Computer Center Sabotage, 1968–1971: Luddism, Black Studies, and the Diversion of Technological Progress

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Like many other large US institutions, universities rapidly adopted electronic digital computers after World War II (Cortada 2008: 284–333). Administrators used computers to manage finances and schedule classes, librarians used computers to process a so-called information overload, and professors used computers to conduct big-budget research projects. In 1967 the President's Science Advisory Committee reported that, "in the field of scholarship and education, there is hardly an area that is not now using digital computing" (Pierce et al. 1967: 1). As their role in universities expanded, however, some of these computers came under attack. I do not mean this in the figurative sense that they endured critical scrutiny—though this certainly did occur. I mean it in the literal sense that students began to seize and in some cases destroy university computing installations. By 1969 the situation had grown so unstable that the data-processing magazine *Business Automation* (1969: 28) could declare, "The computer isn't safe on campus anymore."

The following essay is about this brief yet intense rash of computer center sabotage on university campuses throughout the late 1960s and

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early 1970s. From various instances of obstruction and destruction I distill some of the characteristic causes, consequences, and internal tensions that, I argue, make computer center sabotage a particularly illuminating knot within the braided histories of computing, the university, and political activism. In the process, I dispel a number of misconceptions that have obscured the historical significance of what was, at the time, one of the most dramatic, the most discussed, and—from the standpoint of university administrators—the most feared direct action tactics on campus.

Many of the misconceptions I address throughout this essay are prejudicial and puerile, reducing any intentional disruption of computer center activities to a mechanical expression of either technophobic rage or antiwar hysteria. They suggest that the "Luddite rebellion," as one contemporary observer put it, was a mere "act of helplessness" and that the perpetrators should be "treated as the political infants they are" (Bazelon 1969: 52). These misconceptions will be redressed in short order. Even a brief glimpse will reveal that computer center saboteurs were neither infantile nor helpless—that, to the contrary, their actions often reflected deep political convictions, and they were often quite effective.

A few of the misconceptions I address, however, are more complex. They belong to a nuanced constellation of technology and politics within the university, and especially in the humanities, where battles against computation are mostly conceptual, not physical. These misconceptions will require more time and patience to unravel. Before I go on to address computer center sabotage as a whole, I want to provide a detailed example to illustrate what I mean. My point of reference is an event that has enjoyed considerable attention in recent years: the Courant Institute takeover of May 1970. In 2015 the *New York Times* recounted this incident in a story titled "The Mathematicians Who Saved a Kidnapped N.Y.U. Computer" (Barron 2015). The computer in question was a CDC 6600, a mainframe that weighed six tons and, at the time, cost at least $2 million. It belonged to the Atomic Energy Commission, which leased it to NYU's Courant Institute for Mathematical Sciences. The kidnappers were a group of approximately 150 students who had overrun the building, evacuated the staff, seized the computer, and demanded that the university pay $100,000 in bail funds to the Panther 21, a group of Black Panthers who had been charged with conspiring to blow up several buildings in New York City. The occupiers held the Courant Institute for two days until, having failed to secure a ransom, they gave up and left. At this point, it appeared that the affair was over. But when a pair of mathematicians reentered the vacated building to inspect its condition, they found

that the door to the machine room could not be opened. Peering through a window above the door, they saw several jugs of homemade napalm resting on top of the computer. On the floor, a live fuse was slowly burning its way toward the jugs. The mathematicians located a fire extinguisher and—with one mathematician aiming the nozzle under the door and the other mathematician looking through the window to offer guidance—they managed to stop the fuse before it reached the napalm.

The stakes involved in this story are deadly serious. Explosives, millions of dollars of hardware, and the threat of expulsion, incarceration, and bodily harm: these are the volatile ingredients that have made an utterly botched demolition seem worthy of revisiting forty-five years later. Anyone wondering what would have motivated hundreds of students to assume such incredible stakes, however, will find only a one-sentence explanation: they were "angry about the Vietnam War and the shootings at Kent State University" (Barron 2015). As readers, we are left to conclude that kidnapping a $2 million computer on the behalf of the Black Panther Party is simply what "angry" students did back then.

In the six years since the *Times* published this story, a handful of scholars have gone on to provide additional context. In his recent rapprochement between Marxism and Luddism, *Breaking Things at Work*, Gavin Mueller traces the rapid computerization of the US military throughout the 1960s. Many computer-oriented military projects relied on university collaboration, and Mueller offers the Courant Institute takeover to help show how engineering and computer science departments across the US became key sites of anti-war struggle (Mueller 2021: 96). In his study of African Americans and the origins of the internet, *Black Software*, Charlton McIlwain briefly recaps the Courant Institute takeover and emphasizes the computer's robust symbolism. "To the protesters," he explains, "that computer symbolized and showcased state power. They believed the state used that computer to exercise control and advance its own interests and prerogatives. To those protesters, that computer extended the oppressor's reach" (McIlwain 2020: 68–69). Both of these accounts help explain why NYU students would have targeted a computer in particular. With its military connotations and its symbolic resonance with state oppression, the CDC 6600 seemed to represent everything these students opposed.

But what these accounts do not explain—and what speaks to a larger ambiguity that I will attempt to resolve throughout this essay—is why the occupiers offered to release the computer in exchange for bail funds. In some ways, the goal of securing $100,000 for the Panther 21 was unsur-

prising. The trial's questionable legal basis and its unprecedented length and cost had catapulted it into the national spotlight. Fundraising for the defendants became something of the latest craze—a phenomenon that Tom Wolfe (1970) christened with the phrase "radical chic." But if the occupiers were motivated by university-military collaboration and by the suppression of anti-war dissent, then why did they center their demands on an issue that was not overtly war-related? Why not demand, for instance, that NYU dismantle its ROTC program? Why endure the extreme labor and liabilities of capturing a high-profile symbol of university-sanctioned militarism only to sacrifice it for the Black Panthers?

Several months after the Courant Institute takeover, systems analyst Joan Dublin pushed these questions into the foreground. Writing in the December 1970 newsletter of Computer People for Peace, Dublin (1970: 13) observed that news reports of the takeover exhibited a fascination with bombs, top-dollar technology, and potential wreckage, but these reports contained "little mention of the political reasons behind the event." In her own account of these "political reasons," Dublin did not discuss militarization or the invasion of Cambodia. She did not even mention Kent State. Instead, she explained that the takeover "was begun with the understanding that NYU must open itself up to the needs of the community." NYU had long been one of the most powerful landholders in New York City's Greenwich Village. Throughout the 1950s and 1960s the campus underwent several controversial expansions, taking advantage of cheap neighborhood property that had been reclassified as slums during Robert Moses's infamous urban renewal program (Stern, Fishman, and Mellins 1997: 228–42; Beasley 2009: 1). A partnership with nearby Bellevue Hospital proved particularly contentious, as NYU pushed for the dislocation of thousands of residents and established research and training programs that had little connection to the primary care needs of local patients (Opdycke 1999: 111–17; Beasley 2009: 13–15). According to Dublin, the protesters felt "that the university had gone too far in usurping community property and in failing to consider the requirements of students, residents, and workers in that area." NYU students had already engaged in a number of community-focused initiatives during previous semesters, including organizing rent strikes, collecting garbage, and rallying for open admissions policies (Frusciano and Petit 1997: 217–35; Beasley 2009: 8–13). Earlier that spring NYU's cafeteria and clerical workers—many of whom included local Black and Puerto Rican residents—had begun organizing into unions, and the month leading up to the Courant Institute takeover witnessed various actions from sympathetic

students: picketing, boycotting classes, holding rallies, seizing elevators, and shutting down cafeterias, as well as a raid on the Washington Square Faculty Club.[1]

