

Atomic Imagery in Animated Japanese Science Fiction

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The most recent issue of our society newsletter features a thorough listing of over 200 articles on animation that were published in 1990. Of the 200 articles, only nine in any way address the contribution of the Japanese to animation. Of those, fully seven articles discuss the financial symbiosis between Japan and U.S. animators. It falls to two articles out of two hundred to focus academic attention on a culture perhaps more deeply saturated in animation than any on earth. This gaping void of research and opinion presents the members society with an unparalleled opportunity for original scholarship. This is the void I've chosen to jump into. Not only because the Japanese have a different technical approach to animation, but because their repertoire of icons suggest a different psychological approach as well.

The whole world watched the island empire of Japan in the days and years following the atomic bombings that ended World War II. The country became a medical experiment in the physical effects of radiation. Psychologists and sociologists swarmed over the beaten nation to probe the minds and souls of those who had survived nuclear devastation. Economists and tycoons invested their expertise and money into the fiscal restoration of Japan. Today, the commercial superiority and equitable foreign relations the country enjoys speak of the thorough healing of the wounds of war.

But an important facet of Japanese society relives the nuclear nightmare and regularly instills in its audience the past memory and future fear of the mushroom cloud. Though it remains virtually unexamined in scholarly literature of the West, Japanese animation, as ubiquitous in its country as the nighttime "soap" in ours, continually relies on icons of atomic warfare and its aftermath. It is my intention to highlight some of those images and to propose the larger meanings given them by repetition.

Examination of this narrow core of images presumes a familiarity with Japanese animation that is evident neither in classroom discussions nor in journal publications. To lessen the inevitable culture shock brought on by first contact with "Japanimation," allow me to single out a few characteristics, which distinguish Oriental from Occidental animation.

First, the omnipresence of animation in Japan raises it to a level worthy of regular, adult attention.

Animation is as prevalent in that country as the Western once was in America (roughly thirty-five animation shows a week on television¹). It is a form respected for both its visual and dramatic artistry. This respect has actually presented something of a problem for a society, which reveres age and status; as do the Japanese.

Today's comic artists, if they have any standing in the industry at all, are automatically called *sensei* [literally, "one born before"] by their assistants, fans...and the mass media. Persons of the *sensei* status tend to be older, as the title implies, but the very nature of the industry...has meant that there are now even teenage *sensei*. The mass media's solution has been a steady escalation of honorifics [to properly distinguish older master animators from younger ones]. The words applied to the superstars of the industry so far include *sosho* (slightly above *sensei*), *kyosho* ("great master" or "maestro"), *osama* ("king"), and *kyoso* (founder of a religion). Osamu Tezuka, regarded as the pioneer of the modern Japanese story-comic, is the only artist accorded the supreme accolade: *manga no kamisama*, or "the God of Comics."²

This is a foreign concept for Westerners who consider animation a poor relation of the legitimate cinema, primarily suited for fables of simple morality which have as their audience, children.

Perhaps one of the sources of the esteem in which Japanese animators are held is the epic breadth of the tales they tell. The sheer scope of the stories told by Japanese animators routinely dwarfs their Western counterparts. Far more sophisticated and detailed than even live-action American television, it is often difficult to follow the intertwined lives of the characters without complicated reference guides. "The Macross Saga," for example, traced the life stories of 42 major characters.³ Within the course of a series, the birth, marriage, and even the death of any one (or all) of the players may be chronicled. The substantive plots are thick with complexity, almost precluding accessibility for the novice. Nevertheless, some of the richest characters in modern literature await the viewer who is willing to actively contribute to his own entertainment.

