrality of reproduction to perceptions of environmental risk. The bodies of mothers and young children have often been used to represent environmental risk, arguably because they capture what is most deeply at stake: the reproduction of the species.[33] In the case of TMI, these bodies captured the high stakes of nuclear energy. But if the figure of the reproductive body spoke to the theme of risk, it spoke no less powerfully to the theme of protection. Although the vast majority of evacuees stayed with family and friends during the crisis, photographs of pregnant women and children camping out in the Hershey Center implied that the state was protecting those citizens most vulnerable to the radiation threat.[34] As Thornburgh later recalled after touring the center, "This was a stark reminder of the responsibility of governing." Walking through the stadium, he had seen "young children, mothers carrying babies, and their bewilderment and confusion over a technology they clearly didn't understand, seeking reassurance that the situation had been handled."[35] The steady reproduction of images of expectant mothers, young children, and babies was thus double-edged: some images indicted the state for endangering public safety while others cast it as a vital agent of protection.



## Bodies at Risk

Governor Thornburgh lifted the advisory on April 9, twelve days after the start of the accident. By then the hydrogen bubble had disappeared, temperatures in the core had gone down, and the reactor was in stable condition. But the accident shattered the trust that many residents had placed in the plant. Previously, they had trusted the experts to protect them from harm and had believed them when they had said that there would never be a serious accident at the reactor.[36] As one woman looked back on her earlier choice to live near TMI, "I was trusting so I stayed. My faith outweighed my fear."[37] The accident tipped the scale in the other direction, with fear outweighing trust. This fear was often accompanied by a sense of betrayal. As one local woman explained the change, she had always had faith in government leaders, but "after this monster was released on us, all I have is cynicism and mistrust."[38] One father recalled that his children had been playing outside during those first two days, "sucking up radiation – just because those bastards didn't tell the truth about releases."[39] Friday, March 30, was, as one woman put it, "the last day in my life I'll ever trust the utility or our government to do the right thing for me."[40]

At the heart of this collapse of trust was a single question: had local residents been exposed to levels of radiation that threatened their health? For officials, the answer was no. They were convinced that while radiation levels had soared inside the reactor's containment building, they had never reached dangerous levels beyond the plant. The full body scanning of over seven hundred citizens had shown no internal contamination. The USDA and the FDA had found only a few minute traces of radiation in the hundreds of food samples they collected throughout April. The Department of Agriculture detected iodine-131 in only a small number of the two hundred milk samples they had taken from nearby farms. The cumulative data was so reassuring that in May 1979 several federal agencies projected that, statistically, offsite radiation exposure would lead to "approximately one" case of fatal excess cancer and "approximately two" cases of excess health effects (including fatal cancer, nonfatal cancer, and genetic damage) among those living within fifty miles of the plant.[41]

The community's response to these official findings ranged from acceptance to skepticism to rejection. On one end of the spectrum were those residents who believed the findings, insisting that they were more likely to be killed by an oncoming car while crossing the street than by living near a nuclear power plant. On the other end were antinuclear activists who

accused the government of whitewashing the event, contending that radiation exposures had been far worse than what officials were claiming.[42] But most residents found themselves somewhere in the middle. Neither wholly dismissive of the radiation threat nor necessarily convinced of a sinister government cover-up, most believed something else: that no one was really sure of the accident's long-term health effects.

This uncertainty stemmed from several sources. First, it was a response to the dormant nature of radiation. Because radiation's damaging effects could remain hidden in the body for decades, it was impossible to assess injury. Local residents thus found themselves confronting an ambiguity surrounding illness that conjured the experiences of veterans who had been exposed to chlorine gas during World War II and Agent Orange during the Vietnam War.[43] Residents were caught between two contending claims – those of Met Ed executives who insisted that no one had been harmed, and those of nuclear industry critics like Helen Caldicott, who pointed out that it is the "latency period that allows the industry to say no one died at Three Mile Island. We don't expect anyone to have died yet."[44] Local residents attempted to chart a path between these two opposing interpretations, an attempt that was captured by the slogan that appeared on kitschy posters and T-shirts after the crisis: "I Survived TMI, I Think."[45]

This uncertainty also reflected the lack of scientific consensus about the long-term health effects of low-dose radiation. While some scientists insisted that low levels of exposure posed little health risk, others were convinced that there was no safe threshold. As Harvard biologist George Wald explained at the time, "Every dose of radiation is an overdose. There is no threshold. A little ... radiation does a little harm, more of it does more harm."[46] Finally, the uncertainty was exacerbated by concerns over the state's response to the accident. The governor's advisory struck some residents as both inadequate and arbitrary. Why had the governor limited the order to pregnant women and preschool-aged children within the five-mile radius? What if you lived within the five-mile radius but had children who were six, seven, or eight? What if you lived six miles from the plant, but you were pregnant or had children under the age of five? Given the changing wind direction, how could the threat of radiation be contained within a five-mile radius at all? What about women who learned they were pregnant only after the accident?