There is no doubt that the Courant Institute occupiers were opposed to the Vietnam War, and that they were emboldened amid the tumultuous aftermath of Kent State. But as Betsy Beasley (2009: 13, 15) writes in her comprehensive analysis of the May 1970 upheaval at NYU, "what seemed at first glance to be simply a mimic of earlier student anti-war action" was "not primarily about ending a war." It belonged instead to a preexisting tradition of direct action intended to hold NYU accountable to the local community. A flyer circulating outside the Courant Institute made this explicit: "New York University has been oppressing the black and brown people in New York through its racist admissions policies, through a health complex that gives totally inadequate care to the people on the lower east side, and through their real estate holdings in lower New York City" (14).

The flyer described the captive CDC 6600 as a "tool of oppression," which explained why it was an eminently expendable hostage. But the flyer also went on to clarify the computer's principal appeal: "NYU must begin reparations to the Black community by paying the bail of Black Panther leaders now being held in New York, but they will not pay if we just ask. NYU does not want the Panthers on the streets fighting for the Black community. They will only pay if they feel a real threat. OUR HOLD ON THE COMPUTER IS THAT THREAT."

The CDC 6600 was chosen because it was a "tool of oppression" but also, and more fundamentally, because it embodied a set of intellectual, ideological, and financial investments that the university could not afford to ignore. It was a counterweight that allowed the protesters to communicate exactly how heavily they valued their own goals, even if it was not organically implicated in these goals. What initially seemed like a straightforward case of students feeling "angry about the Vietnam War and the shootings at Kent State" was therefore something much more difficult to summarize. The Courant Institute takeover was indeed about the Vietnam War and Kent State, but it was also about racism, labor unions, gentrification, healthcare, community control, the criminal justice system, university resources, and—somewhere between all of these—computing technology.

The following essay attempts to untangle this dense and sometimes unintuitive cluster of social forces plaited together by computer center sabo-

1. For more on the unionization effort, see Richards 2008: 133–40.

tage. In addition to providing a more historically accurate account of the motives and implications surrounding incidents such as the Courant Institute takeover, I hope it helps us rethink what we mean when we say that a computer is a political object. Within this haphazard play of social forces, campus computers emerge not just as tools of oppression or liberation, but as fulcrums within the broader historical articulation, and more importantly the disarticulation, of technological and social progress.

A Target for Militants and Almost Anyone Else

Between 1968 and 1971 there were at least twenty-seven instances of computer center sabotage on North American university campuses: ten attempts to destroy computing equipment and seventeen forcible occupations or shutdowns.[2] Some of these incidents were minor. At Penn State University, students stormed the computer center and then vacated in under an hour. At the University of Miami, a homemade bomb exploded outside the computer center's air conditioner unit, causing negligible damage and injuring no one. Other incidents, however, proved more serious. At Fresno State College, students threw Molotov cocktails through a computer center window and destroyed a CDC 3150 valued at $1 million. At Sir George Williams University, students occupied the computer center for two weeks before a police raid sparked a fire that caused $2 million worth of damage. And at the University of Wisconsin–Madison, students detonated a van full of ANFO outside the Army Math Research Center, destroying four computers and killing a researcher. Within the data-processing community a clear narrative took shape: computer centers were in danger. In popular periodi-

2. Attempts to destroy computing equipment occurred at Loyola University (now Loyola Marymount), Fresno State College (now Fresno State University), Sir George Williams University (now Concordia), the University of Wisconsin–Madison, the University of Wisconsin–Milwaukee, University of Kansas, Princeton University, the University of Miami, New York University, and Boston University. Occupations occurred at the University of California Santa Barbara, the University of California Berkeley, Stanford University, Northwestern University, Utica College, the University of Pittsburgh, Howard University, Hofstra University, SUNY Stony Brook, Brandeis University, Tufts University, Salem State College (now Salem State University), and the University of Cincinnati. Work stoppages and attempted occupations occurred at MIT; Princeton; Penn State; the University of Maryland, College Park; and Syracuse University. Major protests against computer-related projects occurred at many of these schools as well as the University of Illinois Urbana-Champaign and Harvard University.

cals such as *Computerworld* and *Datamation*, ominous headlines marked the trend: "Will Students Wreck Your Computer Center?" (Grant 1969); "Violence by Rebels Threatens Centers" (Morton 1970b); "Campus Computers: Target for Militants and Almost Anyone Else" (Nelson 1970).

Yet while industry insiders were clearly concerned, they did not seem particularly surprised. In some cases they appeared to find it normal—inevitable, even—that "dissident students" and "anti-Establishment members of U.S. society" would strap explosives onto a million-dollar computing installation and blow it to pieces. When christening 1970 the official data-processing "year of the crisis," *Computerworld* invoked a string of arson, bombings, and invasions alongside a string of hurricanes, floods, and heat waves—as if sabotage were no less natural than the weather (Morton 1970a). The repeated seizure and destruction of millions of dollars of university-owned gadgetry was a serious matter with potentially devastating tolls for everyone involved. But it was also, in the words of *Data Processing Magazine*, a "cliché," rendered dull and trite through overuse (Grant 1969: 63).

Today, a similar crisis would be virtually unthinkable. If it appeared cliché at the time, then this was due, at least in part, to the generally insurgent *esprit du temps* that we now associate with the 1960s. Throughout the decade a wave of disruptive and sometimes violent demonstrations had consumed university campuses, cresting in the weeks after the Kent State and Jackson State massacres of May 1970. During that month alone, more than half of the United States' roughly 2,600 campuses experienced a "significant impact," ranging from vigils and sit-ins to occupations and riots.[3] Instruction halted for at least one day on 536 campuses, and 51 of these campuses shut down for the duration of the term. According to a Gallup poll conducted the following month, Americans had come to view student protest as the single greatest problem facing the nation (Gallup 1970). A few torched computers, meanwhile, would have only reaffirmed this public fascination with "the campus rebellion."

