

Under the Umbrella of “Manga?”

The Case of Anime Research

Oya Yasunori

While I am a member of a group that mainly researches manga, the research that I conduct is centered on anime. Of course, that is not to say that I do not research manga at all. In the same way, I study video games, tokusatsu films, figurines, cosplay, and recently even the celebrities known in Japan as “idols;” I am currently investigating the “genes of information” that flow between media and the influences that they produce. For example, I am particularly interested in the experimental incorporation of elements of manga into kabuki performances.

From the perspective of a person who researches anime under the umbrella of manga studies, I will summarize my findings regarding the genetic information that Japanese anime has inherited from manga.

1. Manga Leading Anime

1-1. The Proportion of Anime Based upon Manga

I began by asking what kinds of original media have anime been adapted from, and what proportion of anime have been adapted from each medium; the most recent results of my investigation are presented in the following chart (Fig. 1):

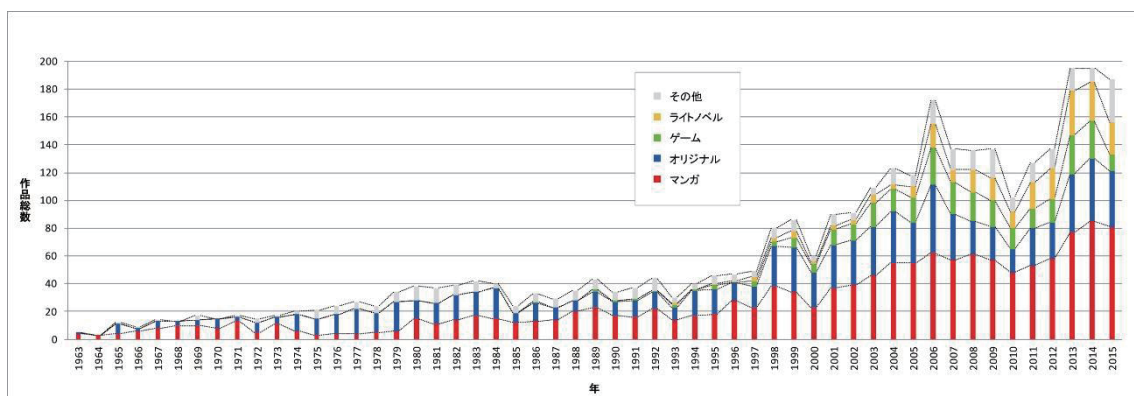


Fig. 1 Proportions of Televised Anime Based upon Original Works in Other Media

The history of Japan’s televised anime begins with genetic information inherited from manga.

It began with Astro Boy (Tetsuwan Atomu), which was released in 1963. Afterward came more anime based upon the works of popular manga artists, such as “Tetsujin 28-go” and “8 Man,” which both also went on to achieve an exclusive level of popularity. Regardless of the fact that were a large number of original anime also being broadcast at the time, viewers referred to all televised anime as “TV manga” (terebi manga).

The reason that viewers referred to televised anime in this way was not that they strictly differentiated between the earlier style of animation, particularly full animation, and Tezuka’s style of limited animation that emerged after the release of Astro Boy; rather it was that the viewers thought televised anime (including works that weren’t based upon manga), looked as if manga had somehow come to life to move about on the television screen, although seeming somewhat cheaply made.

The proportion of anime based on video games began to increase around 2001, followed by an increase in anime based on light novels around 2005, nonetheless anime based on manga continues to remain popular even today. The reason for this is that from the perspective of the creators, who expend tremendous production costs on an anime, the benefit of basing a work upon a popular manga is that there is a lesser risk of failure involved than there is when creating an original work. Since the beginning, the Japanese manga industry has produced works that take into account not only the input of creators and editors, but also the opinions of its readers by conducting readership surveys. Due to this process, “manga-based anime” naturally appeal to fans of manga who anticipate adaptations of works selected from among the great number of manga in existence, leading to the acquisition of a large number of viewers.

