Speciesism, Part III:
Neoteny and the Politics of Life

In part one of this series, drawing on Sergei Eisenstein and Ōtsuka Eiji, I called attention to the “plasmaticity” of animation, which becomes pronounced in animated characters. Implicit in my emphasis on plasmaticity was a move away from representation theory and the politics of representation. If we look at wartime animation only in terms of what it represents, we quickly reach an impasse. We might say, for instance, that pigs in Norakuro represent the Chinese, or the jungle critters in Momotarō: Umi no shinpei (1945, Momotaro’s divine navy) represent inhabitants of the islands of (what the Japanese at the time referred to as) the Southern Seas. Yet even the context of Norakuro and Momotarō, where the references appear more stable than in Tezuka’s Chōjin taikei (1971–75, Birdman anthology) or Janguru taitei (1951–54, Jungle emperor), the power of these animations does not come primarily from representation. The materiality of the medium or media is integral to the actual experience and impact of speciesism, that is, of the transformation of “peoples” into nonhuman animal species.

Among the examples of speciesism explored thus far, it is clear that different media present a distinctive set of material orientations. There is, of course, overlap between different media in terms of their material
orientations, which allows for translation across media, not only at the level of narrative devices or generic conventions. Nonetheless, if we are to grasp something of the specificity of manga and animation, materially and experientially, we need to consider some basic differences.

Numa Shōzō’s *Kachikujin Yapū* (The domesticated people Yapoo; also translated as “Yapoo, the Human Cattle” on the book cover) novels foreground textual techniques and discursive strategies of instrumentalization: the encyclopedic and clinical presentation of cruel, painful techniques for reengineering Yapū bodies for various uses frequently overwhelms the events that compose the story. Pierre Boulle’s novel *La planète des singes* (1963, *Planet of the Apes*) uses a venerable literary device: two space travelers find a message in a bottle in which a human recounts his journey to a planet on which monkeys (chimpanzees, gorillas, and orangutans), not humans, are the intelligent species; as it turns out, however, the two space travelers reading the story are chimpanzees and find the story shocking and incredible. In other words, the novel plays with the absence of images to encourage us to assume that the readers are human, which device is designed to shock our assumptions about the primacy and universality of the human species. Speciesism in film will draw on other kinds of material orientation. In the *Planet of the Apes* films and *Star Trek* series, for instance, makeup plays a crucial role, and sometimes animatronics or models are used for special effects. This is often the case with speciesism in live-action cinema, with digital effects and digital animation in recent years gradually supplanting and recoding earlier “species effects.” Manga and manga films present yet another set of material orientations.

**THE LIFE OF CHARACTERS**

In the formation of a specific set of manga and animation orientations, the 1920s and 1930s are particularly important, and those orientations continue to affect animation and manga today. In Japan, as in other parts of the world, the emergence of mass culture in the 1920s brought with it a new sense of distinct markets and audiences. This era saw, for instance, the mass production of a set of cultural materials for women (women’s journals and other female-directed commodities), as well as the mass production of a children’s culture, with new journals and books intended for children, which would increasingly include manga. This process was not merely a matter of discovering and developing new markets or niche audiences but of actively isolating and shaping them, economically, legally, and politically. As early as the Film
Laws of 1917, for instance, the Japanese government displayed a concern for segregating audiences by gender (mandating separate seating for men and women), and, as film become associated in the popular imagination with juvenile delinquency, particularly in the course of the 1920s, children were delineated with greater force as an audience, a market, a population.

At the same time, as American mass-produced popular culture began its global surge, American comics, animations, and films had a profound impact on the formation of the new world of manga and manga film in Japan. Introduced in the 1920s and gathering steam in the 1930s, a series of American cartoon characters—Mickey Mouse, Betty Boop, Felix the Cat, Popeye, and others—captured the attention of Japanese audiences and artists. Particularly important were the new styles of drawing characters (frequently animal characters) that put emphasis on the fluidity of the line, typically in conjunction with characters composed largely of simple geometric shapes, which made for ample, easily deformable characters. Referring us to Luthi’s work on folktales, Ōtsuka Eiji sees in such developments the emergence of “deathless” bodies, bodies that undergo radical deformation without dying. They simply spring back. Likewise Sergei Eisenstein called attention to the “plasmatic-ness” of Disney’s animated characters. Years later, Disney animators Ollie Johnson and Frank Thomas outlined the various techniques that emerged in the 1930s and gradually became associated with Disney, among them the famous “squash and stretch” that has also played a central role in Pixar’s vision of computer animation.

How did the fluidity of line become embodied in cartoon characters, especially in animal characters in the newly emerging mass-produced popular culture for children, rather than swarm across the surface of the page or screen? There are a number of factors. The invention of folklore studies or ethnography in Japan played an important role. It is surely not a coincidence that Yanagita Kunio, the “father” of Japanese ethnography, published a major book on Momotaro (Momotarō no tanjō [1931, Birth of Momotaro]) at the same time that Momotaro cartoons were being produced. In Japan as elsewhere, animation and manga became closely associated with folklore. What is more, the general association of children with animals—children like animals, children are like animals—contributed to the establishment of a nexus of folktale-animal-child-cartoon. It was (and is) the fluidity of the animated line that grounds the folktale-animal-child-cartoon nexus. This is why when Ōtsuka and Eisenstein consider the fluidity of animation characters, they turn simultaneously to the realm of folklore and children.

There are also technical reasons for the embodiment of the animated line
in animal characters. First, as I previously suggested, the use of animal characters allowed greater latitude for violent transformation. Second, the human eye is apparently less finicky about the accuracy of movement with animal characters than human characters—surely, however, such expectations are as much learned as innate. Third, the technical setup for animation production encouraged animators to channel the force of the moving image into characters. With the introduction of the layers of celluloid and the animation stand, which gradually became standard practice in the 1930s, the camera was fixed (on a rostrum), and so, to impart a sense of motion, animators had the choice of moving the sheets, or animating the characters, or both. In the 1930s and 1940s, the emphasis fell on character animation, to the point that character animation appeared to be the art of animation, taking precedence over camera movement and editing (animation is largely preedited). While the art of painting backgrounds received attention, this was a matter of art and not of animation per se.

It was not until the 1950s, when animators explicitly developed procedures of limited animation, deemphasizing character animation and playing with iconic expression, that moving the celluloid sheets became an appealing option for imparting a sense of movement. This is when Tezuka played an integral role in the formation of anime in Japan, with the television animation for Tetsuwan Atomu in the early 1960s, for which his team used techniques for dramatically limiting character animation and shifting the experience of movement into other registers of the moving image. Nonetheless, such techniques are still frequently disparaged today, and the bias toward character animation as the art of animation remains. Subsequently, I will return to the question of how developments in limited animation affected Tezuka’s approach to nonhuman characters.