Flashbacks are extensively used to "flesh-out" personal histories; often, these will occur at moments of heightened stress, indicating past motivation for present action. An ideal (but, by no means, isolated) example of this type of retroactive character development occurs in an episode of *Star Blazers*. Derek Wildstar, an impulsive fighter pilot on the Space Cruiser *Yamato*, flies into a rage as a captured member of an enemy alien race is interrogated. As he charges furiously toward the alien, he indulges in a lengthy reverie which recounts his parents' death at the hands of bombs dropped by members of the alien's race.⁴

When setting the scene for or showing the consequences of a character's motivation, artists seldom shy away from frank, often graphic, violence. Depictions of bloody savagery have experienced an escalation concurrent with a reawakening of the Asian *gekiga* (or "drama pictures") tradition. In the 1960s, this style marked a departure from the more "cartoony" animation of the West. The prominent animators of this era "brought new realism to the action/adventure genre. Poorly paid, unknown, and hence less fettered by public opinion, when they felt the story warranted it they did not hesitate to draw blood."⁵

Not bound by the inhibitions of the West or limited to audiences composed entirely of children, Japanimation frequently panders to the prurient as well as the morbid interests of society. It is, then, perhaps not surprising to find a candid approach to eroticism in the animated films of Japan. A heroine of the recently popular *Megazonene 23* often appeared topless. In fact, the content of Takashi Ishii's *Tenshi no Harawata* (*Entrails of the Angel*) was so erotic that it "has been made into successful, live action feature film by Japan's largest maker of soft-core porno movies."⁶

As important as the dramatic development of the characters is their stylistic novelty. Extensive model sheets are prepared at the outset of each production, showing the characters at different ages, in various forms of dress, and in different moods. This is not so different from the American approach to animated feature filmmaking⁷, but it is quite a bit different from the approach, of say, Hanna-Barbera, to a weekly animated series. *The Flintstones* and *The Jetsons* as well as the current hit, *The Simpsons*, have limited model sheets which reflect the pressure of weekly production. By contrast, no expense is spared to people animated series in Japan with visually unique individuals.

The care taken to create backgrounds and special effects rivals that lavished on character design. Particularly impressive is the sustained use of detailed perspective in Japanese backgrounds. The perspective of the background is consistently maintained via computer. Unlike many Western "purists," even the most conservative Japanese animators have embraced computer-aided animation. This confers, on moving backgrounds at least, a degree of sophistication and speed of production unknown since the Fleischer brother's early *Popeye* cartoons.

A complement to the artistry evident in the background is the effects animation common in so many Japanese productions. It is as if the challenge of drawing waves, flames, explosions, and ripples summons the

best from the animators of Japan. Japanese excellence in this area has, of late, been admitted within the walls of Bastille of Western animation, Walt Disney Studios. In fact, one-third of the effects animators employed for the recent commercial success, *The Little Mermaid*, were Japanese.⁸ These animators gave an Eastern flavor to fire and water particularly evident in a dramatic sea storm that precedes the loss of Prince Eric's ship to its flammable cargo.

The admitted excellence of Japanese animators in the aforementioned areas, unfortunately, takes its toll on what Western audiences might consider the focus of any animated piece: character movement itself. When the members of Space Force break into a run on the deck of the Space Cruiser *Yamato*, their gaits are riddled with jerky holds reminiscent of *Colonel Heeza Liar*. When Lynn Menmei, popular singer aboard *Robotech's* SDF-1, hesitantly sways to her own music, the pressures and limitations of weekly, assembly-line animation are obvious. The quality of fluid motion has been sacrificed to the sophistication of other elements.

It is with greater understanding of the conventions of Japanese animation that one can proceed to examine the presence of atomic imagery therein. To hold each frame of Japanese animation up to the light of the Hiroshima and Nagasaki bombings is as daunting a task as analysis of the entire library of American animation. Consequently, a narrowed examination of the single, most popular genre of Japanimation is warranted in a paper of this limited scope. That genre is science fiction.

This leads to a parenthetical observation on the distinction between live-action and animated science fiction. If, indeed, much of the genre depends upon the icons of atomic warfare, the most cost-efficient way to convincingly use the icons as dramatic elements lies in animation. Of course, models and stock footage are available to the live-action filmmaker, but within the budgetary considerations of Japanese television, both of these have limits of credibility that prohibit their smooth integration into larger works. Conversely, it costs no more to animate an atomic explosion than it does to animate a man running from it.