But this cliché also reflected deeper beliefs about activists and their relationship to technology. In the late 1960s Columbia political scientist and presidential adviser Zbigniew Brzezinski (1970: 9) explained this relationship in terms of the "technetronic society": a millenarian theory of a post-postindustrial society "that is shaped culturally, psychologically, socially,

3. For an overview of these "significant impacts," see Peterson and Bilorusky 1971: 15–71. For a concise overview of the entire unrest period, see Astin et al. 1997.

and economically by the impact of technology and electronics—particularly in the area of computers and communications." A model Cold War liberal, Brzezinski nonetheless echoed countercultural gurus Marshall McLuhan and Theodore Roszak when he argued that, in the final analysis, all campus unrest was a byproduct of an ongoing technetronic revolution. The most militant activists were those who felt most threatened by the technetronic world order and by the technocrats who were building it. These activists typically included students in the humanities and social sciences, who had arrived on campus with ambitions of becoming poets, historians, and philosophers—yet who soon discovered that the technetronic society only wanted engineers, computer scientists, and systems analysts. Rather than adapt to life in the technetronic age, these students responded with "emotion and violence," attacking the institutions that no longer needed them. In his 1971 study on youth and dissent, psychologist Kenneth Keniston summarized the stark diagnoses of Brzezinski as well as Daniel Bell, Alvin Toffler, and other conservative analysts of what Brzezinski (1968: 10) called "the death rattle of the historical irrelevants."

> They rebel in a blind, mindless, and generally destructive way against rationalism, intellect, technology, organization, discipline, hierarchy, and all of the requisites of a postindustrial society. Sensing their historical obsolescence, they lash out like the Luddites against the computers and managers that are consigning them into the "dustbin of history." It is predictable that they will end with bombing, terrorism, and anarchy, for the obsolete young are desperately pitting themselves against historical forces they cannot stop. (Keniston 1971: 337).

Thus the most common explanation was also the simplest. Computer center sabotage was "predictable" because activists hated computers, because they felt threatened, and because the 1960s, as one computer scientist later put it, "were revolutionary times. Young people were angry. . . . To these angry young people, the computer was a symbol of all they thought was wrong with the Western world" (Carroll 1995: 578).

These generalizations are misleading. This does not mean that they are complete fabrications, but that they lean heavily on a single historical model: Berkeley's Free Speech Movement (FSM) of 1964–65, which President Nixon's Commission on Campus Unrest later described as "the prototype for student protest throughout the decade" (Scranton et al. 1970: 22). Although certainly not the first student protest of the 1960s, the FSM

marked the first mass adoption of sit-ins and other direct action tactics on a North American college campus. It was also the first major protest to identify the university itself as its primary target. The Commission on Campus Unrest called this the "Berkeley invention": instead of protesting a common political issue such as the Vietnam War, worker exploitation, or racial injustice, Berkeley students protested the University of California and its role within a dehumanizing "system" that kept imperialism, capitalism, and racism in motion (Scranton et al. 22–28). To clarify this somewhat abstract point, FSM activists relied on a vivid metaphor. "The mass university of today," wrote one activist, "is an overpowering, over-towering, impersonal, alien machine," and any student caught within the clutches of this terrible machine suffered from "the IBM syndrome" (Draper 1965: 153).[4] In a canonical speech delivered to five thousand demonstrators outside Berkeley's Sproul Hall, activist Mario Savio (2014: 188) exhorted listeners to disrupt the machine: "you've got to put your bodies upon the gears and upon the wheels, upon the levers, upon all the apparatus, and you've got to make it stop." From the outset, then, the "Berkeley invention"—this novel style of campus-centered direct action that became the prototype for subsequent student protests throughout the decade—relied on data-processing metaphors to articulate its central class conflict. The University of California was a programmatic machine, and each UC student was "little more than an IBM card": standardized, one-dimensionalized, and crushed into grist for the postindustrial mill (Savio 1965).

IBM cards, in particular, emerged as a handy rhetorical tool.[5] In the 1960s a computer was still an obscure device, rarely seen or operated except by data-processing professionals. But the stiff paper punch cards that stored data and programs for these devices were familiar to every Berkeley student, all of whom had used IBM cards for class registration. A punch card represented one small piece of "the machine" that students could actually see and touch and hold in their hands, and throughout the FSM these ubiquitous cards became a "symbolic point of attack" (Lubar 1992: 46). At sit-ins, activists brandished cards punched to spell out "FSM" and "STRIKE." They submitted prank cards to the registrar, enrolling nonexistent students named "Goldwater for President" and "English 1A is No

4. For an authoritative analysis of the FSM and the "computational metaphor," see F. Turner 2006: 11–16.

5. For a detailed account of the FSM and the evolving cultural meaning of punchcards, see Lubar 1992.

Good" (Berlandt 1964). They set these cards on fire, in displays similar to draft card burnings. And they transcribed the standard warning from these cards onto signs that read, "I am a UC student. Please don't bend, fold, spindle, or mutilate me." This prohibition against folding, spindling, and mutilating became especially popular, as it condensed a complex experience of alienation into a single pithy refrain. In 1966 the president of the Association of Computing Machinery (ACM) even chided his colleagues for its coldness, calling it "a mark of our neglect that the arrogance and inanity of 'Do not fold, spindle or mutilate' has become the public's symbol of computing . . . without even the grace of a prefatory 'please'" (Oettinger 1966: 545).

The FSM cultivated an entire technological language for expressing and subverting the contradictions of a technetronic society. Given its landmark status in the history of student unrest, it is perhaps understandable that the cultural meaning of computer center sabotage became dominated by the FSM's general revolt against dehumanization. But as we will see, there is a giant gulf between burning an IBM card and blowing up an IBM computer, and the FSM obscures just as much as it reveals about how this gulf was crossed. While saboteurs claimed various motives for their actions, technocracy and alienation were never more than secondary.

A case in point is the first destruction of a computer center in North America: the so-called Sir George Williams affair in Montreal. The incident began on January 29, 1969, when several hundred students occupied the computer lab on the ninth floor of SGWU's Henry F. Hall Building. The occupation continued until February 11, when riot police raided the building and, in the ensuing scuffle, students smashed the computers with an axe and a fire broke out. Newspaper headlines throughout Canada and the United States cataloged the staggering toll: a CDC 3300 and an IBM 1620 valued at over $1 million, in addition to the tens of thousands of programming hours lost when occupiers threw records out of the windows.[6] Images of computer paper and punch cards falling like snowflakes onto the streets of downtown Montreal provided a potent but enigmatic statement about the perpetrators' intentions. Some observers praised the occupiers for toppling the quintessential icon of an immoral society (Maassen 1969). Other observers condemned the occupiers for their "violent envy" of their tech-savvy peers (Gouveros 1969). One reporter described the occupiers as "the first Luddites of the electronic age," and Brzezinski himself wrote that they had "vented their anger at 'the system'" (Ross 1969; Brzezinswki 1970: 108).

6. For a discussion of the overemphasis on the computer, see Williams 1971: 118.

Historian Robin Winks (1997: 478) later dismissed the entire incident as the "thoughtless, needless, and frustrated destruction of the twentieth century's symbol of quantification."

Somehow, all of these interpretations missed the mark. In a one-year retrospective study of the causes and implications of the Sir George Williams affair, *Computerworld* concluded that, "contrary to popular opinion outside Montreal, the attack was not symbolic or Luddite" (Hanlon 1970). The participants "did not connect the computer in any way with depersonalization," and there "were no statements about 'we are only punchcards.'" In fact, until the day of the police raid, the occupiers had protected the computer by routinely checking the temperature and humidity of the machine room and by establishing a sign-in system to regulate access.