The combination of these three technical factors (potential for deformation, expectations for verisimilitude in motion, and fixity of the camera) led to an emphasis on the animation of animal characters in cartoons and manga films. Thus the force of the moving image, which comes of the mechanical succession of images that is the ground of animation, was channeled into animal characters, cute little nonhumans such as Mickey, Felix, Norakuro, Chubby, Oswald; Momotaro’s dog, monkey, pheasant, and subsequently, rabbits; and into companion species in general, such as Dankichi’s monkey or Maabō’s animal friends—there always seems to be an animated pet for the human protagonists, who in contrast are often rendered with more hieratic lines.
The force of the moving image is thus directed into nonhuman, humanoid, or animaloid characters whose plasticity embodies that force, at once folding it into their bodies and releasing it. Needless to say, this is not a matter of representation. Plasticity does not represent the force of the mechanical succession of images. It affords an actual experience of it. The animal or animaloid characters summon and channel a technical force. As a consequence, a technical force is now experienced as an animal force, as vitality, as life itself.

Such an experience is not, as so many commentators would have it, an illusion of life. It is a real experience of a force wherein the technical and the vital are inseparable. We might call it techno-animism or techno-vitalism, provided we do not take the “ism” to imply that this is first and foremost an ideological construction or illusion. It is a new experience of life.

Tezuka captures this sentiment nicely in his English title for the manga *Firumu wa ikite iru* (1958): “film has a life.” Appropriately enough, *Firumu wa ikite iru* tells of an aspiring animator who strives to establish himself in a setting that recalls the heyday of Tōei animation studios, where Tezuka worked as an animator and writer. The manga highlights the life force of animal characters, beginning with the aspiring animator’s attempts to design a horse that really moves, truly lives. Significantly, although the animator meets with many challenges, there is never any sense of an illusion of life, or of a monstrous reanimation. The challenge is to enter into the flow of life, into the experience of life, that is animated film.

Thus far I have placed manga alongside animation, not drawing a contrast between them as I have between cinema and animation. This may appear odd since, strictly speaking, manga is not an art of the moving image. Nonetheless, there are strong historical links between manga, cinema, and animation. The transformations in manga art that resulted in the emergence of manga as a popular image-based narrative art in the 1920s and 1930s in Japan were intimately tied to the emergence of cinema and animation as forms of entertainment distinctive from other sorts of spectacle. Although Tezuka is commonly credited with the introduction of cinematic techniques into manga, the process began earlier. With the advent of talkies, for instance, many *benshi* or film explicators lost employment and turned to *kamishibai* or “paper theater,” which consisted of showing a series of images (frequently inspired by cinema and in cinematic sequences) while offering commentary, both comedic and narrative. Immediately after the war, *kamishibai* enjoyed a surge of popularity as an entertainment for children, with artists bicycling from neighborhood to neighborhood, with picture stands mounted on their bikes to perform “paper theater” shows. Gradually, children’s manga and then
television supplanted kamishibai, but kamishibai had a profound impact on both manga and television anime.

The conventions of cinema and cinematic techniques entered manga at a variety of levels, which allowed manga to be construed as a way of “doing film” on paper. This is not all there is to manga, of course. There are many ways of doing manga. Yet, as Tezuka’s early manga versions of Disney’s Pinno-cchio and Bambi attest (as well as Firumu wa ikite iru), the dream of producing something like a film in manga proved a durable one, especially for Tezuka. Clearly, Tezuka was an innovator in this respect, and yet he was also consolidating conventions that had already began to blur the boundary between manga and manga film in the 1930s and 1940s. For instance, in a 1941 manga by Ōshiro Noboru, Kisha no ryokō (Travel by rail), a boy and his father traveling by train to western Japan meet a man who introduces himself as a manga artist. The manga artist then proceeds to explain how manga films are made. In other words, the term manga itself, and the art of manga, called to mind both paper manga and manga film. Not surprisingly, then, in the pages of Ōshiro’s paper manga, characters reminiscent of animated films make an appearance. In one full-color two-page spread in another Ōshiro manga, Yukai na tekkōjo (1941, Merry ironworks), animal characters projected on a screen come to life and invite the group to enter the film and visit the factory. In addition, many of the popular manga films of the 1930s and 1940s were based on manga characters serialized in children’s magazines, as with Norakuro and Bōken Dankichi. In sum, due to the general impact of cinema on various arts from the 1920s, in conjunction with the increasingly tight links between children’s manga and animated films from the 1930s, manga conventions frequently overlap with, and sometimes become indiscernible from, those of a specific kind of moving image: animation. The dialogue or synergy between paper manga and film manga becomes part of this new experience of life, in which the force of the mechanical succession of images is channeled primarily into merry little animal characters.

In stressing the importance of this new experience of life, I do not mean to imply that it exists above or beyond ideologies or codes, somehow unaffected by them or easily outmaneuvering them. On the contrary, codes will swarm over and around this new life form, the animated animaloid. What are speciesism and its companion, multispeciesism, but codings of this “techno-vitalist” or “animetic” force that is summoned and channeled through animaloid bodies? In fact, I would venture to say that, as science fiction became a cultural dominant in the 1980s and 1990s (as Fredric Jameson in particular has argued), animation of various kinds has also proliferated.
The new life force and the codes that direct its flows always arrive together. As such, animated life-forms do not afford a direct and immediate experience of this new techno-vitalist force. Yet they do present sites and moments where something promises (or threatens) to outstrip or elude coding, even if such moments of crisis encourage greater efforts to recode. If we ignore the materiality of animation (its material flows), we miss something crucial. We fail to see how animation media introduce life itself into politics, into the social. We fail to see how our personal visions of life and the life world are political and social. If we overlook the material flows of animation, we merely read them as representations of political ideas or events happening beyond the animation itself. We thus completely erase the actual experience, dynamics, and real experimentation of animation.

Take, for instance, the final sequence in Seo Mitsuyo’s 1935 Norakuro nitōhei (Stray Black, private second class) in which Norakuro, the dog soldier, is cavorting and singing merrily atop the caged tiger while other dogs happily skip and dance as they all wheel the captive off to an unknown destination. Given the context, we are to some extent invited to read this animation at the level of representation, in terms of allegory: these dogs stand for Japanese soldiers, and the tiger their Korean foe, or more precisely, their captive. In which case, the temptation is to conclude that this is what the animation is really about: Japan’s colonization and exploitation of Korea in the years leading up to the war, which culminated in the forcible conscription of Koreans into Japanese factories (as workers), into the army (as soldiers), and into Japan’s network of military brothels (as prostitutes). In other words, everything that belongs to animation—the merrily prancing, singing, dancing animals—appears as nothing more than a friendly and misleading mask for the brutal truth of Japanese cultural and military aggression. Animation is sugarcoated empire. The task of the critic is then to scrape away the candy coating and to expose the truth about the violence of territorial expansion and the Japanese violation of national sovereignty.