For years, I believed that Japanese science fiction equaled "Godzilla" (even that unsophisticated form had obvious atomic overtones), and quickly wrote it off. Campy monsters and poorly-dubbed prints predisposed me to dismiss tales of other worlds and events of the distant future. When I finally encountered animated science fiction (under duress) I was faced with a grim vision of things to come; the Japanese outlook on the

future is less than cheery. Yet, beneath these surface shortcomings and misconceptions, I discovered a hypnotically involving format with a list of recurring icons—images that recount the greatest fears and strengths of the Japanese people.

Chief among these icons is the ever-present visual image of the mushroom cloud. Though the weapons of the future could take on any shape or destructive power, practically every ray-gun of Japanimated science fiction takes on nuclear properties. Even in the vacuum of space, super weapons produce mushroom clouds.

The tell-tale clouds which accompanied the bombings of Nagasaki and Hiroshima were visible for hundreds of miles from the epicenters of the blasts. Consequently, the primary evidence of the atomic bomb drops were those clouds. A collection of hundreds of amateur drawings by survivors of the atomic bomb was published by Nippon Hoso Shuppan Kyokai (The Japanese Broadcasting Corporation) in 1977. Of the artwork submitted, representations of the deadly cloud outnumbered all other subjects by almost 2 to 1.⁹ It is not surprising relevant symbol of nuclear holocaust has been adopted by the professional artists of Japan's animation industry.

What gives greater meaning to the smoky atomic plume are the pervasive psychological effects of the events it presaged. As a whole, today's Japanese children, removed by two or more generations from the experience of the bomb, have a greater sense of societal insecurity than their Western counterparts. Researchers believe this stems from nightmares of losing family and friends to another atomic bombing.¹⁰ Indeed, the shock of such nightmarish visions is often more psychologically incapacitating than "normal" grief. To that end, the recollections of a single bomb survivor speak for his entire society:

I heard [from my uncle] that my mother was killed...that she died in the house...when the house was burning...that she was asphyxiated by the smoke and died...He explained it that way...But I think it was his imagination...because grandfather told us that my mother was out buying things at the store...so she must have been killed on the way to the market and not at home...somewhere around the center of the city. Well, this too is imagination...but since we couldn't find any remnant of her body or bones, we could only imagine...Rather than a feeling of sorrow [what I experience] was shock, strong shock...It must have been the shock that I felt...¹¹

Janimators regularly tap such memories of family loss and societal devastation as character motivation.

Such nightmares are by no mean relegated to the immediate aftermath of "Fat Man" and "Little Boy".

At the very least, the first generation to be born after World War II was prone to a radioactive legacy of genetic defects. These run the gamut from sterility to cancer. But, by far, the most visible disorders are products of disaster at a man's own atomic level. Radiation-induced chromosome aberrations accounted for a Japanese birth defect rate nearly 80% above the norm from 1945-1980.¹² If a fetus with these aberrations, distortions of DNA, survives to term, the result is a child which develops unevenly, with one part of its physiology growing out of proportion to the rest of its body. The most common manifestation of this is microcephaly, a condition indicated by a drastically-reduced head circumference.

Awareness of the effects of genetic mutation is evident in the works of Japan's animators. The villains of their science fiction epics are frequently genetic off-shoots of human stock. These "bad guys" are usually distinguished by an element (or elements) of human physiology or psyche blown out of proportion to all others. Witness the giant interplanetary invaders of *Clash the Bionids*- human in all respects save their 60 foot height.¹³ Or the evil aliens of *Megazone 23*- a battalion of "human-isotopes" bred to emphasize the warlike propensities of the race.¹⁴

