CHAPTER THIRTY

Anime's Situated Posthumanism: Representation, Mediality, Performance

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Unfortunately, the copy-editor missed several mistakes indicated during the proofreading process. See yellow highlights below.

Anime, a popular media form from Japan, has been closely tied to posthuman critical discourse in Europe and North America. Designating primarily genre fiction appearing in cel animation, the name itself—an abbreviation of the English loanword *animeshon*—took roots in vernacular Japanese in the 1970s (cf. Berndt 2018). Roughly two decades later it began to enter the global lexicon. But contrary to the popular global definition—"Animation Made in Japan"—in Japanese discourse, anime is specified with regard to medium as cel, or cel-look, animation, serialized narratives produced on tight budgets and consequently rendered to the greatest possible extend in so-called limited rather than full animation;¹ with regard to media, that is, institutions and practices of production, distribution, and consumption, as closely tied to television and manga (i.e., magazine-based printed comics). With manga, the traditional supplier of stories to be adapted, anime shares the commercial orientation, the format of serial narratives, the high degree of conventionality, and usually also the fandom. As a matter of fact, not all "anime" are TV series or related franchise movies, but categorizing these as anime in the same breath as animated feature films made for theatrical release by renowned director-auteurs (such as Hayao Miyazaki and Mamoru Oshii) may become problematic beyond the narrow confines of medium specificity. Turning to anime, and manga, in search of contributions to, for example, posthumanism calls for a consideration of media affordances which change according to time, place, and audiences.

This chapter foregrounds the study of anime which is, arguably, much more connected to posthuman (as posthumanist and post-anthropocentric) discourse² than manga, from media affordance down to global circulation. The animated movie Ghost in the Shell (Kikaku kidōtai, dir. Mamoru Oshii 1995; hereafter, GiTS) serves as the main point of reference due to its extraordinary critical impact. It is not juxtaposed with the eponymous manga it adapted (by Masamune Shirow 1989–90) and neither the ensuing franchise (including Oshii's sequel Innocence, 2004, and the two TV anime series Ghost in the Shell: STAND ALONE COMPLEX and S.A.C. 2nd GIG by Kenji Kamiyama, 2002–03 and 2004–05 respectively). As most accounts of anime's posthumanism highlight plot, dialog, and character configurations, this chapter privileges anime-specific mediality, and precisely because its focus is on the media form of anime rather than the thematic genre of science fiction Englishlanguage discourse is given preference over the Japanese one, where literature has played the central role (cf. Fujita 2012). The chapter shows what type of anime is at stake in relation to posthumanism, and how not only exceptional animated movies like GiTS but also ordinary TV anime series (like Inuyashiki: Last Hero and Coppelion) may afford posthumanist thought, namely by making viewers feel "disjunctive synthesis" (Lamarre 2015: 8).

REPRESENTING THE POSTHUMAN

Since its introduction to non-Japanese adult audiences around 1990 anime has been associated with posthuman representation. Already in the 1960s the animated TV series Astro Boy (Tetsuwan Atomu, dir. Osamu Tezuka 1963-66) crossed borders, but it did not have the transnational critical impact of later feature-length animated movies for theatrical release like GiTS, or AKIRA (dir. Katsuhiro Ōtomo 1988). Prior to the age of online streaming services and Quality TV, the media-institutional role of cinema proved vital to attracting attention by academics and public intellectuals abroad. Not surprisingly, the manga³ these movies initially rested on enjoyed a much lesser fame outside of Japan. In addition to cinema, anime's globalization was facilitated by three factors: its initial embedding in the domain of science fiction (hereafter, SF); critical interest in representation or thematic content, especially the cyborg as a posthuman type of character; and the discourse of techno-Orientalism, "a practice of ascribing, erasing, and/or disavowing relationships between technology and Asian peoples and subjects" (Niu 2008: 74, 91: n7). In the early 1990s, the reception of anime and its posthumanism was linked to techno-Orientalism, which articulated both fear and desire toward Japan as a new economic and technological power at the time (cf. Ueno 2001). Facilitated by cyberpunk narratives such as Blade Runner (dir. Ridley Scott 1982) and William Gibson's Neuromancer (1984), techno-Orientalism included a likening of Japanese people to robots lacking individuality and "animatedness" (cf. Ngai 2005).

Outside Japan, the circulation of anime, and manga, was boosted by a perceived affinity with the thematic genre of SF; to rephrase, they spread as part of a specific "subcultural cluster" (Kacsuk 2016: 289). SF also became the major gateway for anime to enter Anglophone academia (cf. Orbaugh 2002, 2005, 2009). Inside Japan, SF series increased the cultural status of anime domestically around 1980, although this did not equally apply to the media of manga which has been framed to a much higher degree by demographic genres, that

is, age and gender-specific categories. In part these genres provided the space for female manga authors to publish SF narratives already in the 1970s and 1980s, but whenever non-Japanese posthuman discourse considered Japanese popular media, there has been an inclination to privilege anime and, relatedly, male directors.