Many of these questions centered on fetal health. During the accident, while officials had been trying to gather credible information about plant conditions, pregnant women were trying to decide whether to have



abortions. Local obstetricians later reported that throughout late March and early April they had been deluged by phone calls from pregnant women asking whether they should abort their fetuses.[47] Although almost all pregnant women had evacuated the area by Friday afternoon (the third day of the accident), they feared that their fetuses had been endangered during the early days of the accident, when public officials had not yet grasped how bad plant conditions were. So pervasive were fears about fetal health that the American College of Obstetrics and Gynecologists and the American College of Radiology felt compelled to issue a joint news release on April 13 advising women in the TMI area not to terminate their pregnancies.[48]

These fears endured in the years after the crisis. In testimonies they provided at public hearings and in private letters to the Kemeny Commission (appointed by President Jimmy Carter to investigate the accident), local women expressed dread about the accident's health consequences for future generations. Some mothers wondered whether their children would one day get radiation-induced cancer. A mother of an eight-year old boy recalled how her son had asked her if he was going to get cancer and die. "What do I tell him?" she wondered.[49] Another mother had decided to have a second child because she wanted to ensure that her son would have a living sibling who could serve as a donor if he eventually developed cancer from the accident.[50] Others focused on the accident's teratogenic effects, fearful that their children had sustained latent genetic damage that might one day cause them to have "defective" babies of their own. One woman instructed her daughter to warn whomever she eventually married that she had lived near TMI at the time of the accident. "Isn't it terrible," she asked, "to have to worry about damage to unborn children from that monstrous plant?"[51] Several women told the commission that the most searing aspect of the accident was the question that had been posed to them by their daughters in its wake: "Will I still have healthy, normal children someday?"[52] The National Institute of Mental Health interviewed over three hundred mothers who lived near the plant and found that, despite official reassurances, over 40 per cent of them believed that the accident would cause health problems in future generations.[53]

These fears about fetal injury harkened back to the radiation scares of the 1950s. By the mid-1950s, the National Academy of Sciences and the United Nations Scientific Committee on the Effects of Atomic Radiation – spurred on by growing public concern over radioactive fallout from weapons testing – were warning that human embryos were more

susceptible to radiation damage than adults. These studies stressed that unlike somatic injuries, the genetic harms from radiation could stretch indefinitely into the future, ensnaring each successive generation in its web. Taking their cues from this insight, opponents of atomic testing placed the unborn at the center of their efforts to secure a ban. In May 1958 theologian, scientist, and activist Albert Schweitzer published an essay entitled "The Rights of the Unborn and the Peril Today," in which he singled out radiation's dormancy as its "most sinister aspect" precisely because of its repercussions on the unborn: "[Y]ears may pass before the evil consequences appear. Indeed, incipient injuries may manifest themselves, not in the first or second generations, but in the following cycles. Observers in generation after generation, for centuries to come, will witness the birth of ever-increasing numbers of children with mental and physical defects."[54]

The threat of mutation – and the larger radiation scare of which it was a part – receded from public view after the signing of the Limited Test Ban Treaty of 1963 (which halted above-ground testing). But the threat returned in the early 1970s as a burgeoning antinuclear movement insisted on "the malignant connection" between plants and bombs and warned that nuclear power plants emitted low-level radiation that endangered public health. The accident at TMI was thus a vivid dramatization of what activists had been arguing over the previous decade: in the dangers they posed, plants and bombs had more in common than the industry cared to admit. The preoccupation with fetal health during the TMI crisis resonated with the radiation scares of the 1950s, while simultaneously replacing the earlier Cold War specter of the mushroom cloud with a new ominous symbol: the cooling towers.

