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CHAPTER 8: CONCLUSION

This dissertation began with two basic goals: to see how emotions could contribute to the political and cognitive qualities of science fiction, and to demonstrate through visual analysis how the concept of emotion itself might be treated and explored “science fictionally,” or as part of the cognitive depiction of alternative worlds that can encourage new avenues of political thought. In order to accomplish this, I used science fiction manga as a source of SF where character emotions are generally prominent, and then explored SF manga terms of its potential to express political ideas through the visual expression of emotion. Bridging the concept of SF as a form of narrative which encourages people to imagine and desire something beyond their own circumstances through cognitive exploration with manga’s long history of artistic and narrative development in regards to communicating ideas through depictions of emotion, I showed that science fiction and more traditionally character-based fiction share a common potential for audiences to infer and interpret the content of a given work. While one of the strengths of SF is that it need not be beholden to the idea that characters are central to a narrative, this does not mean that characters and their emotions are unable to add to the sense of an alternative world derived from logical processes either. Taking “cognitive estrangement” not as a static concept that disappears from view as the field of science fiction continues to grow but one that has also evolved accordingly such that emotion has potential significance in terms of both “cognition” and “estrangement,” I have argued that science fiction manga encourages the exploration of the novum through emotion by drawing attention to the psychologies of characters within the contexts of their environments. Emotion, rather than merely being an accessory to the novum, can contribute substantially to our understanding of a science fictional aspect in a narrative, not only by acting as a source of alternative perspectives through which different interpretations of a novum can be made, but also by becoming a novum in and of itself.

As a concept that exists within both the world and continuous history of the
SF narrative, emotion can be explored just as much as any alien encounter or future society, especially when it is integrated into a science fictional setting. Thus, when considering the question asked in Chapter 1 as to whether or not character emotions themselves can be science fictional, the answer is clearly “yes,” though this does not say much by itself. By then analyzing SF manga in depth, however, it also became possible to see how emotions become science fictional, and as a result what political ideas can be found in SF manga when one pays attention to that emotional component. Taking into account the approach to comics paneling that is used in manga wherein groups of panels are emphasized through the use of page composition and flowing panel progression (as opposed to merely treating manga like a collection of single panels), I analyzed the interaction between character emotions and science fictional worlds in the titles 7 Billion Needles, Zettai Karen Children, and Coppelion. I demonstrated how these manga engage with both emotion and the SF novum in specific ways that place emotion squarely at the centers of each of their science fictional environments, such that these works and their ideas would be significantly different if emotions were removed or lessened in importance.

For 7 Billion Needles the mutual exploration of the developing bond between human and alien acts as a method for growing beyond present psychological limitations, and is conveyed through the constant focus on its characters’ emotional transformations. I showed how 7 Billion Needles challenges the science fictionality of Bertolt Brecht’s “estrangement effect” by embracing the immersive qualities of portrayals of emotion in fiction rather than denying them. Over the course of the narrative, “emotion as reflection of the novum” gradually transforms into “emotion as novum,” especially through the protagonist Hikaru and the way she overcomes her inner trauma through her therapeutic interactions with the symbionts. Here, the role of emotions in comparison to a similar narrative that places less emphasis on them is quite clear when looking at 7 Billion Needles relative to the original SF narrative it was adapted from, Hal Clement’s Needle. Though Needle does not portray its main character Robert Kinnaird as devoid of emotion, the very fact that he is more or less emotionally content from the outset means that the arrival of the aliens act as the beginning of his problems, whereas for Hikaru in 7 Billion Needles the influence of the symbionts is processed in the context of the pain of her willful isolation from others, and thus allows for the exploration of the novum of symbiotic integration with aliens through the specific dimensions of her psychological changes. This focus on
characters’ feelings, expressed through consistent visual emphasis on facial expressions and the visual depiction of people’s inner selves as spaces of conflict and resolution, is what allows the idea of extremely close interaction between different beings to not just be an exchange of cultural information but extremely personal and emotional information as well. As a result of Hikaru not only being emotionally affected by the symbionts but also affecting them through her passionate outbursts (spoken or thought), empathy becomes a politically significant force. *7 Billion Needles* presents the ideas that it is important to take into account people’s emotional contexts when considering solutions for the problems of society, and that the active exchange of emotion can be a way to work towards such solutions.

