# 7 | Conclusion: Surviving Fixations

> Let us not waste our time in idle discourse! Let us do something, while we have the chance! It is not every day that we are needed. Not indeed that we personally are needed. Others would meet the case equally well, if not better. To all mankind they were addressed, those cries for help still ringing in our ears! But at this place, at this moment of time, all mankind is us, whether we like it or not. Let us make the most of it, before it is too late! Let us represent worthily for once the foul brood to which a cruel fate consigned us! What do you say? It is true that when with folded arms we weigh the pros and cons we are no less a credit to our species. The tiger bounds to the help of his congeners without the least reflection, or else he slinks away into the depths of the thickets. But that is not the question. What are we doing here, *that* is the question. And we are blessed in this, that we happen to know the answer. Yes, in the immense confusion one thing alone is clear. We are waiting for Godot to come –
>
> Samuel Beckett[1]

We have tried this before, repeatedly. The injunction that we must fix education so as to fix society is as old as public schooling. The claim that the new technologies of an era represent unprecedented opportunities for fulfilling unmet social ideals is equally as old. Despite well over a century of educational crises, countless reforms, endless experiments with the new media of the moment – radio, film, television, computers, the internet, games, mobile phones, and tablets – public education has never come close to approximating its idealization as society's great equalizer and unifier, and new technologies have never managed to fill in the gaps.

But maybe this time will be different?

In the early decades of the twenty-first century, and in response to widespread concerns about widening inequities and shrinking opportunities, many people once again

advocated ardently for additional rounds of education reform, and many once again valorized the unprecedented opportunities of new technologies. According to many of these accounts, those who had not benefitted from the economic and political transformations since the 1970s were being "left behind" because they had the wrong skills and dispositions. By contrast, advocates for reform pointed to the exciting things happening in hubs of "innovation" like Silicon Valley. They argued that all could be part of this exciting new world if only society could reinvent education and harness the unparalleled opportunities of new technologies.[2]

The case examined in this book suggests that this time was not so different. It is hard to imagine an educational intervention better equipped to fulfill this vision of social change than the Downtown School. They had smart, skilled, and dedicated founders and teachers, an abundance of the latest media technologies, and a pedagogic approach that had been tailored not only for the presumed affinities of contemporary young people but also for the skills and dispositions that the twenty-first economy and world seemingly demanded. And yet, despite the best intentions of the school's designers, educators, and backers, the Downtown School's cutting-edge intervention mostly overlooked, rather than overcame, the school's contributions to the remaking of privilege. The reformers had promised unprecedented creativity and fun, and yet daily life at the school turned into a lot of recognizably rote behavior. They believed they were opening the school to the world but in several highly problematic areas educators and, in particular, privileged parents worked to seal it off. They hoped to overcome social division but ended up with a system that removed many of the most uncomfortable underprivileged. They quickly became much like the versions of the institution that they aimed to reinvent, and helped remake many of the very social divisions they hoped to mend. How can it be, that in a

society that prides itself on efficiency, Americans keep reinventing systems that routinely fail to fulfill their social promises?

One of the most illuminating books that I read while grappling with these questions focused not on education reform but instead on the "development industry" in the country of Lesotho in Southern Africa, James Ferguson's classic ethnography *The Anti-Politics Machine*.[3] The resonances were striking: round after round of "development" projects that came nowhere close to approximating their stated aims, and yet somehow more rounds of "development" were always in the waiting. For Ferguson, who drew heavily on Foucault's (1977) analysis of prisons, the key to understanding the endurance of ineffective "development" projects was to focus not on their apparent "failure" but rather on what "development" projects did accomplish and how. By changing the problematic in this way, Ferguson argued that the primary accomplishment of "development" was not the eradication of poverty, its stated aim, but rather the expansion and entrenchment of bureaucratic state power. Once viewed in this way, "development" appeared to Ferguson as an "anti-politics machine" that, on the one hand, expanded bureaucratic state power, while also, and on the other hand, produced ideological effects that depoliticized that expansion as well as the problem of poverty.[4] All of this, according to Ferguson, happened "behind the backs" of the plans and good intentions of the development workers.

By making a similar shift in perspective, Americans' seeming fixation with new technological and educational remedies also takes on an appearance that differs significantly from "official" ideologies about reform. If we ask what perennial educational and technological interventions do accomplish, instead of continually asking why they so

often "fail," then the enormous amount of money, energy, and affect that are continuously directed into new educational and technological remedies no longer appears as just bad policy or incompetence. For one, perpetual reform clearly maintains, and often expands, industries and investment opportunities that specialize in diagnosing ailments and prescribing new solutions. Perpetual education reform has produced a not so small army of specialists – in academia, think tanks, consulting firms, non-profits, and corporations – whose full-time jobs consist of diagnosing what is wrong with institutional education and prescribing new solutions. Similarly, many technology and media companies, as well as many technological researchers, have long relied on perpetual education reform and other forms of technological solutionism as a stream of revenue and funding.[5] The recurring "failure" of various reform projects and movements does not cause these industries to implode but, on the contrary, helps produce the conditions for further rounds of reform. One project or movement's lack of success is another project or movement's opportunity. This is especially true with education reform because of the role that educational systems play in legitimating the sorting of young people into adult hierarchies. Indeed, it is precisely because a project or movement "fails" to overcome entrenched hierarchies that other reformers can produce a critical diagnosis of what went wrong and propose alternative remedies. In this way, reform industries perpetuates themselves with a seemingly historical, critical, and scientific edge, but they do so without asking more fundamental questions about whether educational and technological remedies can realize the social transformations that they continually promise.