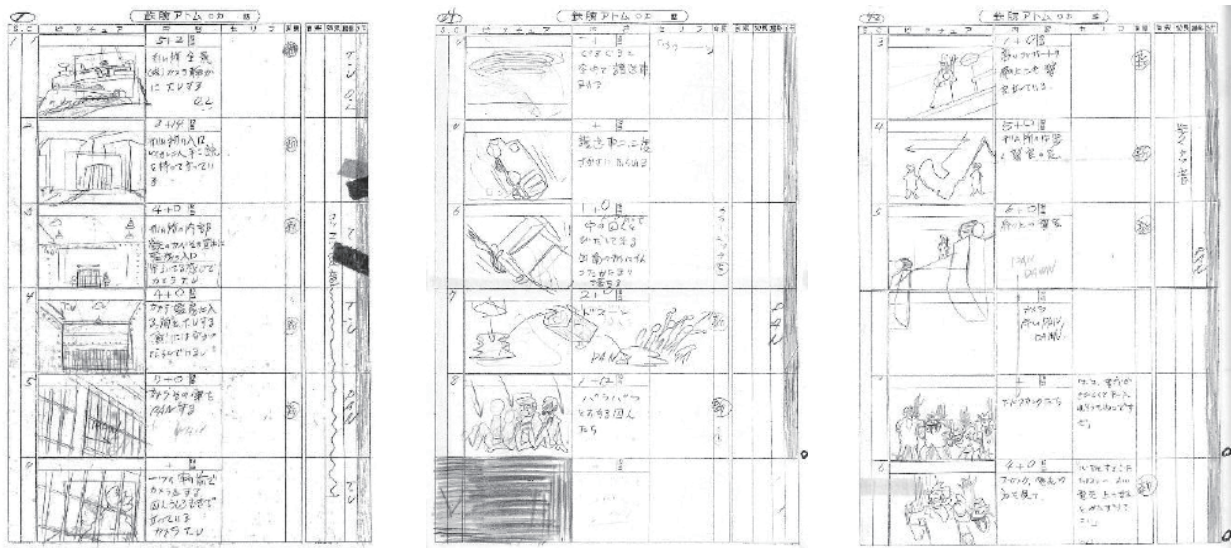
For those same reasons, most original anime adopt the style of popular manga-based anime, and are composed according to the same rules (=promises); I think of anime as being something like manga’s child, and the relationship of today’s original anime to manga like that of a grandchild.

1-2. The “Mangafication” of Animation

I previously mentioned that manga possesses “genetic information,” and I will now introduce one such example from my research.

I examined a storyboard that Kenzō Masaoka illustrated in 1946. It resembles the image boards used overseas, with regularly sized images aligned in order and extremely simply drawn. Toei Animation’s storyboards from the 1960s include sections besides those for images, containing information regarding content, sound, etc., in the same style that can be seen with today’s specialized division of labor. However, when I examined Gisaburō Sugii’s storyboards for episode 6 of Astro Boy, broadcast in February of 1963, I discovered notes such as “PAN,” “T.U.” (track up), etc., which are all commonly used on storyboards today. This, plus the use of manga’s vertical and horizontal panel layouts, methods for directing the reader’s eye, etc., make it seem as if the storyboards were drawn using manga techniques in an attempt to answer the question of whether or not by doing so anime could be created more efficiently and at a lesser expense. This is a clear example of how manga-style thought processes are seen at work even at the storyboard stage.

Fig. 2 Storyboards for “Astro Boy,” Episode 6: “Lightning Man (Denkō Ningen),” drawn by Gisaburō Sugii (Source: “Tetsuwan Atomu” Complete 6 Box DVD Set, Special Feature, “Original Storyboard Collection,” Vol. 5, Columbia Music Entertainment, 2004, pgs. 5, 32, 50)



Originally I believed this to be Osamu Tezuka's invention, as he created the storyboards for episodes 1 – 5, however beginning with episode 51, although notes such as “PAN” or “O.L.” (overlap) could be seen, no notes spanning panels were to be found. Through further research I plan to investigate who in fact was the first person to create storyboards that span panels, and due to the fact that I've been able to narrow down a target time period I believe it is only a matter of time before I find an answer.