The impact of genetic tinkering is felt not only by antagonistic races, but by the landscapes upon which animated dramas are played. The world of *Warriors of the Wind*, for instance, is an ever-expanding radioactive wilderness which threatens the pockets of humanity that survived "The Seven Days of Fire." Giant mushrooms tower like trees over the homes of colossal mutant insects. Delicate spores dangle from gossamer webs, waiting for the unsuspecting traveler to inadvertently touch them and release their deadly cache of radioactive gas. This dangerous environment, as menacing as any of the sentient characters of *Warriors of the Winds*, is a product of man's atomic warmongering.¹⁵

The aforementioned environment speaks strongly of the importance of the post-apocalyptic setting to Japanimated science fiction. A genetically altered physical milieu has a temporal counterpart born of cause and effect. Thus, Japanimators predict a nuclear holocaust, yet-future in time, which (either instantaneously or gradually) renders our planet a cinder. When could such a thing happen? It is not a vision of tomorrow which serves as a jumping-off point for Japanese speculation, but a vision of yesterday.

A prominent Japanese belief is that the end of World War II marked the beginning of an atomic age whose logical consequence is the eventual destruction of Earth ("...after the atomic explosion the theory that life

could not survive...was widely spread about.”¹⁶). This gives rise to a reverence for the relics of the war that might not otherwise exist. The Space Cruiser Yamato, is such a relic. An actual ship sunk by the Allies in World War II, the Yamato, via the tale of *Star Blazers*, is exhumed from its watery grave, refitted for space travel, and launched for the planet Iscandar, where a machine resides that can rid the Earth of the radiation that plagues it.

Captain Harlock is another Japanned hero that relies on the importance of World War II to the Japanese people. A German warrior is teamed with a Japanese super-scientist in the last days of the war. He gives his life to protect the scientist from angry Yanks. Generations later, the German’s descendant rekindles his family’s alliance with the Japanese by piloting the space ship designed by the man for which his ancestor died. The whole premise of *Captain Harlock* is dependent on the German-Japanese confederation of World War II.

That the world will end seems a foregone conclusion in Japan’s animated science fiction. Of interest to animators and audiences alike is the method of final destruction. To date, most stories fall into two camps: those which posit obliteration at the hands of aliens and those which demonstrate mankind as a race capable of self-destruction.

Though wars between factions of humans may seem important, the common threat of alien invasion is a uniting force which puts other conflicts in sobering perspective. Such is the case at the outset of *Star Blazers*. The people of Earth are routinely caught up in petty squabbles over land and money, but their lives are re-prioritized by the sudden, cataclysmic appearance of “planet bombs” in the skies above them. In scant hours, nations are pulling together in defensive solidarity, irrespective of the clashes which once divided them.

This plot convention might be seen as a reference to the “alien” destruction of Japan in World War II. Japan was, after all, a recently-industrialized nation that was still healing the wounds of a thousand years of feudalism. The entire samurai culture, in fact, was based on territorial disputes that deeply separated one village from another. The national unity required to “pull off” the successful Japanese campaigns of the war (i.e., Pearl Harbor) was largely the product of a line of thinking that pitted the island nation nobly united against the barbarians of the West.

The other prevailing philosophy of global cessation involves an escalation of the petty disputes previously mentioned. The stupidity and near-sightedness of man is held up to scrutiny by *Warriors of the Wind*, a story in which even an encroaching, uninhabitable wilderness fails to stop the remnants of mankind from fighting

one another. Eventually, one faction rises above others in destructive power by waking one of the “Fire Giants,” unleashing an uncontrollable anthropomorphized version of an atomic bomb.