Like Ferguson's account of the "development industry," the perpetuation of new technological and educational remedies for entrenched social problems also produces ideological and political effects, but in a somewhat different way than Ferguson suggests.

For one, and like Ferguson's account, all these efforts are strongly sanctioned by moral imperatives – to eradicate poverty, to fulfill democratic ideals about equality of opportunity, to expand economic opportunities, to unleash new possibilities for creative expression, and so forth – and, as such, it is incredibly difficult to challenge "development," or education reform, or socially-oriented technology interventions as enterprises without also seeming to reject the values that legitimize their existence. It is much easier to identify problems with specific projects while leaving faith in the larger enterprise, and hence the values that such enterprises officially represent, intact. Of course this is a false choice, but the conflation of enterprises and the values that legitimate them makes pointed critiques of the former quite difficult. Moreover, technocratic discourses about "development," educational reform, and technology design tend to cast each of these endeavors in instrumental and hence apolitical terms.

Yet, and unlike Ferguson's account, it would be a mistake to characterize education reform and technological solutionism as simply another "anti-politics machine." For one, debates about both education reform, and the social implications of new technologies, are often *highly* public and politicized, much to the chagrin of many of the people who specialize in these professions. Indeed, professional reformers and technology designers often see both politics and public anxieties as inhibitors of their success. Instead, the tremendous amount of money, effort, and affect that is continually directed towards education reform and technological solutions do not appear to function as an *anti*-politics machine but rather as a politicized buffer zone that absorbs and stabilizes volatile energies of discontent while leaving the sources of those volatilities intact. In liberal democratic societies, debates and struggles over both school reform, as well as the utopian or dystopian role of new technologies in social life, provide a sanctioned, personally

meaningful, but also often structurally unthreatening way for citizens to participate in public-democratic life. While ruling groups undoubtedly benefit from this absorption of critical energies, and while many elites play an outsized role in shaping the terrain of these debates and struggles, it is far too simplistic to suggest that elites, or any other unified subject, control the strings. As Ferguson rightly pointed out about the development industry, we cannot look at what failed interventions accomplish and then infer that the resulting product – the stabilization of politically volatile energies, for example – is the plan of a unified actor, and thus that all those who engage in development projects are somehow conspirators of the state, or of capital, or of technoscience, or whatever.

Yet Ferguson's machine imagery is also limited in that, while it rightly decenters accounts that figure reformers as conspirators, it instead casts them as cultural dopes.[6] Those who do the work of reform, from the perspective of Ferguson's problematic, appear as cogs in the machine, helping to advance and entrench state power, but doing so "behind their backs."[7] In the case of the Downtown School, a puzzle that remains insufficiently addressed by Ferguson's machine imagery is how reformers who meet morally sanctioned calls to improve the world often manage to sustain confidence in the emancipatory potential of their remedies despite having some knowledge of recurring "failures," witnessing the ineffectiveness of their own efforts firsthand, and often helping to remake the ailments that they aim to mend. I find it too facile to say that these unintended "instrument-effects" simply happen behind their backs, just as it is too facile to suggest that such effects are reformers' "real" but concealed intentions. While the dynamics by which reformers contribute to the entrenchment of power relations despite their best intentions will undoubtedly vary according to the contingencies of different projects,

aspects of the lines of analysis developed in this book may well be applicable in other cases. I want to be clear, however, that in stating the possibility of broader applicability I am in no way proposing a generalizable model that can be impressed upon situations irrespective of their historical and cultural contexts. Generalizations and models lie at the core of standard reformist analysis and thus overlook the very contextual realities that this book has attempted to bring to the surface. Ultimately, I leave it to others more knowledgeable than I am about the contingencies of other reform endeavors to assess whether aspects of the processes that I have identified at the Downtown School may also operate in these other cases. What follows is a provisional attempt to knit together the various lines of analysis that this book has developed into a process I call fixation. Fixation, as this book has been developing the notion, can be understood as an open-ended social process that tends to sustain itself through the interweaving of four key processes: remedial bracketing, torqueing, stabilizing, and sanctioned-counter practices.

## Remedial Bracketing, Torqueing, and Stabilizing

In the design phase of their planned intervention, the reformers relied on simplifying resources and assumptions in order to make the worlds into which they aimed to intervene intelligible and seemingly transformable with the remedies they had on hand and were developing. Much like the adage about the person with a hammer, the remedies on hand "bracketed" how reformers and their supporters imagined the worlds into which they aimed to intervene and the transformations they hoped to catalyze. This remedial bracketing allowed reformers to both imagine and plan their intervention and to argue for the intervention's relevance to themselves and potential supporters. Remedial bracketing directed intense attention towards some aspects of the worlds that reformers were likely

to encounter, but it also produced blind spots and distortions of just about everything that could not be manipulated with the proposed remedy. In this way, the reformers remedial bracketing was akin to Scott's (1998) famous analysis of "state simplifications," as well as Brown and Duguid's (2000) and Dourish's (2007) analysis of the limits of technology design, all of which produced "tunnel vision."[8]