2. Characteristics of Expression

Earlier I described anime as being manga's child, however unlike in live-action filmmaking, animators can challenge themselves with difficult camera angles as they please without being concerned with actual locations.

At a glance, adapting an anime from an original manga source may seem easy, as one might assume that the storyboards are for the most part already complete. However, in the event that manga and anime's precious and unique characteristics fail to mesh with one another, the end result is that the attractive qualities of each are lost.

Setting aside debates concerning the gaps that can emerge between individuals' subjective impressions of a work and it's anime adaptation, I will confirm the distinguishing characteristics of each medium as I examine them.

2-1. The Book Medium

“Panels” link to the Heart

In comparison to the passive way in which audiences view anime, manga depends upon the reader's active approach, basically allowing for each individual to read at their own pace. Generally speaking, the existence of the “panel” in manga is equivalent to the “cut” in anime. The way that the shape of a panel can be used to express length of time, movement, speed of development, etc., is a fantastic invention of literacy that cannot be replicated in any other medium.

In addition, when reading manga it is at times possible to alter the flow of the story; the reader may hesitate before reading the next “panel,” or even intentionally avoid looking at one directly. This characteristic ability is made possible by the active nature of manga, and is something that cannot be done with passive anime. When viewing anime, even scenes that are uncomfortable to watch can enter an unprepared viewer's field of vision.

Another difference from manga is that in anime an “instant” is often expressed in an actual

instant, in terms of seconds, and the image will continue to move regardless of the fact that the viewer did not understand what occurred. Of course there is the opposing idea that in the hands of a talented director, expressive techniques such as slow-motion shots, still shots combined with color changes, etc. can all be effective as long as there is adequate literacy.

(2)The Importance of the Page

Anime does not possess an equivalent to the manga “page.” Unlike manga’s “panels,” coming pages may not creep into the reader’s field of vision, yet when a page is turned the following page has the ability to catch the reader off guard. Anime presents itself for viewing in a linear fashion, and aside from using animated depictions of pages turning on screen, I have yet to see an anime that possesses an equivalent method of expression.

2-2.Text and Sound

(1)Unread “Kanji”

The name is written, “saku ran bou” (錯乱坊), but read as “Cherry” (チェリー). As some of you may know, this name belongs to a monk who drives all of the other characters that appear in Takahashi Rumiko’s Urusei Yatsura mad; the name is a play on the words “sakuran saseru bouzu” (錯乱させる坊主), which means “monk who drives people mad,” and “sakuranbo” (サクランボ), which means “cherry”. Yet without a proper explanation, viewers of the anime would never understand such wordplay. This may be one reason why recent anime use on-screen text, and viewers have become accustomed to reading the accompanying phonetic characters.



Fig. 3 “cocoon,” by Machiko Kyō, Akita Publishing Co., Vol. 1, 2010, pg. 22. An example of a panel that the author hesitated to read: a panel containing painful-looking imagery suddenly appears despite the manga’s cutesy art style.



Fig. 4 “JoJo’s Bizarre Adventure,” by Hirohiko Araki, Shueisha Inc., Vol. 41, 1995, pgs. 136 – 137. An example of a powerful first panel that is revealed when the page is turned.

(2) Expressive Symbols Inherited from Manga

One cannot ignore the expressive sound symbolism used in manga. When it proves too difficult to translate the sound symbols used in a manga into actual audible sounds, anime adaptations tend to simply use the same symbols as their source manga. Although this has become a common feature of recent anime, it could be said that anime has newly inherited this technique from manga.

* Recent anime even includes scenes where sound symbols are transmitted through the airwaves.

