



## Immobile Sections and Trans-Series Movement: *Astroboy* and the Emergence of Anime

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**Abstract** This article contrasts the different economies of motion found in cinema and animation, and explores the particular economy of movement and libidinal investment that accompanies Japanese anime, paying close attention to the first anime TV series, *Astroboy* (*Tetsuwan Atomu*). Metz and Lyotard argue that cinema generates an impression of reality through its particular economy of motion. Cel animation, in contrast, relies on a different economy of motion. This is especially the case in the specific kind of limited animation found in Japanese anime. This article focuses on the specificities of this kind of animated movement (particularly its emphasis on stillness), and the way *Astroboy* relied on commodity serialization to generate a particularly immersive image environment – one that set the stage for what is now known as ‘anime’.

**Keywords** anime, *Astroboy* (*Tetsuwan Atomu*), Japanese animation, manga, media mix, seriality, stillness and motion, Tezuka Osamu

### Introduction

In a recent interview, Takahashi Hiroshi, president of the premier Japanese animation studio Toei Animation, opined that the recent

global success of Japanese animation or anime can be explained not only by its particular visual style and strong narrative emphasis, but also because 'Japanese animation companies are just the best in the world at getting the media mix right' (Lewis, 2004). The 'media mix' is a term that refers to the media environment whereby a particular franchise releases interconnecting products for a wide range of media 'platforms' - animation, comics, video games, theatrical films, soundtracks - and commodity types - cell-phone straps, T-shirts, bags, figurines, and so on. It is a state of what we might call the 'serial interconnection of commodities' - wherein commodities (including media types) do not stand alone as products but interrelate, generally through the existence of a principal character or narrative. Indeed, observing the intelligence and intensity of the Japanese media mix, I would have to agree with Takahashi's assertion.

But this raises the historical question of when this media mix developed in Japan, and what led Japanese animation companies to excel in the management of this mix? Moreover, what is the nature of the intimate relationship between the animation industry and the media mix? Might the movement of commodities in the media mix be tied to the particular kind of animated movement developed by the anime industry in Japan? What is the nature of the relation between motion and stillness of the image in Japanese anime, and how does this motion-stillness economy link up with the extensive commercial apparatus that surrounds and supports the anime industry? Can this alternation between motion and stillness be read as both the impetus and support for the historically intimate relationship between animation and merchandising, particularly as it has developed in postwar Japan?

Taking these questions as my starting point, I examine this problem of motion and stillness in the animated image through what is arguably the first Japanese anime: the 1963 TV series *Tetsuwan Atomu*, or 'Mighty Atom' - exported to the US as *Astroboy*.<sup>1</sup> Specifically, I explore how the particularities of the medium of animation facilitate the creation of product spin-offs, or the serial production of commodities. Histories of licensing usually cite Disney as the first major instance of serial commodification, and the creation of product tie-ins in Japan was a practice that preceded *Astroboy*. Indeed, the major rival for *Astroboy*'s Japanese sponsor, the candy maker Meiji Seika, was the candy company Morinaga, which at the time was using Disney characters drawn from the TV series *Disney Land* (on air since 1959) as its mascots (Mushi Production, 2002: 40). However, *Astroboy* was both the first explosively popular animation series in Japan and the basis for intense commodity serialization. As such, it stands out as a moment when the anime industry coalesced both its aesthetic traits and its relationship to merchandising. It is thus a major step in the development of the animation merchandising machine in postwar Japan, one that would later be (re-)exported to other parts of the world (see

Iwabuchi, 2002). Significantly, it is this very merchandising machine that allowed anime to develop. Put differently, the merchandising industry developed anime. Television anime, it is important to recognize, would not have been possible without the income generated by licensing character images, as the costs of production of weekly episodes were not covered by the broadcast fees received from the TV stations. Character merchandising – and the income received from the licensing of characters to companies as various as food producers, toy companies, and record companies – was one of the principal means of supporting the production of television animation. Merchandising allowed the animation industry in Japan to survive.<sup>2</sup>