As is widely known, GiTS, the movie, tells the story of Major Motoko Kusanagi, a cyborg at Japan's Public Security Section 9, who experiences an identity crisis that makes her question the authenticity of her memories. Throughout the movie she chases a mysterious hacker, the so-called Puppet Master, and eventually she merges with that artificial intelligence to propagate. Japanologist Sharalyn Orbaugh, one of the most prolific academics writing on GiTS, read the movie as "a narrative that is all about the nature of sex/gender identity and self-identity in general in a future world where sexual reproduction has given way to mechanical replication" (2005: 67). Relatedly, she highlighted cultural differences, for example, in her retrospection on the "Cyborg's Heyday 1985–1995" where she maintains:

One of the most salient aspects of all the posthuman films of Oshii Mamoru⁴ is that the cyborgs they depict are not always terrifying, hypermasculine, evil characters. On the contrary, many of his cyborg protagonists are feminine in shape, and Oshii is interested in exploring what cyborg subjectivity is like "from the inside," so that viewers get a much more nuanced, complex sense of what it might *feel* like to be posthuman. (2015: 196; emphasis added)

Over the course of the last two decades, and in line with the shifting accentuation in posthuman theory, GiTS has been scrutinized in regard to how much it actually promotes a non-binarist relation between mind and matter, or ghost—the Major's organic brain and sense of self (although "for Motoko, the self is neither in her body nor in her brain"; [Kadobayashi 2015: 34])—and shell, her prosthetic body. Media theoretician Thomas Lamarre has responded to the general, not Japan-specific "impasse of the cyborg problematic"—the posthuman being as not networked enough and its intelligence not sufficiently embodied—with a focus on affective relationality:

The ghost is matter of embodied experience and intuition of the world rather than disembodied subjectivity. It entails, in effect, *feeling* rather than perceiving. Where the perceiver seems to reside in the shell (or in the head) and to stand outside the world, the ghost feels the world and the self at the same time, prior to the perceiver being conscious of either. (Lamarre 2015: 7)

With respect to the GiTS animations Lamarre elaborated on the example of scan lines, that is, the emulation of video footage in anime as a marker of the cyborg's view and as such "an experiential analog to the ghost" (7); with respect to the GiTS manga he foregrounded the material composition of graphic storytelling, or "how each panel 'feels' and 'affects' the other panels on its page as well as pages preceding or following it" (2018: loc. 6706). In this context, Lamarre introduced the term "disjunctive synthesis" (2015: 8), denoting "a fusion of different dimensions without loss of difference" (2018: loc. 6683) that applies, in his reading,

to both the GiTS narrative's discourse of the posthuman and the twofold audiovisuality, or "cyborg mediality," that gives rise to it.

SITUATED MEDIALITY

Differences in perspective are not only due to a location outside or inside Japan, but likewise, and even more so, the degree of familiarity with the media environment that has hosted anime in the first place. Consequently, an external perspective can be found as much in traditional film criticism as in anthropological research by Japan experts. One of its recurring characteristics is a generalized notion of the media in question, generalized insofar as formalist medium specificity is given preference over historically and culturally situated media practices including conditions of production, distribution, and modes of consumption. A representative example in this regard is the monograph Robo Sapiens Japanicus: Robots, Gender, Family and the Nation (2018) by Jennifer Robertson. Taking its departure from the popularity of humanoid, socially assistive and therapeutic companion robots such as ASIMO and Pepper, which are neither fully functionable as caretakers of the elderly nor commercially viable, Robertson investigates "real-world human-robot relations in Japan" (1) with a special analytical emphasis on "the type of national cultural, social institutional, and family structures within which humans and robots are *imagined* to coexist" (26; emphasis added). Her fieldwork reveals that "the inclusion of robots in a network of animate entities is an attitude shared by many Japanese roboticists today" (13), and she traces this orientation back to both indigenous animism and the favorable images of robots that "have been forged by science fiction films, anime, and manga" (8).

Neither of these popular media is homogenous though, as, for example, differences between the affections of Japanese roboticists and the preferences of non-Japanese critics evince. While many of the latter are attracted by bounded narratives which facilitate philosophical readings (cf. Swale 2015; Bolton 2018), the actual developers of humanoid robots and their domestic users have been cherishing a collective memory that rests on TV anime such as Astro Boy, or Doraemon (1973, 1979–2005). Evidence is provided by the SF fantasy anime series *Inuyashiki: Last Hero* (dir. Keiichi Satō and Shūhei Yabuta 2017).⁵ Set in contemporary Tokyo, it features Mr. Inuyashiki, a prematurely aged mousey salaryman, whom extraterrestrials accidentally kill and then revive as a cyborg. Contrary to his antagonist, an increasingly violent high school student, Mr. Inuyashiki uses his newly acquired powers to help people. In the third out of eleven episodes, he overhears remote cries, but he cannot get his machinic body to soar into the air—until he starts to cantillate the Astro Boy theme song. Thus, the elderly man, whose only companion is a stray dog he picked up briefly after his transformation, is empowered diegetically by intertextual reference to an old anime series, or by anime as such which, even if it employs CGI as is the case here, has become an aging media compared to the time of the first GiTS movie, at least insofar as posthuman tropes are concerned.