(3) The Expression of Sound in Manga

Although a person may be able to imagine the voices and other sounds in a manga, it is impossible to imagine a specific melody. Manga artist Daishiro Kawakami states that although it is impossible to express a melody in a manga, one characteristic of manga is the possibility for the reader to come to



Fig. 5 “Urusei Yatsura,” by Rumiko Takahashi, Shogakukan, Vol. 1, 1980, pg. 18



©POT (Yoshihiro Togashi), 1998 – 2011. ©VAP, Nippon TV, Shueisha, Madhouse

Fig. 6 “HUNTER × HUNTER,” by Yoshihiro Togashi, television anime series, episode 107: “Return × And × Retire” (Ritān × To × Ritaia). An example of ruby text unexpectedly accompanying alphabetic text, from 2014.

understand what was being expressed after they've finished reading the book, if at some point they actually encounter that melody in real life. On the other hand, when manga is adapted into anime it is thought that things such as melodies and speech patterns can be realistically and faithfully reproduced.

Fig. 8 “Otonoba,” by Daishiro Kawakami, Kodansha, vol. 1, 2014, pg. 200



© 荒木飛呂彦／集英社・ジョジョの奇妙な冒険製作委員会

©Hirohiko Araki, Shueisha, JoJo's Bizarre Adventure Production Committee

Fig. 7 “JoJo's Bizarre Adventure,” by Hirohiko Araki, televised anime series, episode 4, “Overdrive” (Hamon Shissō: Obāдораibu), Warner Home Video. An example of onomatopoeic sound symbolism being used to depict an impossible to produce sound effect, from 2013

Fig. 9 “GANGSTA.,” by Kōhske, Shinchosha, vol. 1, 2011, pg. 142

Hearing impaired character Nicolas has a faltering speech pattern that is expressed more realistically in the anime adaptation than it is in the manga. 2015.

2-3. In Pursuit of Reality

The Accurate Depiction of Movement

Rapid movements are omitted when manga are drawn because of the ways pages and panels are used, yet these same movements can be depicted without omission in anime. Recently, both audiences and directors have come to demand a higher amount of accuracy. This has led to an increased drive toward images drawn with the use of rotoscope and 3D motion capture techniques.



Fig. 8 “Otonoba,” by Daishiro Kawakami, Kodansha, vol. 1, 2014, pg. 200



Fig. 9 “GANGSTA.,” by Kōhske, Shinchosha, vol. 1, 2011, pg. 142



©Kōhske, Shinchosha, Gangsta. Committee
Fig. 10 “GANGSTA.,” by Kōhske, television anime series, episode 2, “Hundemarken,” Bandai Visual.

Inducement of Empathy



Fig. 11 (left) “GANGSTA.,” by Kohske, Shinchosha, vol. 1, 2011, pg. 94



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Fig. 12(right) “GANGSTA.,” by Kohske, television anime series, episode 2, “Hundemarken,” Bandai Visual. In this scene, a character uses sign language to communicate with hearing impaired character Nicolas. An example of an anime adaptation accurately depicting movement that had been omitted in the original manga. 2015.

3-1. Questions Regarding both Manga and Anime: The Empathic System

Thus far I’ve examined anime adaptations of manga, as well as the most outstanding characteristics of both media, and I’ve come to believe that manga in particular is an active medium that is unique in the way it’s readers’ freedom and enthusiasm promotes the expansion of imagery within the brain. On the other hand I also believe there is a certain pleasure that the audience feels when passively watching anime, which comes from the experience of surrendering oneself to its autonomous dramatic development.

By comparing these two media I was able to understand the merits and demerits of each; however I was still left wondering, “which of these two media has a greater ability to inspire empathy in people?” and “is there a difference between the mechanisms that allow people to have empathic responses to the two?”

It could not obtain the evidence I sought based upon the opinions of individual people. Therefore I decided to begin to study introductory neuroscience and psychology, and to investigate the mechanisms of empathy as they are described in both fields.

3-2. Outline

Were you aware that when humans perceive a thing through their eyes, they first recognize the three dimensions of its form, before reconfiguring the image of that form as an outline in the back of the brain? When we see people’s faces, which have no outlines around them, we actually go through the trouble of converting what we’ve seen into outlined images within our brains.