The original motives behind the Sir George Williams affair preceded the computer center occupation by almost a year. In April 1968, six West Indian students had accused an SGWU biology professor of deliberately assigning Black students lower grades than white students.[7] After disregarding these allegations for seven months, the university established a hearing committee in the middle of the fall semester. A group of Black students objected to several of the committee members, which led to a series of disputes, ignored demands, and sit-ins, until finally, on January 26, 1969, the administration initiated public hearings without the support or recognition of the students who first brought the allegations ten months earlier.

Up to this point, the conflict had nothing to do with computers. This changed on January 28, when a student newspaper published minutes from a private administrative meeting about security for the upcoming hearings. Anticipating protests and violence from Black students, administrators had brainstormed vulnerable sites on campus. Again and again they returned to data-processing machinery, suggesting that "perhaps a plainclothes constable should be in the Computer Centre as it is a very valuable piece of equipment" (*Georgian* 1969b). The administrators were partially correct: students were indeed preparing to protest on campus, but they had planned to occupy the school's administrative offices, not the computer center (Hanlon 1970). According to one of the Black student leaders, nobody had even considered targeting computers until they discovered the administration's meeting minutes in the student newspaper (Butcher 1971: 91). Suddenly, the computer center seemed like a superior option. The following morning

7. For details on the events preceding the occupation, see Butcher 1971. For more on the Sir George Williams affair in the broader political context of Montreal, the Black Power movement, and the Caribbean, see Mills 2010: 95–118; Austin 2007.

hundreds of Black students broke up a committee hearing and then began their occupation on the ninth floor of the Hall Building—a location suggested, in effect, by the administration itself.

The SGWU computer center was more of a tactical object than a symbolic one. Students chose the site not because they feared computers or because they resented the "electronization of university life," but because they knew the university was anxious to protect it (Ross 1969). The CDC 3300 in particular was considered a "valuable hostage." It was maintained by a team of twenty people who employed it in a range of activities including payroll, accounting, scheduling, faculty research, and computer science coursework (Sir George Williams University 1966–67: 49). According to one estimate, the machine cost the university $1,000 per hour to rent and operate (*Georgian* 1969a). Demonstrators believed that, without it, school activities would grind to a halt. They also believed that the administration would not exercise physical force in the proximity of millions of dollars of hardware. "We felt we'd be safe with the computer," explained one occupier. "We felt the police would not be called in, because [the administration] would be afraid that in any commotion somehow the computer would be hurt" (Hanlon 1970).

Historical precedent supported these beliefs. The previous spring one hundred Black students seized Northwestern University's central IBM computer system for almost two days. The following semester a dozen members of UC Santa Barbara's Black Student Union occupied the campus computer center for twelve hours. And in January of 1969—less than two weeks before the outset of the Sir George Williams affair—two major occupations occurred. At Brandeis, roughly seventy members of the Afro-American Society occupied the university's central communications center for eleven days. Meanwhile, fifty members of the University of Pittsburgh's Black Action Society locked themselves into a computer center for seven hours. Like the Sir George Williams affair, none of these occupations were wholly spontaneous. They commenced only after long-standing campus grievances had either been ignored or silenced by university officials. Moreover, none of these grievances centered on computers themselves. They centered instead on housing, recruitment, financial aid, hiring, curriculum, and the overall equitable treatment of the small but sudden influx of Black students onto white college campuses since the middle of the decade.[8] The computer's relationship to these demands was tactical. At UCSB, demon-

8. For background on these changes and demands, see Biondi 2012, especially the first chapter.

strators had initially considered occupying the chancellor's office, but they ultimately chose the computer center because they "wanted to have something in which there was a stake" (Pigeon et al. 2015: 28). And at Brandeis, occupiers referred to a captive IBM 1130 as their "$200,000 lever" (Fripp and Robinson 1969).

By all appearances, the tactic worked. Each of these occupations concluded without damage, arrests, or even punitive measures from the university. More importantly, they resulted in major concessions for Black students, including, in the cases of Pitt and UCSB, the creation of a Black studies program. In the wake of these successes, activists continued to use computers and computer centers to address real—as opposed to symbolic—problems on campus. When students at Tufts University discovered that only two of eighty workers on a campus construction site were Black, they occupied the computer center and demanded increased minority employment. When the Fresno State administration refused to rehire eight of the college's twelve total ethnic studies faculty—a decision that "effectively destroyed" the Black studies program—students threw Molotov cocktails through the computer center window (Madigan 1970). When administrators at Howard University refused to grant students an equal share in departmental policy decisions, they took over the Locke Hall computer center, barred the doors with chains and padlocks, and defied a temporary restraining order until the university president closed the entire school.

This is not to suggest that computer center sabotage was exclusively a means to an end. At institutions where computational experts collaborated with the Department of Defense, saboteurs came to view the suspension of computer center activities as an end in itself. Computing installations were often some of the most tangible manifestations of a military-industrial-academic complex that, in 1969 alone, amassed $279 million in Pentagon support for university research.[9] Electronic digital computing had emerged as a direct result of academic and military collaboration during World War II, and the expanding computational infrastructure at research universities was both cause and consequence of warfare's perpetual reduction into a problem of information management, an approach firmly consolidated during Robert McNamara's tenure at the DOD.[10] But even when computer cen-

9. For the development of the military-industrial-academic complex, see Geiger 1993. For a specific case study of the military-industrial-academic complex and its relationship to computing, see Leslie 1993: 14–43; Cohen 1988.

10. See Edwards 1996 for the classic account of this development.

ter sabotage was waged against US imperialism, demonstrators' aims were more practical than symbolic. At the University of Maryland, members of Students for a Democratic Society picketed and attempted to infiltrate the computer center when they learned that the CIA was funding research into computer vision, with possible applications toward jungle surveillance. At SUNY Stony Brook, students occupied the campus computer center when they discovered a $400,000 contract proposal to the DOD's Project THEMIS titled "Computer Aids to Decision Making." And at the University of Wisconsin–Madison, students blew up several computers in Sterling Hall, where the Army Math Research Center was assisting in a massive rural and dense-brush surveillance program, or McNamara's ill-fated "electronic battlefield" in Vietnam.[11] In each of these instances, saboteurs were objecting not to the abstract militarism of systems analysis or information technology, but to the immediate involvement of university resources in military operations.

It is impossible to know how every computer center saboteur on every campus personally felt about computers. It is likely that many of them would have identified with the language of the FSM, and that they believed there was something rotten at the heart of computation. Even saboteurs who felt indifferent toward computers must have judged them at the very least to be expendable. But the specters of computation and technetronic alienation never motivated students to seize or destroy a campus computing installation. Racism and imperialism did. This does not mean that computers were an afterthought for computer center saboteurs, but it does prompt us to reconsider how computers might have emerged as a key object of concern within the dissident economy of computer center sabotage.

