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Born of Trauma: *Akira* and Capitalist Modes of Destruction

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Images of atomic destruction and nuclear apocalypse abound in popular culture, familiar mushroom clouds that leave in their wake the wholesale destruction of cities, towns, and lands. Mass culture seems to thrive on repeating the threat of world annihilation, and the scope of destruction seems continually to escalate: planets, even solar systems, disintegrate in the blink of an eye; entire populations vanish.

We confront in such images a compulsion to repeat what terrifies us, but repetition of the terror of world annihilation also numbs us to it, and larger doses of destruction become necessary: increases in magnitude and intensity, in the scale and the quality of destruction and its imaging. Ultimately, the repetition and escalation promise to inure us to mass destruction, producing a desire to get ever closer to it and at the same time making anything less

than mass destruction feel a relief, a “victory.” Images of global annihilation imply a mixture of habituation, fascination, and addiction.

Trauma, and in particular psychoanalytic questions about traumatic repetition, provides a way to grapple with these different dimensions of our engagement with images of large-scale destruction. Dominick LaCapra, for instance, returns to Freud’s discussion of “working-through” (mourning) and “acting out” (melancholia) to think about different ways of repeating trauma. “In acting-out,” he writes, “one has a mimetic relation to the past which is regenerated or relived as if it were fully present rather than represented in memory and inscription.”¹ In other words, we repeat the traumatic event without any sense of historical or critical distance from it, precisely because the event remains incomprehensible.

In this conceptualization, the repetitious escalation of violence in the imaging of nuclear destruction entails an acting out of our historically traumatic relation to weapons of mass destruction (WMDs), and especially the atomic bomb. We face today a proliferation of scenarios that replay our fascination with WMDs in the lineage of the bomb—starships blasting planetary systems out of existence, battles for survival in postapocalyptic worlds. But do these scenarios allow us any critical or historical distance from the trauma of nuclear destruction (Hiroshima and Nagasaki) and nuclear escalation (the nuclear testing and arms race of the Cold War)? We must ask if this apparent acting out of trauma affords any possibilities for working through it. This question remains urgent. With many nuclear weapons still poised for launch and with a gradual breakdown of responsibility in chains of command, nuclear holocaust is as much and maybe more of a danger today than ever before.

In Otomo Katsuhiro’s *manga* and anime versions of *Akira*, I find possibilities for a historically grounded engagement with this trauma. There is, in *Akira*, a contrast between two modes of repetition of the trauma of the atomic bomb: a constitutive mode and a generative mode. Constitutive repetition is associated with national identity, the developmental state, and industrial society, while generative trauma is associated with the global city and empire, information society, and disaster capital. Yet *Akira* does not merely contrast these two modes; it imagines a historical passage from one

to the other, in their close association with historical modes of production and destruction and with socioeconomic configurations of war and capital.

The distinction between constitutive repetition and generative repetition differs from that which LaCapra draws between acting out (melancholia) and working through (mourning). Although mourning, unlike melancholia, “involves introjection through a relation to the past that recognizes its difference from the present,” acting out and working through are “intimately linked but distinguishable processes.”² In fact, acting out may create the conditions under which working through a past trauma becomes possible. Similarly, in *Akira*, constitutive repetition creates the conditions for generative repetition. Yet the passage is not like that from melancholia to mourning. *Akira* does not propose a working through, or mourning, of Japan’s history of nuclear trauma. Instead it takes the intensification of acting out of nuclear destruction as the basic condition for the passage into a new era and a new world, a world that eerily anticipates and speaks directly to current configurations of war and capital.

Otomo Katsuhiro, Destroyer of Cities

Otomo Katsuhiro (b. 1954) first set out to destroy Tokyo in his *manga* of the late 1970s and early 1980s. He started this ambitious project rather modestly, blowing up a government building in the short *manga* “Fireball” in 1979 and a large apartment complex in *Domu* (*Domu: A Child’s Dream*) in 1981–82. Prior to these two works, Otomo’s *manga* were largely vignettes, stylistically meticulous portraits of youth and the lower-class denizens of the newly developed areas outside central Tokyo (where Otomo himself resided). But as Otomo rained destruction on the architectural icons of postwar Japanese prosperity and security, the destruction itself brought a new coherence to his narratives.³ It provided a way to retain something of his meticulous, almost clinical attention to the detail of face and character, while linking vignettes into serialized stories that could span several volumes. His six-volume *manga Akira* (serialized 1982–90) is the culmination of this tendency. *Akira* opens with the detonation of a new kind of bomb over metropolitan Tokyo and goes on to detail the subsequent threat posed by this bomb for the recon-

structed Neo-Tokyo. Simply put, mass destruction holds things together. This is the central relation and ultimate paradox of Otomo's work: at some level, destruction is productive, generative, constructive, creative. Destruction is production, and vice versa.

Akira proved equally productive for Otomo's career. While he had already earned critical acclaim for his early *manga* and won a broader audience with *Domu*, *Akira* made Otomo a celebrity in Japan and around the world. The popularity of the *manga*, while still in serialization, gave him the industrial leverage to write and direct an animated film version in 1988, with the highest budget of any Japanese animated film to date. Otomo's icons of urban destruction meshed with the increasing transnational distribution and reception of Japanese popular culture in Europe and North America (where, for the first time, *manga* and anime versions of *Akira* appeared fairly soon after the Japanese release). The popular and critical success of *Akira* internationally marked the beginning of the global boom in anime and *manga* that has continued into the twenty-first century.⁴ As a consequence, *Akira* came to characterize anime for audiences around the world, and *Akira* and its author alike became iconic figures.⁵

Another consequence of *Akira*'s success was the equation of anime with apocalyptic destruction and postapocalyptic worlds. Given the diversity of animation production in Japan, the equation of anime with apocalypse presents a very limited view, and yet there is no doubt that *Akira*'s iconic images of nuclear destruction are what made it amenable to transnational distribution and reception. Both *manga* and anime versions explicitly link destruction and production, war and capital. In other words, there is, in *Akira*, an eerie convergence between what is presented in the "text" and what is happening between the text and the world.⁶ Although Otomo's other works involve scenarios in which worlds are destroyed and (re)produced, it is *Akira* that looms largest in its embrace of destruction as production.⁷ To understand how *Akira* imagines war/capital and destruction/production, we must first consider how its new kind of bomb—the psychic bomb—allows an oscillation between 1945 and 1983, between the "older" atomic bomb and the "newer" psychic bomb.