Inuyashiki: Last Hero is reminiscent of GiTS in several regards—its opening titles, which feature mask-like human faces attached to machinic bodies; a naked woman in fetal position floating in free space; the foregrounding of mediated experience by means of a variety of

screens (from smartphone displays and computer monitors to public LCD walls); and also the overall seriousness in tone. The everyday-life settings are realistic, the social issues too: bullying at school, shit-storms online, and neglect in dysfunctional families. But the fact that there is nothing to laugh about distinguishes Inuyashiki: Last Hero from the bulk of mainstream anime which, as a global niche media, is marked, among other things, by comedic changes in register far beyond mere on-the-side gags. One device is the so-called *chibi*, an exaggerated ("super deformed") midget character, or midget version of one and the same character, that makes affective states visible. Playfully jeopardizing diegetic coherence and promoting characters' fluid identity, chibi have been increasingly used since the 1990s, and in the more openly structured TV series format at that, as distinct from authorial movies like the ones by Hayao Miyazaki or Mamoru Oshii. Although not strictly chibi, GiTS's cute and funny tachikoma-smaller spider-like robots endowed with artificial intelligence, who synchronize every night (and are consequently all performed by one and the same voice actor)—did not make it from Shirow's manga into Oshii's 1995 movie; they appear in the later TV anime series though. Media philosopher Takeshi Kadobayashi conceives the tachikoma as an allegorization of "the parergonic condition of the 'ghost' concept in the GiTS series. The tachikoma exhibit liveliness although they do not possess a ghost, or rather precisely because they do not have to be anxious in that regard" (2015: 48). Kadobayashi likens them to the earlier anime robots Astro Boy and Doraemon, for whom it was also insignificant whether they had a ghost at all, and he maintains further that they do not become as earnest and uncanny as the Puppet Master when they "begin to host something like a ghost" (2015: 47) in the first TV series.

But even without chibi-fication or a similar kind of comicality, Inuyashiki: Last Hero appears sufficiently animetic, and not only because of the fantasy elements, the central characters' levitation, and their ultimate duel in space. The series exhibits the typical "synthetic disparity" (Ritzer 2013: 143) between sequences of spectacular action and daily dinner table conversation or monologic contemplation, as well as "the coexistence of different graphic worlds" (Csicsery-Ronay Jr 2015: 41). The latter manifests in the alternation between limited and full animation or, in a broader sense, still and moving images, which occasionally fuse by "the incorporation of an intensity of movement into the still image itself" (Steinberg 2012: 28). The still image itself furthermore tends to entwine pictorial flatness and depth, especially in the form of two-dimensional, apparently hand drawn character designs, and computer-generated three-dimensional cityscapes (the contrast of which is much sharper in the manga due to the extensive use of photographic images for backgrounds there). Anything but confined to the visual dimension, im/mobility, and dis/continuity go right to the heart of anime's media affordance for posthumanism. While animation in general may appear "as a nexus of contradictions" in regard to the segmentation of movements as well as body and voice in its production (Ngai 2005: 125), commercial TV anime has turned technical and economic constraints into a recognizable style, its (by now deliberate) imperfection corresponding with character types that escape the modern anthropocentric standard. Symptomatic in this regard is the adaptation of Akira Kurosawa's renowned movie Seven Samurai (1954) into a twenty-six-episode anime series, Samurai 7 (dir. Toshifumi Takizawa 2004). The anime's retro-futuristic setting turns the bandits who threaten the villagers into giant cyborgs, or more specifically, mobile armors without souls. But an intermediary being is also featured: Kikuchiyo, the cyborg who has retained his soul. In Kurosawa's film, he was a social hybrid and therefore able to mediate between the classes of farmers and samurai; in the anime, he conjoins technologically outdated human warriors and advanced killing machines. Symptomatically, his closest companion is a newly added girl character, little Komachi.