Yet there is something else at stake in animation, which we must address if we are to understand the persistence of the candy coating, so to speak, in postwar Japan and its transnational popularity. The playful critters of wartime manga and manga films are not merely a mask of cute that can be neatly stripped away to expose the underlying reality of war. Even if we insist on reading wartime manga and manga films in terms of an underlying ideological truth, we would have to acknowledge that such ideology is never simple. In light of the contemporary scene of Japanese popular culture, with its abundance of little creatures begging for nurture and leaping into combat,
we must also think about how the candy coating or mask has outlived the realities of the Fifteen-Year Asia-Pacific War. It may not be possible to introduce a neat divide between cute little nonhumans and war. We might also have to ask whether the reality of postwar Japan has not consistently been war, despite Article 9 of the Japanese Constitution that forbids the nation to bear arms.

Two things happen when the translation of race war into species war entails a transformation of racial others into cute nonhumans. On the one hand, there is a sort of ideological operation or abstraction at work, a decoding and recoding of international relations into species relations. This procedure imparts a sense of overcoming racial, ethnic, and national divisions and conflicts. Entrenched divisions and segregations are at once evoked and radically shifted. Due in part to their address to children or family audiences, manga and manga films impart a sense of play, which promises a dramatic decoding of divisions and segregations. Rivalry among cute little animals not only makes military conflict look like play, it pitches it as cooperative and coproductive interaction. Simply put, this is not “survival of the fittest” or “nature red in tooth and claw.” The result of decoding and recoding is a multispecies ideal. The multispecies ideal (or more precisely, multispecies coding) jives with Japanese wartime thinking about coprosperity, pan-Asianism, and “overcoming modernity.”

On the other hand, it is the plasticity of animation, wherein the force of the moving image is channeled in animal characters, that makes decoding happen materially. This decoding has two implications. First, the plasticity loosens the hold on reference. This implies a shift from allegory (representation) to fable (fabulation and myth): the cute little dogs, for instance, are not just Japanese soldiers but life-forms acting out forces of nature. This is why Sergei Eisenstein sees in animation not simply plasticity but plasmaticness, which I have rendered as plasmaticity. The plasticity of animated animals, their elastic deformations and transformations, conjure forth a wellspring of primordial forms and life-forces. Second, related to this plasmaticity, life itself is introduced into the social and political. Vitality becomes a political force, enters the social machine.

As a result, between plasmaticity and multispeciesism, in their constant interaction, in the process of the one decoding and the other recoding, there

**If we ignore the materiality of animation (its material flows), we miss something crucial. We fail to see how animation media introduce life itself into politics, into the social.**
emerges a theater of biopolitical operations. Manga and manga films do not simply represent actual peoples in animal form in order to sugarcoat the exploitation of weak by the strong. They transform a field of social and political relations into biopolitical theater. Their cuteness or sugary quality is not a mask for an underlying reality. It brings forth an operative logic based on regulating populations, which are articulated in terms of their vitality rather than in terms of popular or natural sovereignty (which latter is at once presumed and bypassed by the very logic of species). Consequently, we cannot think of cute little manga species as a trick or a form of dupery that fools people (children) into believing what they might not otherwise believe. This is not a matter of propaganda, unless we acknowledge that all entertainment is effectively propaganda, and vice versa.

In sum, although Japanese wartime animations invite us to read them in terms of national allegory or allegorical representation in which animals stand for peoples, that register of expression is folded into a biopolitical theater of operations, stretched between animetic (or manga-filmic) plasticity and multispecies codes. In effect, at the same time, the geopolitical logic of national sovereignty is folded into a geopolitical logic of biopower, an operative logic of the coordination of populations on the basis of vitality and productivity.

Oddly, however, the analysis of biopolitics has been studiously eliminated from discussions of interwar and wartime Japan, especially in the study of popular culture, where the emphasis has always been on the mechanics of representation (propaganda). The emphasis on representation has encouraged a tendency to dwell on questions of cultural nationalism to the exclusion of questions about populations, regulations, and the materiality of media. The result is a reinforcement of the primacy of Japanese sovereignty, in which the exploitation, domination, and regulation of populations within the Japanese empire appears primarily as a question of victimization, evoking tidy distinctions between victim and victimizer. Yet the interpellation of populations within the Japanese empire did not (and could not) operate on the basis of clear-cut distinctions between colonizer and colonized or victimizer and victim. Empire does not operate through physical suppression and domination at every point. To address this dimension of imperial power and violence, we might, on the one hand, increase the range of possibilities for subject positions to include bystanders, witnesses, collaborators, and others. Yet, on the other hand, the challenge of manga and animations is that, alongside questions about the formation of different subjectivities, their apparently guileless little animals force us to reckon with questions about
biopolitics, about the governance of populations, and the introduction of life into politics. The biopolitical theater of operations has two axes or procedures. There is the channeling of the force of the moving image into animal character animation, whereby techno-vitality or plasmaticity introduces a new experience of life and new life-forms into the sociopolitical field. And there are the new modes of regulating populations via an intricate combination of legal injunctions (film laws and audience segregations) and industrial measures (the establishment of audience populations such as children’s culture and women’s cultures). Thus, with greater force throughout the 1930s and 1940s, alongside the decoding and recoding implicit in the speciesism of manga and manga film, we see a process of demassification and remassification in which the people (or peoples) are gradually divided into subpopulations (children or adolescents and adults; women and men; unmarried and married; inner and outer territories; north and south empires) as well as mobilized into superpopulations (nation, region, empire, Asia).

It is precisely this biopolitical theater of operations that Tezuka addresses in his manga and anime, as the example of Chōjin taikei demonstrates. Chōjin taikei, like wartime speciesism, invites reading as national allegory in the register of political satire. In fact, it evokes the classic double bind of modern Japan as neither the West or non-West, and maybe both. Its birds appear to represent the American Occupiers or the West; the humans to represent the non-West or the rest; while the Japanese fail as birds and as humans. Yet, as in wartime manga and manga film, the plasmaticity inherent in animal characters, in conjunction with the decoding entailed in speciesism, gradually frees species of their references, bringing into play and highlighting a nonrepresentational field. Here Tezuka finds himself in a bind. On the one hand, he wants to evoke the decoding power of speciesism and to liberate life and life-forms from their political coding (which primarily takes the form of social Darwinism or evolutionist racism). Yet, on the other hand, his proximity to wartime manga and manga films makes him keenly aware and wary of the problems inherent in presenting a solution to the problem of social Darwinism in the form of the multispecies ideal. Consequently, he dwells on the cruelty and absurdity of coding, which affords a satire of social Darwinism and evolutionist racism yet forecloses multispeciesism. The result is a
theater of cruelty, of species cruelty. Cute little animals make an appearance but only to be violently coopted or tragically crushed. Indeed, in one chapter (15), a secret society of bird predators hatches eggs in order to eat the cute little babies who emerge (see 2:94).