In the case of *Zettai Karen Children*, I found that its tendency towards outward expression of emotions is used to deliberately contrast between serious expressions of alienation and humorous expressions of confidence in one’s identity as a way to portray a world divided between psychics (Espers) and non-psychics (Normals). The manga introduces an idea that I refer to as the “normality approach,” whereby characters consciously work towards being “normal” as a political strategy for confronting the sense of tension and division in their society. This approach allows ostensibly non-science fictional concepts such as love, trust, and the desire to be normal to be cognitively and emotionally explored as the basis for a political solution that is derived from the notion that the “everyday” is something that can be sought after. The characters continuously hybridize the concept of “normality” by embracing the contradiction between “normality as something natural and internal” and “normality as something social and external.” Thus, in *Zettai Karen Children*, emotion is the foundation of the novum and is a crucial factor in its cognitive extrapolation, and while there is no prior SF narrative on which *Zettai Karen Children* is based, here the role of emotion is even more vital than in *7 Billion Needles*. This is because how the three young girls at the center of the narrative (“the Children”) feel about their environment is actually crucial to our understanding of their world and the processes that go into creating identities for them and others in their society, and the way that the characters emotionally experience their world impacts their decisions within it. Without emotion, there is no “normality approach” because the idea is not simply to have them “act” or “become” normal but to have them perceive themselves as normal in the first place, to attempt to solve the problem of everyday alienation by addressing their emotional experience first and foremost.
As a work with a more explicit political stance, *Coppelion* necessitated a different angle of entry for studying the influence of emotion on its political ideas, which venture closer to the more conventional definition of political as pertaining to how a society operates. By looking at shifts in both how emotions are expressed and in whom the primary sources of emotions are located, I showed how the visualization of emotions affects the political criticism of nuclear power that is core to that manga’s premise. Going from a direct political criticism of the societal structure of Japan as tending towards misuse of nuclear power (due to its tendency to value the image of safety and harmony over the actual condition of its society) to one that criticizes the abuse of power and technology in general, the various expressions of emotion within *Coppelion* as a single work show the versatility and flexibility of science fictional character emotions with respect to their ability to reflect and present the novum. Out of the three manga analyzed, *Coppelion* is in some ways least affected by emotion, as both the idea that nuclear power can be criticized and that a societal structure can exist around nuclear power that pushes it towards neglect and misuse are concepts that can easily exist without emotions being a factor. However, the manga does not simply point towards the physical harm and death caused by radioactive contamination, and instead draws attention to the psychological toll of living in the aftermath of the failure of this societal structure. *Coppelion* presents the idea that people can be affected just as much emotionally as they are physically by their circumstances, which impacts how they interact with their world, or in this case the post-meltdown environment of Tokyo. Similarly, when the manga begins to use genetic engineering as an analogue for nuclear power, the series also highlights and encourages the tension between “SF as other reality” and “SF as metaphor” through the responses of the Coppelions to their own bodies, locating both a source of estrangement and a cognitive experience within the Coppelions and their emotions. This internal exploration of the Coppelions is then used to further highlight the idea that Japan’s mishandling of nuclear power speaks to a potential to abuse other forms of power beyond science.

These three examples show that, while roughly similar ideas could be presented without the use of emotion, the expression of emotion encourages consideration of the internal world of the character as something connected to their external environment, which then highlights the possibility of solutions that take the psychological component of people into account. If the “science” in science fiction is based on the idea of “experimentation,” that is to say depict-
ing alternative environments in which a set of ideas can be presented in terms of cause and effect, then these manga expand the space of experimentation by presenting emotion as an important element of humanity that can and should be factored into our understanding of what it means to exist within a “world.” If there is an overarching lesson that these SF manga convey, it is that to ignore emotions when thinking about the consequences of historical developments past, present, and future is to also ignore a significant part of the people occupying the world and how they perceive their world.

The central question of this dissertation is, “How does the depiction of emotion affect the political ideas conveyed in science fiction manga?” On a basic level, 7 Billion Needles, Zettai Karen Children, and Coppelion all clearly position emotion as a facet of the novum and its exploration in the SF narrative, meaning that political ideas are affected by the fact that emotions are treated as important in the first place. However, when it comes to the effect that emotion has on SF manga as something that is expressed through its presentation, in other words how the visual depiction of emotion changes these works, the fact that all three manga produce not only three different sets of political ideas but also three different ways of engaging the present and the future means that, if there is any common effect that emotion has on them beyond the broader lesson described in the previous paragraph, then it exists less at the end product and more in the narrative process itself.