Otomo's psychic bomb first exploded across the pages of *Young Magazine* on December 20, 1982, with December 6, 1982, its date in the *manga*.⁸

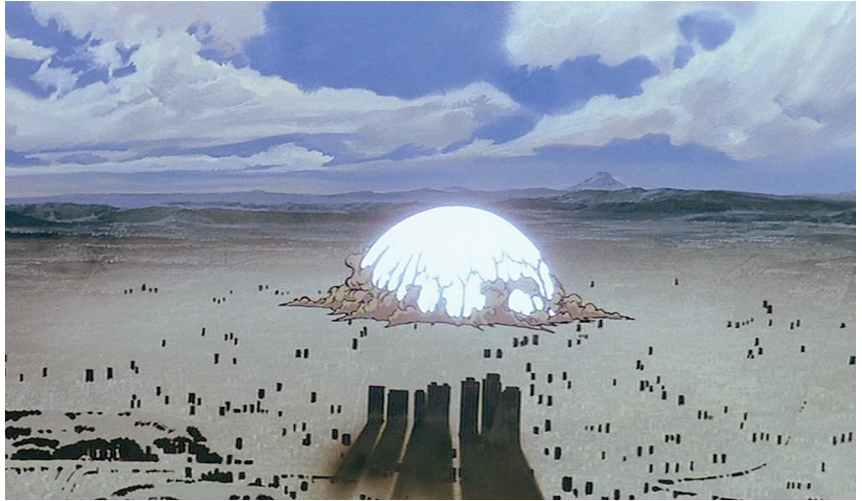


Figure 1 At the beginning of the animated film *Akira* a new kind of bomb—the psychic bomb—explodes in Tokyo

The story then jumps to 2030, to the reconstructed city of Neo-Tokyo. Not only does the psychic bomb explosion iconically repeat the mushroom cloud of the atomic bomb (fig. 1), but the drug-stoked biker boys of Neo-Tokyo repeat the *bōsozoku* (motorcycle gangs or “speed tribes”) that became an icon of youth, violence, rebellion, and delinquency in real-life 1980s Japan.⁹ The animated film opens with the bombing of Tokyo on July 16, 1988—the year of the film’s release. This strategy not only places the nuclear holocaust close to viewers temporally, but it analogizes film and bomb: the anime, like the *manga*, is itself a new kind of bomb. It is a psychic weapon. While the *manga* and anime dates are somewhat different (the action of the film takes place in 2019), Otomo leaves no doubt in either version that the psychic bomb is a repetition of the real atomic bomb of 1945, World War III is a repetition of World War II, and twenty-first-century Neo-Tokyo repeats 1980s Tokyo.

While projecting present society into the future is not an unusual narrative device, it makes for an unsettling double optic, in which we are encouraged to search for difference in repetition. The psychic bomb is at once the same and different. On the one hand, it appears to represent an atomic bomb

on a larger scale, an escalation of weaponry and nuclear destruction. And, like Fat Man and Little Boy, Otomo's psychic bomb has a name: Akira, or Light. On the other hand, Akira the bomb is also a child, one of a group of children whose minds have been experimentally altered to release their psychic powers of telekinesis and telepathy and to enable them to psychically convert matter into energy. Among these children, it is Akira whose abilities have achieved a level of intensity wherein *he* has become a psychic bomb. The psychic bomb is thus a very strange WMD. While it has the capability to repeat the destruction of the atomic bomb, it differs from the atomic bomb insofar as it resides within the human mind, or, more precisely, in a child's mind. Consequently, we do not know whether to fear the bomb or to embrace it.

A similar uncertainty guides the narrative structure. The story hinges on the possibility of reawakening the child Akira, who lies in cryogenic sleep in a vault buried deep below a bomb crater in the heart of Tokyo. Various groups compete to reach Akira first, but with different aims: some wish to awaken Akira for military purposes, some to prevent his instrumental use; still others await Akira's destruction religiously, as the revelation of a new era. The psychic children are presented as a new stage in human evolution; thus the awakening of Akira promises something new. But we cannot be sure if Akira, as a psychic bomb, will present repetition with difference or repetition of the same. He is at once a source of fear and of hope, his awakening a perverse situation in which quasi-nuclear destruction raises expectations for the advent of a new, potentially better era.

There is plenty of evidence for either scenario. In the *manga*, the vaporizing of 1980s Tokyo by the first psychic bomb spurred reconstruction and urban development; by the twenty-first century, Neo-Tokyo has been rebuilt on a vaster scale around the Akira bomb crater, a massive urban sprawl circling an empty center (just as the Tokyo destroyed with firebombs in 1945 had emerged from its ashes on a vaster scale by 1983, and just as Hiroshima and Nagasaki were reconstructed after the atomic bombs). Thus *Akira* inexorably links nuclear destruction and economic reconstruction.

One of the more powerful images of the entwining of destruction and reconstruction in *Akira* is that of the Tokyo Dome, built to cover the psychic bomb crater. Ostensibly constructed for the future Olympics in Neo-Tokyo,

the dome also serves to conceal the signs of destruction. (It also recalls that iconic moment in the postwar economic miracle of real-life Japan: the 1964 Tokyo Olympics.) Beneath the dome, scientists and soldiers are at work analyzing the force of the child Akira. The concave dome (reconstruction) serves as a mirror image of the convex bomb crater (destruction).¹⁰ Destruction and reconstruction appear as inverse, complementary images.

What is more, the scale of destruction serves only to increase the scale of reconstruction: the bigger the bomb, the bigger the reconstructed city. The underlying logic of escalation (of destruction and of production) is reminiscent of the Cold War arms race. *Akira* offers an unusual take on postwar history by implying that arms escalation is inextricably linked to massive urbanization. At the same time, escalation implies a form of traumatic repetition in which our habituation to the terror of nuclear destruction forces an increase in degree of shock. Not only must the catastrophe appear larger in magnitude, but also viewers must somehow feel closer to it. In *Akira* the metropolis itself comes to embody this strange relation to nuclear destruction, in which destruction produces more of the same.

While *Akira* is often situated generically alongside other apocalyptic or postapocalyptic *manga* and anime stories, it differs profoundly in its equation of war with capital, destruction with production, and the arms race with urbanization. The reconstructed Neo-Tokyo of the twenty-first century is but an enlarged version of its 1980s predecessor, with amplified inequalities and magnified hierarchies. The soaring skyscrapers of the *manga*'s Neo-Tokyo exemplify a world of entrenched and apparently immovable vertical hierarchies. *Akira* does not simply revel in destruction, but strives for a critical vision of postwar Japanese economic reconstruction — what Chalmers Johnson, at about the same time (1982), christened “the developmental state.”¹¹

Akira presents the postwar Japanese developmental state as a world in which capital and war work together. Capital reconstructs urban centers in an attempt to stabilize, institutionalize, and enlarge hierarchies of wealth and privilege. War does not break with capital development. It affords capital new purchase, such that capital may extend its domain. Given that the American wars in Korea and Vietnam spurred Japan's economic miracle, it is not a stretch to imagine Tokyo as a world predicated on military destruction and a politics of nuclear escalation. By equating war with prosperity in

this way, Otomo punctures illusions of geopolitical distance and economic prosperity that conspired to make 1980s Tokyo feel secure from the world of nuclear war. And if Otomo Katsuhiro, *destroyer* of cities, is also revered as the *creator* of Neo-Tokyo, it is precisely because his works, especially *Akira*, methodically blur the distinction between modes of destruction and modes of production.