Yet the condition of possibility for this merchandising impetus is itself linked to the particular kind of movement that director Tezuka Osamu and his collaborators at Mushi Production studio systematized in their production of *Astroboy* – the particular aesthetic of animated movement, and its ability to engage the desires of its spectators. In *Astroboy* we find segments of movement interspersed with segments of stillness (a character runs into a scene, stops to listen, with a pause on the listening pose); scenes where the only movement is that of a character's mouth, or Astroboy's large eyes; a quick alternation between still images (such as in shot-reverse-shot sequences) to give inter-scene dynamism without intra-image movement; and a style of movement that is itself more like a series of poses rapidly alternated (running being composed of a series of images in which the character's legs are extended, together, then extended again) than the fluid movement characterized by Disney animation (and emulated by contemporaneous Japanese animated films). This particular kind of animated movement (known as limited animation)<sup>3</sup> has been explored in an important essay by Thomas Lamarre (2002), 'From Animation to *Anime*: Drawing Movements and Moving Drawings'. He describes the particular kind of 'jerkiness' that limited animation produces in terms of the invention of 'machines of movement' which in turn give rise to a new conception of life, based around the expansion of the interval between one image and another. While taking Lamarre's argument about limited animation as my starting point, this article concerns itself with the moments of immobility or stillness within a character's movements, and the importance of this immobility for the success of the *Astroboy* series and the development of the anime industry in Japan. For it is this immobility that allows the animated image to communicate both with the manga (comic) origins of the animated series, and with the *similarly immobile commodity form*. It is this immobility within the ostensibly movement-based medium of animation that forms one of the principal pillars on which the anime industry was built. If we can cite *Astroboy*'s commercial success as the basis for the continued production of this series, the subsequent production of other animated TV series in Japan, and the development of anime and the media mix as we know it, the basis for this commercial success

must in turn be found in the successful engagement of spectatorial desire for this serially mobile and immobile *Astroboy* image.

### Cinematic movement

Before turning to *Astroboy*, however, I now consider the work of two other thinkers whose writings on motion are germane to this article: Christian Metz and Jean-François Lyotard. In 'On the Impression of Reality in the Cinema', Metz (1974) argues that of all media, the cinema is the one that is experienced as the most real, and that generates a degree of 'affective and perceptual *participation* in the spectator' (p. 4) unsurpassed by other media. Cinema, in brief, generates the highest degree of the impression of reality. What is the mechanism that allows cinema this conceit? How is it that cinema generates this 'feeling that we are witnessing an almost real spectacle' (p. 4)? The answer, for Metz, lies in the introduction of movement into an image that is not perceptually real: the cinema 'render[s] the world of the imagination more real than it had ever been' precisely by injecting 'the reality of motion into the unreality of the image' (p. 15). Motion is always perceived as real. Since motion is never a tangible reality – one can never hold movement in one's hand – there is no difference between the perception of motion in immediate, daily life and the perception of motion onscreen, in cinema. And yet, cinema generates the highest impression of reality of all media precisely because it is *not* the most realistic of media. Here Metz distinguishes between two problems when thinking about media. The first is 'the impression of reality *produced by the diegesis*, the universe of fiction' (p. 12) by which we can understand the degree of affective or libidinal investment of the spectator in the spectacle. The second is 'the reality of the vehicle of representation in each art' (p. 13), the proximity between the experience of the spectacle and the experience of phenomenological reality. Theatre is the most realistic of media, the closest to reality as experienced, but nonetheless does not equal cinema in the degree of investment in the diegesis that it generates. Theatre is all too real – the presence of the players in front of the audience, and in the same space as the audience, diminishes the audience's ability to lose themselves in the spectacle. The very unreality of the cinematic spectacle – the hermeneutic separation of the diegetic world of the film from the world of the spectator – allows a greater degree of affective participation on the part of the spectator than is possible in the theatre. Cinema generates the highest degree of spectatorial investment precisely because it combines the unreality of the spectacle with the reality of movement.

Metz's writings on the impression of reality in cinema were roundly critiqued in the 1970s by a number of writers who found objectionable Metz's lack of inquiry into the type of subject this impression of

reality presupposed, and the ideological mechanisms at work in the construction of this impression.<sup>4</sup> From our present perspective on the question of animated movement, the more pressing issue is the question of the quality of movement itself: do all types of movement create this impression of reality equally, or is a specific regime of movement required? In this regard, Jean-François Lyotard's remarks in 'Acinema' (1986) prove the most fertile ground for thinking through the problem at hand. Here Lyotard makes explicit what was only implicit in Metz's essay: the 'impression of reality' is a construction supported not only by the mere existence of motion in the cinema, but by a very special economy of motion in the cinema. In short, not just any kind of motion will do to generate cinema's reality-effect; not all kinds of motion support the impression of reality. Rather, a specific kind of motion, a particular economy of motion, is required. Consequently, other types of motion can function to break down this impression of reality.