The key simplifying processes that contributed to the reformers' remedial bracketing were generalization and substitution. In order to demonstrate relevance to themselves and potential supporters, the reformers aligned their project with, and hence helped construct, efforts to fix generalized problems that were widely thought to represent the diverse concerns and yearnings of the people they aimed to help. These generalizations were issues of broad concern in public-political debates, issues such as economic inequality, globalization, and technological change. While alignment with these generalized matters of concerns helped attract support and legitimacy for the intervention, doing so also created a problem for reformers since general problems could not be handled and transformed by the concrete remedies on hand. As such, reformers engaged in a second major simplifying process: they substituted problems that they could attempt to fix and transform for the abstracted problems that had helped garner support and legitimacy. These substitutions invited little critical attention because they were rooted in widely held assumptions, such as the emancipatory and developmental potential of schooling, and the history-making power of new technologies. For example, the reformers routinely substituted diagnoses such as the "achievement gap" or the "participation gap" or "conventional schools are boring" for more general political concerns over "unequal opportunities," even though the former were substantial reductions of the latter and the latter was already an abstraction of the diverse ways in which the people they aimed to

help were coping with unequal historical arrangements. Often, the remedial problem was conflated with the broader problem and neither problematization provided much insight about how differently positioned people were trying to make their lives in the world.[9] Through these processes of generalization and substitution, the reform project moved forward as a promising concrete remedy for the diverse concerns that the broader issues problematized.

But as soon as reformers attempted to launch their intervention, a tangle of turbulent forces that had been overlooked and distorted by remedial bracketing perforated the project and began torqueing it in unexpected directions.[10] They had anticipated that the school's "game-based" pedagogy and focus on the "making" of media technologies would "recruit" enthusiastic participation from "digital kids," but it quickly became apparent that many students' interests and concerns lay elsewhere, that the innovative aspects of their intervention primarily appealed to boys with creative professional parents, and that many other students had their own ideas about learning, identity, technology, and fun (chapters 4 and 5). They imagined that their progressive intervention would allow students unprecedented creativity and agency, and many privileged parents were drawn to the school for these virtues, and yet many of these same parents demanded that educators prioritize discipline and highly scripted activities over playful and extemporaneous fun (chapter 6). They had imagined a school that would be open to all and connected to the world, and yet parents, and especially privileged parents, pressured educators to seal it off (chapters 3 and 6). They had hoped to resist the "testing regime" and other competitive processes by which educational systems legitimate social selection, and yet parents encouraged educators to conform to institutional standards so as to help their children gain advantages in these contests (chapters 4 and 6). In short, they subscribed to the

commonsensical view that schooling was a mechanism of opportunity, but in doing so they mostly overlooked how students and families faced institutionalized schooling as a competitive contest that mediated access to the limited factions of adult society that "win" a middle-class life. They were, to put it frankly, blind to their own role in the reproduction of relations of privilege, and particularly class relations.

These torqueing forces destabilized not only reformers' plans but also the project itself, creating apparent chaos and urgent dilemmas about how to respond. In theory, these dilemmas were moments when reformers could have overcome some of the limitations of remedial bracketing – they could, for example, have attempted to trace the social and cultural sources of these torqueing forces so as to better understand the worlds into which they were intervening – and to some extent some reformers did begin to reexamine aspects of their assumptions in these more expansive ways. But the dominant tendency was not so much to reexamine the premises of their remedy as to engage in a much less ideological form of fixation: they searched for resources that would help them stabilize the project against the volatile torqueing forces described above. Palpably worried that their project could imminently and embarrassingly collapse, reformers felt they had to act quickly, and they looked for stabilizing resources wherever they could. There were some deliberation about what to do, but the imperative to quickly establish order took precedent. Ironically, many readily available resources and techniques for stabilizing the project came from established versions of the remedies that reformers aimed to supplant. With the help of various specialists, and drawing on their own experiences with schooling, reformers and educators rearranged classrooms into ordered rows, instituted strict "zero tolerance" policies, ratcheted up punishment and discipline, increased surveillance by educators, and scripted students' activity into ever finer increments at

nearly all points of the day (chapters 4 and 6). Reformers also tried to stabilize the project by forging alliances with powerful locals, which in this case were primarily privileged parents, even though these locals in no way represented the interests of all of the people for whom the intervention had been designed. Powerful outsiders became influential insiders in large part by stoking reformers' fears of collapse while simultaneously offering relief in exchange for concessions and power sharing (chapter 6). While the affixation of these resources helped stabilize the project and ease anxieties about imminent collapse, doing so did not allow reformers to fulfill their well-intentioned goal of mending the more general problems that had morally legitimated the project. Instead, their attempts to stabilize the project often transformed the "cutting-edge" remedy into something much more familiar, and familiarly problematic from the standpoint of substantive social change.