Still, there remains a double optic implicit in the psychic bomb. On the one hand, the psychic bomb is just more of the atomic bomb, with a difference only in magnitude. In this register, military destruction spurs economic reconstruction. On the other hand, the psychic bomb differs qualitatively from the atomic bomb. It introduces a “mentalist” dimension into destruction, as if the capacity for global annihilation had become a psychic faculty of creative destructivity. In this register, destruction does not so much spur reconstruction as promise to generate a new kind of world, to take us beyond the unbearable world in which war and capital work together. Here, world destruction verges on world renewal—and in fact there is a cult in *Akira* (given a larger role in the *manga*), which imagines Akira in terms of a millenarian *yonaoshi*, or “world renewal.”

The mysterious psychic child bomb points toward two different modes of destruction/production. It is a matter of repetition of the same versus repetition with difference. Each mode implies a specific relation to trauma, a constitutive mode of traumatic repetition and a generative mode of traumatic repetition.

Constitutive Repetition of Historical Trauma

After boldly opening with the explosion of a new kind of bomb over Tokyo, *Akira* presents a gang of biker boys encountering the bomb. After speeding down the highway, they arrive at the end of the road and the bomb crater—an enormous empty pit at the center of Neo-Tokyo. Two characters come to the fore: Kaneda, the leader, and Tetsuo, a younger boy who shows signs of rebellion against Kaneda’s leadership.¹² Significantly, the boys are unable to articulate any meaningful relation between themselves and this place where the bomb fell. It is the end of the road, a hole in the city, at once familiar and unremarkable yet somehow puzzling. They turn back.

As Tetsuo races ahead of the others, a child appears before him in the middle of the highway. He swerves, crashes, and the child disappears. Later we will learn that the child is one of the psychic children, escaped from an experimental nursery. This child — a double of the bomb crater itself — is a familiar figure somehow out of place, whose significance remains cryptic, a second puzzling encounter for the boys with the trauma of quasi-nuclear destruction.

Tetsuo's near-fatal encounter with the psychic child catapults Kaneda and the boys into a world of political factions competing to gain access to Akira. No sooner has Tetsuo crashed than a military team appears, evidently in pursuit of the escaped child; they take Tetsuo with them, ostensibly to a hospital. The boys will have difficulties locating Tetsuo and, when they do, they will find him greatly changed. The encounter with the psychic child and military scientists unlocks Tetsuo's psychic abilities, and he begins to transform or mutate into an exceedingly powerful and destructive being.

What is important to note is that the plot begins with a traumatic encounter with a bomb in cryptic form, an incomprehensible remnant of mass destruction (Akira's crater), and a double of Akira (the psychic child). Everything will continue to unfold in relation to Akira, the psychic bomb that repeats the atomic bomb. At many levels, *Akira* reveals a cryptic repetition of past trauma, the trauma of nuclear destruction. Because the story takes place in Tokyo, we need to read *Akira* in light of the Japanese experience of, and discourses on, nuclear destruction.

As the only nation to have directly experienced nuclear destruction on a massive scale, with the atomic bombs dropped by the United States on Hiroshima and Nagasaki, Japan has developed a special and very complex relationship to nuclear weapons. Under much of the American occupation of Japan (1945–52), representations and discussions of Hiroshima and Nagasaki were banned.¹³ While films and stories dealing with the atomic bombs began to appear in Japan soon after the occupation ended, it was the atomic fallout from an American thermonuclear test on Bikini Atoll on March 1, 1954, that truly reopened the trauma of Hiroshima and Nagasaki. A Japanese fishing boat, *Daigo Fukuryū-maru*, was exposed to radiation, and the boat's chief radioman died some six months later of acute radiation syndrome. Iconic images of the mushroom cloud then circulated in the Japa-

nese media, and the incident seemed to mobilize all the repressed horrors of the end of World War II, producing a new wave of terror and outrage vis-à-vis the atomic bombs.

The Bikini Atoll incident also engendered a traumatic fascination with the effects of nuclear radiation, which spawned monstrous creatures such as Gojira (Godzilla). The spectacular, grotesque, utterly fascinating deformations of Tetsuo's body are of this lineage. The workings of psychic powers in *Akira* follow logically from nuclear radiation: invisible yet exceedingly powerful forces that act at a distance, inducing deformations of the human body. Tetsuo's psychic mutation, made manifest in his radiation-like deformations, evokes the *hibakusha*, the Japanese victims of atomic weapons. This is a form of destruction that cannot be contained or localized. It permeates bodies everywhere.

Reading *Akira* only as a repetition of the trauma of nuclear destruction, however, risks reinforcing the position of Japan as victim.¹⁴ As commentators have pointed out with increasing insistence in recent years, continually representing Japan's experience of the atomic bombs encourages amnesia vis-à-vis Japan's imperial past and war crimes. Journalist Honda Katsuichi has called the Japanese peace movement to task for its tendency to embrace a "victim mentality" (*higaisha ishiki*) that permits it to linger on the horrors of Hiroshima and Nagasaki while ignoring Japan's war crimes.¹⁵ Lisa Yoneyama writes that "a global narrative of the universal history of humanity" in Japan has helped to sustain "a national victimology and phantasm of innocence throughout most of the postwar years."¹⁶ In response, novelist Oda Makoto has stressed the "interlacing and admixture—indeed the complementarity—between each individual's victimized and victimizing aspects."¹⁷

Such critics desire a fuller historical understanding of the past, to force contemporary Japan to reckon seriously with its role as aggressor in World War II. Interestingly, right-wing commentators also dislike the fact that atomic bombs have proven central to the construction of Japanese national identity in the postwar era—the "long postwar," as Carol Gluck calls it, because it never seems to end.¹⁸ For Katô Norihiro, a Japanese literary critic whose controversial essay *Haisengoron* (On Postdefeat, 1997) suggested that defeat had forced Japan into an abnormal situation, the problem with

emphasizing this “victim mentality” is that it stresses Japanese defeat. In his opinion, reiterating the history of Japan’s aggression only deepens the public sentiment of failure, adding a sense of shame to that of victimhood.¹⁹