Lyotard reformulates the problem of the impression of reality in terms of an economy of libidinal investment, and argues that film production is the art of managing this libidinal investment through the managing of an economy of movement. It is worth noting that, for the Lyotard of this period - the so-called 'libidinal Lyotard' (Williams, 2000: 62) - the organization of the libido is the essential mode of organizing a social body. And here, as with Freud, the libido is figured not only as a sexual but also as a more generally productive energy. Different social forms involve different forms of libidinal organization, that is, different relations between energy and structure. Cinematography, for Lyotard, is one such structure that works to organize libidinal energy. Cinematography is a writing with movements, and a selection of movements in order to 'protect the order of the whole' (Lyotard, 1986: 350). Taking aim at institutional cinema in particular, Lyotard writes that,

cinematography is thus conceived and practiced as an incessant organizing of movements following the rules of representation for spatial localization, those of narration or the instantiation of language, and those of the form 'film music' for the sound track. The so-called impression of reality is a real oppression of orders. (p. 350)

This ordering of movements conforms to what Lyotard calls the 'figure of return', an imperative that requires the smooth alternation of production and consumption, and the 'repetition and propagation of sameness' (p. 353) in the libidinal economy as in the political economy of capitalist social formations. This 'return' might be thought of in terms of Marx's famous cycle of M-C-M' - money/commodity/more money - where the return is the return of the original money, plus the surplus value gained in the cycle of exchange. Yet for Lyotard this surplus value is not only monetary but social: it is the libidinal ordering that integrates subjects and their desires into an established social formation. Cinematic movement and its direction - insofar as it

'eliminates *all impulsionial movement, real or unreal, which will not lend itself to reduplication*, all movement which would escape identification' (p. 355) - is one such means of social integration according to the model of the return. Regulation of cinematic movement according to the model of the return not only produces capital, but regulates subjects and integrates their libidinal economies into that of the social whole.

This organization of the social body through the orchestration of movement in cinema is not, however, necessary - as the impression of reality was in Metz - but contingent, and therefore capable of being resisted. This indeed is where we find the space for a politics of cinema, an 'acinema'. How can we produce this acinema? Lyotard (1986) suggests creating a cinema that conforms to the 'pyrotechnical imperative' - a *jouissance* of pure consumption without return, consumption without production, a reveling in sterile (that is unproductive) differences. Concretely, this would mean creating a cinema that tends towards one of two poles: immobility or excessive movement. In creating a cinema of immobility or of excessive movement 'the cinema insensibly ceases to be an ordering force; it produces true, that is, vain, simulacrum, blissful intensities, instead of productive/consumable objects' (p. 351).

While the question of the politics of movement is fascinating, what I am interested in here is something of the reverse. What I would like to ask is rather: how can this normalizing economy of institutional cinematic movement be undermined in anime by its extensive use of immobility, while nonetheless effectively catching the spectator up in a movement of return? How can the immobility of the anime image itself become incorporated into a process of libidinal ordering parallel to (if different from) that of institutional cinema? How can a patently unrealistic movement-image economy nonetheless generate a comparable economy of return? The answer I will suggest is that this parallel economy is sustained by a very different kind of movement of return: the serial circulation of commodities. Here I turn to *Astroboy*.

### **The emergence of anime-ic movement – part 1: immobile sections**

*Astroboy* was the first 30-minute, weekly animated TV series produced in Japan, and is considered to be the beginnings of 'anime' - or at least one of the two main streams that flow into it.<sup>5</sup> First broadcast on 1 January 1963, *Astroboy* is based on the manga or comic series of the same name, created by the 'god of manga', Tezuka Osamu. Tezuka occupies a huge place in the Japanese imaginary and the history of its postwar mass culture in that he lays claim to being the creator of both manga and anime as we know them. While I cannot go into the material history of manga here, it is worth noting that manga as it is

known today is very much a postwar development.<sup>6</sup> Tezuka is credited with introducing the two distinguishing features of postwar manga: cinematic framing techniques and the long-story format (leading to sprawling narratives that continue over multiple volumes, often serialized in manga magazines before being published as individual books).