This preoccupation also reflected the ways in which the fetus had been culturally and legally transformed over the prior three decades. Between 1946 and 1953, photographs of the developing fetus were featured in *Newsweek*, *Time*, and *Life*, allowing millions of Americans to visually comprehend it for the first time (previously, human fetuses had been displayed only at museums and world's fairs). In 1946, the same year that *Newsweek* printed a photograph of a three-month old fetus, the District Court of the District of Columbia overturned six decades of legal precedent when it determined in the *Bonbrest v. Kotz* case that "a child *en ventre sa mère* is regarded as a human being from the moment of conception."[55] The atomic age facilitated the legal transformation: a 1959 volume entitled *Atoms and the Law* devoted over twenty pages to radiation and prenatal injury. And scientific findings about fetal injury



sustained at Hiroshima and Nagasaki cast the fetus as vulnerable to external dangers; indeed, the *Hibakusha* – the Japanese term for the community of bombing victims – included babies who were *in utero* at the time of the explosions. The postwar cultural, scientific, and legal construction of the fetus, in other words, emerged in a distinctly atomic world. Writes historian Sara Dubow, "[A]tomic sciences and the science of embryology became at least loosely linked in the public imagination."[56]

This rendering of the fetus as both visible and vulnerable intensified in the years leading up to the accident. In the early 1960s, ultrasound exams were introduced as a routine obstetrics practice. In April 1965 *Life* magazine published a sixteen-page photo-essay by Swedish medical photographer Lennart Nilsson that charted the development of the human fetus. The issue sold eight million copies in its first four days on newsstands.[57] In 1973 the University of Washington first identified "Fetal Alcohol Syndrome" as a cluster of physical and mental birth defects associated with the expectant mother's consumption of alcohol, and in 1981 the Surgeon General issued its first official warning about the risks of drinking alcohol during pregnancy.[58] In 1977 the American Cancer Society used fetal sonogram images to reinforce the idea that smoking endangered public health.[59] These transformations in medicine, reproductive technology, and public health policy had the cumulative effect of casting the human fetus in a historically new light: as a vulnerable body requiring vigilant protection from a range of external assaults. If the nuclear reactor at TMI was concealed from view, the human fetus occupied the inverse position: hiding in plain sight.

During the same period, the struggle over abortion assumed a prominent place in American political culture, and nowhere more so than in central Pennsylvania. As early as 1969 local activists in Pittsburgh started People Concerned for the Unborn Child, the state's first pro-life group. In 1970 the Pennsylvania Catholic Conference launched Pennsylvanians for Human Life, an educational group designed to rally support for abortion restrictions. By the early 1980s several organizations had come together to form the Pennsylvania Pro-Life Federation, a state affiliate of the National Right to Life committee. Together, these groups put the state on the vanguard of the fight to outlaw abortion. This was more than a legislative battle; it was a struggle over the question of what constitutes life itself. Activists cultivated a pro-life discourse that put a premium on the preservation of human life from the moment of conception to natural death. This discourse emerged in tandem with the heightened visibility of the fetus. Abortion opponents believed that if the

fetus could be seen, it could be saved. As one popular pro-life slogan put it, "If there were a window on a pregnant woman's stomach, there would be no more abortions."[60] Also shaping this discourse was the doctrine of the Catholic Church, the single largest religious body in the state. The state's main Catholic organization adopted the Second Vatican Council's 1965 definition of abortion as the functional equivalent of infanticide. Vatican II contended that human life began at conception, placing that question at the center of the abortion issue and dispensing with earlier condemnations of the practice on the grounds that it concealed sexual transgression.[61] Throughout Pennsylvania, antiabortion activists fought to gain a discursive monopoly over a term that appeared to transcend politics altogether.

How did the abortion fight shape the community's response to the accident? Throughout their many letters and testimonies to the Kemeny Commission, local women made no explicit references to the contemporaneous political struggle over abortion. Yet they lived in the midst of it: central Pennsylvania was ground zero of the state's abortion wars, in part because activists traveled to Harrisburg to protest on the steps of the capitol building and to meet with legislators. The three largest religious denominations in the region all condemned abortion to varying degrees, and the area's conservative activists were fighting to make abortion a centerpiece of the Republican Party's agenda. At the same time, it would be wrong to assume that the women who lived near TMI had a consistent position on abortion, especially if one believes obstetricians' reports that their offices were deluged with phone calls from pregnant women who were considering the procedure after the accident. Indeed, the most direct allusion to an explicitly "pro-life" position during the crisis came from Governor Thornburgh, who appeared on television on April 6 and spoke directly to evacuees: "It's not easy for a child-bearing young woman to pack up her belongings, in a rush of fear, and move to the floor of a stadium during the most anxious month of her life. Not all the comfort in the world can erase that memory from this woman's consciousness – nor perhaps even that of her unborn son or daughter."[62] The statement advances a concept of fetal personhood through its remarkable depiction of the unborn as an active subject capable of memory.