The Right and Left have very different responses: while Honda and Yoneyama demand a fuller reckoning with Japanese wartime aggression, Katô calls for the remilitarization of Japan. Yet despite their differences in opinion about the history of Japanese military aggression, these commentators share a common problematic: the postwar removal of Japan from history. Sawaragi Noi puts it succinctly in referring to postwar Japan as a “bad place” — bad because Japan under the umbrella of the Pax Americana became a place outside of, or unrelated to, world historical developments.²⁰

I read *Akira* in light of these discourses on Japan’s defeat, the perpetual postwar, and national victimology. The postwar Japanese developmental state, as it manifests in the economic reconstruction of Neo-Tokyo, appears as an empty repetition of historical trauma: bomb and build, re-bomb and re-build. While this cycle appears rather static and potentially more mythic than historical, *Akira* is invested in world history, which itself appears as a traumatic repetition of the same (World War I, World War II, World War III). Japan, in this rendering, is not so much outside world history as a vantage on world developments in the post–World War II world: it is always after a war *and* between wars. As each flattening of the city results in increased verticality and hierarchization, traumatic repetition of the bomb is linked to the stabilization of identities, insofar as the city’s grid and vertical hierarchies neatly organize social relations. This is the mode of constitutive repetition, in which the repetition of historical trauma results in the destruction and production characteristic of the developmental state.

Of course, trauma is by definition opposed to the constitutive; trauma destroys the subject and identity. *Akira*, however, presents a mode of repetition of historical trauma in which the repetition proves constitutive of subjects. It is not unlike what LaCapra defines as acting out, or melancholia. But the emphasis is different. In *Akira* the emphasis falls less on an ethically questionable relation to world history than on the military-industrial juggernaut. Otomo wants to break with the constitutive cycles of postwar economic reconstruction, and *Akira* holds out the possibility of moving beyond Japan’s postwar repetition. Again the double optic: the psychic bomb *Akira*

may bring more of the same, or it may change everything. Consequently, it is unclear whether one should hasten or impede his reawakening. What is clear is that the postwar order, the developmental state with its constitutive mode of destruction/production, hovers strategically on the verge of annihilation.

The story in both *manga* and anime versions follows the conflicts between different factions in pursuit of Akira: those who would prevent the bomb versus those who would use it, condensed into the rivalry between Kaneda and Tetsuo. As Kaneda strives to prevent the bomb and to stop Tetsuo's mutation, Tetsuo embraces his new powers and seeks to awaken Akira. Ultimately, amid the final scenes of massive destruction, Kaneda and Tetsuo do battle. These conflicting relations to Akira hold out two kinds of response to the constitutive repetition of trauma. There is a logic of nuclear prevention, which becomes an operative logic of deterrence. And there is another, more difficult to define, in which nuclear destruction is embraced, that might be termed a logic of nuclear experimentation-mutation. The latter response recalls the set of strategies that Brian Massumi characterizes as an operative logic of preemption.²¹

Ultimately, as the final reconciliation of Kaneda and Tetsuo implies, *Akira* does not present a simple endorsement of one logic over the other. Instead it explores the tensions and interactions between them, describing a passage in which deterrence enables preemption. It is in this passage that constitutive repetition gives way to generative trauma, which promises a new era.

Deterrence and Preemption

Akira derives much of its narrative force from the logic of prevention, from the race to prevent the reawakening of Akira and thus the second destruction of Tokyo. Colonel Shikishima, military head of the Akira Project, is a pivotal character; although we initially suspect that he wishes to deploy the child bomb, he subsequently proves himself dedicated to preventing Akira's reawakening and becomes an ally of Kaneda. Yet insofar as his is a race to *secure* the psychic bomb, the colonel's efforts present a peculiar twist on the logic of prevention: to prevent mass destruction he must *seize* the means of mass destruction. In other words, consciously or not, Otomo writes Colonel

Shikishima and Kaneda (and by extension, Japan) into the nuclear arms race and the Cold War logic of deterrence.

Massumi nicely describes this kind of passage, from the logic of prevention to the logic of deterrence.²² “Epistemologically,” Massumi writes, “prevention assumes an ability to assess threats and identify their causes. Once the causes are identified, appropriate curative measures are sought to avoid their realization.” In the case of nuclear prevention, for instance, the goal would be to prevent the production of nuclear weapons and to dispose of existing weapons. If prevention has no ontology of its own, as Massumi claims, it is because the object—in this instance the atomic bomb or psychic bomb—has an objectively given existence prior to prevention. Those who pursue nuclear prevention deal with objects that are already defined by other formations, especially the scientific institutions that invented and realized the bombs. “The preventative measures,” Massumi concludes, “will then operate as a political extension of the concerned specialist domains.” As head of the *Akira* Project, the colonel is a political extension of the domain of scientific research on the amplification of children’s telekinetic abilities. As such, his efforts are derivative, not self-sustaining.

Deterrence takes over when the means of prevention have failed. As Massumi argues, this is when an operative logic of power emerges, because “deterrence cannot afford to subordinate itself to objects.” Deterrence and prevention share an epistemology: they know that weapons are out there, and someone can and surely will deploy them. But deterrence presupposes an immediacy of threat. It cannot waste time listening to specialist opinions before acting. In fact, specialist knowledge is deemed inadequate to the situation, somehow incomplete.

This is precisely the situation faced by the colonel in *Akira*: not only do the scientists not know exactly how *Akira* works and what will happen if he is awakened, but the colonel cannot afford to wait for them to complete their knowledge. *Akira* is awakening (no one can say why), and, because the government bureaucrats (that other specialist domain) will not listen to him, the colonel must take action. He opts to seize the psychic bomb.

Massumi notes, “The only way to have the kind of epistemological immediacy necessary for deterrence is for its process to *have its own cause* and hold it fast within itself. The quickest and most direct way for a process to

acquire its own cause is for it to *produce* one. . . . [In the instance of nuclear deterrence,] the process must take the effect that it seeks to avoid (nuclear annihilation) and organize itself around it, as the cause of its very own dynamic (deterrence).” This is exactly what the colonel does in *Akira*, and he does so in a predictable Cold War fashion, by interpreting the threat of the psychic bomb as a clear and present danger. The colonel thus finds it necessary to break with the government bureaucracy and organize a renegade army around the race to seize the child bomb. In the process, he shifts from prevention to deterrence. He aims to acquire the threat in order to prevent it. Yet by the very logic of the story, *Akira* cannot be destroyed. Consequently, any effort to prevent *Akira*’s awakening will translate into an arms race in which each faction seeks to acquire the capacity for psychic annihilation rather than to eradicate the capacity for destruction altogether.