*Astroboy*, I noted earlier, is thought to be the beginnings of one of two main streams of anime. The other stream, or, in the words of animation critic Tsugata Nobuyuki, the other 'axis' of Japanese anime is the Disney-influenced, full-animation, feature-length animated film stream that comes out of Toei Studios' animation division, Toei Animation (formerly Toei Douga), which I would like to briefly consider here. This second stream finds its culmination in the contemporary giant of anime, Miyazaki Hayao, who indeed began his career as an animator for Toei.<sup>7</sup> Toei was officially established in 1956, but its germinal form was established in 1948 as an association called Nihon Douga, which drew together many animators active in the prewar and wartime periods. Indeed Toei's history may be traced back even further, to the first animation produced in Japan: its two principal founders, Yamamoto Sanae and Yabushita Taiji, were trained by one of the three founding figures of animation in Japan, Kitayama Seitarou (Yamaguchi, 2004: 49).<sup>8</sup> This lineage leads Yamaguchi Yasuo to claim that the contemporary Japanese animation boom can be traced back to Kitayama, who was active from 1917 to around 1923. It is indeed important to keep these types of genealogies in mind when considering the history of Japanese animation since, in the prewar period, animation in Japan was not an industry at all but an assortment of small production groups often based around a principal animator, who passed knowledge and know-how about animation to his disciples in esoteric fashion.

However, there is a greater break between anime – roughly defined as Japanese TV animation post-*Astroboy* – and the longer history of animation that comes before it than Yamaguchi's genealogy allows.<sup>9</sup> Toei Animation modeled itself in the image of Disney Studios. From its industrial, mass-production methods, to its aspiration to cinematic realism (using full animation to generate realism in motion, and the multiplane camera to generate a sense of cinematic depth), to its use of fairy-tales as the source material for its narratives, Toei aspired to be the 'Disney of the Orient'.<sup>10</sup> Indeed its first full-length production, *Hakujuyaden* (Legend of the White Serpent, 1958, released in the US as *Panda and the Magic Serpent*) – which was also the first full-length, full-color animated film produced in Japan – is a veritable *Snow White* of the East, based as it is on a Chinese folk legend, using rotoscoping to generate realistic motion of the main characters (Miyao, 2002: 207), and deploying a group of less-than-realistic animal and dwarf-sized human characters for comic relief.<sup>11</sup>

One way to formulate the differences between these two streams of animation in Japan is to think of the Toei stream as a style of

animation composed of the relation between animation and cinema (mediated by the cinematic style of Disney animation) whose physical apparatus was the film theatre. The other stream, anime proper, which finds its beginnings in *Astroboy*, is developed from the relation between animation and manga (in its postwar narrative-comics manifestation), whose physical apparatus was the new medium of television. While there was a relation between cartoons and animation in Japan from the very first (two of the three original Japanese animators came from the cartoon tradition), *Astroboy* was the first instance of an animated series constituting itself explicitly on this relation between manga and animation. In both name and style, the product was 'TV manga'.<sup>12</sup> With *Astroboy*, manga becomes not only the source of thematic elements or characters (as comics had indeed been previously, as far back as 1917) but a source of a new visual logic, and a new relation between motion and stillness. As an aesthetic response to economic constraints, *Astroboy*'s Mushi Production made manga move. As Yamamoto Ei'ichi, one of Tezuka's earliest collaborators, describes:

In the end we completely did away with the techniques of full animation. Then we adopted the completely new technique of making the manga frame the basis for the shot, moving only a section of this frame. (Mushi Production, 2001: 46)

In so doing, they 'invented' a particular style of limited animation.

Contrary to the common narrative which implies that Tezuka and his animators 'invented' limited animation single-handedly, it must be said that limited animation as a set of techniques and a visual style was already being used by popular American cartoons such as *Popeye* and *The Jetsons* (which were televised in Japan at the time) and had been since United Production of America's (UPA) popularization of the technique in the late 1940s (Butler, 1994: 278). Indeed, it is safe to say that limited animation was common knowledge for Japanese animators at the time (Yamaguchi, 2004: 75). Yet Tezuka and his collaborators' retellings of the event emphasize not the influence of American animation, but rather the influence of three other elements: technological failure, manga, and 'kamishibai' or picture card shows. In Tezuka's own account, his inspiration for limited animation was not the animation of UPA - though he probably had seen some of it - but his childhood experience of watching *Felix the Cat* animation on his home projector - a 9½ mm projector made by the French company Pathé. The projector was old, so it would often stop and start, holding an image for longer than it was supposed to. Thus the 10-minute *Felix* episode turned into 30 minutes of animation. When trying to strategize ways to economize on time and energy in creating a weekly TV series, Tezuka remembered his experience watching *Felix*, and came up with the idea of using *still* images to economize on drawing and lengthen the screening time. Dialogue and sound, he conjectured,