Battle for Earth Station One is a variation on this familiar theme. In this case, however, the end of the world is a result of pollution. Generations of thoughtless citizens have cluttered the biosphere to the point that it will no longer support human life. The last remaining band of earthlings arranges to abandon their planet by space ship. Accidentally traveling through space *and* time, their disabled ship arrives on their own planet several hundred years in the past. The futile task before them: convincing their ancestors of the need to mend their ecologically unsound ways. “Yep, son,” commented Pogo on American pollution, “we have met the enemy and he is us.”¹⁷

Thus, segments which bring a future holocaust to life are almost always included for their value as propaganda. Certainly, no one can deny the deeper, rhetorical purpose of McCay’s *Sinking of the Lusitania* – that of urging the United States into World War I. In like manner, yet with dissimilar message, animated versions of Keiji Nakazawa’s popular comic books *I Saw It* and *Barefoot Gen* (both purporting to be fictional “eye-witness” accounts of the bombings) “tell of the horrors of war so that people will be inspired to work for peace.”¹⁸

Japanese predictions of the future are, indeed, dismal. Their depressing bias may explain, to some degree, the limited acceptance mainstream Japanimated science fiction enjoys in this country. In this, the land of the comparatively cheery *Star Trek* and *Star Wars*, the seeds of doom find little purchase. These examples of popular Western science fiction show the promise of victory, peace, health and wealth – seldom possibilities in the world of the future painted in hues chosen from the Japanese palette.

This foreboding forecast for humanity seems somewhat incongruous with the peace-loving nature of today’s Japanese society. Current events show the reluctance of Japan’s people to engage in anything remotely resembling warfare. The country has no standing army, only the equivalent of a National Guard. The troops they promised to the Persian Gulf Crisis were sent with the explicit understanding that they would do nothing which threatened human life of either enemy or ally. The writings of Takashi Nagai, a revered doctor and leading author of Japan’s post-war peace movement, underscore the country’s epidemic pacifism:

Men and women of the world, never again plan war! With this atomic bomb,

war can only mean suicide for the human race. From this atomic waste the people of Nagasaki confront the world and cry out: No more war! Let us follow the commandment of love and work together. The people of Nagasaki prostrate themselves before God and pray: Grant that Nagasaki may be the last atomic wilderness in the history of the world.¹⁹

Perhaps vicariously expressing a persuasive national attitude, the characters of Japanese animation are often introduced to an audience as proponents of peace which are forced by desperate acts into violent situations, primarily the defense of loved ones or homeland. Such pacifists are frequently contrasted with military figures who are members of their family or social circle. So it is with the young Derek Wildstar of *Star Blasters*, whose brother is a cadet at the Space Academy and Lynn Kyle, an exploitative and manipulative peace activist aboard *Robotech's* SDF-1. Despite their loud, sensible, voices of anti-military protest, however, characters of this nature always seem to be in the minority.

Comparison and contrast of war and peace as represented by characters in Japanese animation reflects a deeper understanding of the complexities of human thought than generally apparent in Western animation. When these issues are compounded by the complexities of character and plot previously discussed, an accurate depiction of almost any emotion is possible.

The emotion of desperation, for instance, is a recurring one in Japanese animation. The “cornered” feeling of a man (or country) on the defensive is at the cusp of transformation between tranquil pacifism and all-out war. In Japan, despair has been recognized since the days of the samurai as a dangerous state of the psyche, capable of upsetting the equilibrium of sensibility that represents the best in man.²⁰ If this balance is absent (as it is in desperate moments), people are likely to unleash weapons in their defense with no real idea of their destructive power. Such weapons and their use are ignoble.

Warriors of the Wind's Queen Selena, when faced with an onslaught of angry insect/monsters, resurrects one of the sleeping “Fire Giants.” At first, the men she commands are elated by her show of power, but when the giant is commanded to unleash his terrible force, even the most war-hungry foot soldier beneath her recoils in horror from a display of destructive energy previously beyond imagining. Though use of the giant is an instrumental part of the victory won, Selena's conquest is honorless and guilt stained.

By inference, the manner of conquest employed on those fateful days of August, 1945 is similarly

honorless and guilt-stained. Though Nagasaki's mayor, Hitoshi Motoshima, in a peace declaration commemorating the 35th anniversary of the bombing of his city, said that "the citizens of Nagasaka [are] now recovered from the suffering and anger of the bombing..."²¹, the recurring atomic icons and themes of Japanned science fiction tell a different story. They tell the story of a people who live in fear of a mushroom cloud, who suffer the societal insecurity of an inexorable nightmare, who have witnessed the manifestation of twisted chromosomes, who believe the end of the world began with the end of the war, who imagine themselves members of a race bent on self-destruction, who see the peaceful nature of their race subject to moments of desperation which could cost them everything. The presence of atomic imagery in Japanese animation indicates a preoccupation with nuclear destruction that may never dissipate.