The story as a whole, in the *manga* and anime, takes the effect that it apparently seeks to avoid (psychic destruction) as an organizing cause. Simply put, *Akira* is organized around *Akira*, and quasi-nuclear destruction must be held close to generate a narrative structure. Nuclear destruction thus becomes productive, constructive, and even, as Massumi suggests, self-propelling. Destruction, as Otomo discovered as he shifted from his earlier vignettes toward large narratives such as *Akira*, can serve as an organizing narrative dynamic, much as the operative logic of deterrence transforms an effect (nuclear destruction) into a cause to produce a self-driving dynamic. Nonetheless, as Massumi remarks, deterrence “is no longer in a position to realize its original effect, annihilation. Instead it becomes the determinant of something else: a race.” In *Akira*, characters race after one another in underground passages, through corridors, down streets. One can easily lose track of who is chasing whom, but after awhile it does not really matter. The overall effect, the self-propelling dynamic, is that of a race for psychic arms: a projection of Cold War deterrence onto the fictional twenty-first century.

Strangely enough, Massumi concludes that deterrence is the apotheosis of humanism in the technoscientific age, because “in the face of the imminent annihilation of the species it still reposes on an implicit psychological premise: that an at-least-residual concern for humanity and a minimum of shared sanity can be mobilized to place a limit on conflict.” Yet such humanism frequently implies a Western universalist vantage. To account for *Akira*,

something must be added to (or subtracted from) the universalist framework. Humanist concern and shared sanity are expressed in *Akira* vis-à-vis denizens of the same city — citizens — and the plot centers on city destruction, not global annihilation. Insofar as Tokyo is a global city that somehow bypasses or supersedes nationalism, citizens of Tokyo stand in for citizens of the world. This is a localization or specification of general humanism. One might well expect deterrence to spin dreams of a nuclear-endowed Japanese nation on equal footing with the United States in the Pax Americana “balance of terror.” After all, *Akira* appears at the time of Ishihara Shintarō and Morita Akio’s *The Japan That Can Say No* (1989).²³ Yet in *Akira*, the city Tokyo appears in the place of the nation Japan. Global city replaces nation. *Akira*’s operative logic of deterrence takes as its object not the globe and global humanity but the global city and global citizenry.

Near the end of the film version, Tetsuo’s mutations are pushed to the limit: his body begins to attract and eclectically incorporate all available material, as if the boundary between his body and the city were dissolving (fig. 2). Finally, Kaneda is pulled into Tetsuo’s mutating body, where he is able to touch Tetsuo’s memories, allowing Tetsuo to evolve beyond this reality. It is a beautiful, sentimental ending, in which Tetsuo recalls Kaneda’s brotherly kindness to him. Recollection of kindness tempers his fanatical desire for absolute power, and Tetsuo disappears into another realm, that of *Akira*; perhaps he has become pure energy or pure mind. The implication is that he has moved beyond our reality.

Otomo adds another important sequence in the *manga*. After Tetsuo has vanished into a putatively higher form of existence, Kaneda takes a stand against the U.N. teams arriving in Tokyo to assist with the crisis. To avoid what he sees as a loss of political sovereignty, Kaneda rejects international aid and stands in defense of a new political entity: the Great Tokyo Empire (*Dai-Tōkyō teikoku*), at once city, nation, and empire. This prompts us to reread the biker boys’ earlier sense of oppression and alienation as problems of political sovereignty. Otomo does not embrace national sovereignty or the Japanese nation. With the Great Tokyo Empire, he presents a new political structure that is as unwieldy and eclectic as Tetsuo’s mutations, one that recalls the Great Japanese Empire of the prewar era even as it harkens the emergence of global cities of the information age. It is as if the nuclear



Figure 2 In the animated film *Akira*, as Tetsuo is unable to control his psychic powers, his body begins to mutate and to merge with elements of the city

nation that supplied the logical frame and material limit for the Cold War itself had mutated.

Another operative logic, built on Tetsuo's embrace of nuclear radiation—like psychic mutations, emerges to challenge deterrence. Tetsuo is the important figure here, as he strives to move beyond the balance of terror by becoming the terror. Though we glimpse the inferiority complex that lies behind his arrogant preening and posturing in a mock-Nietzschean parade of will to power, Tetsuo harnesses and intensifies our sense of awe. He alone strives to move beyond the operative logic of deterrence.

Tetsuo's relation to the psychic bomb meshes neatly with what Masumi calls the operative logic of preemption. While preemption shares many characteristics with deterrence (operating in the present on a future threat, such that present futurity becomes the motor of its process), the process of preemption is qualitatively different. Its "epistemology is unabashedly one of *uncertainty*," "because the threat has not only not yet fully formed . . . it has not yet even emerged." This makes for a different kind of ontological premise: the nature of the threat cannot even be specified, and the lack of knowl-

edge about the nature of the threat can never be overcome. Consequently, “the threat has become proteiform and it tends to proliferate unpredictably.” For Massumi, this signals the passage toward an operative logic based on indeterminate potentiality.

Tetsuo does not merely represent this other operative logic but embodies it, making it visible and palpable. Even though no one can truly specify the nature of the threat (because no one knows exactly what *Akira* is or how the psychic bomb operates), effects of *Akira* start to crop up unpredictably, mutating and proliferating. Initially, the psychic bomb is mistaken for a nuclear bomb, because its destruction of Tokyo so closely resembles that caused by the atomic bomb. But the effects of the bomb, paired with the sudden appearance and disappearance of psychic children, takes us beyond the epistemology of a knowable threat that can be seized and thus deterred. The massive arms race in which the various factions engage is so obviously old-fashioned that we sense it is bound to fail. Indeed, it proves impossible to seize and deter indeterminate potentiality, especially when this potentiality lies within the human mind.

While Kaneda and his company face the psychic bomb within the operative logic of deterrence (and thus approach the bomb as an identifiable and knowable uncertainty), Tetsuo enters the same situation from the angle of its indeterminate potentiality. In this logic, there is no hope for a balance of power or of terror. Tetsuo does not seek balance, but starts to act entirely imbalanced, as if he has lost all sense of proportion and equilibrium. The horizon of humanism, even its least residual, disappears as Tetsuo imagines himself as superhuman, which allows him to treat others as less than human. This is what Massumi calls “post-humanist moral imbalance,” the strategy for which is to transform a part of your own self in the image of what you fight or fear. Because there is no common battleground on which Tetsuo can engage *Akira*, he must become like *Akira*.