The Technology of Computer Destruction

On the evening of February 9, 1971, several hundred demonstrators gathered in Stanford University's Dinkelspiel Hall to organize a protest against the US invasion of Laos. In the middle of the meeting, one of the demonstrators offered the following suggestion:

> I think that it's apparent that the place that has to be hit, and has to be hit hardest and can be hit not only here but in every college campus and in every city in the country, are the computer centers . . . and they

11. For the intimate connection between the Army Math Research Center and the so-called electronic battlefield, see Bates 1992: 242–53.

> don't have to be hit violently. Computer centers are the most vulnerable places anywhere. If you've seen the lights blink every once in a while with the power shortage, well, if that were to happen in a computer center for a millisecond, the computer has to be shut down, and reloaded. And that's at least an hour delay. Now what does an hour delay mean to a computer center? Well it could mean just an hour delay. It could mean a day delay. It could mean a week delay. It could be a month delay or a year delay. . . . Nobody knows. It's dependent upon what's destroyed in just that power shortage. What's destroyed in core storage. What's destroyed as to the records. What could be destroyed in the tape reserve rooms by the temperature going too high. Nobody knows. (Kennedy et al. 1972: 462)

So far I have argued that, contrary to popular belief, computer center sabotage was not an irrational crime of passion. Computer centers were strategically valuable, and when saboteurs chose to occupy and destroy them they knew exactly what they were doing. Yet the grammatical shift midway through this rallying cry suggests that—when we move beyond the general idea of sabotage and get down to the wires, the tape reels, and the circuit cards—sometimes saboteurs were less knowledgeable than the occasion required. At the beginning of the speech the demonstrator is decisive, explaining exactly why a computer center is an effective target. But as the subject turns to the power outage and its impact, this decisiveness wanes. The conditional mood dominates, and we learn only what a delay *could* mean. The demonstrator confronts the computer like a child, pushing buttons and unplugging cords in order to see what happens. The political goal is crystal clear, but as for the computer itself: "nobody knows."

This apparent schism between the theory and the practice of computer center sabotage imposed two constraints on any would-be saboteur. The first constraint concerned intellectual jurisdiction. Writing for *Datamation* in 1966, the author of the first national survey of public attitudes toward computers in the United States reported mostly optimistic feedback, but with a "disquieting undercurrent of uneasiness" among those respondents who were least familiar with computing machinery (Lee 1966). This correlation between uneasiness and unfamiliarity seemed to support the standard industry argument that "the great source of fear about the machine" was not actually automation, privacy, or any other legitimate concern but rather, as one computer programmer put it, "that people don't understand them" (Todd 1970). In his landmark treatise on the ethics of computation,

Computer Power and Human Reason, renegade computer scientist Joseph Weizenbaum stressed just how totalizing this logic had become. The widespread myth that computers were "too complicated for ordinary people to understand" had insulated the computing industry from virtually all criticism by ensuring that the only people empowered to assess and respond to the social consequences of computation were "the artificial intelligentsia," or the very class of experts most invested in computation's continued expansion (Weizenbaum 1976: ix, 253). Thus it was not a question whether saboteurs were justified in their actions but whether they possessed the requisite expertise. If they did not "understand" computers on a technical level, then they were not qualified to decide how these highly technical devices should be used.

This constraint was a constraint in principle only, and saboteurs overcame it simply by rejecting the principle. Even a critic as relentless as Weizenbaum—whose refusal of technocratic authority remains a singular example of intellectual independence amid the otherwise opportunistic history of digital computing experts—leveraged and thereby valorized his own authority as a highly accomplished computer scientist. Saboteurs, by contrast, had no discernible authority, and yet they acted regardless, revealing the unstable foundations of computational authority tout court. A computer center takeover was literal proof that one did not need to "understand" computers on a technical level in order to comprehend and alter their role in social affairs. One did not need to be a computer scientist to know that Black lives were more valuable than computing machinery, or that it was immoral to use computers to research how to kill people, so saboteurs took these matters into their own, inexpert hands.

The second constraint was more immediately practical, as demonstrated by the computer-user liaison for UC Santa Cruz. Writing for *Datamation* in 1971, the liaison reported that someone in Los Angeles had recently shot a computer with a gun. "This was naive," he explained; "if the culprit had aimed his shots at the tape storage room he would have done considerably more damage" (Van Tassel 1971). A saboteur may not have needed to understand computers on a technical level in order to grasp their social consequences or even to occupy a computer center, but they would need at least a basic understanding if they wanted to destroy them.

This constraint could not be circumvented through sheer political will. It required saboteurs to learn how computers operate and what makes them vulnerable. And as the liaison explained, a computer's greatest vulnerabilities were often counterintuitive to the untrained eye. Anyone could

see that the Sir George Williams affair, for instance, was an unmitigated disaster. Yet while news reports had focused on the millions of dollars of incinerated computing equipment, the liaison emphasized the punch cards thrown from the computer center's ninth-story windows. The scorched hardware could "easily" be replaced, but the thousands of programming hours invested into the punch cards could not. The liaison relayed similar stories of saboteurs who hit data-processing centers where it hurt, using magnets and other unassuming weapons to erase valuable information. Though less shocking than a hail of gunfire, these low-profile incidents were considerably more concerning because they implied that "dissatisfied persons are learning what to destroy."

Throughout the 1960s various individuals and organizations offered guidance to "dissatisfied persons." For the most part, this guidance focused on disrupting the computerized systems that were slowly bureaucratizing customer services. At the height of the Free Speech Movement, Stanford business professor John Troxell (1965) outlined an approach that he called "Defy and Defeat the Takeover," which involved punching random holes into the computer punch cards that frequently accompanied billing statements. Harvey Matusow, the founder of the International Society for the Abolition of Data Processing Machines, later described this same method as "computer card roulette." In his 1968 "Guerrilla Manual for Striking Back at the Computer," Matusow listed computer card roulette alongside several similar ploys: demagnetizing cashier's checks, overpaying utility bills by one or two cents, inserting magnetized strips into outgoing mail, and perpetually renewing and canceling magazine subscriptions, as well as some decidedly impressionistic tactics, such as befriending and then, eventually, shaming and demoralizing members of the data-processing industry (Matusow 1968: 85–93).

By far the most infamous document was a brief article called "The Technology of Computer Destruction," which, as its title suggests, went beyond harassing computerized systems and advocated the outright destruction of mainframes. Written anonymously by a self-described computer scientist, the article consisted of an authoritative list of dos and don'ts, advising in particular against empty displays of brute force. "An axe is not an effective weapon against a computer," the anonymous author explained, "and one should not waste time bludgeoning transformers, fans, or other bulky items" (Anonymous Tool 1970). Instead, aspiring saboteurs could maximize destruction through subtler maneuvers: scoring the surfaces of magnetic disks with a knife, taking a metal file to read/write heads, punc-

turing core memory with a blunt object, stealing portable circuit cards, clipping electrical wires, and, of course, punching superfluous holes into punch cards. The article first appeared in February 1970 in the Boston-based underground newspaper *Broadside*/*Free Press*. It was soon reprinted in the Chicago-based *Seed* and then reprinted there once again after the editors became "deluged with requests" (*Seed* 1971). By 1971 mainstream venues ranging from *IEEE Spectrum* to *Campus Security* to the *Wall Street Journal* were excerpting the article, warning readers about the latest faction of tech-savvy militants (Beardsley 1972; Zaiden 1971; Immel 1971).