could be used to cover up the immobility of the image (Tezuka, 1977: 157-8). Sakamoto Yusaku, Tezuka's key collaborator on the *Astroboy* project, similarly dwells on the still image and sound, and emphasizes not only the importance of manga, but also that of kamishibai picture card shows – a kind of popular cultural theatre for children especially prevalent in the late 1940s and 1950s, whereby a storyteller would narrate a story accompanied by a series of still images.<sup>13</sup> *Astroboy* if nothing else, Sakamoto thought, could be a kind of 'electric kamishibai' (Mushi Production, 2002: 44).

This vacillation around the issue of the invention of limited animation may be explained as a culturalist disavowal of the non-native origins of Japanese anime – a disavowal of the fact that America – and American limited animation – lies at the heart of Japanese postwar culture, as the cultural theorist Azuma Hiroki puts it (2001: 20). Nonetheless it is essential to acknowledge that the creation of *Astroboy* did indeed involve an 'invention' of a particular kind – the invention of a relation between manga (with its deployment of still poses) and animation as two formerly discrete media; an invention that created a style of animation in which it seemed as if the manga itself was moving, or that the manga poses themselves were 'animated' (even if at times by voice alone). The basis of this new type of animation wasn't the moving image at all, but rather the manga image. And this turned out to be a 'moving' experience indeed, particularly for the countless young fans of the manga series.

Before turning to this experience, I would like to briefly outline the labour-saving devices that characterize this particular instance of limited animation, developed during the production of *Astroboy*:

- 1 *Three-frame shooting*: using one image over three (or more) frames, or a maximum of eight images (usually less) per second, instead of full animation's 12 images per second;
- 2 *Stop-images*: using a single, still image for scenes where movement is not required; shot-reaction-shot scenes, crowd scenes, even dialogue scenes where the voice gives the character life when the still image does not;
- 3 *Pull-cels*: a single image is pulled across the background; or the background is pulled under the image; this is particularly prevalent in flying scenes, or vehicle scenes where objects are moving in a single direction;
- 4 *Repetition*: movement loops for repetitive actions such as walking; often used in combination with the pull-cel technique: the body is still, the legs move, and the background 'flows by' underneath;
- 5 *Sectioning*: only the essential part of the character moves, while the rest stays immobile; this is especially prevalent in talking scenes where only the mouth moves, but is used to some degree in almost all scenes in which there is movement (such as

walking scenes, where the torso is immobile but the legs are moving);

- 6 *Dual-use or cel bank*: a 'bank' of images or movements is created to eliminate the need to draw every image of every episode; particular movements and backgrounds are archived and then re-used across episodes, further reducing the production time;
- 7 *Short shot length*: longer shots require more movement, shorter shots do not; hence a series of still images of shorter shot length are used instead of a longer take that requires more movement. (Yamamoto, 1989: 105–6)

The result of these time-saving devices is limited animation. Immobility rather than movement dominates most scenes, and often the life of the characters is sustained by the voice or narrative alone. The experience of anime is thus that of an order of poses or 'immobile sections' (here referring to Gilles Deleuze's (1986) discussion of Bergson in *Cinema 1*), as much as it is of a sequence of movements. Yet, against Deleuze's assimilation of animation to cinema (p. 5), what we find in limited animation and especially anime is an intermedia<sup>14</sup> – a medium that is composed as an assemblage of discrete media – that deals in both motion and immobility, movement *and* poses.