Psychology tells us that when a person happens to see several other people’s faces, they will most quickly notice the faces of people whose eyebrows are slanted. It is said that the purpose of this ability is to allow humans to assess the emotional states of others, which in turn helps people to cooperate and survive together as a society.

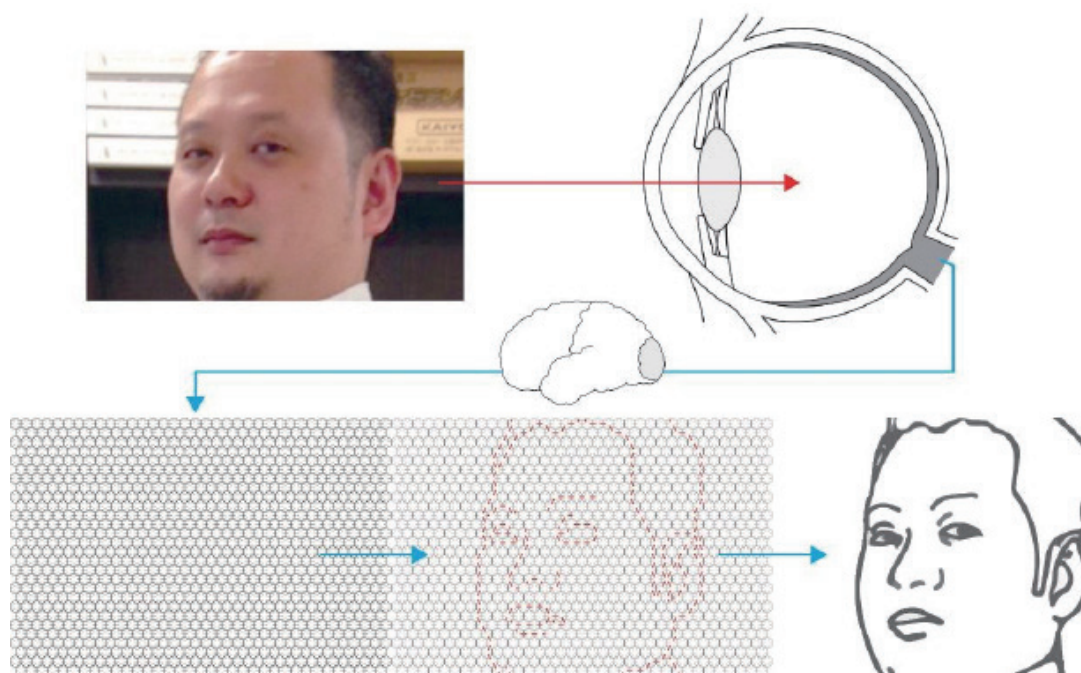


Fig.13 A diagram illustrating how the sight of the author's face is reconfigured as an outline within the orientation columns of the occipital lobe

It is possible that the manga medium makes it easier for people's brains to recognize emotions due to the way manga are drawn using basic outlines and symbolism.

On the other hand, anime's outlines are becoming thinner and thinner by the year. Of course in comparison to original anime, the anime adapted from manga exhibit a greater awareness of the manga artist's artistic touch, yet even still, taking into consideration things such as screen resolution and image composition, they seem to have become a bit too thin. Although the reason for doing away with outlines is to achieve a sense of realism, and possibly also to close the gap between anime and 3D animation, unfortunately it seems that characters, objects, and backgrounds are becoming harder to differentiate between, causing them all to blend together and therefore become difficult to see.

If so, is anime a difficult media for people to have an empathic response to?

3-3. The Sympathetic Response of Mirror Neurons

I interviewed Kyoto International Manga Museum director and brain anatomy researcher Dr. Takeshi Yoro on the subject of brain activity, in an attempt to answer a question that had long been on my mind: "Do people exhibit a greater empathic response when reading manga, or when watching anime?" He very simply responded, "Probably anime."

Personally I was hoping that his answer would be manga, because of the links that form between its panels, pages, and the mind. Nevertheless, I will next discuss a group of nerve cells introduced to me by Dr. Yoro called mirror neurons, and the two different systems that these cells belong to.