"The Technology of Computer Destruction" captured public attention because it challenged the widespread assumption that saboteurs were technologically incompetent. It suggested that when saboteurs discussed computers they knew exactly what they were talking about, and that by putting care into their craft they could maximize their leverage. More fundamentally, it suggested that "computer destruction"—which on the surface sounds like a negation of technology—was a technology in and of itself. This went beyond the obvious fact that saboteurs, like anybody else, were capable of learning about computers. It suggested that there was, or could someday be, a sophisticated branch of knowledge specific to the practical social relations that link saboteurs and their machines. Not computer science, not even computer hacking, but computer destruction: a form of technical expertise from below, so to speak, that could bridge the theory and the practice of computer center sabotage.

All this, however, was just a suggestion. While the article fueled a small series of concerned news reports, there is no evidence that "The Technology of Computer Destruction" ever directly informed an instance of computer center sabotage, much less that it coalesced into an autonomous discourse. The notion that there is a *technology* of computer destruction is therefore more of a hypothesis than a conclusion, distilled from momentary instances of wreckage and fragmentary clippings from underground newspapers. But if anyone wondered what the systematic study of computer destruction might have looked like, they got a glimpse in the fall of 1970, when Syracuse University ran a semester-long workshop called "Computer Automated Disruption." Once a week for fifteen weeks participants met to discuss their motives, the potential consequences, and hypothetical methods for disrupting data-processing systems at large organizations. A front-page story in *Computerworld* described the workshop as "a course in the nonviolent sabotage of computer installations" (Merritt 1970). A headline in the Computer People for Peace newsletter described it more succinctly as a "course on offing Big Brother" (*Interrupt* 1970).

Computer Automated Disruption was part of Humanities 480, the flagship course in SU's fledgling nonviolence studies program. The program and the course were direct outgrowths of the previous semester, when SU, like thousands of other universities across the United States, was thrown into disarray after the Kent State massacre (Galpin, Wilson, and Barck 1984: 23–44). On the same evening of the Kent State shooting, the SU bookstore was firebombed. Hundreds of students spread throughout campus breaking windows and barricading roadways, and the next morning thousands of students voted to strike. Some classes continued to meet, but informally, dominated by discussions of the strike and the war. Other classes disbanded altogether as students regrouped into strategy sessions about the Black Panthers, high school liberation, and other local issues. On May 7 a group of Black students broke into the computer center in Machinery Hall, where they intended to hold the computer "hostage" in exchange for $100,000 for the Black Panther legal defense fund. However, after removing several windows inside the building, they found that they could not get inside the machine room, so they overturned several boxes of IBM cards and left to occupy the administration building instead.[12] A student-led Strike Committee issued nineteen demands in total, including a demand to continue the informal strategy sessions through university-sanctioned coursework. In response, the university created the nonviolence studies program along with its first course, Humanities 480, a three-credit introduction to the theory and practice of nonviolence.

Humanities 480 was the largest course of its kind in the United States. Each week 450 students attended a plenary session with lectures, film screenings, and panel discussions that had been curated to capture "the entire spectrum of nonviolence" (Swanson 1970). Later in the week the students split into one of forty semester-long workshops under titles such as "Communal Living," "Nonviolent Action by the Poor," "Revolution in Corporate Liberal America," and "Women's Liberation." These workshops were designed to be democratic and consensual.[13] Students collaborated directly with workshop leaders to decide on their own readings, assignments, goals, and grading criteria. Some workshops adopted traditional curricular tools such as lectures and term papers, while others were more innovative. In one workshop, students picketed markets and grocery stores that sold produce harvested by nonunion workers. In another workshop,

12. Accounts from the *Daily Orange* and the *Nickel Review* list the date as May 7. An account in the *Post-Standard* lists the date as May 6.

13. For the structure of the course, see Amberg 1971c.

students developed and then personally implemented their own model of a "wholistic lifestyle."

Due to the experimental nature of the course, workshop leaders expanded beyond faculty and graduate students to include undergraduates and community volunteers with relevant expertise. The leader of Computer Automated Disruption was Hamilton Armstrong Jr., an executive at the Syracuse-based Crucible Steel Company and president of the Syracuse chapter of the ACM. As a well-placed computing professional, Armstrong was an unlikely candidate for devising a course on sabotage. In his own words, "I'm Joe Average, wear three-piece Ivy League suits, and am the conservative-looking type" (Amberg 1971b). But he was involved with local anti-war organizations, and he expressed concern over "certain evils" perpetuated by the computing industry, particularly the expansive accumulation of public information within centralized data banks (Armstrong 1970). His preferred response to these evils centered on professional organizing. In the early 1970s he became president of the Society of Professional Data Processors, where he focused on developing ethical standards across his field (Taylor 1973). Organizing, however, was only one of many potential methods for impacting the computer industry, and his workshop at SU adopted an explicitly radical approach: "When I walked into the class, I told the students I would present more radical techniques than they could get in any other workshop."

Throughout the semester Armstrong explored a variety of approaches to computer center sabotage. He introduced students to "computer card roulette," and he explained why it worked: the computer systems at telephone and utilities companies were designed to process highly uniform data, and if enough customers returned irregular responses, then they could overwhelm these systems. He taught students how to erase computer tapes at a distance by using specific radar frequencies. He helped devise plans for blowing up the control tower at the nearby Hancock International Airport, and he even took the class on a "field trip" to Machinery Hall, where they "went through the logistics of bombing the computer: where to put the dynamite, what guards to get past, and so on." The students "went through this step by step" (Amberg 1971b). In each of these scenarios Armstrong emphasized the limitations of individual action. Overwhelming a computerized billing service, for instance, required collaboration among thousands of like-minded customers. And while one person could blow up an airport's computer installation, it would require a coordinated team of industry insiders to suppress an airline's operations long-term. He also addressed ethi-

cal issues, including the potential destruction of medical tools and data intended to analyze and alleviate poverty. He considered the general prospect of data-processing work for the public good. Yet while Armstrong appeared to regard sabotage as ultimately damaging to society, his goal was to empower students to make their own choice: "Up to now, people lived in fear of computers. Now they know how to pull the switch."