Curiously, many reformers' managed to maintain confidence in the novelty and transformative potential of their remedy, at least for a while, even as they made their project more and more like canonical versions of the institution. Reformers were able to mostly overlook this tension in part because many of the stabilizing resources that they deployed were canonical and hence unremarkable, especially to experienced reformers and educators. Experienced reformers and educators tended to classify these stabilizing resources not as part of the innovative treatment but rather as "classroom management" techniques, a separate precondition of treatment, and novices, including myself, learned to make similar distinctions as they became more experienced reformers and educators (chapter 4). Additionally, a spatialized division of labor, as well as asymmetrical relations of power across this division, separated those who designed the remedy – professional media technology designers, scholars, officers from foundations, and professional

educational reformers – from those who executed it on a daily basis – teachers and other educators, support staff, and the principal. The former held power over the latter but was also largely absent from the messy business of making the intervention run, an important aspect of which involved the authoritative exercise of power over some of the people the intervention had been designed to help. In doing so, some aspects of the remedy, which will be discussed in more detail shortly, continued to appear to many of the reform project's planners and supporters as novel and potentially transformative, while well-established practices of discipline and control became part of the taken-for-granted background of executors' everyday routines. Reformers were also able to reconcile tensions in their partnerships with powerful locals because such partnerships were legitimated by more general assumptions about the virtuous character of "local participation," or, in the case of schooling, "good parenting." While reformers were often torn about forging these partnerships, they nevertheless tended to accept them since they did not feel that their moral project could endure and retain its status as an innovative model of reform without this outside support, and they were probably right (chapter 6). Finally, rhetorics about individualism and market-like consumer "choice" helped reformers disassociate their remedy from some of its divisive effects by attributing responsibility for those effects to the seemingly apolitical preferences of families. Most people, including many of the parents of students who left the school, did not so much challenge the school for entailing inherited biases as suggest that departing students had not been a "good fit" for the school (chapter 6).

The processes discussed thus far provide an account of how reformers managed to help remake the structural relations that they aimed to transform, not behind their backs, but often in plain view. But the account thus far does not yet offer any insight about how

enthusiasms for the novel promise of the remedy were continuously regenerated. The maintenance of enthusiasms depended not only on the practices of overlooking discussed above but also on the production, documentation, circulation, and ritualistic celebration of practices that appeared to fulfill the remedy's novel potential, practices that I have been referring to as sanctioned counter-practices.

## Sanctioned Counter-Practices

Optimistic feelings about the innovative and moral character of the project were in part constructed and maintained by orchestrating, documenting, and ritualistically staging celebrations of activities that approximated reformers' idealized plans. Many of these sanctioned counter-practices were mostly stylistic transformations of canonical practices, such as using unconventional terminology for courses, exams, and grading. For example, reformers instructed teachers to tell students that a paper and pencil test that was meant to assess students' prior knowledge of fractions was actually an application to a code-breaking academy, or to grade students according to the familiar rubric of five ranked categories, with plusses and minuses for each, but to call these categories things like "master" and "apprentice" rather than "A, B, C," and so forth (chapter 4). Other sanctioned counter-practices, such as the project-based "Level Up" period at the end of each trimester and the school's after-school programs focused on media production, were more substantively unconventional but were either relatively fleeting or carefully contained into circumscribed periods and spaces (ibid). To maintain the sense of novelty, reformers continually updated these sanctioned counter-practices, and new technologies often contributed to this sense of novelty by playing a starring role. In practice, sanctioned counter-practices played a relatively minor role in the day-to-day routines of

the project, especially when compared to the practices of fixation described above, and their role in daily life diminished even further as the project aged.

Yet sanctioned-counter practices played an outsized role in keeping the project going. Sanctioned counter-practices were the principal content when reformers told stories about the project to themselves and various supporters and potential allies, including parents, funding agencies, other reformers and practitioners, governmental officials, corporate partners, academics, journalists, and even the general public. At the Downtown School, showcases, festivals, assemblies, ceremonies, publicity materials, wall decorations, websites, conference talks, email updates, social media posts, and tours for prospective families, journalists, government officials, academics, designers, and officers from funding agencies all routinely featured, and typically celebrated, the school's sanctioned counter-practices. By contrast, the canonical practices discussed above were almost never featured in these ritualized self-representations of the project. As representations of these sanctioned-counter practices circulated, they not only helped legitimate the moral project in the eyes of allies upon whose support the project depended, but they also helped construct idealizations of the project as a cutting-edge model of reform that could and should be generalized.

Of course, such selectively cheerful self-presentations are hardly surprising. As the sociologist Howard Becker bluntly put it, organizations often tell lies about themselves to outsiders.[11] Yet it would be a mistake to interpret the outsized attention that reformers gave to sanctioned counter-practices as merely an attempt to conceal what they were really up to. At the Downtown School, the ritualistic staging, documentation, circulation, and valorization of sanctioned counter-practices over everyday routines did not so much

conceal reformers' "real" intentions as help reformers and their supporters realize the collective experience of having good intentions and being cutting-edge. One consequence of constructing these enthusiasms was that it helped reformers secure wider support and legitimacy for the project, but it only did so because many reformers sincerely believed that they were constructing a project that was both innovative and progressively transformative, and also because many others wanted to believe the same. The vignette at the opening of chapter 2 illustrated this phenomenon playing out. The television production crews, like nearly all visitors to the Downtown School, focused on the school's unconventional features: students designing video games, the "immersive embodied learning environment," the "game-like" pedagogy, students as active and creative "makers" of media technology, and so forth. But to do so, the television crew had to extract students from the places and activities where they spent most of their time while at school: classrooms with conventional power relations, highly scripted pedagogic routines, zero tolerance disciplinary policies, and so forth. Reformers could not fully control the story that the journalists would construct, but like nearly all the other journalists who visited the school, these journalists represented the school as a cutting-edge and hopeful reform project for the digital age. Similarly, at the end of each trimester the reformers and educators invited parents and supporters to attend a celebratory event that was presented as a culmination of not only that week's special "Level Up" period but also the trimester as a whole. While Level Up was distinctively unlike the school's normal routines, and while educators shrunk Level Up as the school aged and even replaced one trimester's Level Up period with activities meant to prepare students for state exams, the festive celebrations of Level Up at the end of each trimester placed students' and their creative productions on stage for parents and supporters, many of whom documented the occasions with photographs and videos, as did the reformers.[12] Such stagings of

sanctioned counter-practice were able to exert such a moral and normative force not because reformers set out to dupe parents and supporters but because they appeared to verify both insiders and outsiders' hopeful yearnings. By sharing their enthusiasms with broader communities and networks, many reformers and advocates helped convince each other that now was a moment when transformative change was possible, that is, that this time was different.