Notes

- ¹ "Hayao Miyazaku," *Animag*, 9 (1986), 6.
- ² Schodt, Fredrick L. *Manga! Manga! The War of Japanese Comics* (Tokyo: Kodansha International, 1983), p. 139.
- ³ Kay Reynolds and Ardith Carlton, *Robotech Art I* (Norfolk, Virginia: Donning Company, 1986).
- ⁴ Yoshinobu Nishizaki, dir., *Star Blazers—The Beginning: Quest for Iscandar* episode 13.
- ⁵ Schodt, Fredrick L. *Manga! Manga! The War of Japanese Comics* (Tokyo: Kodansha International, 1983), p. 124.
- ⁶ *Ibid*, p. 136.
- ⁷ Frank Thomas and Ollie Johnston, *Disney Animation: The Illustration of Life* (New York: Abbeville Press, 1981), p. 124.
- ⁸ John Musker and Ron Clements, dirs., *The Little Mermaid*, Walt Disney Studios, 1989.
- ⁹ Nippon Hoso Shuppan Kyokai (The Japanese Broadcasting Corporation), ed., *Unforgettable Fire: Pictures Drawn by Atomic Bomb Survivors*, trans. Hiroshima World Friendship Center (New York: Pantheon Books, 1977), p. 105.
- ¹⁰ The Committee for the Compilation of Materials on Damage Caused by the Atomic Bombs in Hiroshima and Nagasaki, *Hiroshima and Nagasaki: The Physical, Medical, and Social Effects of the Atomic Bombings*, trans. Eisei Ishikawa and David L. Swain (New York: Basic Books, Inc., 1981), p. 486.
- ¹¹ *Ibid*, p. 489.
- ¹² The Committee for the Compilation of Materials on Damage Caused by the Atomic Bombs in Hiroshima and Nagasaki, *Hiroshima and Nagasaki: The Physical, Medical and Social Effects of the Atomic Bombings*, trans. Eisei Ishikawa and David L. Swain (New York: Basic Books, Inc., 1981), p. 486.
- ¹³ Noburu Ishiguro, dir., *Clash of the Bionids*; Toho International, Ltd., 1984.
- ¹⁴ *. "Megazone 23" issue of *Graffiti*, p. 42.
- ¹⁵ Hayao Miyazaki, dir., *Warriors of the Wind*, Tokuma Shoten Publishing Co., Ltd., 1984.
- ¹⁶ Nagai, Takashi, *The Bells of Nagasaki*, trans. William Johnstont (Tokyo: Kodansha International, 1984), p. 111.
- ¹⁷ Harrison, Randall P., *The Cartoon: Communication to the Quick*, The Sage CommText Series (Beverly Hills: Sage Publications, 1981), p. 68.
- ¹⁸ Schodt, Fredrick L. *Manga! Manga! The War of Japanese Comics* (Tokyo: Kodansha International, 1983), p. 155.
- ¹⁹ Nagai, Takashi, *The Bells of Nagasaki*, trans. William Johnston (Tokyo: Kodansha International, 1984), p. xxiii.
- ²⁰ T. Walter Wallbank, et al., *Civilization Past and Present* (Glenview, Illinois: Scott, Foresman and Company, 1980), II, p. 113.
- ²¹ The Committee for the Compilation of Materials on Damage Caused by the Atomic Bombs in Hiroshima and Nagasaki, *Hiroshima and Nagasaki: The Physical, Medical, and Social Effects of the Atomic Bombings*, trans. Eisei Ishikawa and David L. Swain (New York: Basic Books, Inc., 1981), p. 613.