Cinema as a medium presupposes homogeneous and mechanical relations between frames – hence Deleuze's term 'any-moment-whatever', a term which refers to the film camera's mechanical sampling of instants of time, and thereby its creation of a new kind of image. It also presupposes the erasure of the differences between one frame and another (Baudry, 1986: 290). This erasure of difference between individual 'any-moments-whatever' is the basis for cinema's smooth, uninterrupted motion – and its impression of reality. The specificity of animation is that it allows for a heterogeneous relation between frames or moments, and the emergence of a gap between images. Anime in particular is founded on the exploitation of this heterogeneous relation between frames. Frames are no longer any-moment-whatever, but a combination of moments, movements and poses. To use media theorist Yomota Inuhiko's (1999) formulation, anime tends towards

the embodiment of privileged moments [i.e. poses] recomposed as fiction in an age that comes after the collapse of the transcendental moment of metaphysics, and in which movement has become the segmented representation of a succession of any-moments-whatever. (p. 27)

While Yomota is commenting on manga, his formulation is especially appropriate for thinking about the intermedial status of anime, and its particular movement economy based around immobile sections (moments of immobility; the redeployment of the pose after the end of metaphysics), and sequences of motion (approximating the segmented representation of any-moments-whatever).

## **The emergence of anime-ic movement – part 2: trans-series movement**

The questions that arise from this recognition of anime's peculiar movement economy are: Does anime's interruption of the smooth motion of cinema and its emphasis on the still image lead to a Lyotardian politics of motion based on the 'pyrotechnical imperative'? Is anime's alternation of movement and stillness an incarnation of Lyotard's 'acinema'? The answer, in brief, is 'no': anime does not lead directly to a politics of motion or an acinema. We find instead a particular economy of return. But how is the movement of return – the smooth alternation between production and consumption, and the structuring of libidinal energy – sustained *despite* the immobility of the image? How is spectatorial investment in the image maintained in a system that clearly does not attempt to produce the impression of reality that grounds Metz's cinema? How does anime instantiate a comparable (if different) system of return to that of institutional cinema?

The answer comes in *Astroboy's* very form: the series. This series is, moreover, of several kinds. First there is the TV series itself: a total of 193 weekly episodes, extending over a period of four years. Each episode follows a general form in which there is some problem that the protagonist Astro – accompanied by his catchy theme song – rises into the air to solve. Second, most episodes are based on some earlier episode of the *Astroboy* manga that Tezuka serialized in monthly and weekly comic magazines from 1952–68, one of the most popular and longest-running series of the day. The manga images of Astro and his surrounding characters were used as the basis of the TV series drawings. Here, the stillness of the image is key: insofar as the anime made extensive use of still images it resembled all the more closely the comic series which the young viewers of the TV series were likely to be enamored with. The very stillness of the images within the TV series drew the comic version and the animated version even closer together, binding the separate diegetic worlds into a single world mediated by the still image of Astro – whether on the small screen or on the manga page.<sup>15</sup> The stillness of the anime image inscribed its diegetic world into the familiar world of the comic series, thereby making libidinal investment in the new TV series animation all the more easy. There was, to be sure, a particular pleasure in seeing a familiar (manga) narrative translated into the moving medium of animation. Yet this pleasure lay not only in seeing the manga image move, but also in seeing it stilled, resonating all the more strongly with the still character-image of the manga series.

This immobility of the anime image, and the very interruption of the smooth relation between frames, the emphasis on a heterogeneous relation between frames and the 'stop-image' poses of the characters – especially of the protagonist Astro – opens onto a third series: the

commodity series. Astro figurines and other goods appeared in the same year the TV series was released, but the main mode of proliferation of Astro goods was in the form of stickers included as bonus gifts for the chocolate products of the TV series' main sponsor: the candy-maker Meiji Seika. Meiji's use of *Astroboy* images on the boxes of their many candy products, and the inclusion of Astro and friends stickers as bonus gifts with their chocolate bars (or as send-in giveaways), arguably changed the face of marketing in Japan and ignited the so-called 'chocolate wars' of summer 1963 (Mushi Productions, 2001: 42; Yamaguchi, 2004: 77). The success of Meiji Seika's *Astroboy* sticker campaign also led one of its major rivals, Glico, to sponsor the second TV anime series, *Tetsujin 28-go* (Iron Man no. 28, released in the US as *Gigantor*), which came on air in October 1963, and was accompanied by its own marketing campaign – offering badges ('wappen') instead of stickers.