“Since the enemy is indeterminate,” Massumi suggests, “it is certain that he will remain undetectable until he makes a move. You look to detect the movements, at as emergent a level as possible.” Under such circumstances, the best option is to make the adversary show itself, and the most effective way of fighting is to actively produce it. This is Tetsuo’s course of action: he seeks out the psychic bomb by transforming himself in its image, by tak-

ing on something of its structure. The result is a dissolution of the barrier between matter and energy, made manifest in a wildly mutating body that desperately assimilates all surrounding matter into itself. Rather than wait for the bomb to explode, Tetsuo's body becomes the psychic explosion. This is the logic of preemption: to rush headlong into producing the very catastrophe that exists only (if at all) in a state of indeterminate potentiality.

Such logic produces its truth retroactively, as Massumi insists. Thus we will never know if Akira would not have destroyed Neo-Tokyo without Tetsuo's intervention; we will never know if deterrence had a chance. Tetsuo has produced the truth of the situation by making something happen. His mutations constitute a preemptive psychic strike, taking the form of terror to combat the terror. In this way, Otomo presents the postwar Japanese developmental state as an unbearable mode of destruction/production, in which war and capital work together to reproduce conditions of unevenness on ever-larger scales. It is the trauma of nuclear destruction that holds this order together. The problem is one of the constitutive repetition of historical trauma, of repeating Hiroshima and Nagasaki in such a manner as to form identities, positions, and hierarchies.

In response to such constitutive repetition, however, Otomo does not turn to a fuller historical reckoning, to a working through of Japan's experience of empire, war, and nuclear destruction. Instead *Akira* imagines two action-centered responses. On the one hand, Kaneda and his allies work within an operative logic of deterrence, attempting to secure the means of destruction. The implication here is that Japan will move beyond its constitutive trauma and the long postwar by going nuclear and participating actively in the Cold War arms race. On the other hand, perhaps unwilling to embrace such a conservative and ultimately reactionary vision, Otomo also offers a radically violent response in which the *effects* of nuclear destruction are actively produced by remaking the political body in the image of what it fears. Tetsuo's mutations function as a preemptive strike on the threat of nuclear destruction. It is as if acting out were raised to a new level of intensity, in which trauma was no longer a matter of its historically specific origin. Tetsuo's will to mutation is a bid to part with Japanese victimology, a national identity predicated on the atomic destruction of Hiroshima and Nagasaki. *Akira* does not try to show us what the historical trauma of Hiroshima and Nagasaki

has repressed or concealed. On the contrary, in the body of Tetsuo, trauma becomes a matter of indeterminate potentiality. The constitutive mode of repetition gives way to a generative mode that promises to transform the Japanese developmental state into something new.

What strikes me as important about *Akira* is that, in the 1980s, it does not and maybe cannot imagine a tidy passage from deterrence to preemption. In an almost prophetic manner, it strives to envision how a preemptive logic might sweep up and transform the sociohistorical formation in which industrialized nation-states are organized around Cold War deterrence. Yet Tetsuo's preemptive strike on the postwar nation at once succeeds and fails, leaving us poised on the verge of a new mode of destruction/production stretched between deterrence and preemption.

Disaster Capital

In an essay published in the summer of 2005, Naomi Klein coined the term *disaster capitalism* to describe the Bush administration's push to develop plans for the destruction and reconstruction of various countries. She wrote,

Last summer, in the lull of the August media doze, the Bush Administration's doctrine of preventive war took a major leap forward. On August 5, 2004, the White House created the Office of the Coordinator for Reconstruction and Stabilization, headed by former US Ambassador to Ukraine, Carlos Pascual. Its mandate is to draw up elaborate "post-conflict" plans for up to twenty-five countries that are not, as of yet, in conflict. According to Pascual, it will also be able to coordinate three full-scale reconstruction operations in different countries "at the same time," each lasting "five to seven years."²⁴

Klein discusses how the coordinator for reconstruction and stabilization will dole out engineering and supplies contracts to a familiar cast of American corporations and explains why shattered countries are attractive to the World Bank: there are profits to be made in the destruction and reconstruction of countries. The Bush administration sees a bright future for "disaster capitalism."

If the Bush administration and *Akira* share a geopolitical imaginary, it

is because they are both dependent on analogies to World War II and the American occupation of Japan. Not only has Pearl Harbor served as an analogy for 9/11 with the Bush administration, but the “plans” (I use the word loosely here, for they were more fantasy than actual plans) for the invasion, occupation, and reconstruction of Iraq drew heavily on analogies to the postwar reconstruction of Japan and Germany.²⁵ In ideological terms, the example of Japan has certain advantages over that of Germany: unlike Germany, Japan was radically Other — there was no “good Japanese” — and the American army alone occupied and reconstructed Japan. With 9/11, America was again responding to Pearl Harbor; and as with World War II, the outcome of the war was not only destruction of the enemy nation, but its reconstruction. War and capital work together productively.

Even while conjuring up a geopolitical imaginary of post–World War II reconstructed nations, the preemptive logic of the Office of the Coordinator of Reconstruction and Stabilization is very different from the Cold War logic of deterrence. It is no longer a question of actual enemies who can be transformed into actual allies. Rather, it is a matter of potential enemies who are also potentially prosperous postwar allies; hence the effort to detect signs of that indeterminate potentiality for postwar economic reconstruction at as emergent a level as possible. This entails a great deal of wishful thinking and downright fantastical projection. In fact, it is unnecessary and maybe impossible in this operative logic to achieve actual peace and stabilization, and certainly not at the level of nation-states. Destruction and reconstruction will continue apace, and the result will be cities and communities that take on the structure of perpetual war — rather as Neo-Tokyo comes to resemble the atomic bomb by structuring itself around the bomb crater — while economic disparity and social hierarchization increase.

Disaster capital also meshes nicely with the rise of information society. Scenarios in which information is gathered and acted on preemptively present possibilities for war and capital to act together well beyond the confines of the developmental state and the national military-industrial complex. Disaster capital must break to some extent with industrialized and industrializing nations in favor of global cities, local proto-national groups, and even “tribes.” It remains poised between Cold War deterrence and the preemp-

tive war on terror — if only because it continues to evoke, in a residual form, the so-called Great War and post–World War II national reconstruction.