The staging and pubic valorization of sanctioned counter-practices was also powerful because it helped reformers ease a management problem for organizations that see themselves as unlike canonical bureaucracies. For the project to endure, reformers needed to facilitate compliance to bureaucratic strictures, and the organizational authorities that enforced them, from enough subordinates, in this case students, many of whom were also inclined to see themselves as unconventional and non-conformist.[13] By helping these (often male) subordinates work through gendered, classed, and aged tensions between conformity and non-conformity, the staging and valorization of sanctioned counter-practices helped produce a faction of subordinates who were not only compliant to the demands of the organization but who were often also enthusiastic advocates for the project's novelty and worth. At the Downtown School, boys from creative professional families, in particular, played this role. Because celebrations of sanctioned counter-practices emphasized how the Downtown School was an aberrant version of schooling, these boys could see themselves as unconventional and non-conformist even as they mostly adhered to organizational strictures and educator directives, which, as discussed above, were highly restrictive and regressive.[14] Again, reformers did not see the celebration of sanctioned counter-practices as unduly manipulative or duplicitous; rather,

they felt they were constructing an organizational environment that was uniquely attuned to the interests and sensibilities of contemporary youth.

While the staging and celebration of sanctioned-counter practices helped sustain reformers' enthusiasms for their remedy, and thus helped secure broader support for the project, the valorization of sanctioned counter-practices also produced effects that ironically thwarted reformers' larger philanthropic aims. Sanctioned counter-practices were unique in that, on the one hand, people in positions of authority recognized and valued them positively, while, on the other hand, they had not yet been standardized, codified, and instrumentalized as "best practices." As such, those who were best positioned to adapt to authorities' changing understandings of sanctioned counter-practice gained institutional recognition and rewards without authorities in the organization or conforming subordinates tending to see those rewards as socially produced.[15] As just noted, subordinates' successful participation in sanctioned counter-practices tended to be seen by both institutional authorities and subordinates who partook in them enthusiastically as expressions of individual interests and talents. But since sanctioned counter-practices tended to be modeled after the cultural practices of currently successful individuals and groups – in this case, professionals who worked in esteemed "creative industries" – those most inclined and able to adapt to these constantly changing ways of being acceptably unconventional within the organization also tended to be those who were most socially proximate to the model groups and their practices. As such, the subordinates who were best positioned to adapt to organizational authorities' constantly changing understandings of permissible non-conformity tended to be those who were already privileged: in the case of the Downtown School, boys from households with creative professional parents. And it was not simply that persons and groups that

were more socially distant from the exalted model groups were often disadvantaged or disinclined to adapt to changing sanctioned counter-practices, although that was often true, but it was also often the case that authorities overlooked or stigmatized the innovative counter-practices of persons whose communities and networks were not well represented in the exalted model groups. As such, many persons from non-dominant groups either felt that they were not well matched for the "cutting-edge" project, or they tried to comport themselves to the celebrated models of sanctioned nonconformity but from a significantly disadvantaged position. In either case, the staging and valorization of sanctioned counter-practices helped legitimate the remaking of hierarchical social divisions, even though reformers celebrated these practices in part because they were assumed to have the potential to mend those very divisions.

## What can be done?

I do not want to suggest that there are easy remedies for the problems that I have been detailing. This is also not a book that purports to systematically explore and develop alternative ways for addressing the political and economic challenges of the current historical moment, an urgent and delicate endeavor, to say the least. Yet I also want to caution against indifference or a cynical "nothing can be done" response, both of which only further reinforce the status quo. Untethering aspirations for emancipatory social change from educational or technological remedies need not lead to pessimism. Rather, doing so can also open up political possibilities, especially during a broader "crisis in authority," to quote Stuart Hall's (1987) reading of Gramsci.[16] Ultimately, the question of "what can be done" depends on how different potential responders are differently

positioned, which is to say that everyone exercises different political responsibilities and possibilities throughout their ongoing participation in social life.[17] As such, the ideas that follow are not meant to be general prescriptions for social change; rather, they are speculations about some of the political implications that this book may have for readers who are engaged in practices similar to those addressed by the book. Such speculations are necessarily partial and I offer them in the spirit of stimulating further conversations and experimentations, not as normative dictates.