What is clear is that local women drew upon the pro-life movement – its religious inflection, its valorization of motherhood and reproduction, and its grammar of sanctified human life – in order to condemn the nuclear industry for endangering public health. As one woman who had been pregnant at the time of the crisis explained it, "I never carried a picket sign



in my life, but TMI has become my cause." She had come to believe that at the time of the accident, her unborn baby had been imperiled by an industry that was reckless and profit-driven. "Growing inside me was God's most precious gift," she recalled, "while growing outside was an industry concerned with profits. I'm motivated now by a concern for the health and safety of others."[63] Her statement evokes what anthropologist Faye Ginsburg has identified as a central pro-life motif: "the violation of the boundary of the impregnated womb by male figures representing the profit motive."[64] Local women insisted that their burgeoning opposition to nuclear power was an extension of – rather than departure from – their Christianity. One woman from Lancaster traveled with her family to Washington, DC, in May 1979 to protest nuclear power: "I have two wonderful children. Jessica is thirteen, and Rick is fifteen. We all marched together in Washington DC in the antinuclear rally. We are a family who shares a belief in God. We feel we are taking a Christian stand on the issue of nuclear power."[65] Another local woman who attended the same march told the commission that this was her first time participating in a political protest: "I marched, as a mother for my children's children; as an American citizen, because I love America and I would like to see it stop poisoning the land, air, water, animals, etc., by the whole nuclear power cycle; [and] as a Christian, because it is spiritually and morally wrong."[66] A dairy farmer testified at a public hearing that several women who lived near the plant had told her that they were afraid to have children after the accident: "This, to me, is a horrible situation, because I am a woman. I have four children and I know what it means and how a woman feels to reproduce. This is the highest achievement and to be denied this achievement, to me, is a horrendous prospect."[67]

These responses combined a dawning awareness of the nuclear threat with a heightened cultural anxiety surrounding the disposability of human bodies. As historian Bethany Moreton observed, the rise of the conservative Christian right during the 1970s was haunted by the image of "vulnerable human life tossed out as refuse." "Jerry Falwell's account of his awakening to an active pro-life position," Moreton writes, "invokes a dumpster in Los Angeles overflowing with the dismembered remains of 1,700 fetal bodies and a trash incinerator in Wichita sending up hundreds more in smoke, like the victims of Auschwitz."[68] This image of vulnerable, disposable human life had its corollary on the political left, and nowhere more so than in the antinuclear movement. There, too, the image of imperiled young life loomed large. Babies and young children served as paradigmatic radiation victims in the movement's most widely circulated

posters and signs, and its most prominent spokesperson, Helen Caldicott, carried a baby casket at marches to symbolize the nuclear threat.[69] The specter of endangered young life thus established an affinity between two social movements that appeared to occupy divergent ends of the political spectrum: the pro-life and antinuclear movements. The affinity was borne out organizationally and in the lives of activists, as well: an antinuclear pacifist group called Pro-Lifers for Survival was founded in 1971, and the US Conference of Catholic Bishops later linked its support of human life to the nuclear freeze movement. Meanwhile, pacifists like Daniel and Philip Berrigan condemned abortion as a form of state-sanctioned murder (Daniel Berrigan even blockaded a Planned Parenthood clinic in Rochester, New York).[70]

Animating both the pro-life and antinuclear movements, then, was an anxiety that human bodies could be rendered disposable by the state. This was an anxiety that attended all modern wars and that deepened after the bombings of Hiroshima and Nagasaki. But for many Americans, it was the Vietnam War that brought it home. Southcentral Pennsylvania was no hotbed of antiwar mobilization, but its residents – like other citizens throughout both the United States and the globe – had watched as the war seemed to remake bodies into fodder. They had seen Buddhist monks burn themselves alive to condemn the war, college-age protesters on American campuses shot down by the National Guard, Vietnamese men, women, and children massacred in a conflict that obliterated the distinction between soldiers and civilians, and young soldiers brought home in body bags. All the while, they observed a growing disconnect between the official story about the war and its actual progression. Two core insights emerged out of the Vietnam disaster: the government could deceive its own people, and patriots could be rendered disposable. The accident rerouted these insights from the foreign to the domestic realm, from the war front to the home front, and from the martial, masculine body to the bodies of pregnant women, the young, and the unborn. Riffing on the antiwar term "cannon fodder," TMI residents feared they had been remade into the "radiation fodder" of the nuclear age.