*Astroboy* thus not only established the mode of production of TV animation in postwar Japan, but also the synergetic relationship between anime characters, product merchandising and advertising that continues to this day, with some arguing that an anime episode is nothing but a 30-minute commercial (Kusakawa, 1981: 21). With these stickers and package advertisements using images of Astro (and friends) in poses common to both the manga and the TV series, we see how the very interruption of motion in Tezuka's manga-inspired brand of limited animation opened the image out to other commercial domains. Moreover, the uses to which these stickers were put – turning one's daily world and possessions (from books to desks to bags) into an Astro world by adorning them with *Astroboy* stickers, courtesy of Meiji Seika (Tsunashima, 1998) – all revolved around the creation of an *Astroboy* world out of one's surroundings, based on a series of trans-media migrations of the Astro image and poses. The stilled image of Astro built a world not only *within* the animated series but also, and especially, *without*: an Astro-world was born. Here the intra-medial stillness of the Astro image within the anime series functioned as the basis for the trans-series movement of spectatorial desire, attaching not only to the anime image, but also to the manga image, the Astro-sticker image (and thereby Meiji Seika's chocolates), and the Astro figurine-image.

The particular genius of the stickers was their transposability, their ability to move from one medium to another, to overlay the worldly objects of the consumer with the images of Astro. If this transposability duplicated the transposition of the Astro image from manga to anime and back, it also extended the media world of *Astroboy* into the very mundane world of the stickering-subject – making even desks and pencil cases sites of libidinal capture, of a potential return to the pleasures of identification with the Astro image. Astro stickers functioned as lures that led the subject back into the world of *Astroboy*, a world no longer left behind when the spectator (of the TV series or

manga) transformed back into 'student', or 'child'. More continuously than cinema had done, anime folded the ordering of desire back onto the social body, extending the world of the anime text out into the larger social world, continuing its libidinal ordering beyond the time of TV episode, and into the lives and worlds of its avid consumers. This is the final meaning of anime's intermedial status: it is not only a medium that was formed by the convergence of discrete media (comics, animation, television) but one that functions through the continuing resonance between these media and the new medium of anime, a resonance (via the immobile image of the character) that extended onto (and created) a brand new social world of character-images: a social world that everywhere resonates with the diegetic world, and channels the consuming subject's desire.

### **Astroboy and the movement of history**

This serial expansion of the *Astroboy* world demonstrates how the interruption of cinematic movement that we find at the beginning of Japanese anime, and the emergence of the anime-image (as a synthesis of the manga and animated image), resulted in a new kind of movement, one with an even more powerful structure of intermedia diffusion, identification and libidinal ordering. On the one hand, *Astroboy* clearly disrupted the link between smooth movement and identification prevalent in both institutional cinema and in Disney-influenced full animation. On the other hand, *Astroboy* - through its use of immobile sections - generated a different kind of movement: the trans-series and trans-media movement of commodities. This trans-series movement enabled forms of identification and libidinal ordering to continue not only within but also outside the animated world. The still and moving images of Astro in the anime prolonged the movement of spectatorial desire and investment in the diegesis out onto the still images of Astro stickers or comic-book images or figurines. In fact, the alternating movement and stillness of the Astro image ensured that there is no longer an outside to the anime text. Everywhere the image of Astro allowed for the continuation of the pleasures of identification, or Astro-worlding. The very immobility of the anime-image was the condition of possibility for its communication with the commodity-image, binding the world of daily consumption closer to that of media consumption than cinema had hitherto been capable of. The cinematic impression of reality was displaced by the extension of the anime-ic image-world. *Astroboy* thus initiated a motion-stillness economy of movement different from the cyclical movement of consumption-production described by Lyotard, but even more amenable to the consumption imperative of late capital, since it is through these moments of immobility that media, commodities and desire communicate. It is not insignificant that some (for example, Tsunashima, 1998: 39) locate the origins of character- and

brand-marketing – so key to the functioning of late capitalism in Japan – in this inaugural anime series, *Astroboy*, and the new movement of return that it developed.

Emerging as Japan was entering its period of postwar high-economic growth, and making the transition from a secondary to a tertiary sector economy its primary source of economic expansion, *Astroboy* and the character-based system of serial consumption that it established thus not only had a huge influence on cultural production for the rest of that century and into the 21st century, but also on its economic production, marketing and consumption. Indeed, *Astroboy* and the television anime that followed in its path – adopting both limited animation style and its connections with product merchandising – are inseparable from another kind of movement: that of history, from the ruins of the Pacific War and the emphasis on the secondary sector in Japan's reconstruction, to the movement into late capitalism, with its dependency on an economy of consumption, and on consumers' ceaseless (and ceaselessly ordered) desire to make the media world into their world via the consumption of character goods.<sup>16</sup> As the recent creation of a third animated *Astroboy* TV series in 2003 and the continuing expansion of the market for anime and its related character-commodities in Japan and the world attest, the special relation between movement and immobility that *Astroboy* pioneered is by no means exhausted.