Those of us who have access to academic and policy debates can use these opportunities to try to problematize and delegitimize sedimented ideologies and policies that help sustain relations of domination, we can work toward developing and legitimizing alternative accounts about what is happening and how, and we can work with others to imagine progressive possibilities about how things could be different. For example, what might happen if academic and policy debates about "inequality" *temporarily* took education reform or technological solutions off the table as remedies? Where else might people's frustrations with the status quo and yearnings for change be directed? Could a refusal to place the burden of social change on educational and technological solutions help bolster more direct and forceful challenges to, say, the power of capital in relation to labor, or to the legitimacy of an increasingly global plutocracy's wealth and power, or to the recoding of an exclusionary and racialized masculine elite in many of the celebrated fields of the "new economy," or to the claim that higher taxes and efforts at redistribution are politically impossible, to name only a few? I say "temporarily" because organized educational interventions and technological mediations will inevitably play a role in efforts at systemic change, but it seems to me that we can only work toward developing and implementing emancipatory educational and technological forms and practices if we

first start with emancipatory struggles and only secondarily ask questions about the possible roles of education and technology in those efforts. Doing so privileges questions about emancipation for whom, from what, by what means and resists the tendency to reduce these questions to ones about education or technology. It could also lead to more systemic diagnoses about the sources of the frustrations that many people feel with a status quo. It could, for example, help destabilize what has increasingly become a marketized, but also fragile, common sense for many people.

Let me elaborate on one such possibility. A lesson that I took from this project was that nearly all families – comparatively privileged and underprivileged alike – were understandably frustrated, and even exasperated, by the precariousness they felt as they tried to rear their children for a meaningful and secure future. Many parents bemoaned the intense pressures: the three-thousand applicants for a public middle school with just over one hundred seats, the necessity to leave the house at four in the morning and wait in line for hours so that their child could attend a quality government-supported summer program, the ways in which intense competition in selective schools produced neuroses in their children, and so on. While families experienced these pressures in different ways, many of their frustrations were partly generated and sustained by a more general hegemonic ideology, namely, the assumption that we have no choice but to compete against one another in order to prove our worth, or, more positively, the invitation to make our lives and personalities through idealization of market relations. These shared frustrations across difference showed cracks in sedimented common sense and thus were seeds of political possibilities. And yet, these shared frustrations did not tend to lead to the forging of solidarities across difference; rather, many families attempted to use their comparative advantages to secure and enclose a scarce resource. The more emancipatory

political possibilities were not pursued in part because many families did not have access to counter-hegemonic resources and perspectives that directed critical attention and energies towards the more general sources of their discontent. Without a more direct challenge to the legitimacy of the races in which we are all expected to compete, I fear that most educational and technological remedies will remain trapped in the service of reigning orders, functioning as palliatives and buffers rather than counter-forces. Without starting with direct challenges to hegemonic common sense, without placing the competitive processes that divide at the center of public debates, I fear that the best question that reformers will continue to ask is how to make the playing field more level. The result, as this book has attempted to demonstrate, is fiercer and fiercer competition amongst families as they try to "beat the crowd," sharpening social divisions, and the increasing concentration of privilege in fortified networks of enclaves.[18]

But the book also draws attention to an important limitation to these more intellectual modes of political struggle, namely, an institutionalized tendency to first divide intellectual activity from practical activity and to second divide academic discussions into realms of specialization in which correspondents become focused on rather narrow matters of concern while simultaneously yearning for political-moral influence on the "bigger issues." Counter-hegemonic academic perspectives too often become divided from each other, and from potential political-theoretical alliances, in part because those of us who work in academia largely make our careers and lives through institutional arrangements that encourage division. Resisting these pressures is not just a matter of once again calling for inter- or trans-disciplinary collaborations, nor of creating organizational units within universities that include scholars from various backgrounds, but also of developing and legitimating *modes of living* that attempt to resist and reverse

pressures towards bracketing and division. Another lesson of the case examined in this book is that well-intentioned people, including left-leaning academics, can exercise a seemingly progressive politics while simultaneously overlooking how many of their activities contribute to the remaking of hierarchical divisions, and especially class divisions, although these clearly intersect with other structures of privilege such as gender and race. Blindness of this sort is not merely a matter of intellectual divisions within progressive debates, although the marginalization of social class as a topic of concern for many years undoubtedly did not help.[19] Rather, these forms of class blindness are largely produced because many professional intellectuals with progressive political sensibilities and cosmopolitan cultural orientations, myself included, live much of our lives in classed enclaves similar to those described in this book. Many of us attended classed colleges and graduate schools, we often live in classed and often racialized neighborhoods, we work in classed institutions, we often send our children to classed schools and after-school programs, we typically engage in classed forms of leisure, practice classed forms of consumption, and so on. And yet, even from these positions of relative privilege, many of us are deeply concerned and anxious about how to make meaningful and secure futures for our families and ourselves. How, then, to respond? One option is to make concerted efforts to cross and perforate the borders of the enclaves we inhabit, that is, to form real alliances and relations with people who are less privileged and who are also, and more so, experiencing risk and precariousness at the hands of contemporary political and economic arrangements. And I am not just imagining doing so in our "field work," or as an aspect of university "service," but also in our lives more generally. As we all know, a tendency amongst many intellectuals with progressive political commitments is to align with a progressive cause and ritualistically decry "neoliberalism" while simultaneously engaging in countless practices that help remake symbolic and spatial divisions between our lives

and the lives of many people who are not nearly as privileged and yet live close by. I do not pretend to be immune from such practices, nor do I think that what I am recommending is anyway easy, but I am eager to take part in a more reflexive assessment of not just how our ideas entail structural biases but also of how the ways we live our lives limit our abilities to contribute to progressive social change. And, as this book has shown, such an undertaking need not be limited to those of us who work in the academy; rather it extends to a broader class fraction of parents who work as professionals, hold progressive political commitments, and yet face real intellectual and moral dilemmas as they face the problem of schooling and the more general conundrum of how to make meaningful and secure futures for their children possible in a competitive capitalist society.