Nonetheless, even though Tezuka makes the forces of coding appear omnipotent and eternal, this is a strategy designed to free decoding (techno-vitality and plasticity) from recoding (social Darwinism and multispeciesism)—an attempt to liberate desires that escape the grid. These desires appear in almost mythic form in Chōjin taikei at three junctures. In a fairly early chapter (6), a cute little bird, formerly a domesticated pet of an elderly man, is forced to take part in the birds’ elimination of humans, including the old man. Yet, as a testament to its compassion for the old man, the cute little pet convinces the assembled birds to sing to the man whom they have just fatally injured, and he dies in bliss at the center of the circle of singing bird people (94:76; Figure 1). In a later episode (chapter 17), centuries after the extinction of humankind, a bird girl dreams of human children who capture and cage her, and eventually, kill and eat her. As important in this episode as the cruelty of humans is the ability of the bird child to make contact across the centuries, imaginatively. There is also the episode of the tragic lovers of different bird species mentioned previously. In sum, although it is humanoid cruelty that triumphs in such episodes, they nonetheless evoke a moment of connection across species, which takes the form of mutual compassion for or identification with the other. It is above all the flexibility of children and youth, their fundamental openness, that allows a trans-species potential to flit across the implacable biopolitical theater of operations.

**FIGURE 1.** The bird people who have slain an old man in their campaign to eradicate humans, in compliance to the wishes of the little bird who was formerly the man’s beloved pet, raise their voices in a final symphony to ease his pain. Again man is at once judged and solaced within the animal’s theater of operations. Chōjin taikei, Tezuka Osamu manga zenshū, vol. 94 (Tokyo: Kōdansha, 1980). Courtesy of Tezuka Productions.
Two new procedures follow from Tezuka’s transformation of the biopolitical theater of operations. First, as we have already seen, while Tezuka tends to foreclose multispeciesism as code (and rejects codes of compassion or religion), he redirects the dynamics of multispecies cooperation into a transpecies potential embodied in a nonhuman character, which conjures forth strange new desires, such as the desire of the former pet to ease the pain of its master’s death, or for birds of a different feather to nest together. In other words, instead of multispeciesism per se, Tezuka gives us a transpecies potential, which is above all embodied in nonhumans.

Second, the plasmaticity inherent in manga and animation animals is carefully directed into new channels, too. There are evocations of merry little critters whose buoyancy spurs them to leap and dance, and to spring back from whatever impacts them, as if invulnerable and deathless. Yet such plasmaticity is highly limited and qualified in Tezuka. This is due in part to technical procedures: because Tezuka works in manga and in limited animation, there are pronounced changes in the degree of motion imparted to characters. In fact, rather than channel the energies of the moving image primarily into character animation, Tezuka begins to spread those energies across the manga page (playing with the size and shape of frames, for instance) and across the celluloid surfaces and television screen—on which, as in manga, there is the gradual elimination of the framing effect of frames in favor of character figures that break free of them.

Despite his admiration of Disney animations and his explicit use of certain Disney procedures, Tezuka does not follow the procedures of full animation in his manga or small screen anime. Nonetheless Tezuka’s use of motion is not simply a matter of limiting or stilling motion; it is a matter of shifting how the force of mechanical succession of instants is channeled into the image. The plasmaticity associated with the fully animated nonhuman character tends to be shunted into bodily postures, gestures, and facial expressions. Character design takes on greater importance, in a general way. Tezuka tends to guide the energies of the moving image into faces, where features, especially eyes, become larger and more emotive as they bear the burden of expressing and constraining animating forces. In keeping with such tendencies, Tezuka’s cute little nonhumans do not only merrily cavort and caper but also suffer and die, as the prior example of Mimio the Rabbit suggested.

In sum, in Tezuka’s manga and anime, the tragic suffering and death of cute little nonhumans effects a transformation of the biopolitical theater of operations of wartime animation at two levels, that of codes (multispeciesism)
and that of flows (plasmaticity). On the one hand, with the death or suffering of nonhumans, Tezuka forecloses easy access to the codes of multispeciesism, while transforming and embodying them into the transspecies potential of his loveable yet doomed companion species. On the other hand, the suffering or “passional” quality of these loveable nonhumans follows from procedures for transforming and redirecting the plasmaticity of animal characters that were developed in the heyday of full animation in the 1930s and 1940s. Tezuka’s works channel those energies into the cuteness of faces, and spread them across the surface of pages and screens, which tends to liberate the character from the frame. Put another way, Tezuka’s works present a shift from plasmaticity to neoteny. In fact, it is neoteny, that is, the theory that the retention of juvenile characteristics can serve as a force of evolutionary transformation, that comes closest to explaining how “cute” is intimately linked to questions of race and evolution in Tezuka’s works. Tezuka’s subtle transformation of plasmaticity into neoteny at the level of nonhuman characters would have a profound impact on the dynamics of speciesism in subsequent manga and animation, precisely because his systemization of manga and anime expression helped to define the postwar.

**NEOTENY**

In a humorous article on Disney’s characters, evolutionary biologist Stephen Gould shows how Mickey Mouse and Donald Duck have become younger and younger in appearance. Measuring the transformations in their physique and facial traits, Gould detects a gradual movement toward ever more juvenile features. He concludes, tongue in cheek, that this “growth in reverse” of Mickey Mouse and Donald Duck “reflects an unconscious discovery of this biological principle of neotony on the part of Disney and his artists.”

Similarly, in his seminal work on Momotaro, *Momotarōzō no hen'yō* (Metamorphoses in the imaging of Momotaro), Namekawa Michio devotes an entire chapter (5) to the growth in reverse of the character Momotaro in the course of its increased dissemination across media, which trend he dubs *teinenreiaka keikō* or the “tendency of age diminishment.” Indeed, Momotaro begins his career as a stalwart young man battling demons in the Edo period, only to transform into an ever more youthful youth in the manga films of the 1920s and 1930s, and by the postwar, it is not uncommon to see Momotaro as a child or even a baby in manga and anime.