Humanities 480 proved popular. In the spring semester enrollment expanded from 450 to 800 students in more than sixty-five workshops.[14] But it also proved contentious. In March of 1971 the *Post-Standard* ran a series of four articles about the course, leading with the headline "SU 'Nonviolence Workshop' Stirs Controversy" (Amberg 1971c). Concerns included student control over curriculum design, the use of nonaccredited instructors, and the substitution of "traditional" academic content with direct community engagement. The subsequent *Post-Standard* articles explored these concerns through case studies that depicted Humanities 480 in an unambiguously negative light. One article reported on an auditorium where students drank beer during lectures and, when the libations dwindled, instructors took up a collection to purchase more beer (Amberg 1971a). After the lecture students dispersed into their workshops where they praised communism, voiced sympathy for domestic terrorists, and discussed sexuality with "dormitory talk often expressed in sailors' language." Another article focused solely on Computer Automated Disruption. In an interview, Armstrong affirmed his personal commitment to professional organizing as well as his reasonable reservations about data ethics, but the story centered on the more sensational aspects of the course. A subsequent letter to the editor of the *Post-Standard* criticized the "bomb teacher" for "working to destroy our society" (Marsula 1971). Three months later, SU announced that Humanities 480 would be discontinued. The nonviolence studies program persisted, but as the students who initially pushed for this program began to graduate the intense wave of enthusiasm behind it subsided.[15]

Computer Automated Disruption therefore came and went, causing a minor stir but leaving no real legacy in the academy or the computing industry except for a handful of brief news reports. Its impact is captured in business executive Thomas E. Karpick's (1971) scandalized letter to the editor of *Computerworld*, which asks, "How can Hamilton Armstrong Jr., the so-

14. See the survey reports from SU's Independent Student Opinion Committee in Glassman 1971.

15. On the aftermath of the nonviolence studies program, see Katz 1973.

called course leader, himself an EDP professional, not present his students with the challenge to improve that which they find wrong?" Why not invite the "enthusiastic youth" to join the data-processing industry and invigorate it with their bold ideas and constructive criticism?

Karpick's question helps us understand why the technology of computer destruction never became anything more than a hypothesis. The fact is that Armstrong *was* challenging his students "to improve that which they find wrong." He taught them a number of computer-related techniques with the goal of changing both the data-processing industry and society itself for the better. But since these techniques implied that social progress might come through the interruption of technological progress, they appeared antithetical to progress, full stop. It was not that Karpick disagreed with Armstrong but that whatever Armstrong was proposing was completely illegible. For Karpick, computer destruction could only ever be destruction and nothing more.

Karpick ends his letter with an analogy to illustrate the perils of Armstrong's inaction. When data-processing professionals see a problem and "do nothing," Karpick writes, they are in "the same class as the 20 students who took over the Salem (Massachusetts) State College Data Processing facilities and promised they 'didn't plan any damage.'" The incident to which Karpick refers began in November 1970, when Salem State's Union of Student Involvement (USI) presented the administration with a list of forty-one demands ranging in focus from birth control and day care services to curriculum reform and military recruitment. The administration ignored these demands, and the USI responded by holding a UNIVAC 9200 hostage for almost seven days.

What Karpick does not mention is that, in response to the occupation, Salem State's president initiated an "all-college referendum" on the USI's demands (Brody 1971). By the time Karpick's letter appeared in *Computerworld*, the college's Student Association was finalizing its list of priorities. Over the next three years Salem State would witness some of the most progressive developments in campus history, including the creation of a day care center, a women's center, and a counseling center, as well as a "minority affairs" program and the school's first affirmative action committee. What Karpick's analogy illustrates, then, is not the danger of "doing nothing." It illustrates a structural limit to his own understanding of how to use a computer, wherein a week-long computer center takeover fails to register as meaningful action of any kind. Less than wrong, it is "nothing" at all.

The Diversion of Technological Progress

In his apologia for machine-wrecking, *Progress without People*, David Noble (1995: 7) writes that the Luddites of the early nineteenth century were "perhaps the last people in the West to perceive technology in the present tense." What Noble means is that the Luddites exercised keen discernment. They did not, as popular caricatures suggest, destroy every machine they could get their hands on. They only destroyed those machines they deemed "harmful to commonality." To say that the Luddites perceived technology "in the present tense" means that machines were never abstractions: never wholly good, wholly evil, or wholly neutral. They were always situated in a particular time and place among particular users and owners, where they were bound up in conflicting systems of power from which they could never be fully disarticulated. This understanding of technology ought to sound familiar to contemporary critics of computation, many of whom have produced valuable work revealing how would-be neutral tools are in fact integral to modern forms of domination: how facial recognition software encodes racial and gender biases, or how automated social service systems further entrench economic stratification, or how social media platforms facilitate surveillance, disinformation, and the exploitation of affective labor.

But Noble's claim extends beyond a critique of technological neutrality. When he writes that the Luddites perceived technology "in the present tense," he also means that they responded to technology *in the present*, without regard to a potential future in which oppressive machines might be put toward benevolent ends. Living in an era when industrial machinery still seemed novel, and when the future dominance of that machinery did not yet appear inevitable, the Luddites were unencumbered by what Noble calls the "hegemonic ideology of technological progress." While this understanding of technology will likewise sound familiar to many contemporary critics of computation, it is much more difficult to identify with a specific critical practice. It is one thing to suggest that Google, for instance, should not work on projects for the Department of Defense. It is another thing to suggest that Google should not exist, that its employees should leave the tech industry and find something altogether more valuable to do with their time. I argue it is within this hazy distinction that computer center sabotage can play a particularly clarifying role.

The ideology of technological progress that Noble laments is one that has already been diagnosed in the work of Lewis Mumford, Herbert Marcuse, Jacques Ellul, and other classic critics of what Langdon Win-

ner calls "autonomous technology." These critics warned that technological progress had become an end in itself—an end that was gradually subsuming all other ends to the point that, today, as R. H. Lossin (2016) writes, our conceptions of "progress and technological progress have become so thoroughly conflated that any suggestion to the contrary simply seems insane." This was the sentiment expressed by the NAACP executive director Roy Wilkins (1969), for instance, in his response to Black activists on campus: "Black students are frittering away their time and the race's destiny by capturing computers before they learn basic algebra." For Wilkins, social progress and technological progress went hand in hand. Learning algebra and other prerequisites of technical mastery would advance "the race's destiny," whereas capturing computers was an irrational waste of time.

Saboteurs seemed menacing not just because they wrecked machinery but because they negated this entire rational order predicated upon technological development. The spokesperson for Northwestern's occupiers, James Turner (1969), made this general point when he told an interviewer that it was the predominantly white administrators, not the Black students, who had adopted an "irrational approach." What was irrational was the belief that student grievances could be resolved by ignoring them, by exercising force, or by otherwise "skirting the issue." In an institution that valued its technological investments more than it valued the well-being of its Black students, seizing a computer was a perfectly rational method for bringing administrators to the bargaining table. If appeals to Black safety and success were not valid forms of entreaty, then "the only form possible," as one writer for the *Pitt News* put it, "will be computer center takeovers where students will have to threaten to destroy million dollar machinery in order to make the administration respond" (Rosenblum 1969).

Objections to computer center sabotage on the basis of the ostensible neutrality of computation—the common argument that computers are merely "neutral instruments that are used for good or bad purposes," and are therefore undeserving targets in the larger battle against imperialism and racial injustice—were not only wrong but also immaterial to the matter at hand (Dial 1970: 449). If anything, saboteurs radicalized these claims about technological neutrality. They replaced the highly equivocal suggestion that computers *could* be used for good purposes with a guarantee that they *would* be used for good purposes, regardless of their creators' and owners' original intentions. Saboteurs' views of computation itself varied from indifference to a vague discomfort to a programmatic critique of computers and the industries that sustain them. What motivated and therefore

united their actions was not a theory about computation but a staunchly secular orientation toward technology and the future. To adapt Lossin's exceptional analysis of early twentieth-century industrial workers: sabotage destabilized the hegemonic ideology of technological progress by "negatively reimagining" social progress as "something external to technological development and productive capacity. Indeed, it suggested that social progress would be achieved by the *interruption* of industrial progress, the disruption of production, and the violation of property rights" (Lossin 2021: 76).