The Mirror System

It is said that when a ballet dancer watches a ballet performance, their brain will automatically respond to the dance as if they were the person dancing. The group of nerve cells that respond in such a situation is referred to as the Mirror System. However, if that same person was to instead watch a game of capoeira,



Fig. 14 It is said that people are able to count the angry faces significantly faster than the faces expressing other emotions

The Mentalizing System

A second type of mirror neuron belongs to a system named the Mentalizing System.

These cells work to verify the reasons that lead to actions; for example, if you see a person crying, these cells work to perceive what made that person cry. For instance, if the person is crying because they experienced something that you also have experienced (for example, heartbreak), it is said that you will share those feelings and sympathize with the person strongly (and completely). Perhaps the saying, “As people age, their tear ducts loosen” rings true because as people age they accumulate more and more experiences that allow them to sympathize with others.

Of course one would think that reactions also occur in the Mentalizing System while someone is reading manga; however, we can still refer to these two different types of nerve cells to explain Dr. Yoro’s statement that “anime is easier to empathize with.”

However, at this stage of my investigation I can only make conjectures based upon my results. In actuality, according to psychiatry and animal behavior researcher Matthew Lieberman, “researchers of the Mirror System focus upon reactions to action, while researchers of the Mentalizing System research words and cartoonish illustrations;” he has a pessimistic view of both research methods, whereas I myself have just begun to research nerve cells.

3-4. The Future of Anime Studies under the Umbrella of “Manga”

I’ve gained some understanding of the differences between the systems that allow for empathic responses to the two media in question, however in either case signals pass through various regions of the brain before finally arriving at the same location, the “amygdala,” which is the organ that draws upon a person’s experiences to determine likes and dislikes; it is there that these signals develop into emotions. From this point one might say that if a person practices the necessary skills and is able to achieve literacy, it is not so difficult for them to experience an empathic response to manga, anime, or in fact to any entertainment medium; furthermore it is possible that in the end, the only thing that truly makes a work interesting is the audience’s “compatibility the with the creator of the work.”

Manga and anime are somewhat like a parent and child; however, from the current discussion we

might deduce that the act of digitization will have a significant impact upon the future of manga. Once this becomes commonplace, anime also will likely have no choice but to change from its current form. And how will it change?

I shall continue to conduct my research in nervous anticipation.

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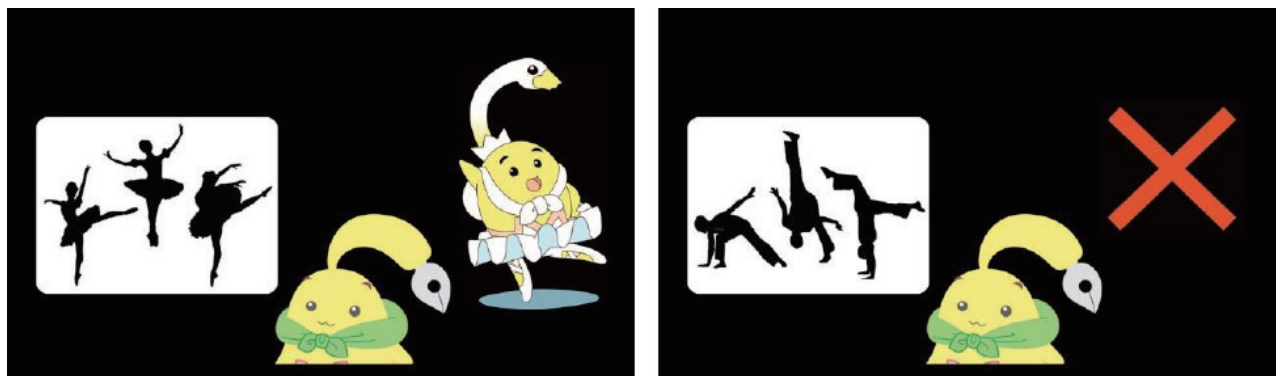


Fig. 15 A person's ability to sympathize is greatly influenced by whether they have or have not experienced something personally

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