The signs of reverse growth, *teinenreiaka* or juvenilization in character
design that Gould finds in such Disney characters as Mickey Mouse and Donald Duck and that Namekawa sees in Momotaro entertainments, indicate a general fate of cartoon heroes drawn from folklore in the modern era. Reverse growth happens as characters move from “traditional” folktales into literature and film, and into children’s literature, animation, television, and manga. There are a number of explanations for such trends. The gradual expansion of culture industries, and especially the expansion in markets of animation and manga for children, surely played an important role. Such trends led to a stricter association of folklore with children’s entertainment, which encouraged younger and younger heroes in the company of younger and younger companion species—and ever cuter ones as well. In other words, the reverse growth trend is in part a matter of the establishment of younger audience populations, which became target markets or niches. These children and youth populations became more diversified and tightly focused with the introduction of marketing principles into the world of manga and anime in the 1970s, and with the emergence of powerful entertainment corporations in the 1980s.

Such trends have reached the point today where marketers count on the tendency of entertainments directed toward teens or young adults to shift toward children in the course of their sales: while the older kids may lose interest in certain characters and stories as they grow up, the younger kids are eager to adopt what appear to them as more mature or edgy fare. As such, rather than simple obsolescence of characters, there are effects of juvenilization within the market, and marketers sometimes retool or redirect characters and stories with younger audiences in mind. At the same time, as the otaku phenomenon indicates, there can also arise a sort of loyalty to the products of one’s childhood years, and a refusal to let go of them. The combination of these two trends generates a situation in which, on the one hand, kid stuff, and especially cute little characters, appears to spread across different age populations; and on the other hand, the characters and stories in entertainments for kids, while decidedly cute or juvenile on the surface, often feel somehow adult in their use of violence, sexuality, tragedy, and complex emotions. It is frequently difficult to say whether we are seeing a juvenilization of adults or a precocious maturation of children.

Here, too, Tezuka is a pivotal figure. In Natsume Fusanosuke’s opinion, Tezuka transformed manga for children not by writing to children but by writing the stories that he himself wanted to see written. What is more, Natsume writes, because Tezuka’s sophisticated use of line, frame, and story allowed for a new degree of complexity in narrative and psychological
presentation in children’s manga, artists began to line up to write them.\textsuperscript{18} Children’s manga suddenly allowed for both complexity and greater latitude in expression. Something of this transformation comes across in Fujimoto Hiroshi’s remarks (discussed in part I) about the death of Mimio the Rabbit in Tezuka’s \textit{Chiteikoku kaijin} (1948, Mysterious underground men). In fact, Tezuka’s manga for children were frequently criticized for being too violent for children, and such objections are today commonly directed at manga and anime as a whole, especially in the American market: so cute but too violent!

In sum, there is a general trend toward younger and cuter characters, and yet this is not a simple juvenilization or infantilization, in terms of its effects on established populations and across them and on the production of new niche populations.\textsuperscript{19} In fact, looking at such trends primarily in terms of cute or cuteness may entirely miss the point, even if we acknowledge that cuteness evokes not only a sense of nurture toward the cute little creature but also a sense of control over and thus violence toward it. This is where neoteny is of interest, especially in the context of Tezuka Osamu and the gradual transformation of Japan’s wartime speciesism into a general mode of “cute multicultural address” for export in manga, animation, and other entertainments and commodities.

Neoteny refers to the retention, by adults of a species, of traits previously seen only in juveniles. The adult retains juvenile physical characteristics well into maturity. In the evolutionary terms, the retention of juvenile traits permits a species to undergo significant physical changes that allow it to adapt to environmental changes. Those who give credence to neoteny cite the examples of flightless birds (whose proportions recall those of the chicks of flighted birds), the resemblance of domestic dogs to immature wolves, and the large head and sparse body hair of humans, which is reminiscent of baby primates. Gould, for instance, was at one time a proponent of the theory that humans might in some respects be considered neotenous chimpanzees. Thus his humorous interpretation of the evolution of Disney characters—that their growth in reverse constitutes an unconscious discovery of the biological principle of neoteny—carries a certain weight, for all its comedic tone.

In evolutionary biology, neoteny is still under debate, with some evidence for it and a good deal of clamor against it. What matters in this context is not so much the biological fact of neoteny as its conceptual terrain. Two factors strike me as particularly important. On the one hand, neoteny indicates a sort of excess in modes of cuteness. In his discussion of the neotenous tendencies of Disney characters, Gould turns to Konrad Lorenz’s discussion of how humans use differences in form between babies and adults as important
behavioral cues: “When we see a living creature with babyish features, we feel an automatic surge of tenderness.” Naturally, as a biologist, Gould understands the controversy that surrounds Lorenz’s argument that such behavioral responses constitute an innate biological predisposition. Gould doesn’t embrace behaviorism. He adds that such behaviors may equally well be learned rather than innate, and in fact such a distinction is not crucial to his argument about neoteny. What matters is that such a response occurs.

Tezuka’s depictions of his heroes is in keeping with the features of babyhood identified by Lorenz—“a relatively large head, predominance of the brain capsule, large and low-lying eyes, bulging cheek region, short and thick extremities, a springy elastic consistency, and clumsy movements.” In such tendencies, commentators aptly see Tezuka’s debt to Disney, especially to prewar Disney. Yet, as Namekawa’s account of Momotaro reminds us, such neoteny is not only a tendency of Disney but of an entire nexus of comics, cartoons, and characters that came to the fore from the 1920s and 1930s. Such neoteny became a matter of fact in manga and manga films by the early 1930s, in Japan as elsewhere in the world of cartoons. In the postwar era, Tezuka continued to push the limits of neoteny in characters, enlarging the eyes and head, expanding the brain capsule and making the cheeks bulge—to the point that he is often credited with inaugurating a Japanese cute that was even cuter than Disney and company.

In an insightful essay on the dynamics of cute culture in Japan, Sharon Kinsella offers a fine description of the cute character that follows directly from Lorenz: “The essential anatomy of a cute cartoon character consists in its being small, soft, infantile, mammalian, round, without bodily appendages (e.g. arms), with bodily orifices (e.g. mouths), non-sexual, mute, insecure, helpless or bewildered.” Yet there is more to neoteny than cuteness and juvenility.

On the other hand, neoteny presents a way of thinking evolution differently. This is surely part of its appeal for Gould. With his theory of punctuated equilibrium and of spandrels (with Richard Lewotin), Gould harnessed evidence for a general critique of “adaptationism,” that is, of theories that assumed that biological traits were selected for specifically. Generally speaking, Gould insisted on contingency and even a degree of arbitrariness in natural selection, which loosened the sense of teleological determinism that frequently crops up in sociobiology. Like Gould and Lewotin’s concept of the spandrel, the theory of neoteny disturbs the idea of a smoothly determined evolution in which traits are selected for specific utilitarian reasons. Baby or juvenile traits, precisely because they are immature, are usually construed
as less efficient and less adapted to the environment. Gould’s turn of phrase, “growth in reverse,” captures something of this overturning of deterministic progression or teleological maturation that haunts evolutionary theory.