Childlike and cute characters who invite empathy, last but not least by means of big eyes, abound in mainstream anime: from Astro Boy, the robot who cannot grow, to those animaloid creatures and spirit beings that populate the globally most widespread franchises today (suffice to think of Pokémon, Yōkai Watch, or Kemono Friends). Anime characters like Mr. Inuyashiki, who is not cute but who escapes perfection as much as Astro Boy in both narrative setting and animation, seem to deliver what roboticist Masahiro Mori had in mind for humanoid robots in 1970 when he called attention to the "uncanny valley," a point where human-likeness in a nonhuman entity starts to look eerie or even creepy (Karl F. MacDorman points out that the use of the word uncanny leads back to the first translation in 1978 and insinuates a psychoanalytical connection that Mori himself had not intended [2019: 226–7]). Mori's advice "to create a *safe* level of affinity by deliberately pursuing a nonhuman design" (2012: 4; emphasis added) has obviously been heeded by anime. Two things suggest this: first, the abundance of posthuman characters who, in all their ambiguity, are approachable and ultimately unthreatening, or "safe"; and second, the fact that "[t]he overwhelming majority of Japanese-based [anime] productions maintain an attachment to 2D or hand-drawn character design within a backdrop and texturing that is aided by 3D design and digital imaging" (Swale 2015: 39). Not the photorealism of computer-animated films like Final Fantasy: The Spirits Within (dir. Hironobu Sakaguchi 2001) but deliberate stylization is one of anime's characteristics just like the occasional restraint toward animating anything and everything, invoking motion through sound or rapid editing of still images instead. Yet, in order to illustrate the power of stylization, Mori referenced the traditional puppet theater, bunraku, and not anime, although anime had already given rise to numerous nonhuman characters. The commitment to im/perfection—as a way to invite audience participation from empathy and immersion down to fan creation—did presumably not yet appear as deliberate a choice as under today's technological conditions.

Mori's idea of the uncanny valley has increasingly attracted global attention since 2005, mainly in regard to computer animation and video games. In the humanities, it has been cherished as hinting to an uncertainty or "in-betweenness that may momentarily make us question our knowledge or beliefs about the foundations or definitions of reality, organic life, humanness and agency," according to film scholar Lisa Bode (2018: 66). Focusing on non-Japanese commentary, her overview seems to confirm Robertson's assertion that "the uncanny valley hypothesis is largely a preoccupation of Anglophone scholars" (2018: 157). As a Japan expert trained in Cultural Studies Robertson criticizes Mori's hypothesis, among other things, for the generalization of the user, maintaining rightly that the uncanniness of puppets and robots alters depending on age, gender, ethnicity, education, and familiarity. In extension, she calls for socio-critical specification with respect to the widespread assumption that Japanese robotophilia escapes Western binarisms. According to her, modern Japan shows

an inclination to replace the man-machine binarism by the man-woman binarism and human exceptionalism by "Japanese exceptionalism" (2018: 142–3), for example, when people in need prefer robots over minorities, foreigners, and refugees. But the critical stance toward generalization is not applied to the media texts which Robertson introduces at length to support her argument of conservative "retro-robotics." One of her central examples is a tenpage informational manga in short-story format commissioned by the Japanese government in 2007.⁶ Not available in stores, it signals to potential readers difference from typical entertaining graphic fiction; it even lacks the very manga look that is expected to invite empathy and immersion, close-ups of characters' faces to begin with. Regarding such a publication as "exemplary of the widespread use in Japan of gekiga (graphic propaganda)" (2018: 22) is only possible if one abstains from considering the meaning of *gekiga*⁷ shared by the majority of manga authors, editors, and readers. The formalist reference to a "typical graphic structure" (Robertson 2018: 74)—panel types as categorized by cognitive linguist Neil Cohn—does not accommodate manga specificity either as it overlooks the situatedness that needs to be considered when assessing the possible socio-political impact of Japan's highly compartmentalized popular media. After all, the allegedly universal "graphic structure" of manga differs significantly according to time and (gendered) genre.

PERFORMANCE

As distinct from the GiTS manga, the 1995 movie ends on the protagonist's rebirth as a girl who speaks eventually with the Major's low voice as if the ghost remained while the shell was replaced after the merger with the Puppet Master. Compared to the Major's nakedness in other scenes (more boldly pictured in the manga though), her girlhood has not attracted much attention. In the main it has been taken as indicative of the necessity of embodiment and—as no other body was available on the black market guickly enough—the eluding of control by the state, the owner of most shells. But the girl body also points to connectivity and performativity (cf. Berndt 2019). Heather Warren-Crow demonstrates in Girlhood and the Plastic Image (2014) what the girl and the digital image have in common, namely, a fluctuating in-betweenness, closely related to malleability and environmental openness. As such even the Major, who does not appear girly at all, exhibits properties of a girl: at the beginning of the GiTS movie, she takes off her coat to dive into the city/cyberscape, her "naked" body turning visually transparent and finally disappearing as a result of merger with the environment. Otherwise, she plugs into the Web by means of a cable attached to her neck's data port, and precisely this networkedness makes her both vulnerable to penetration and powerful.