When looking at the visual language of manga as a means to express both emotion and the SF environment, the central presence of the “manga page” reveals itself to be more important than what I had originally described. Whether it is depicting a girl reacting to an alien living inside of her, expressing a character’s frustration over being viewed as a monster, or giving the reader a look into the conditions of people living in an environment contaminated by radiation, again and again both emotion and world are communicated over groups of panels that emphasize the two-dimensionality of the page without denying the importance of any three-dimensional spaces depicted. Even other elements such as the word balloons and the panels themselves contribute to this sense of hybrid flatness. While this alone does not say much, and is indeed in certain respects more of a reaffirmation of my method for studying science fiction manga visually in the first place, consider the difference between “traditional fiction” and “utopian fiction” as described by Philip E. Wegner. “The classic privileging of temporality and history over space has its literary analogue in a critical
tradition that valorizes the development of character psychology as the highest expression of narrative art. Characters are fundamentally temporal constructs that unfold into a space ... often presented in this critical tradition through the metaphor of the ‘stage’ upon which the drama of character development unfolds, and setting is viewed as distinctly secondary in importance to character.”

Here, the basic difference, that traditional fiction uses the stage to emphasize the actors while science and utopian fictions work the other way around, could generally apply to manga on a narrative level if all images were removed. However, the emotional expressions of these science fictional worlds through their visual narratives flattens both literally and metaphorically the contents of SF manga such that the distinction between “the stage as backdrop for the actors” and “the actors that draw attention to the stage” becomes blurred.

Though emotions are generally depicted as coming from the characters rather than their environment, whether they are truly the elements being emphasized, or are instead prompting the reader to pay attention to the background, becomes rather ambiguous, and in this confusion even emotion turns into a visual “space” that can be explored. The shape of Hikaru’s past trauma in 7 Billion Needles is as much of an SF context as the arrival of the alien symbionts. The emotions of the Children in Zettai Karen Children are the very “testing grounds” or “alternative political space” for the hybridized normality approach. The images of the survivors responding to their outward environment and the Coppelions reacting to their inner existences merge over the course of Coppelion. Both the external alternative environment and the internal psychological world become equally flat, and thereby equally important on the page, through the very structure of manga.

As shown by my analyses, how this relationship is utilized will inevitably vary from one science fiction manga to the next. However, the way in which manga equalizes the “actor” and “stage” on a formal level also synergizes with the general narrative tendency in manga to prominently feature the expression of emotion in the first place, creating a space of possibility where emotions are more significant in those worlds, thus making it more likely that an “emotional novum” can appear in SF manga. Can the visual qualities of manga offer something unique to the exploration of political imagination in science fiction?

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While other two-dimensional art forms can be used to convey SF narratives and can indeed flatten the image, with manga that heavy focus on inter-panel relationships, on the two-dimensional spatial relationships between elements, constantly factors into the portrayal of these science fictional worlds. Though this too may not be an entirely unique quality that can only be found in manga, the degree to which manga in a sense equalizes through its visual flatness the expression of the concrete and the abstract, the logical and the emotional, and the external and the internal creates the potential for both the concept and process of cognitive estrangement to continue to grow.

This investigation into the science fictionality of emotion and its visual and narrative presence in SF manga raises another intriguing question: can emotions in manga become science fictional in the absence of a science fictional environment? *7 Billion Needles, Zettai Karen Children,* and *Coppelion* can all be comfortably called “science fiction” at the very least on a basic conceptual level, and the same can be said for most of the manga referenced in general throughout this dissertation. What of the non-SF titles, however? Could the manga page itself become science fictional in any context? Assuming that this could happen, science fiction would go beyond simply being a narrative genre or even an aesthetic one, transforming into something that is truly cognitively estranging. While it would be impossible at this point to fully determine whether or not such a thing would be possible, my research leads me to believe that this idea is feasible. In particular, I look to *Zettai Karen Children* and the way it transforms the concept of the everyday using its characters’ emotions for a potential solution. The portrayal of an overtly conscious and active pursuit of normality in *Zettai Karen Children* draws attention to the underlying social tensions that the Children experience. Though this is conveyed in part by showing how their emotions influence the use of their superhuman abilities, such as when the Children are comfortable misusing their abilities around their caretaker Minamoto, it is conceivable for a manga to convincingly express the feeling that its characters are influenced by the processes of their world without necessarily needing to show the world around them. While I focused largely on “conventional” works of manga for this dissertation, if I were to further research whether the “science fictional manga page” could exist outside of SF as a genre, I would consider studying more visually experimental works of manga because of the possibility that a tendency to challenge the formal qualities of manga may very well engender “cognitive estrangement.” This would involve analyzing the border between
the mainstream and the unorthodox in terms of visual expression in manga, and
the method of analysis I have used for this dissertation to study SF manga pro-
vides a stable foundation from which I would be able to proceed.