In sum, the conceptual shift from cute to neoteny is an attempt to grasp cute as a process and potential rather than as a set of formal features—as a quality or intensity rather than a measurable set of attributes. Neoteny implies a cuteness that is not simply cute. It implies an evolutionary force or process that is nonlinear, nonteleological and immanent to the organism. As such, neoteny implies some manner of critique of social Darwinism and racism. What is more, neoteny entails a surplus or excess that crosses species. Lorenz’s famous image of neotenous types, for instance, includes a human baby, a pup, a chick, and a baby rabbit. Likewise, a contemporary animal ethologist such as Franz de Waal sees “maternal excess” in the act of an animal of one species adopting the young of another species—his example is that of a dog adopting lion cubs. Here, too, the response to neoteny also implies a transpecies potential. Yet my aim in evoking such examples is not to ground the analysis of manga and anime images in innate patterns of behavioral response. Rather what interests me is how cute little species bring into play immanent, nonlinear, nonteleological forces that promise to underdetermine teleological scenarios of maturation and socioeconomic progress (modernization), as well as hierarchal organization and social Darwinism.

Neoteny gives us a better grasp on how cute operates in Tezuka’s worlds. The robot boy Atom, for instance, presents a literal take on neoteny: it is precisely because Atom cannot grow up that he comes to embody “progressive” childlike virtues that run counter to the hierarchical order to things. Likewise, in Chōjin taikei, young and cute exemplars of the species (both of birdkind and humankind) are bearers of a transspecies potential that runs counter to the practices of segregation and hierarchy associated with the social Darwinist universe of modernization. In effect, Tezuka’s use of cute little nonhumans allows him to conduct an immanent critique of the hierarchies and divisions associated with racism as a social Darwinist conceit in which the survival of the fittest meshes inextricably with the teleological development of modernization theory. In this respect, the disclaimers about
racism that appear in certain volumes of Tezuka’s collected works (such as *Chōjin taikei*) are correct to remind us that, even though Tezuka’s depictions of Africans, Southeast Asians, and other foreigners may appear outdated and unenlightened, Tezuka’s works show a profound concern for inequality, and his procedures of humor and parody, so central to manga, were designed to expose such problems, not to reinforce racism. In other words, Tezuka Productions assures us that representations of racial difference in Tezuka’s manga should not be seen in terms of an expression of racism but in light of Tezuka’s general critique of inequality—which, they aptly note, extends to the animal world as well as imaginary creatures.

Indeed, if we are to gauge the effects of racial thinking in Tezuka, dwelling on representations and evaluating them in terms of whether they flatter or degrade a people will not take us very far. More challenging are Tezuka’s efforts to expose the absurdity and cruelty of racism, for to do so he must first locate something that occupies the same ground as racism, while undermining or exposing racism. For Tezuka, that something is neoteny, neotenous characters, and usually nonhuman ones.

The tactic of neoteny derives from Tezuka’s engagement with speciesism, as he works through racial difference in the register of the evolution of species. Thus, when Tezuka wishes to develop affirmative depictions of racial others, he resorts to neoteny. In a short manga *Janbo* (1974, Jumbo), included in the three-volume collection *Za kureetaa* (1982, The crater), the passengers on a jumbo jet are threatened by a man-eating spider. Under these tense conditions, a white American man somewhat predictably directs accusations and racial remarks at a young African American woman, and a young Japanese man steps forward to defend and befriend her. What is interesting is that, for the African American woman to play the role of the damsel in distress, she undergoes neotenization: a relatively large head, predominance of the brain capsule, large and low-lying eyes, bulging cheek region (120:152; see Figure 2).

In this instance, the neotenous traits that typically allow for a transspecies potential in Tezuka are here used to evoke an interracial or transracial potential. *Janbo* ends with the young Japanese man and young African American walking off together—and an elderly woman walking away with her pet spider (the terrible spider turns out to be a frightened companion species on the loose). A parallel is drawn between the transspecies encounter and the interracial encounter.

Nonetheless, because neoteny almost invariably appears in combination with speciesism (indeed it appears to be a variation on speciesism in which juvenilization serves to “animalize” the human), it likewise runs the risk of
reinforcing the very segregations that it aims to displace and overcome. It is surely for this reason that the transspecies moments in Tezuka are brief and fleeting, and generally there is no social formation associated with neoteny or neotenous characters. The closest thing to a neotenous social formation is the animal paradise or peaceable kingdom of species, which is invariably destroyed. This is because, as the example of the jungle empire attests, a social formation based on neoteny would surely take the form of a multispecies empire. With the exception of Janguru taitei, Tezuka steers clear of this solution to racism, to social Darwinist modernization. Instead, he turns to neoteny because neoteny affords an immanent critique of social Darwinist modernity rather than an alternative to it or an overcoming of it.

By the same token, to remain forever immanent and never transcendent, Tezuka’s neotenous nonhumans are fated to suffer at the hands of humans and even to die tragically. They cannot survive in the world of social Darwinism. They can only point to other possibilities, other desires and connections, yet unrealized and maybe unrealizable in political or social terms. Neotenous characters continuously suffer, die, and are reborn—a process that Tezuka’s magnum opus Hi no tori (1967–88, Phoenix) develops into a general strategy for serializing characters across narrative worlds, as if a palimpsest for his collected works. In sum, even though Tezuka largely refuses to develop neoteny into an alternative social formation or utopia, neoteny takes on a certain mythic weight in his work, almost as if (in a quasi-Jungian way) the mythic imagination in itself afforded a measure of salvation from the fallen condition of Darwinist modernity. In this respect, cute, that is, the neotenous character, remains inseparable from narrative arc in Tezuka. Neoteny comprises an incipient narrative of growth in reverse or, more precisely, countergrowth. The neotenous character is precisely such a counter-evolutionary narrative in the bud.

In a book with the provocative title Tezuka izu deddo (2005, Tezuka is dead), Itō Gō looks at the relation between character and narrative in the works of Tezuka. The point of departure for Itō’s wide-open theory of manga
expression (summarized in Miri Nakamura’s translation of the book’s opening chapter in this volume) is the idea that reference to Tezuka cannot account for the variety of manga expression appearing in the 1990s. Ito offers a distinction between kyarakutaa and kyara as a new paradigm for the analysis of manga expression. The term kyarakutaa, which derives from the Japanese pronunciation for the English word character, can be used to refer to characters in manga and anime, yet the abbreviated pronunciation kyara or “chara” has come into common use in talking about character more broadly, including character figurines and model kits (garage kits) for anime, manga, and game characters. For Ito, kyarakutaa is the limited term, while kyara implies something that is not only larger but also ontologically prior to kyarakutaa. He writes, “kyara comes before kyarakutaa, and imparts a ‘sense of existence’ (sonzaikan) and ‘sense of life’ (seimeikan).”