This was the community's deepest fear: that its members had been used as "guinea pigs" in a nuclear experiment. Residents feared that their bodies and those of their offspring had been made expendable by a lethal collaboration between a reckless utility company and an ineffectual state. They feared that theirs had become – to borrow a phrase from sociologist Eric Klinenberg – "bodies that don't matter."[71] This theme of human expendability was linked to the imperiled fate of the unborn, as in



the testimony of one man who told public officials that TMI should be shut down because "an unborn child is more important than those towers over there."[72] But it was also sometimes cast in terms of a broader devaluation of human life. "We can buy other forms of energy," one woman told local legislators, "but where are we going to buy a human life?"[73] If nuclear power continued to spread, another wrote to the Kemeny Commission, then "we are as expendable as German Jews."[74] This theme of human expendability was not new in US history. For those subaltern groups who had been subjected to enslavement, dispossession, forced relocation, and racial violence, it was all too familiar. And the theme was especially acute for African American and Native American women who historically had been subjected to forced sterilization campaigns.[75] But it was something of a revelation for a community that prided itself on its loyalty to the nation, and wanted to believe, in turn, that its members' lives were valued by the state. "I love my country and have tried to show my children how wonderful their country is," one woman told the commission. She always cried when she heard "God Bless America," she wrote them. "Don't make me cry for a different reason as I continue to hear it."[76]

The accident at TMI was more than a technological crisis. It was also a political and cultural crisis that raised elemental questions about whether citizens could trust the state to protect them from harm. The accident transformed the largely white, conservative population of central Pennsylvania into biological citizens, and the specific constellation of threats posed by radiation – coupled with the state's response – located reproductive and fetal health at the center of this new citizenship mode. By placing the right to life itself – what Adriana Petryna has called "the superadded burden of survival"[77] – at the heart of citizenship, the accident drew local women into the center of a political struggle, not only over the fate of TMI but also over the future of nuclear power. This marked a departure for many residents who had seen themselves as immune from the social upheavals of the era.

Ultimately, the TMI story demands that scholars move their analysis of a "politics of life" beyond the abortion fight and consider it within the context of the second Cold War. The image of an endangered fetus was a distinct creation of the atomic age that revealed the existential insecurity at the heart of the Cold War nation. And while this image proved politically polarizing within the context of the struggle over abortion, at Three Mile Island it had the opposite effect. It compelled local men and women to engage in protest and provisionally ally with the antinuclear movement,

even while retaining their identities as conservatives. In the process, they questioned a Cold War logic that drew a sharp boundary between power plants and bombs and punctured the fantasy on which that boundary had long relied: that in a nuclear world, American civilians would magically be inoculated against radiological dangers.

## Notes

1. On the accident, see J. Samuel Walker, *Three Mile Island: A Nuclear Crisis in Historical Perspective* (Berkeley, 2004); and John Kemeny, *Accident at Three Mile Island: The Need for Change, The Legacy of TMI* (Oxford, 1979).
2. On the history of atomic weapons testing and the radiation scares of the 1950s, see Paul Boyer, *By the Bomb's Early Light: American Thought and Culture at the Dawn of the Atomic Age* (Chapel Hill, NC, 1994), *Fallout: A Historian Reflects on America's Half-Century Encounter with Nuclear Weapons* (Columbus, OH, 1998), and "From Activism to Apathy: The American People and Nuclear Weapons, 1963–1980," *Journal of American History* 70:4 (March 1984): 821–44; Robert A. Divine, *Blowing on the Wind: The Nuclear Test Ban Debate, 1954–1960* (Oxford, 1978); Milton Katz, *Ban the Bomb: A History of SANE, 1957–1985* (Westport, CT, 1986); and Joseph Masco, *Nuclear Borderlands: The Manhattan Project in Post–Cold War New Mexico* (Princeton, 2006), 43–98; and Spencer Weart, *Nuclear Fear: A History of Images* (Cambridge, 1988).
3. On the significance of pregnant women as symbols of environmental risk, see Finis Dunaway, "Gas Masks, Pogo, and the Ecological Indian: Earth Day and the Visual Politics of American Environmentalism," *American Quarterly* (Mar. 2008): 67–99. See also Dunaway, *Seeing Green: The Use and Abuse of Environmental Images* (Chicago, 2015).
4. For studies that show how disasters expose social fraying, see Kai Erikson, *A New Species of Trouble: Explorations in Disaster, Trauma, and Community* (New York, 1994); and Eric Klinenberg, *Heatwave: A Social Autopsy of Disaster in Chicago* (Chicago, 2002). For a recent study that foregrounds disaster's communitarian dimensions, see Rebecca Solnit, *A Paradise Built in Hell: The Extraordinary Communities That Arise in Disaster* (New York, 2009).
5. Weart, *Nuclear Fear*, 299.
6. On the Rasmussen Report, see ibid., 335.
7. Quoted in Lee Clarke, *Worst Cases: Terror and Catastrophe in the Popular Imagination* (Chicago, 2005), 43.
8. Select Committee's Report of the Hearings Concerning TMI, Statement by Mayor Robert Reid, Goldsboro Fire Hall, Public Meeting, Jun. 6, 1979, Box 199, Folder 13, Richard Thornburgh Papers, Special Collections, University of Pittsburgh Library. Hereafter referred to as RT Papers.



