

Why Manga Matters After Fukushima

YASUHITO ABE

Assistant Professor at Doshisha University

ABSTRACT

The Fukushima Daiichi nuclear disaster of 2011 has created an alternative space for reportage and journalism. While much research has investigated how mainstream news media reported the Fukushima disaster in Japan and elsewhere, virtually absent is a scholarly investigation of the role of new media artworks in shaping what it means to be the Fukushima nuclear crisis. This study thus focuses on the role of Japanese manga among various new media artworks, and investigates how the disaster was represented in comics form.

Among various Japanese manga on the Fukushima disaster, this paper focuses on examining a Japanese manga titled as *Ichi Efu: Fukushima Daiichi genshiryoku hatsudensho rōdōki* or *1F: A cleanup worker's account of Fukushima Daiichi nuclear power plant* (thereafter, *1F*) written by Kazuto Tatsuta, one of the Japanese cleanup workers at the wrecked power plant. Originally published in *Morning*, a Japanese weekly manga magazine in 2013, *1F* illuminates what the consequences of the Fukushima disaster looked like from the perspectives of a cleanup worker, providing an uncommon view of Fukushima for a wide variety of audiences including comic fans in Japan and elsewhere.

On March 11, 2011, a massive earthquake and the resulting tsunami devastated the northeastern region of Japan and severely damaged the Fukushima Daiichi nuclear power plant operated by Tokyo Electric Power Company (TEPCO). This led to the Fukushima Daiichi nuclear disaster, in which three reactors melted down, resulting in radioactive pollution. Following the disaster, narratives and visual images of 'Fukushima' continued to unfold in various art forms. [1] Observing the cultural and aesthetic responses to Fukushima, my study focuses on the role of one specific art form known as manga or Japanese comics. Manga acted as a key object of popular culture in Japan before and after the disaster. Ian Condry described the accessibility and ubiquitousness of manga in contemporary Japanese society:

Manga is cheap to buy and can be accessed for free relatively easily. The full price for weekly magazines is roughly \$3, and they contain about twenty different serials. Yet these can also be read for free while standing in convenience stores [sic], a practice known as tachiyomi ("reading while standing")...Reading for oneself or hearing by word of mouth is the more likely mode for learning about new manga. Manga in print are also easily passed around, a kind of grassroots circulation where reading itself is part of social relationship. [2]

With the growth of digital and mobile media in recent years, manga is more easily accessed online; it is thus one of the most prominent art forms in Japanese society. Indeed, manga played a role in representing a range of historical events including the atomic bomb of Hiroshima in 1945, the Lucky Dragon No.5 Incident in 1954, and the Chernobyl nuclear disaster in 1986. It provided a cultural and aesthetic resource for shaping collective memory, like any other art form. [3] The aftermath of the Fukushima disaster likewise bore witness to an outpouring of manga on the disaster. The Japanese manga artist Miso Suzuki, for instance, interviewed various people, including publishers and scientists afterward and then transformed their accounts into a story in the form of comics. [4] Furthermore, Tetsu Kariya's popular manga series *Oishimbo* featured the consequences of the Fukushima disaster in terms of food safety. [5] All these examples suggest that manga has remained a key art form for confirming a specific view of the nuclear disaster. The Fukushima disaster thus provided cultural and aesthetic 'opportunities' to exploit the potential of the art form. In this article, I examine how this medium represents the aftermath of the Fukushima disaster, asking how and why manga matters in post-Fukushima Japanese society.

Among various manga about the Fukushima disaster, particularly notable is *Ichi Efu: Fukushima Daiichi Genshiryoku Hatsudensho Rōdōki* or *Ichi Efu: A Cleanup Worker's Account of the Fukushima Daiichi Nuclear Power Plant* (hereafter referred to as simply *Ichi Efu*). The title of the manga, *Ichi Efu*, is a common abbreviation for the Fukushima Daiichi nuclear power plant. After being awarded the 34th Manga Open New Face Award on October 3, 2013, the weekly Japanese manga magazine *Morning*, published by Kodansha Ltd., printed the original version, *Ichi Efu: Fukushima Daiichi Genshiryoku Hatsudensho Annaiki* or *Ichi Efu: A Tour of the Fukushima Daiichi Nuclear Power Plant*. [6] This story illuminated the experiences of a part-time Japanese cleanup worker, given the pseudonym Kazuto Tatsuta, at the Fukushima Daiichi nuclear power plant from June to December 2012. [7] Perhaps because of its uncommon portrayal of 'Fukushima,' the manga was also published in other weekly magazines such as *Shūkan D Morning*, and *Friday* from October 2013 to October 2015. The manga was later published in book form spanning three volumes. The first volume sold around 170,000 copies over two weeks. [8]



Figure 1. *Ichi Efu: Fukushima Daiichi Genshiryoku Hatsudensho Rōdōki (1)*, 2014, Kazuto Tatsuta, Japanese manga, ©Kazuto Tatsuta (Used with permission)

While critical scholars studying the Fukushima disaster have paid relatively insufficient attention to *Ichi Efu*, a careful study of this particular manga provides at least two major advantages. First, because it was arguably one of the most prominent comics after Fukushima, Japanese mainstream media, including NHK and *AERA*, frequently featured it. [9] In languages other than Japanese, *the Japan Times*, *Libération*, and other media outlets played up the manga for their various audiences. Its ultimate translation into English, French, Spanish, and Chinese, and other languages promoted a transnational circulation of popular discourse on the disaster's consequences. [10] An analysis of *Ichi Efu* therefore provides insight into a part of the transnational discourse of 'Fukushima.' Second and equally important, a critical analysis of *Ichi Efu* contributes to enriching the scholarship of nonfiction comics. [11] Investigating Tatsuta's experience-based portrayals of 'Fukushima' in comics form contributes to enhancing our understanding of comics as a medium for framing and defining a specific view of 'Fukushima' in a nonfiction form.