Kyarakutaa remains subordinate to the narrative world of the manga, in Ito’s opinion. Thus confined to the manga’s world, kyarakutaa sustains a certain sense of realism. In contrast, the pared-down design of kyara allows it not only to move across different narrative worlds but also to generate new worlds wherever its users see fit. Kyara takes on a life of its own. It imparts a feeling that it truly exists or actually lives. If Ito feels justified in announcing, “Tezuka is dead,” it is because he sees in Tezuka a narrative use of kyarakutaa that puts limits on the play of independent life and existence inherent in kyara. In effect, the death of Tezuka is the liberation of the vitality of kyara from the restraints that Tezuka placed on it, theoretically at least.

Ito’s aims are different from mine, more geared toward accounting for formal elements than exploring the implications of the forces that specific assemblages channel or direct. But if we look at Ito’s distinction in light of the terms set forth in this essay, Ito’s kyara bears comparison to what I have referred to as plasmaticity. In fact, I would insist that the sense of existence and life of kyara ultimately derives from a channeling of the force of the moving image into animated characters and, by extension, into manga. In contrast, what Ito sees as the narrative dependence of kyarakutaa in Tezuka’s manga dovetails with my conclusions about the dependence of the neotenous character on narrative arcs in Tezuka. Consequently, if we reconsider Ito’s discussion of kyarakutaa and kyara from the angle of plasmaticity and neoteny, it helps us to see how Tezuka’s shift from plasmaticity to neoteny constitutes not a rupture with plasmaticity but an insistent qualification of it. At the same time, another very important question arises, related to the material limits of plasmaticity and also of kyara: can there ever be an unqualified experience of plasmaticity, or an unconditioned use of kyara?
As Eisenstein notes, the plasmaticity of animation conjures forth the experience of a primordial life-force, which encourages animation to put a folkloric, mythic, animistic, and pantheistic spin on evolutionary scenarios—in animation, it is as if every form could recapitulate all forms. As such, animation does not only lend itself to animism and pantheism but also to an ideal of Form, as if animation could naturally culminate in an experience of the unity of all life, as Life.

Tezuka’s manga sometimes appear to gravitate toward an experience of Life, of a grand Unity of Being. A prime example is the evolutionary sequence in volume 2 of Hi no tori, Mirai hen (the “Future” volume, 1968), in which the scientist Masato, assigned the task of bringing about the rebirth of humanity, loses himself in the production of robots rather than working with flesh and blood (203:228). Yet, when Masato dies, he becomes “existence” (sonzai) that watches over the process of evolution, as a supreme life-form (chō sei-meitai) transcending the time and space of the living (203:237–43) as various species emerge and disappear until humans once again take the stage. Another example is the sequence in the “Phoenix” volume of Hi no tori, Hōō hen (1970), in which the painter Akanemaru drowns at sea, and he and his body gradually dissolve and then takes on a series of new forms (205:180–90), a microscopic organism, a turtle, and little bird (Figure 3).

As highlighted in the insistence on circles and spheres in these sequences, Tezuka combines evolution and reincarnation, tending graphically and narratively toward the ideal of a Circle of Life that overarches and underlies the generation and regeneration of all circles and cycles, as well as the forms of characters, which are after all composed largely of circles. What is more, the circle stands in contrast to divisions, segregations, and hierarchies, which are imagined in rectilinear and angular terms (and evoke violence and death). Nonetheless, although Tezuka’s manga flirt with the production of such an ideal of the transcendent Unity of Life, there is no actual social formation or political arrangement that corresponds to the ideal. In other words, if there is an unqualified or unconditional life force coursing through Tezuka’s worlds, it is only experienced through its qualifications, in its material immanence. Even the graphic emphasis on circles and cycles never attains holism. The circular and the rectilinear always appear combined, intermingled, as tendencies rather than categories. As such, the very circle of community, with all its holistic implications, is a combination of compassion and cruelty. In the animal island sequence in Aporo no uta (1970, Apollo’s Song), for instance, when the animals form a circle around the young man and the injured woman, form a natural amphitheater to pass biopolitical judgment against
the man who has eaten meat. Likewise, in *Chōjin taikei*, the birds who have mortally wounded the old man gather around him in the mountain, shaping a natural amphitheater for their symphonic performance (Figure 1). The theater of life, of human or humanoid life, is always a biopolitical theater of operations, precisely because the moment of communal holism and interspecies sympathy never exists in isolation from rectilinear hierarchy and interracial cruelty.

In light of these procedures in Tezuka for dealing with form and life, we can return to Itō’s account of how *kyara* entail a “sense of existence” and a “sense of life” beyond the narrative constraints that Tezuka placed upon character, which frees characters to move across different narrative worlds and to generate new worlds wherever users wish.

There is in Japan today, as elsewhere, a great deal of theoretical interest in, and even critical enthusiasm for, the apparently unprecedented liberation of character from narrative. In many ways, the current scene of character franchises and character-based media mix is truly unprecedented as
regards the confluence of information technologies and the magnitude of media convergence. Yet, if we look at character genealogically from the angle of speciesism, we see that the prevalence of companion species and cute little nonhumans points to something ambivalent and irresolvable, which is inherent in the manga and animation “machine” from its inception or consolidation in the prewar era, and which is amplified the current world of manga, animation and games. Namely, the new experience of life that arises from the directing of the force due to the mechanical succession of images into animation (techno-vitalism or techno-animism) results in flows that are readily aligned with abstractions, codes, and axioms of multiethnic or multicultural empire. Put another way, it is because the animated character implies the emergence a new life-form, a species, that it lends itself to codes for the regulation or coordination of populations, to population dynamics and evolution. From this point of view, the unprecedented media-enhanced and capital-driven liberation of character, which we see especially from the 1990s, goes hand in hand with an expansion of the codes of multiethnic empire. The prevalence and persistence of the multispecies ideal in our current entertainments confirms that our companion-species-and-character-saturated environments tend to encourage us to imagine and to work through political and socioeconomic issues in terms of war and peace among species, that is, in biopolitical terms.31

The point is not to lament this situation and its apparently irresolvable contradictions, but to think about how we are already swept into this formation and how we might live it differently and direct its forces into other channels. This is what is at stake in Tezuka’s commitment to cute little nonhumans.