What makes computer center sabotage valuable, then, is how it rearticulates two key progress narratives where they have intersected, and more often failed to intersect, in the postwar university. On the one hand, the 1960s witnessed major technological advances on university campuses: the near-universal adoption of computing, the rise of time-sharing systems and the ARPANET, and outreach to nontechnical users through developments such as the BASIC programming language. On the other hand, the 1960s witnessed major social gains on university campuses: greater integration among far greater numbers of nonwhite students and faculty, the creation of the first Black and ethnic studies programs, and the academy's only concerted divestment of military contracts since World War II. There was no obvious causal link between these two strains—at least, not in the direct sense that the sudden availability of computers inspired administrators to hire more nonwhite faculty. But these strains were not wholly independent, either. As we have seen, they converged in various instances of computer center sabotage, when students advanced one strain by actively diverting the other. This does not mean that blowing up a computer was inherently anti-racist or anti-imperialist. Just the opposite: at a moment when the connection between Black studies and computers was anything but inherent, saboteurs took the university's immense intellectual, financial, and ideological investment in computing and chose to connect it directly with their own position as members of the university community. They did not merely discover or unmask this point of contact between computing, race, and empire. They created it.

This space of creative negation between social progress and technological progress remains to be fully explored. Humanists have cultivated a rich tradition of technological critique, equipping us with a much-needed conceptual toolbox for resisting the cultural logic of computation. Sabotage is not one of the tools in that toolbox, and yet it is deeply entwined with the history of the humanities. The students most closely associated with computer center sabotage were humanities students. Computer center occupa-

tions bolstered hiring initiatives in multiple humanities departments, and at Pitt and UC Santa Barbara they ended with the wholesale creation of Black studies programs. Syracuse University injected sabotage directly into its humanities curriculum with a workshop on Computer Automated Disruption. I am not suggesting that present-day humanities instructors should teach students how to shut down their universities' digital learning management systems, much less how to firebomb their local IT offices. But as humanists continue to map out critical relationships to the digital tools that we use every day, computer center sabotage represents one radical example of what it has meant, historically, to approach technology as a means and not an end. It posits technological progress in terms of a diversion—in the double sense of both a feint that distracts from more substantive modes of progress, and of a force that can be redirected, or *diverted*, into channels where it may not quite seem to belong.

To clarify this final point about the diversion of technological progress, I want to close by returning where I began: with the Courant Institute takeover at NYU, when students seized a CDC 6600 on behalf of the Panther 21. At the end of her revisionist account of the takeover, systems analyst and Computer People for Peace member Joan Dublin reaffirmed her disappointment over the dominant portrayal of the incident. "It is distressing," she wrote, "to find the computer journals much too eager to jump to the tune of 'computer destruction' stories without relating background information" (Dublin 1970). Speaking from her own experience as a member of the data-processing community, Dublin reasoned that "perhaps part of the problem is our uneasiness about our own computer centers": "What if a community group found reason to take over the computer center where you or I work? Although we all say that we value human life above property, when the decision involves our work place we may not be quite so sure. The NYU action attempted to make the political connections between the computer and how it affects our lives."

What exactly these "political connections" were, Dublin did not say. It is possible she was positing some kind of veiled material link between the CDC 6600 and the lives of the Black community, which the occupiers tried to expose through their takeover. But I would suggest she was addressing the connection between computers and her own life, and the lives of anyone else who worked with data-processing machinery. The investments that she and her peers had made in computing technology became political when computing came to seem exceptional, somehow beyond worldly affairs, distorting the perceived values of technology versus human life. If computer

center sabotage accomplished anything, it was to stoke these smoldering asymmetries into their inevitable conflagration.

One data-processing professional who might have agreed with this line of thinking was Sundiata Acoli, a member of the Panther 21.[16] After earning a mathematics degree from Prairie View A&M College at the auspicious age of nineteen, Acoli had gone on to work at NASA, and then at several computer consulting firms in New York City. In 1968 he joined the Black Panther Party, and on April 2, 1969, he was one of twenty-one Black Panthers arrested and charged with conspiracy to bomb multiple police stations and department stores.

At the September 1970 meeting of the ACM, members of Computer People for Peace took up a collection for Acoli's $100,000 bail. By this point Acoli had been in jail for almost eighteen months without a verdict, violating his constitutional right to a speedy trial. Computer People for Peace argued that, since Acoli was a member of the profession in good standing, the ACM had a responsibility to look after his well-being. The ACM Executive Council created a subcommittee to investigate the case, and after three months they released a forty-page report. While the report urged individual members to take whatever action they found appropriate, it did not authorize formal support from the ACM. The subcommittee deferred to a statement from legal counsel: "Any activity on the part of ACM in this issue other than the humanitarian effort to determine (a) that he has a good lawyer and (b) that institutions such as the American Civil Liberties Union are aware of the circumstances, represents ACM taking sides in a controversy completely unrelated to its purposes" (Capsis et al. 1971: 39).

I would suggest that this is the kind of ploy Dublin had in mind when she wrote that "the NYU action attempted to make the political connections between the computer and how it affects our lives." In its recent story about the Courant Institute takeover, the *New York Times* asked mathematician and former institute director Peter Lax to describe how he had felt about the Black Panthers in the 1960s. Instead of a positive or negative assessment, he recalled that he simply "had other things to think about." The Courant Institute existed in one world, the Black Panthers existed in another world, and these two worlds were, to borrow the language of the ACM subcommittee report, "completely unrelated."

They were completely unrelated, that is, until the students seized the CDC 6600. Suddenly the Black Panthers were a real, tangible entity staring

16. At the time, Acoli went by the name of Clark Squire.

Lax in the face. Thus we might respond to Lax the same way that Acoli once responded to an ACM member who vehemently opposed the organization's potential involvement in his trial. In a conversation with ACM cofounder Edmund Berkeley, Acoli's detractor had insisted that the prevailing account of Acoli's legal plight was "very political and very one-sided," that he "did not believe" this account, and that he was "almost amused at the tie-in with computers—and dismayed at the neglect of an opportunity to explore how computers might lead us closer to justice" (Berkeley 1970: 7). Writing from his jail cell in Rikers Island, Acoli replied that his detractor was not actually concerned about political bias at all, that he did not believe the prevailing account of Acoli's plight "because he does not want to believe it," and that "what really disturbs him is the spectre of Black reality exploding into his serene, aloof, air conditioned, panoramic view, raised floor, show case computer profession" (Acoli 1971: 9). And then—in language that today might sound like a starry-eyed critique of the ideology of technological progress, but which at the time conveyed a genuine existential appeal from a genuine political prisoner—Acoli reminded his detractor that "the only computer that will lead us closer to justice is man."

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