For those who make their livelihoods in part by educating students, which include most of us who work as academics, the current possibilities are increasingly sobering and yet several strike me as worthy of greater exploration. For one, we can be more honest with students about the ways in which the educational institutions of which we are a part help produce hierarchical divisions within and beyond. We can admit to students that we live in an extremely hierachical world, and that many people increasingly treat schooling as an instrumental mechanism for sorting people into these hierarchies, but that "success" in schooling, and thus often in the world, is not a reflection of merit. We can confess that there will be a few "winners" and many "losers" in this game and that our collective activity is playing a role in producing those outcomes. We can even continue to say that persons from disadvantaged backgrounds have a shot to become one of the lucky few through schooling. But if we do so, then we should also say that most people are substantially disadvantaged in their attempts to "win" this race, and that no matter who

"wins" the system guarantees the production of many "losers." Such practices of self-critique could destabilize the legitimacy of the institutions on which we depend for employment, and, as such, I imagine it would be difficult for many teachers to enact such practices without risking their jobs. But doing so could also help create new opportunities for teachers and students to imagine and experiment with less competitive and divisive modes of doing institutionalized schooling. I also suspect that many students would appreciate and respect the candor, especially those who already have a sense that the game is not arranged in their favor.

In a related vein, educators can try to help cultivate students' already developing political and critical sensibilities, although, again, educators' increasingly subordinated status in educational institutions makes doing so extremely difficult in many cases. It seems to me that a helpful way of taking such an approach is not so much to teach students about political institutions and problems that exist elsewhere as to help students see how the issues and struggles that they experience in their daily lives are more extensively and historically structured and thus are not matters of personal inadequacy. Doing so requires educators to take students' interests, concerns, and dilemmas seriously, and to avoid the temptation to interpret resistance narrowly as a deviance. Often, it seems to me, educators attempt to cultivate students' political sensibilities by starting with a political or social issue that adults care about and then trying to attach that issue to students' lives. What seems less common are attempts to start with what may at first appear as the trivial or silly issues that concern many students – status amongst their peers, gossip, boredom, conformity, dating dilemmas, and so on – and then working with students to collectively develop an understanding of how those issues are historically and politically structured. Such an approach is even more difficult when part of what concerns some students is

schooling itself. But as Willis (1977) argued, counter-school practices by youth, and especially by youth from non-dominant groups, are often also an expression of partial insight into the injustices of the broader historical arrangements in which they are entangled. But such insights, and the possibilities for broader solidarities that they could help engender, are often also hindered by limitations such as sexism, racism, heteronormative status systems, and so forth. What is thus needed, it seems to me, are not ways of trying to "correct" deviance through discipline but rather efforts that recognize and attempt to expand students' budding critical insights in part by helping them see their own role in producing limiting divisions. Too often correction becomes an end in itself and many students understandably respond to these exercises of power antagonistically, as this book has shown.

For those who design, develop, and deploy new technologies, lessons from the field of science and technology studies – where scholars have long developed constructs that draw attention to how politics are inscribed, and thus made invisible, in designed artifacts and infrastructures – offer helpful guidance.[20] Science and technology studies scholars have developed important theoretical challenges to both technological determinism and non-materialist theories of social life, and, as such, their lessons would be of much help for those who aspire to design new technologies in the service of emancipatory social change. Similarly, proponents of "participatory design" have long experimented with practices of collaborative making that attempt to avoid the pitfalls of high-modernist design interventions, and more recent movements around "reflective design," "critical design," and "adversarial design" have begun to explore how designed artifacts can make matters of concern explicit, rather than concealed.[21] While all of these movements bring much needed perspectives to the technological chauvinism that animates so many technological

interventions, it seems to me that many of these works still tend towards aspects of fixation in that they can overestimate the role of designed artifacts in processes of social and political transformation or reproduction.[22] While these perspectives offer a powerful challenge to technological determinism, and high-modernist ideologies more generally, they can still slip into a sort of prioritization of design, thus overlooking and underestimating many of the other factors that contribute to and inhibit substantive change. Following Suchman (2011) and Domgínguez-Rubio & Fogué (2015), what appears to be needed is not just a consideration of how artifacts and the built environment inscribe or express politics, but also greater attention to how artifacts do political work through their relations with the other activities and entities with which they are entangled in particular situations, what Suchman refers to as "artful integrations."[23] Once critical attention is expanded in these ways, then the role of different technologies in differently situated political struggles will hopefully become clearer and more fruitful.

Again, all of these ideas are partial, and they are intended to be generative, not prescriptive. My hope is that they can contribute to ongoing efforts to resist cynical responses to the question of, "what can be done?"

## Unraveling Fixations

Directing intense attention and curiosity toward aspects of the world is not in itself a bad thing, nor obviously are yearnings to fix broken worlds. While I was nearing completion of a draft of this book I saw the British artist Tacita Dean give a presentation on her artistic process, and I took special note when Dean repeatedly invoked the term "fixation"

to characterize the way in which she had delved into several projects. Dean told, for example, of how she had been "fixated" by a photo of young girl who stowed away on a ship from Australia to England in 1928, and, in another occasion, of how she had been "fixated" by the story of an amateur British sailor, Donald Crowhurst, who entered a contest to circumnavigate the globe in 1968, likely tried to fake circumnavigation, but died, probably by suicide, in the process. What struck me about Dean's self-described fixations was how they led her down such markedly different routes than the fixations that this book has examined. Dean's fixations were also intensely attuned to minutia of the worlds she encountered, but the focus of her attention constantly moved outward and back again along various unanticipated pathways of intersection as they revealed themselves, often in surprising ways. To me, Dean's fixations seemed to unravel, and not in a chaotic sense, nor in the sense of bringing closure to the puzzle that had sparked her initial interest. Rather, they unraveled in the sense of observantly following and documenting interwoven and interlayered rhythms of activity as they crossed her attentive explorations.[24] Dean's fixations, and hence her self and her works, became more complex, more expansive, more historical, and yet still partial and concrete as she attentively explored the open-ended relations that unraveled in front of her.