From the perspective of a genealogy of species in manga and animation, the importance of Tezuka lies in his continuation of the wartime critique of social Darwinism and Western modernity, in conjunction with his adamant discontinuation of the multispecies utopia. For Tezuka, species distinctions are invariably hierarchal distinctions, which only perpetuate segregation, domination, and war. So he transformed the wartime character-species, generating from them a series of cute little nonhumans who uncomfortably and self-consciously straddle the species divide. At the same time, because Tezuka shunted much of the plasmaticity of the animated character into the character design of the nonhuman companion species, the result was a neotenous entity with a transspecies potential. But the neotenous entity does not announce the formation of a multicultural world as an alternative to social Darwinist modernity. Instead, Tezuka tended toward immanent critique. In
his works, the child offers an immanent critique of the adult, and the animal or robot of the human. The figures (child, animal, robot, nonhuman) together make for neoteny, which promises an immanent critique of teleological development, of modernization.

Because Tezuka is often associated with the production of a Japanese cute derived from Disney, it is easy to reduce Tezuka’s neoteny to mere continuation of trends in global animation, or worse, to the ambivalent dynamics of the colonized writing back to the colonizer. This is why we need to consider the specific address to postwar Japan in Tezuka’s neoteny. Precisely because Japan’s wartime speciesism already presented an effort to construct a biopolitical theater of operations beyond the dynamics of racism and social Darwinism, it offered one of the few venues in which postwar Japan could embrace the new situation of defeat and the loss of empire without, for all that, giving up on the abstractions, codes, and ideals associated with military empire. As such, the postwar persistence of speciesism is clearly not a matter of simple historical continuity or discontinuity but of the gradual harnessing and refining of a power formation implicit within Japanese empire. With the transnational movement of manga and anime in the 1990s, Japan’s speciesism came into its own on global scale, cutting across and reinforcing the multispecies ideals articulated in other postwar contexts. The importance of Tezuka’s works lies in their refusal to embrace the multispecies ideal, even as neoteny afforded a glimmer of transspecies potential, of moments of compassion in excess of the formations that strove to keep affective ties within the species. At the end of the first volume of Nōman (1968, Norman), there is an exchange that brings the problem of cute and neoteny into sharp focus.

A young human, displaced in space and time to the moon, on which a multispecies community must fight off an invasion by the evil Geldans (Gerudanjin), experiences a moment of despair when it looks like the Geldans will succeed in their invasion. Just then a cute little mammalian critter scampers in and leaps up on the table to look at the young man, who exclaims “Waa, kawaii naa!” His alien commanding officer remarks that therein lies the difference between humans and Geldans—in the human response to cuteness. Pondering this wisdom as he cradles the little animal, the young man asks, “Can it become a weapon?” And the commander replies sternly, “Don’t put them at the same level.” This scene nicely summarizes Tezuka’s postwar resistance to harnessing cute species in the service of multicultural ideals. For all his commitment to cute little nonhumans as a critique of development, he remains exceedingly wary of the possibility of the human instrumentalization of cuteness or an excess of nurture in the future. After all, once the
forces of the moving image are channeled into animal characters, those new life forms do not just flow or stream randomly or freely. Tezuka reminds us that they will be coded and recoded, instrumentalized and rationalized in new ways. What happens when the neotenous character is not guided into an immanent critique of modernity but unleashed? Here it is a not a matter of returning to narrative or to Tezuka to master the excess but rather of asking, as Tezuka’s Norman does, whether the proliferation of cute little species does not bring about an escalation of war and destruction between populations, under the aegis of the multispecies ideal.

Notes


3. For a brief overview of the emergence of children’s manga in the late 1920s and early 1930s, see Shimizu Isao’s *Zusetsu manga no rekishi* (Illustrated history of manga) (Tokyo: Kawade Shobō, 1999), 64–69. The “special issues” *Bessatsu taiyō* on children’s history of the Shōwa era *Kodomo no shōwashi* (Heibonsha) also provide a detailed presentation of the various currents in magazine and manga at the time.


6. For Pixar’s indebtedness to such techniques, see Leslie Iwerks’s documentary *The Pixar Story* (2007).


8. Tezuka Osamu, *Firumu wa ikite iru* (Film has life), in *Tezuka Osamu manga zenshū* (Complete manga works of Tezuka Osamu), vol. 55 (Tokyo: Kōdansha, 1977).


14. This topic is one of the major problematics in Michel Foucault’s *The Birth of Bio-politics: Lectures at the Collège de France 1978–79* (New York: Palgrave Macmillan, 2008).

15. Frequently cited are Tezuka’s manga versions of two Disney films, *Bambi* and *Pinocchio*, which appear to some degree as precursors of *Janguru taitei* and *Tetsuwan Atomu* respectively.


24. The disclaimer about racial portrayals in Tezuka’s manga is abridged and transformed in the English editions.


28. Itō, Tezuka isu deddo, 94–95.


31. In Dōbutsuka suru posutomodan, Azuma Hiroki, loosely drawing the term “animalization” from Hegel, advances the notion of otaku fans as “animalized.” Azuma Hiroki, Dōbutsuka suru posutomodan: Otaku kara mita Nihon shakai, Kōdansha gendai shinsho 1575 (Tokyo: Kōdansha, 2001); translated by Jonathan E. Abel and Shion Kono as Otaku: Japan’s Database Animals (Minneapolis: University of Minnesota Press, 2009). See, too, Azuma Hiroki, “The Animalization of Otaku Culture,” trans. Yuriko Furuhata and Marc Steinberg, Mechademia 2 (2007): 175–88. Yet, insofar as Azuma sees animalization in terms of behavior response and statistical control, his notion of animalization is closer to kachikuka or domestication (and thus bears comparison and contrast with Kachikujin Yapū). As such, Azuma’s use of animalization also verges on bestialization or dehumanization, and thus he presents otaku torn between animalesque tendencies and humanesque tendencies. Consequently, Azuma tends to ignore questions about biopolitics and the biopolitical theater of operations, placing ideologies and codes in the past, and establishing a posthistorical present in which ideologies and codes are no longer in effect. In contrast, my emphasis on speciesism, on the translation between animals and “races” or peoples (and gradually all manner of populations and their interrelations, be they subcultural, gender, national, ethnic, etc.) does not see the State as something now past or overcome. In this respect, although I also draw on Deleuze and Guattari, my account differs from that of Michael Hardt and Antonio Negri in Empire (Cambridge, Mass.: Harvard University Press, 2000), in which Empire is a historical stage beyond nation and national empire. I am more interested in and persuaded by Guattari and Deleuze’s insistence that the State remains a crucial mediator.