In a manner reminiscent of disaster capital, *Akira* reconceives the post-war Japanese developmental state as a mode of destruction/production that is to be intensified by way of preemptive logic. You never know just where and when an enemy will appear with the potential for successful postconflict economic exploitation, so the best course of action is to produce the effect, primarily by remodeling yourself in the image of the enemy/ally. In this respect, the lack of concern on Bush's behalf vis-à-vis the destruction of New Orleans makes sense: by the terms of preemptive logic, disaster should be allowed to strike at home, to usher in the benefits of reconstruction. Although the benefits will not be shared by all, disaster on the scale of Hurricane Katrina identifies the potential for economic reconstruction and exploitation. New Orleans, like Neo-Tokyo, is a global city, lying stretched between deterrence and preemption, as if between two futures.

Like the Bush administration, *Akira* takes the logic of preemption to its limit to inaugurate a new world order — or, to use the term deployed by the millenarian movement in *Akira*, world renewal (*yonaoshi*). Tokyo must be leveled, repeatedly if necessary, to “discover” the city's potential. But the result is something that at once embodies and defies preemption: the Great Tokyo Empire, at once city and national empire, and neither.

The collapse of the national imaginary in *Akira* (and its refusal of a national victimology associated with the actual trauma of atomic bombs) anticipates the idea, prevalent in the 1990s, that globalization and transnationalism had surpassed nation-states and rendered them politically and economically irrelevant. Instead of nations, the axes of the world economy would be capital and information flows (that moved, for the most part, through global cities). The passage beyond the nation-state was typically predicated on a “second great transformation,” from industrial to informatic modes of production and exploitation — with an inversion in priority of micro and macro economies.²⁶

In Japan, discourses on information society began as early as the 1960s, and the term itself is Japanese coinage. Tessa Morris-Suzuki suggests that information was envisioned as the key to overcoming certain obstacles to

increased productivity and profitability. The idea was to fix wages while increasing workers' efficiency with computerized improvements, while production became more flexible, allowing it to respond faster to diverse consumer demands.²⁷ In the 1980s and 1990s, "the Japanese economy underwent a rapid transition away from traditional heavy manufacturing ('smokestack industries') and toward cleaner high-technology industries such as information technologies and electronics."²⁸ It moved away from the model of the developmental state described by Chalmers Johnston, in which government ministries (especially Ministry of International Trade and Industry) planned and directed Japan's industrial policy.²⁹ The new high-technology industries did not merely produce information technologies but applied them to production.

Two things characterize Otomo's response in *Akira* to the great information transformation. First, he does not imagine the situation solely from the angle of production; on the contrary, he stresses destruction. Second, when Otomo was writing *Akira*, the technologies that subsequently enabled the great transformation—personal computers, cell phones, the Internet, and others—were not visible enough to command Otomo's attention. Consequently, he tends to imagine information and communication technologies as centralizing tools of the developmental state rather than as decentralizing flows.³⁰ Even as discourses emerged that drew an opposition between information technologies and nations, Otomo has sustained this "older" developmental state imaginary. But he has had to situate himself in earlier historical imaginaries to do so. *Metropolis* (2001) reprises Tezuka's *manga Metropolis* (1949) and Fritz Lang's silent film *Metropolis* (1927). *Steamboy* (2004) toys with the destruction of Victorian London by means of highly advanced steam technologies and culminates in an exceedingly predictable replay of the logic of Cold War deterrence.

In *Akira*, the developmental state, with its dreams of participating fully in the Cold War, encounters something that at once fulfills and defies its logic: the psychic bomb. In spectral form, Akira the child bomb anticipates the emergence of new communication and information technologies in the 1990s. Only here, the human body itself is the information technology that spurs new modes of destruction. In this sense the psychic bomb is much like what Paul Virilio, following Albert Einstein, calls the "information bomb."³¹

Virilio remarks, “By demonstrating that they would not recoil from a civilian holocaust, the Americans triggered in the minds of the enemy that *information explosion* which Einstein, towards the end of his life, thought to be as formidable as the atomic blast itself.”³²

His remark helps to explain why the psychic bomb in *Akira* so closely resembles the atomic bomb. We can conceive of each of the atomic bombs dropped on Hiroshima and Nagasaki as two bombs: an atomic bomb and an information bomb, an A-bomb and an “I-bomb.” Again we find that odd double optic in which the same event suggests two different yet intertwined futures: the future of deterrence and the nuclear arms race, and the future of preemption with an information-fueled war in search of emergent potential. While the Bush administration’s war on terror encourages us to leap into the logic of preemption, *Akira* forces us to think of ourselves as living in both futures at once. The new mode of destruction/production — disaster capital — is the cause and effect of living suspended between A-bomb and I-bomb. Otomo thus reminds us that, although an operative logic, as a self-propelling tendency, is not in the sway of a particular formation, it also at some point loses velocity and starts to inhabit particular formations. As the operative logic of preemption sweeps across the developmental state and attempts to dislodge it from deterrence, it is forced to ground itself in the imaginary of disaster capital. In global cities suspended between bombs and between futures, we might hope for new operative logics to emerge, capable of disarming preemption and breaking with disaster capital. But that will depend on our willingness to take seriously the transformation of human bodies and life itself in the image of the bomb — if, like Tetsuo, in a body mutating to the point of self-destruction, we can begin to remember ourselves in the potentialization of trauma under the threat of the I-bomb.

Notes

- 1 Dominick LaCapra, *History and Memory after Auschwitz* (Ithaca, NY: Cornell University Press, 1998), 45.
- 2 Ibid.
- 3 Natsume Fusanosuke calls attention to some of these changes in Otomo’s *manga* in his chapter on *Akira* in *Manga to “sensô” Kôdansha gendai shinsho*, no. 1384 (Tokyo: Kôdansha, 1997).