Dean works as an artist and not as an academic or an activist concerned with questions of unequal relations of power, but her process provides clues as to how a critical scholarly or activist practice could be undertaken without resorting to the narrowness of view that so often limits such endeavors. Dean's descriptions of her process reminded me that "fixations" can move forward in both outward and backward-looking concrete ways, rather than inwards in ways that bracket off much of worlds before and beyond. It struck me that such extroverted fixations help produce non-reductive modes of understanding

and non-prescriptive possibilities for political action. By contrast, this book has explored well-intended processes of fixation that turned inward, bracketing attention to that which could be manipulated with the remedies at hand while relying on idealized simplifications to "connect" those efforts to the worlds of which they were already a part. Such narrowness of focus produced its own apparent chaos when the world did not respond as anticipated, and in these conditions of apparent disorder, reformers did not so much look to the past, nor move outward along previously unseen pathways, as close off possibilities for doing so. Facing the prospect of collapse, the imperative to quickly produce stability predominated, all the more so because the project was highly celebrated as "cutting-edge" and legitimized in moral terms. Under such conditions, the means for producing order were ancillary and small moments of "innovation" were exalted. In this way, people with the best of intentions engaged in practices that helped not only refix the institutional forms that they aimed to supplant, but also remake the very divisions that they yearned to mend.

## Notes

[1] From *Waiting for Godot*. Grove Press, 1994. P. 91.
[2] See chapter 2.
[3] Ferguson (1994).
[4] Ibid: 254-7.
[5] See Buckingham (2007), chapters 1 and 2.
[6] On the tendency of theorists to figure ordinary people as "dopes" see Hall (1981) and the Introduction of this book.
[7] The determinism comes from Foucualt (1977), and also, it seems to me, from Weber's ([1905] 2010) famous metaphor of the iron cage with its "specialists without spirit."
[8] See also Suchman (2006) for a rigorous ethnomethodological critique of the role of plans in technology design and cognitive science more generally, as well as Garfinkel (2002: 197-218).
[9] In this way, simplifying resources produce what both Scott (1999) and Brown and Duguid (2000) refer to as "tunnel vision."
[10] I thank Bowker and Star (1999) for introducing me to the imagery of torqueing pressures.
[11] See Becker (1998: 90-93).
[12] See chapter 4.
[13] Many supposedly "flat" organizations of the "new economy" also face a similar tension. For a critical assessment see Turner (2009) and Kreiss, Finn, and Turner (2010).
[14] See chapter 5 and Sims (2014b).
[15] Bourdieu's notion of "symbolic capital" has influenced my analysis of this dynamic.
[16] Hall was advocating for the relevance of taking an Gramscian perspective on Thatcherism in the late 1980s and early 1990s, but his call seems to ring all the more true in the early decades of the new millennium. The crisis of authority, which according to Hall's reading of Gramsci is a crisis of hegemony and hence of the state, is especially acute in the United States after 9/11, the wars in Afghanistan and Iraq, and then the 2008 financial collapse and subsequent great recession, even though the seeds of such a crisis have been developing for decades.
[17] See, for example, Lave's (2012) essay *Changing Practice.*
[18] See Ferguson (2005) on the corporate logics of securitized enclaves.
[19] See, for example, Collins (2009) for an account of how debates over social reproduction largely disappeared during the 1990s.
[20] See, for example, Winner (1980), Latour (1988), Star (1999), Bowker and Starr (1999), Knobel and Bowker (2011).
[21] On participatory design see Simonsen and Robertson eds. (2013), on critical design see Dunne and Raby (2001) and Dunne (2005), on reflective design see Sengers et al. (2005), on adversarial design see DiSalvo (2012).
[22] Latour (2008), for example, argues that "design," broadly construed, has the potential to bring together various controversial and contradictory "matters of concern." While it is not clear that design has the capacity to fulfill this vision, the vision itself is also problematic in that it does not provide an account of how contradictory or controversial matters of concern would be reconciled once made public. In other words, the vision does not address the power relations that shape how various controversies are won, that is, how certain paths, and not others, are pursued. For a similar analysis, see Domínguez-Rubio and Fogué (2015).
[23] Domínguez-Rubio and Fogué (2015) refer to this potential political work as the "unfolding" capacities of design. See Suchman (2002; 2011) on "artful integration." See also Irani and Sims (forthcoming).
[24] In this way, Dean's artistic practice shares much with the modes of conducting empirical-theoretical work that have been recommended by geographers such as Doreen Massey (e.g. 1993) and anthropologists such as Jean Lave (e.g. 2011; 2012), Tim Ingold (e.g. Ingold 2010; 2011), and Anna Tsing (e.g. Tsing 2005, Choy et al. 2009, Gan and Tsing forthcoming).