When the Major raises her voice for the first time, her mouth stays immobile. This disjunction has led Japanologist Christopher Bolton to associate Japan's bunraku theater, where puppets are being watched frontally on stage while their speech and song resound from the right side of the audience. In *Empire of Signs* (1970), Roland Barthes approached the bunraku configuration with regard to a different kind of subjectivity, one that is performed as concurrently dispersed and unified (Barthes [1970] 1982: 48–57). At first glance, the bunraku stage seems to foreground a lack of agency though: the actual actors are

being performed by puppeteers and a chanter just as the characters they perform are being played by social conditions they can hardly defy or exit only by means of double suicide, for example. The Major's final merger with the Puppet Master can arguably pass as an equivalent of the bunraku characters' withdrawal. But when Bolton uses the section title *Uncanny Parallels* for the revised comparison of bunraku and GiTS in his monograph *Interpreting Anime*, this is not to reconfirm Japanese tradition or a dubious origin; rather, it serves to highlight the twofoldedness of being performed and performing, which appears to be echoed by the assertion that "animation conceals and then foregrounds the performance" (Bolton 2018: 117). Performance artist and researcher Yuji Sone reads both bunraku puppets and actual humanoid robots as performers in his monograph *Japanese Robot Culture*, and he maintains that their affective power and capability to initiate a transformative experience in the viewer lean on "the recognition of the theatricality of the staging ... a dynamic and culturally specific mise en scène" (2017: 18).

One central thread running through Bolton's monograph on animated movies is the oscillation they actuate between affective immersion and critical distance. This is investigated against the backdrop of a primary interest in the concept of the individual human subject and this subject's identity crisis under posthuman conditions. Accordingly, Bolton regards the disparity of the puppets' artificiality and realism—their appearing lively while not being alive—as uncanny. But as mentioned above, Mori did not allude to the Western tradition of the doppelgänger, and anthropologists have shown that the perceived uncanniness is not necessarily shared by contemporary Japanese roboticists either (cf. Richardson 2016). Notably, the discussion of the Major in light of bunraku puppeteering leads back to ideas first developed in the early 2000s (cf. Bolton 2002). Since then critical interest in anime has seen a significant move away from representation to mediality and mediation, and more specifically, from the representation of mediated experience to medial experience. This has affected the view of GiTS:

The challenge of shifting attention to the media problematic is that it is no longer possible to look at the identity crisis in terms of a problem with an answer or a contest with a victor. Taking a discursive side ... resolves nothing. Oshii instead situates us within a media experience of the problematic. (Lamarre 2015: 17)

In other words, worthy of consideration is not only how specific anime works situate their audience paratextually, but also how they make viewers experience, or feel, the issue at hand, in this case, posthumanism as disjunctive synthesis. The TV anime *Coppelion* (dir. Shingō Suzuki 2013, thirteen episodes) is a good example in this regard, especially as it resembles GiTS in various ways. Thus, the images underlying the series' end credits reference the movie's famous opening: just like the latter presented the Major's genesis—as a machinic body assuming flesh and skin and then surfacing from fluid—the TV anime turns a doll into a girl and has her pulled out of the fluid by a companion's hand. In terms of narrative, *Coppelion* begins where the 1995 GiTS left off: instead of the mature female cyborg, genetically engineered high school girls are at the center, so-called Coppelions whom the anime features "as radiation-resistant post-human technologies, as disposable nuclear

workers, and as magical girls endowed with superhuman/supernatural powers" (Monnet 2017: 255). Twenty years after a fatal nuclear accident which transformed Tokyo into a ghost town, so highly contaminated that humans cannot naturally live there anymore, a Coppelion unit is dropped in the now walled city to locate and rescue survivors. Like in the Major's case, the superhuman capabilities of eighteen-year-old Ibara and her companions are not visible at first glance, but can be inferred only from the fact that they do not wear hazmaz suits, in contradistinction to the human characters around them. Apart from that intradiegetically visible evidence, the viewer has to rely on verbal hints in dialog and narration, or on inserted still images of dolls which signal the Coppelions' status as marionettes in the hands of the state, another similarity with the Major. The state is represented by adult "puppeteering" men. And as if confirming Robertson's gender-related argument, even the so-called Ghosts, soldiers of the initial rescue forces who had been left behind, try to use the girls—although for revenge, that is, a devastating detonation of the ruined nuclear power plant, which is too heavily polluted for humans to enter.

But not all Coppelions are female, and not all take an anti-human attitude. In particular Ibara commits to both human and nonhuman survivors, including the poisoned city of Tokyo, which is about to be abandoned completely to become a global nuclear waste dump. In her attempts to go beyond anthropocentric binaries, she represents a posthumanist position par excellence. From an ecocritical perspective, however, the *Coppelion* anime may easily appear as not living up to its subversive promise, an expectation raised by the fact that the manga it is based on was outspoken with regard to the risks of nuclear power⁸ to a degree that it has been found to "convey a criticism of nuclear power" (Li 2017: 41). Consequently, the anime adaptation, which had already been announced by March 2011, was postponed after the Fukushima disasters. This makes *Coppelion* indicative of the high contextuality of mainstream anime's (and other popular media's) representations: what was produced with the primary aim of commercial entertainment, or assumed to pass under that umbrella, may raise political concern under certain circumstances—and be revised accordingly, as happened to the *Coppelion* anime within the two and a half years until it was finally broadcast.