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### Notes

- 1 Hereafter I refer to the series as *Astroboy*, though I will be referring to the Japanese series and its reception in Japan, rather than the somewhat altered American series.
- 2 In addition to merchandising, sale of episodes and series to TV broadcasters in the US and other countries was another means adopted to regain money spent on the production of anime series, which cost considerably more than producing live-action series. Indeed a single 30-minute anime episode cost at least twice as much to produce as a live-action drama of the same length, even though, in a practice established by Mushi Production in a bid to preemptively corner the animation market, episodes were sold to broadcasters for no more than the cost charged for live-action TV series (Mushi Production, 2001: 6).

- 3 Limited animation has a history longer than *Astroboy* and indeed 'originated' outside Japan – a point I return to later.
- 4 An incomplete list of these objectors would include the names of Jean-Louis Baudry, Jean-Louis Comolli, Stephen Heath, and Laura Mulvey.
- 5 The term 'anime' itself seems to have come into use during the 1970s; before this, the common term for TV animation was 'terebi manga' – literally 'television comics' – an appropriate term (as we will see later) that comes from the earlier term for animation, 'manga eiga' or 'comic films' that came into use around 1921 (Yamaguchi and Watanabe, 1977: 12–3).
- 6 See Schodt (1983) and Kinsella (2000) for two informative English accounts of the history and development of manga. Nakano (2004) provides a fascinating account of the manga industry.
- 7 Two of Miyazaki's most well-known works are *Princess Mononoke* and *Spirited Away*.
- 8 The other two founding fathers of Japanese animation are Shimokawa Outen and Kou'uchi Jun'ichi; all three released their first animated films in 1917. Animation was first introduced to Japan in 1909, through the work of Emile Cohl.
- 9 Tsugata defines anime as animated works that are 'produced from a commercial base that have television and film as their media and that come after *Astroboy*'. Tsugata's lengthier definition includes works that: (1) are cel-based and drawn; (2) use labor-, time- and money-saving devices developed by Tezuka and his animators for the tough schedule and low budget of television animation; and (3) create not just gags and good vs evil narratives, but rather complex narratives of human relationships and stories that are based on the development of a particular world or world-view (Tsugata, 2004: 20).
- 10 The term 'Disney of the Orient' seems to be a common term used to describe Toei, and is found in Yamaguchi (2004: 66), as well as Sasakibara and Ohtsuka (2001: 137). On the multiplane camera, see Lamarre (2006b).
- 11 Maltin (1980: 56) notes that rotoscoping was used in Disney's *Snow White*.
- 12 The history of the television in Japan is also important to keep in mind here; 1960 to 1964 were the most important years for the penetration of TV sets in Japanese households. In 1960, TV ownership was at 55 percent of households; by 1964, ownership had grown (with the 1959 Crown Prince's televised wedding and the 1964 Olympics) to 95 percent – a 'phenomenal growth in the domestic market' for televisions that has been 'widely acknowledged as the single most important factor in the success of the Japanese electrical goods industry' (Partner, 1999: 140). Bearing in mind the importance of the electrical and later electronics industry for the rise of Japan as a postwar economic power, the weight of this statement is hard to deny. The key to prosperity in postwar Japan, Simon Partner (1999) convincingly argues, 'was the power and influence of the media, particularly the new medium of television' (p. 4). What Partner does not address is the subjective power of television and the relation of the subjective power of television to economic power. The exploration of *Astroboy* and the beginnings of TV anime in this article is an attempt to do so.
- 13 For an English language account of picture card shows that considers their influence on manga in postwar Japan, see Tsurumi (1987).

- 14 For a consideration of the intermediality of anime in the present historical conjuncture, see Looser (2002) and Lamarre (2006a).
- 15 Tsugata similarly argues that the success of the *Astroboy* TV series can be partly accounted for by the close relation to the comic series; to viewers it (very appropriately!) seemed that the comic itself had begun to move (Tsugata, 2004: 148-9).
- 16 Kusakawa argues that *Astroboy* 'is a symbol of the large-scale conversion of the postwar Japanese economy' from a secondary to tertiary economy, along with the attendant emphasis on and transformation of consumption which this transition presupposes (Kusakawa, 1981: 30-2).

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