9. On the transformation of the industrial rustbelt, see Judith Stein, *Running Steel, Running America: Race, Economic Decline, and the Decline of Liberalism* (Chapel Hill, NC, 1998); Stein, *Pivotal Decade: How the United States Traded Factories for Finance in the Seventies* (New Haven, 2010).
10. Dauphin County was almost 85 percent white. See *US Census of Population and Housing: 1980 Census Tracts, Harrisburg-Hickory*.
11. Robert Del Tredici, *The People of Three Mile Island* (San Francisco, 1980), 64.
12. Association of Religious Data Archives, http://www.thearda.com/mapsReports/reports/counties/42043_1980.asp (accessed Mar. 26, 2010).
13. Transcript of Press Conference, Mar. 28, 1979, 4:30 pm. Statement by William Scranton, Box 194, Folder One, RT Papers.
14. See Walker, *Three Mile Island*, 80–84; See Transcript, Press Conference, William Scranton, Incident at TMI, Mar. 28, 1979, 4:30 pm, Folder One, Box 194, RT Papers.
15. Both of these quotes come from Public Information Task Force Interview of Reporters, Interviews with Roger Witherspoon and Curtis Wilkie, Box 472, unnamed folders, RG 220, National Archives II, University of Maryland at College Park. Hereafter referred to as NA II.
16. Letter from Carlton Walls to Health Resources Planning and Development, Box 307, unfiled, RG 220, NA II.
17. Letter from Thomas Busch to Health Resource Planning and Development, Box 307, unfiled, RG 220. Song comes from Gary Punch, "TMI Fallout: Trust in Officials Collapse," *Pittsburgh Post-Gazette*, Apr. 19, 1979.
18. See Walker, *Three Mile Island*.
19. Transcript, Press Conference, Mar. 30, 1979, 10 pm, Part 2, p. 1A, Box 194, Folder 3, RT Papers.
20. "Report by the Democratic Members of the TMI Committee," Pennsylvania House of Representatives, p. 48, Box 334, Folder 11, RT Papers.
21. See Charles Perrow, *Normal Accidents: Living with High Risk Technologies* (New York, 1984).
22. Report of the Presidential Commission on the Three Mile Island Accident, Joint Hearing before the Subcommittee on Nuclear Regulation of the Committee on Environment and Public Works, U.S. Senate and the Subcommittee on Energy and the Environment of the Committee on Interior and Insular Affairs, House of Representatives, Congress, Ninety-Sixth Congress, Oct. 31, 1979 (Washington, DC, 1980), 20.
23. Transcript of Proceedings, Commission, p. 47, Box 198, Folder 3, RT Papers.
24. Prepared statement by Richard Thornburgh, Hearing before the Subcommittee on Natural Resources and the Environment, the Committee on Science and Technology, US House of Representatives, Ninety-Sixth Congress, Jun. 2, 1979, pp. 49–50, RT Papers.
25. Deposition of Richard Thornburgh, p. 25, Box 30, unfiled, RG 220, NA II.
26. See Walker, *Three Mile Island*, 228.