Comparative literature scholar Livia Monnet sees the anime in a more general way as staying complicit with nuclear capitalism insofar as the nuclear uncanny "is deflected into, and blunted by, melodrama; by the animetic-mangaesque effects of magical (nuclear) irrealism, comical self-referentiality, and self-parody; by postapocalyptic pathos; and finally by an ethos of self-sacrifice" (Monnet 2017: 254). Self-sacrifice concludes also *Inuyashiki: Last Hero*. Having served as a narrative device to terminate the underwhelmingly successful manga serial it was adapted from, it also attests to the observation that anime is "effective for expressing confusion but not as good for portraying solutions or resolution" (Bolton 2018: 50), a statement initially pertaining to the *AKIRA* movie. Monnet's article demonstrates how the search for resolution—in the sense of an unambiguous "critique of Japan's and of global nuclear capitalism"—inevitably fails, the critical discourse of a number of characters being "considerably weakened by *Coppelion*'s compliance with the dominant imaginary of market-oriented anime and SF ecologies" (2017: 256). Eventually the article concedes that "*Coppelion* may be said to tentatively articulate an emergent, new type of subjectivity" called "ahuman (nuclear) condividuality," and in relation to that, an ethico-aesthetic paradigm

called "chaosmos of (nuclear) condivision" (257).

It is interesting to note that the radical inclusion, which these newly developed concepts promote, does not extend to the "animetic-mangaesque effects" and the "self-parody" of commercial anime. Magically occurring levitation serves as one example for playing down the risks of nuclear power and the reality of life in a toxic environment. Indeed, the Coppelions fly, but when they do, for example in battle, their movements are not continuous; occasionally, they freeze and halt in free air. Besides, bold outlines mark them as flat characters off from the three-dimensionally rendered cityspace in which they act. Abrupt juxtaposition rather than "plasmatically" continuous metamorphosis is also the main way in which anime employs the chibi device. Admittedly, the *Coppelion* characters do not undergo such transformation, but in view of the exaggerated depiction of their affective states they approximate the "combination of serious engagement with a playful style," which Ursula K. Heise maintains to be a general characteristic of animation from its inception (2014: 301).

Affective and aesthetic charging is one central aspect for anthropologists Casper Bruun Jensen and Anders Blok in their attempt to "energize the previously discarded concept of animism" (2013: 87). What they call "Shinto cosmograms" in order to free Shinto, Japan's indigenous religion, "from the burden of simply and exclusively signalling an ominous politics" (88), is "characterized by qualities of immanent connectedness, affective and aesthetic charging, imaginative renewal of more-than-human homes and polymorphous enchantment" (107). Hayao Miyazaki's animated movies serve as a case in point. But as this chapter has shown, TV anime holds its own potential with regards to experiencing the posthuman condition. Reaching beyond the bounded art work of an author, it allows for a whole range of disjunctive syntheses, including oscillations between representational issues and aesthetic matter, media convergence and media specificity. In Japanese publications on the posthuman, however, mediality in general and that of anime in particular have carried less weight than philosophical issues (cf. Hyōsho 2008). In comparison to North America, literary critic Naoya Fujita (2012) sees the Japanese discourse, tied as it is to SF literature, characterized by an absence of euphoric transhumanism as an attempt to overcome death; an emphasis on communication networks and interrelationality (like in GiTS); and a culture of animating fictitious characters that rests in part on traditions of animism. An investigation of such particularities and also posthumanist notions ante litteram is, without doubt, worthwhile. In contrast, this chapter has taken the perspective of anime studies to invite speculation on the possibility of an animetic posthumanism which, by its very nature, would go beyond the exclusion of comicality, entertainment, parody, commerce, and fancultural participation.

imited animation minimizes the number of drawings per second of film, creates partial movements, and evokes the impression of movement by other than cinematic means, resulting in "dynamically immobile" images (Steinberg 2012).

f. for an overview Ferrando 2013; and Braidotti, who interrelates the "critique of the Western Humanist ideal of 'Man' as the allegedly universal measure of all things" with the "rejection of species hierarchy and human exceptionalism" and the promotion of a "notion of vitalist materialism that encompasses non-human agents, ranging from plants and animals to technological artefacts" (2018: 339).

I line with Japanese and Japanological custom, this chapter leaves the plural form of nouns unmarked by "-s." The romanization of Japanese words follows the modified Hepburn System, with macrons indicating extended vowels. The translations from Japanese publications are mine.

s distinct from the Western name order employed in this chapter, Orbaugh follows the Japanese convention, surname preceding first name without separation by comma.

ased on the manga by Hiroya Oku, first serialized in the bi-weekly magazine *Evening* 2014–17.

atsuhiko Eguchi (script) and Ryūji Fujii (illustrations) Innovation 25.

type of graphic narrative for mature readers that formed the basis for *seinen* [youth] manga, today preferred by elderly male Japanese politicians. Non-Japanese comics critics occasionally assume it to be the only socio-critical manga genre, that is, an equivalent to alternative comics.