- 4 One might tentatively speak of a first wave of Japanese television animation in the 1960s with such shows as *Tetsuwan Atomu* (*Astro Boy*), *Jangaru teio* (*Kimba the White Lion*), *Supiido reesa* (*Speed Racer*), *Tetsujin 028* (*Gigantor*), and *Eito-man* (*Eight Man*), followed by a second wave, distinct from the first in its venues and distribution, that emerged in the late 1980s. *Akira* is often cited as first entry in this second wave of anime. Susan Napier, for instance, begins her introduction to Japanese anime with *Akira*. See Napier, *Anime: From Akira to Princess Mononoke* (New York: Palgrave, 2000).
- 5 Luminaries such as William Gibson and Terry Gilliam would meet with Otomo to pay homage to the creator of Neo-Tokyo. On the meeting with Gibson, see *Friday* 712 (March 21–April 20, 1988): 16–17; for Terry Gilliam, see *Baato* 6, no. 15 (July 22, 1986): 116–19.
- 6 Ueno Toshiya opens his book *Kurenai no metarusuutsu: Anime to iu senjō* (Tokyo: Kodansha, 1998) with an anecdote about encountering an image from *Akira* in 1993 in war-torn Bosnia. This speaks not only to the global popularity of the film and *manga*, but also to how anime became politicized as a form of rebellion, wherein the culture of juvenile delinquency (bad youth) implies a new sort of ground zero in which destruction promises to pave the way for something new.
- 7 See, for example, the *manga Saara: The Legend of Mother Sarah* (1990–2004), on which Otomo worked as scriptwriter with illustrator Nagayasu Takumi, and the animated productions *Metropolis* (2001) and *Steamboy* (2004), for which Otomo worked variously as scriptwriter, storyboard artist, writer, and director.
- 8 The date in the English version is December 6, 1992.
- 9 I use here Karl Tarō Greenfeld’s translation of *bōsōzoku* as “speed tribes” in *Speed Tribes: Days and Nights with Japan’s Next Generation* (New York: Harper Collins, 1994). See also Satō Ikuya, *Kamikaze Biker: Parody and Anomy in Affluent Japan* (Chicago: University of Chicago Press, 1991).
- 10 In a recent conversation with a Japanese journalist, Onishi Wakato, Japanese artist Nakahashi Katsushige discussed the symbolism of the Runit Dome that was built over the bomb crater from the American nuclear test blast on the small island of Runit in the Enewetak Atoll, which caused severe damage to the crew of a nearby Japanese fishing vessel, *Daigo Fukuryū-maru*. Nakahashi suggests similarities between the Runit Dome and the Tokyo Dome featured in *Akira*. Nakahashi photographed the Runit Dome five thousand times and assembled the twelve-meter dome, à la David Hockney, with the help of volunteers during the “Collapsing Histories” exhibition, August 16, 2004; see online.sfsu.edu/~amkerner/ch/nakahashi.htm (accessed April 10, 2006).
- 11 Chalmers Johnson, *MITI and the Japanese Miracle: The Growth of Industrial Policy, 1925–1975* (Stanford, CA: Stanford University Press, 1982).
- 12 The *manga* and anime versions introduce the central characters and personality conflicts somewhat differently.

- 13 See Monica Braw, *The Bomb Suppressed: American Censorship in Japan 1945–1949* (Lund: Liber Förlag, 1986).
- 14 Recently, in an exhibition titled “Little Boy,” the third installment in his “Superflat” trilogy, Murakami Takashi evoked a generation of artists and viewers whose apparent delight in images of mass destruction (especially nuclear destruction) reflects a fundamental experience of impotence due to the Japanese defeat in war and the subsequent American occupation. Removed from war and history, the Japanese became little boys: “We were forced [by America] into a system that does not produce ‘adults,’” writes Murakami in “Superflat Trilogy: Greetings, You Are Alive,” in *Little Boy: The Arts of Japan’s Exploding Subculture*, ed. Murakami Takashi (New Haven, CT: Yale University Press, 2005), 152. Murakami thus rewrites Japan’s victimology in a large hand: “We are deformed monsters. We were discriminated against as ‘less than human’ in the eyes of the humans of the West” (153). Insofar as this is a rather shopworn stance, one can only wonder at the overall success of the “Little Boy” exhibition in New York in 2005.
- 15 See Honda Katsuichi, “The Blindness of Japanese Peace Movements,” in *Against Amnesia and Complacency*, ed. John Lie (New York: Monthly Review Press, 1993), 73.
- 16 Lisa Yoneyama, *Hiroshima Traces: Time, Space, and the Dialectics of Memory* (Berkeley: University of California Press, 1999), 13.
- 17 Oda Makoto, “The Ethics of Peace,” in *Authority and the Individual in Japan: Citizen Protest in Historical Perspective*, ed. J. Victor Koschmann (Tokyo: Tokyo University Press, 1978), 158–60.
- 18 Carol Gluck, “The Past in the Present,” in *Postwar Japan as History*, ed. Andrew Gordon (Berkeley: University of California Press, 1993), 64–95.
- 19 Marilyn Ivy, “In/Comparable Horrors: Total War and the Japanese Thing,” in *boundary 2* 32 (2005): 137–49.
- 20 Sawaragi Noi, *Nihon—kindai—bijutsu (Japan—Modern—Art)* (Tokyo: Shiinchōsha, 1998). Sawaragi takes issue with emphasis on the “Japanese-ness” of anime by such commentators as Okada Toshio and Murakami Takashi. Sawaragi feels that one must not forget that the world of anime emerged in a Japan under the umbrella of America.
- 21 Brian Massumi, “Potential Politics and the Primacy of Preemption,” *Theory and Event* 10, no. 2 (2007), muse.jhu.edu/journals/theory_and_event/v010/10.2massumi.html.
- 22 Ibid.
- 23 The authorized English translation of *No to ieru Nihon, The Japan That Can Say No* (New York: Simon and Schuster, 1991), does not include Morita’s essays.
- 24 Naomi Klein, “The Rise of Disaster Capitalism,” *Nation*, May 2, 2005.
- 25 Naturally, historians have been quick to point out the weakness and even the willful ignorance of such analogies between Iraq and Japan in terms of the real prospects for successful economic reconstruction. Yet as with the operative logic of preemption, historical accuracy

- or “reality-based thinking” is not an issue for the Bush administration. See John Dower, “A Warning from History: Don’t Expect Democracy in Iraq,” *Boston Review*, February–March 2003, bostonreview.net/BR28.1/dower.html.
- 26 Ishida Yoshihiko and Yann Boulang Moulrier, “Against the Closure of the World,” trans. Christine LaMarre, in *Traces 4: Translation, Biopolitics, Colonial Difference*, ed. Naoki Sakai and Jon Solomon (Hong Kong: University of Hong Kong Press, 2005).
 - 27 Tessa Morris-Suzuki, *Beyond Computopia: Information, Automation, and Democracy in Japan* (London: Kegan Paul, 1988).
 - 28 Duncan McCargo, *Contemporary Japan*, 2nd ed. (New York: Palgrave Macmillan, 2004), 46.
 - 29 Chalmers Johnston, *MITI and the Japanese Miracle*, 315–19.
 - 30 The short *manga* “Fireball,” for instance, deals with a centralized government computer run amuck, and in his animated short, *Kôji chûshi meirei (The Order to Cease Construction, 1987)*, Otomo imagines robots or automated labor largely in industrial terms.
 - 31 Paul Virilio and Sylvère Lotringer, *Crepuscular Dawn* (New York: Semiotext[e], 2002), 135–40.
 - 32 Paul Virilio, *War and Cinema: The Logistics of Perception* (London: Verso, 1989), 6.