Of course, this also assumes that the manga page remains a static concept.
As discussed very briefly in Chapter 4.2, technology is shifting manga, if only
incrementally, off of “paper” as the manga industry experiments with digital
formats. This includes converting paper manga to digital, using online sites
as testing grounds for manga before being printed,\(^\text{383}\) and even unusual mul-
timedia experiments such as “audio manga” where characters are voiced.\(^\text{384}\) In
researching the digital manga page, it may also be necessary to look at digital
comics outside of Japan, especially how other countries’ creators and publishers
have established ways of taking into account smaller digital devices instead of
waiting for screen resolution to improve as was the case with manga publishers.
For example, American digital comics readers such as the popular comiXology
include a “guided view” that zooms in on “important” panels and blocks out
“irrelevant” ones,\(^\text{385}\) and a great number of manhwa [Korean comics] published
online are essentially formatted as very tall, one-panel wide strips in order to
facilitate easy vertical scrolling.\(^\text{386}\) While these approaches are potentially prob-
lematic for manga due to its emphasis on complex inter-panel relationships
and flow, such concepts could potentially influence not only how science fic-
tion manga is created, but also how the digital format might change the very
expressive qualities of the manga page. As also mentioned in Chapter 1, manga
publishers have over the past few years begun to look outside of Japan for artists,
so further research would involve studying how these different approaches to
the computer screen might influence the expression of emotion (and other ele-
ments), and whether or not there has been any multicultural exchange between
these methods.

Another avenue for additional research comes from something I acknowl-
edged but set aside at the beginning, which is the fact that all of the works discussed in this dissertation have female protagonists, are created by men, and ostensibly target a male audience. This leaves open the opportunity for further investigation into SF manga as a product of its environment. While *7 Billion Needles*, *Zettai Karen Children*, and *Coppelion* are only three out of the many science fiction manga to have been published in the past ten years, there is a likely possibility that the approach taken by these manga in presenting its female characters, whom I have on occasion described as “beautiful fighting girls” as per Saitō Tamaki throughout this dissertation, comes from broader trends in the culture surrounding manga. Notably, other researchers have written on the influence of girls’ culture (as something both for girls and about girls) in Japan, whether it is *kawaii* [cute] culture (the idea that Japan is a culture where icons of cuteness are ubiquitous) the *shōjo* (not the manga genre, but the concept of the girl as a cultural and political symbol), or *moe* (a term to describe a strong emotional reaction to the visual design of cute, typically female characters). Studying these connections would involve looking at the similarities and differences between SF and non-SF manga, as well as the history of how the portrayal of female characters has changed over time in relation to other media such as anime, light novels, television, and the Internet whereby manga becomes merely one part of a “media mix” strategy. There is even a great deal to explore in terms of how these cultural forces may influence the qualities and identities of female SF manga protagonists in comparison to the traditional tendency for main characters in science fiction to be male, as well as the trends in current young adult science fiction outside of Japan towards an emphasis on emotion.

Overall, through this dissertation I have demonstrated how the expression of emotion in science fiction manga influences political ideas, and in establish-

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387. This is less the case for Hikaru in *7 Billion Needles*.
ing my theory and method I have also laid out a framework for others interested in the study of the visual expression of emotion in manga and other similar art forms to utilize in their own research. In presenting my study on science fiction manga and its use of emotion, I hope that my work can help to challenge, clarify, and encourage reconsideration of how we think about the political potential of emotion and cognition as artistic and narrative concepts. The theories and applications of this research can act as the impetus for further research into an ever-changing cultural and technological context from which science fiction manga and other forms of mass culture arise. The specific ways in which emotions are hybridized in the context of science fiction manga opens up greater opportunities for “alternative perspectives” in other media to be explored.