Ianga by Tomonori Inoue, in Young Magazine (first weekly, later monthly), 2008–16, 26 vols.

SOURCES CITED

Barthes, Roland. *Empire of Signs*. Translated by Richard Howard. New York: Hill and Wang, [1970] 1982.

- Berndt, Jaqueline. "Anime in Academia: Representative Object, Media Form, and Japanese Studies." *Arts*, vol. 7, no. 4 (2018): n.p, https://www.mdpi.com/2076-0752/7/4/56.
- Berndt, Jaqueline. "Introduction: Shōjo Mediations." In *Shōjo Across Media: Exploring "Girl" Practices in Contemporary Japan*, edited by Jaqueline Berndt, Kazumi Nagaike and Fusami Ogi. New York: Palgrave Macmillan, 2019, pp. 1–21.
- Bode, Lisa. "The Uncanny Valley." In *The Animation Studies Reader*, edited by Nichola Dobson, Annabelle Honess Roe, Amy Ratelle and Caroline Ruddell. New York: Bloomsbury Academic, 2018, pp. 59–68.
- Bolton, Christopher. "From Wooden Cyborgs to Celluloid Souls: Mechanical Bodies in Anime and Japanese Puppet Theater." *Positions*, vol. 10, no. 3 (2002): 729–71.
- Bolton, Christopher. Interpreting Anime. Minneapolis: University of Minnesota Press, 2018.
- Braidotti, Rosi. "Posthuman Critical Theory." In *Posthuman Glossary*, edited by Rosi Braidotti and Maria Hlavajova. London: Bloomsbury, 2018, pp. 339–42.
- Cohn, Neil. *The Visual Language of Comics: Introduction to the Structure and Cognition of Sequential Images.* London: Bloomsbury, 2013.
- Csicsery-Ronay Jr, Istvan. "What Is Estranged in Science Fiction Animation?" In *Simultaneous Worlds: Global Science Fiction Cinema*, edited by Jennifer Feeley and Sarah Ann Wells. Minneapolis: University of Minnesota Press, 2015, pp. 29–46.

Ferrando, Francesca. "Posthumanism, Transhumanism, Antihumanism, Metahumanism, and New Materialism: Differences and Relations." *Existenz*, vol. 8, no. 2 (2013): 26–32.

Fujita, Naoya. "Joron: Nihonteki posutohyūman no jidai" [Preface: The Japanese Posthuman Era]." In *Posutohyūmanitīzu: Itō Keikaku igo no SF* [Posthumanities: SF Since Itō Keikaku], edited by Genkaiken [Studies of the Limit]. Tokyo: Nan'undō, 2012, pp. 3–15.

Heise, Ursula K. "Plasmatic Nature: Environmentalism and Animated Film." *Public Culture*, vol. 26, no. 2 (2014): 301–18.

Hyōshō. Tokushū: posutohyūman" [*Representation*. Special Issue: Posthuman]. Edited by *Hyōshō bunkaron gakkai* [Association for Studies of Culture and Representation]. Tokyo: Getsuyōsha, 2008.

Jensen, Casper Bruun, and Anders Blok. "Techno-animism in Japan: Shinto Cosmograms, Actor-Network Theory, and the Enabling Powers of Non-human Agencies." *Theory Culture & Society*, vol. 30, no. 2 (2013): 84–115.

- Kacsuk, Zoltan. "Subcultural Clusters and Blurry Boundaries: Considering *Art Worlds* and *Fields of Cultural Production* through the Prism of Localized Manga Production in Hungary." In *Cultures of Comics Work*, edited by Casey Brienza and Paddy Johnston. London: Palgrave Macmillan, 2016, pp. 283–96.
- Kadobayashi, Takeshi. "Gōsuto no shibari o hodoku: Kōkaku kidōtai, posutohyūmanizumu, parerugon" [Untying the 'Ghost': *Ghost in the Shell*, posthumanism, parergon]." In *Eiga to tekunorojī* [Film and Technology], edited by Yukihiro Tsukada. Kyoto: Minerva shobō, 2015, pp. 31–57.
- Lamarre, Thomas. "Scan Lines: How Cyborgs Feel." In *Simultaneous Worlds: Global Science Fiction Cinema*, edited by Jennifer Feeley and Sarah Ann Wells. Minneapolis: University of Minnesota Press, 2015, pp. 3–28.
- Lamarre, Thomas. "Cyborg Empiricism: The Ghost Is Not in the Shell." In *Introducing Japanese Popular Culture*, edited by Alisa Freedman and Toby Slade. New York: Routledge, 2018, pp. 300–10. Kindle edition.