27. Transcript of Kemeny Commission Interview with Karl Abraham, p. 73, Box 466, RG 220, NA II.
28. Interview with Curtus Wilkie, Public Information Task Force Interview of Reporters, Box 472, unnamed folder, RG 220, NA II.
29. On these measures, see the *Washington Post Special Report*, Box 200, Folder 1, RT Papers; Box 194, Folder 1, RT Papers; Box 194, Folder 16, RT Papers. See also "Population Dose and Health Impact of the Accident at the TMI Nuclear Station," Box 194, Folder 19, RT Papers.
30. Interview with Tate, Public Information Task Force Interviews of Reporters, p. 2, Box 472, unnamed folder, RG 220, NA II.
31. Ibid, 107.
32. "The Social and Economic Effects of the Accident at TMI: Findings to Date," prepared for the U.S. Nuclear Regulatory Commission, Box 197, Folder 1, RT Papers.
33. Dunaway, "Gas Masks, Pogo, and the Ecological Indian."
34. For several examples, see *Washington Post Special Report.*
35. Quoted in Walker, *Three Mile Island*, 156.
36. "Neighbors Find TMI a Strain," *Philadelphia Inquirer*, Dec. 8, 1982; "TMI Still Frightens Neighbors," *Pittsburgh Press*, Mar. 28, 1982; "Fears Caused by Three Mile Island Endure," *New York Times*, Nov. 11, 1982.
37. "TMI: Anxiety, Apathy Live Side by Side at Middletown," *Pittsburgh Press*, Mar. 25, 1984.
38. Letter from Charlotte Drennen to Kemeny Commission, May 24, 1979, Box 307, unfiled, RG 220, NA II.
39. Quoted in Edward J. Walsh, *Democracy in the Shadows: Citizen Mobilization in the Wake of the Accident at Three Mile Island* (New York, 1988), 39.
40. Ibid., 47.
41. Walker, *Three Mile Island*, 207.
42. Ibid., 207.
43. Evelyn Bromet et al., "Three Mile Island: Mental Health Findings," Department of Health and Human Services, National Institute of Mental Health and the Disaster Assistance and Emergency Mental Health Section, Oct. 1980. Box 218, Folder 12, RT Papers.
44. Transcript, National Nuclear Debate, Pennsylvania State University Capitol Complex, Box 197, Folder 5, RT Papers.
45. See *Washington Post Special Report.*
46. CBS morning news transcript, Mar. 30, 1979, Box 194, Folder 3, RT Papers.
47. "Pennsylvania's Governor Says Area Is Now Safe for Pregnant Women," *New York Times*, Apr. 10, 1979; on Three Mile Island Action Alert, see Public Hearing Statement of Michael Klinger, May 24, 1979, Box 307, unnamed folder, RG 220, NA II.



48. Press Release from American College of Obstetrics and Gynecologist, Apr. 13, 1979, Box 7, unnamed folder, RG 220, NA II.
49. Testimony of Ms. Dominoski, Public hearing, Health Resource Planning and Development, May 24, 1979, Box 307, unnamed folder, RG 220, NA II.
50. Letter from Mitchell Rogovin, Director, NRC/TMI Special Inquiry Group to NRC Chairmen Hendrie, Gilinsky, Kennedy, Bradford, and Ahearne, November 15, 1979, Box 200, Folder 10, RT Papers.
51. Quoted in Walsh, *Democracy in the Shadows*, 39.
52. See, for examples, letters to commission from Nikki Naumann and Mary M. Wertman, Box 307, unnamed folder, RG 220, NA II.
53. "TMI Mothers Anxiety Still above Normal," *Harrisburg Evening News*, Nov. 12, 1982.
54. Albert Schweitzer, "The Rights of the Unborn and the Peril Today: Statement with Reference to the Present Nuclear Crisis in the World" (Chicago, 1958).
55. The case centered on Bette Gay Bonbrest, a girl born in 1939 who had sustained serious injuries during her delivery by forceps. Her father sued the obstetrician for negligence, and the court ruled in her favor, establishing, in historian Sara Dubow's words, "the right of a child to recover from harm incurred when it was a viable fetus *in utero*." The case overturned six decades of legal precedent and was quickly emulated by other courts: by 1960 (only fourteen years later) eighteen states had followed suit by awarding damages for prenatal injury.
56. Sara Dubow, *Ourselves Unborn: A History of the Fetus in Modern America* (New York, 2011), 52.
57. The publication of the magazine in *Life* was timed to come out around the time of Nillson's book *A Child Is Born*. On the growing visibility of the fetus during this period, see again Dubow, *Ourselves Unborn.*
58. "The Weighty Responsibility of Drinking for Two," *New York Times*, Nov. 29, 2006.
59. Laury Oaks, "Smoke Filled Wombs and Fragile Fetuses: The Social Politics of Fetal Representation," *Signs* 26, no. 1 (autumn 2000): 63–108.
60. Quoted in Faye Ginsburg, *Contested Lives: The Abortion Debate in an American Community* (Berkeley, 1988), 104.
61. Mary Segers and Timothy Byrnes, *Abortion Politics in American States* (New York, 1995).
62. Televised Address of Richard Thornburgh, Apr. 6, 1979, Box 194, Folder 10, RT Papers, Special Collections, University of Pittsburgh.
63. "TMI: Anxiety, Apathy Live Side by Side at Middletown," *Pittsburgh Press*, Mar. 25, 1984.
64. Ginsburg, *Contested Lives*, 9.
65. Letter from Charlotte Dennan to Kemeny Commission, Lancaster, PA, RG 220, Box 307, unfiled, NA II.
66. Letter from Carolyn Walborn to Barb Jorgensen, Jun. 14, 1979, Box 7, unnamed folder, RG 220, NA-II.

67. Testimony of Jane Lee, Public Hearings on the Personal Health Effects of the Three Mile Island Accident, New Cumberland, PA, 24 May 1979, Box 307, unfiled, RG 220, NA II.
68. Bethany Moreton, *To Serve God and Walmart: The Making of Christian Free Enterprise* (Cambridge, 2010), 120.
69. "Helen Caldicott's Many Lives: Pediatrician, Mother, Activist," *New York Times*, May 25, 1979.
70. On Pro-Lifers for Survival and the U.S. Conference of Catholic Bishops, see Ginsburg, *Contested Lives*, 45, 263. On the Berrigans, see Murray Polner and Jim O'Grady, *Disarmed and Dangerous: The Radical Lives and Times of Daniel and Philip Berrigan* (New York, 1998), 344.
71. Eric Klinenberg, "Bodies That Don't Matter: Death and Dereliction in Chicago," *Body & Society* 7, no. 2–3 (2001): 121–36.
72. Public Hearing, Middletown, Pennsylvania, May 22, 1979, Box 9, unnamed folder, RG 220, NA II.
73. Walsh, *Democracy in the Shadows*, 58.
74. Letter to commission from Mary Wertman, May 20, 1979, Box 7, unnamed folder, RG 220, NA II.
75. On the histories of forced sterilization campaigns in communities of color, see Laura Briggs, *Reproducing Empire: Race, Sex, Science, and U.S. Imperialism in Puerto Rico* (Berkeley, 2002); Alondra Nelson, *Body and Soul: The Black Panther Party and the Fight against Medical Discrimination* (Minneapolis, 2011); Rebecca Skloot, *The Immortal Life of Henrietta Lacks* (London, 2010); Lori Umansky, *Motherhood Reconceived: Feminism and the Legacies of the 1960s* (New York, 1996).
76. Letter to commission from Mary Wertman, May 20, 1979, Box 7, unnamed folder, RG 220, NA II.
77. Adriana Petryna, *Life Exposed: Biological Citizens after Chernobyl* (Princeton, 2002), 261.

# 3

# Missile Bases as Concentration Camps

## *The Role of National Socialism, the Second World War, and the Holocaust in the West German Discourse on Nuclear Armament*

Eckart Conze

At the beginning of June 1983, when the controversy about the implementation of NATO's Double-Track Decision on nuclear armament was approaching its climax, the German weekly *Der Spiegel* interviewed two leading members of the German Green Party: Otto Schily and Joschka Fischer, who had been elected to the German Bundestag three months earlier.[1] At the heart of the interview was the Green Party's and the German peace movement's protest against the deployment of US medium-range nuclear missiles on European – and German – ground. In the interview, the two politicians discussed not only the protest's legitimacy but also the legality of various forms of protest including the blockade of military facilities. Schily and Fischer referred to Article 20 of the German Constitution and to the right of resistance it granted to German citizens. Confronted with the argument that the purpose of this constitutional article was to protect the democratic system and that its meaning could be understood only against the historical background of Nazism and the Holocaust, Schily replied, "When Europe is approaching nuclear war, we are facing a nuclear holocaust. For this reason, nonviolent resistance is justified." And Joschka Fischer added, "We should certainly be careful not to relativize the singularity of the Nazi crimes against the Jewish people by constructing simple analogies. But I find it morally terrifying that within the systemic logic of modernity [*Systemlogik der Moderne*] there is obviously, even after Auschwitz, no taboo against further preparing for mass annihilation – this time not driven by an ideology of race, but along the lines of the East-West conflict."[2]

Two weeks after this interview, the German Bundestag debated the deployment of nuclear weapons. Heiner Geißler, Minister for Youth,