The Bloomsbury Handbook of Posthumanism, edited by Thomsen, Mads Rosendahl, and Jacob Wamberg, Bloomsbury Publishing Plc, 2020. ProQuest Ebook Central, http://ebookcentral.proquest.com/lib/sub/detail.action?docID=6264152. Created from sub on 2020-12-17 18:15:39.

- Li, Carl K. "How Does the Radiation Make You Feel? The Emotional Criticism of Nuclear Power in the Science Fiction Manga *Coppelion.*" *Journal of Graphic Novels and Comics*, vol. 8, no. 1 (2017): 33–45.
- MacDorman, Karl F. "Masahiro Mori und das unheimliche Tal: Eine Retrospektive." In *Uncanny Interfaces*, edited by Konstantin Daniel Haensch, Lara Nelke and Matthias Planitzer. Hamburg: Textem Verlag, 2019, pp. 220–34.
- Monnet, Livia. "A Chaosmos of Condivision: Radiation Aesthetics in the TV Anime Series *Coppelion* (2013)." In *Ecocriticism in Japan*, edited by Hisaaki Wake, Keijiro Suga and Yuki Masami. London: Lexington Books, 2017, pp. 239–65.
- Mori, Masahiro. "Bukimi no tani." Energy, vol. 7, no. 4 (1970): 33-5.
- Mori, Masahiro. "The Uncanny Valley: The Original Essay by Masahiro Mori." Translated by Karl F. MacDorman and Norri Kageki. *IEEE Spectrum* (2012): n.p. (6pp.). https://spectrum.ieee.org/automaton/robotics/humanoids/the-uncanny-valley.
- Ngai, Sianne. "Animatedness." In Ugly Feelings. Cambridge, MA: Harvard University Press, 2005, pp. 89–125.
- Niu, Greta Aiyu. "Techno-Orientalism, Nanotechnology, Posthumans, and Post-Posthumans in Neal Stephenson's and Linda Nagata's Science Fiction." *MELUS*, vol. 33, no. 4 (2008): 73–96.
- Orbaugh, Sharalyn. "Sex and the Single Cyborg: Japanese Popular Culture Experiments in Subjectivity." *Science Fiction Studies*, vol. 29, no. 3 (2002): 436–52.
- Orbaugh, Sharalyn. "The Genealogy of the Cyborg in Japanese Popular Culture." In *World Weavers: Globalization, Science Fiction, and the Cybernetic Revolution*, edited by Kin Yuen Wong, Gary Westfahl and Amy Kit-Sze Chan. Hong Kong: Hong Kong University Press, 2005, pp. 55–72.
- Orbaugh, Sharalyn. "Emotional Infectivity: Cyborg Affect and the Limits of the Human." *Mechademia*, vol. 3 (2008): 150–72.
- Orbaugh, Sharalyn. "Chapter 12: Manga and Anime." In *The Routledge Companion to Science Fiction*, edited by Mark Bould, Andrew M. Butler, Mark Bould-and Adam Roberts. London/New: York: Routledge, 2009, pp. 112–22.
- Orbaugh, Sharalyn. "Who Does the Feeling When There's No Body There? Critical Feminism Meets Cyborg Affect in Oshii Mamoru's *Innocence*." In *Simultaneous Worlds: Global Science Fiction Cinema*, edited by Jennifer Feeley and Sarah Ann Wells. Minneapolis: University of Minnesota Press, 2015, pp. 191–209.
- Oshii, Mamoru, dir. Kōkaku kidōtai. Japan and UK: Kodansha and Bandai Visual Company, 1995.
- Richardson, Kathleen. "Technological Animism: The Uncanny Personhood of Humanoid Machines." *Social Analysis*, vol. 60, no. 1 (2016): 110–28.
- Ritzer, Ivo. "Transmedialität, Transgenerizität, Transkulturalität: Zur axiomatischen Hybridität von *anime." montage AV*, February 22 (2013: 132–50. DOI: http://dx.doi.org/10.25969/mediarep/441.
- Robertson, Jennifer. *Robo Sapiens Japanicus: Robots, Gender, Family, and the Japanese Nation*. Oakland: University of California Press, 2018.
- Sone, Yuji. Japanese Robot Culture: Performance, Imagination, and Modernity. New York: Palgrave, 2017.
- Steinberg, Marc. Anime's Media Mix: Franchising Toys and Characters in Japan. Minneapolis: University of Minnesota Press, 2012.

Swale, Alistair D. Anime Aesthetics. New York: Palgrave Macmillian, 2015.

Ueno, Toshiya. "Japanimation and Techno-Orientalism." In *The Uncanny: Experiments in Cyborg Culture*, edited by Bruce Genville. Vancouver: Arsenal Pulp Press, 2001, pp. 223–31.

Warren-Crow, Heather. Girlhood and the Plastic Image. Hanover, New Hampshire: Dartmouth College Press, 2014.