The question then is how manga differs from other art works in terms of its portrayal of 'Fukushima.' To address the question, I view the manga as art form compared to new media artworks. More specifically, I investigate how *Ichi Efu* portrayed 'Fukushima' relative to the exhibition, "Don't Follow the Wind," spearheaded by the collective Chim↑Pom. I do not attempt to undertake a comparative study of *Ichi Efu* with the exhibition in a rigorous way simply because their 'art worlds' inherently differ. [12] However, analyzing the two in a relative way casts light on the distinctive characteristics of manga as an art form.

To explore *Ichi Efu*'s portrayal of 'Fukushima,' I commence by viewing the manga as a socially-bounded object in post-Fukushima Japanese society, developing a conceptual framework for this study, and providing a backdrop for the critical analysis of *Ichi Efu*'s portrayal of 'Fukushima' in comics form. More specifically, the concept of nonfiction journalism is discussed with a particular focus on the medium specificity of comics. This is followed by a critical investigation of how the manga used the disaster to offer its own vision for the future by looking at "Don't Follow the Wind." Finally, key findings are summarized, and their implications for future research are discussed.

ICHI EFU IN POST-FUKUSHIMA JAPANESE SOCIETY

While many point out *Ichi Efu*'s remarkably wide media exposure in Japan and elsewhere, little scholarly attention has been paid to the ways in which media outlets *actually* portrayed the manga. This systematic examination of Japanese mainstream media's portrayal of *Ichi Efu* would ideally include content from all kinds of media outlets, including local newspapers, television, radio, magazines, social media, and others. However, my scope is more modest. I focus on investigating major Japanese national newspapers' portrayals of *Ichi Efu*, paying particular attention to the three papers with the largest circulation: *Asahi*, *Yomiuri*, and *Mainichi*. [13] This focus allows a systematic and general analysis of Japanese media's portrayal of the manga. Overall, these newspapers unanimously celebrated *Ichi Efu* in post-Fukushima Japanese society.

The articles used for this study are taken from online databases of the Tokyo editions of the three Japanese national newspapers from October 3, 2013 to August 1, 2016. Because I investigate *Ichi Efu* through the lenses of Japanese national newspapers, only those articles referring to ‘Ichi Efu’ are examined. As a unit of analysis, each article not explicitly related to the manga is excluded. For instance, articles referring to a book on the Fukushima disaster by Tatsuta and his colleagues are excluded from the sample. A total of 23 items are found in *Asahi*, 7 in *Yomiuri*, and 4 in *Mainichi*. Both qualitative and quantitative methods of analysis are used. Framing analysis is used for qualitative analysis. [14] Drawing on this framing analysis, I conduct content analysis and code articles. Three key dominant recurring themes emerge:

1. *Ichi Efu* as an on-site authentic report
2. *Ichi Efu* as a politically neutral report
3. Kazuto Tatsuta as the author of *Ichi Efu*

	Authentic	Politically neutral	Tatsuta	Others	Total
Asahi	16	0	7	0	23
Yomiuri	4	2	0	1	7
Mainichi	3	1	0	0	4
Total	23	3	7	1	34

Table 1. Thematic Categories Dividing Articles from Major Japanese National Newspapers that Referred to Ichi Efu (October 3, 2013 to August 1, 2016)

ICHI EFU AS AN ON-SITE AUTHENTIC REPORT

Most articles referred to *Ichi Efu* as an on-site authentic report of Fukushima. For instance, *Asahi* explicitly noted on April 26, 2014 that it “scrupulously portrays ‘the reality of Fukushima’ from the perspective of [a clean-up] worker in a detached tone.” [15] The article further stated:

The characteristic of the work is [its] extensive and detailed description [of everyday life at the Fukushima Daiichi nuclear power plant]. [His description of] masks, protecting clothing, and the check procedure for radiological dose rate are exactly as stated in the [workers’] manual. Illustrated are details [of operation] that only people with experience are familiar with, including crying “stay safe!” before operations start and [the regulation] that bans one from engaging with operations after detection of exposure to radiation beeps four times. [16]

In this way, *Asahi* highlighted Tatsuta’s detailed portrayal of uncommon procedures for part-time cleanup workers as a rhetorical resource for validating the authenticity of the manga’s narratives. While *Asahi* highly praised the manga for its on-site reporting, the newspaper added that it was not beyond criticism from its readers. For instance, on November 17, 2014, it noted that one of the negative comments about the manga claimed it “underestimated” the health effects of radiation; however, the author of the article featured a Japanese journalist who made a counterargument against the criticism in the same article. [17] Like *Asahi*, both *Yomiuri* and *Mainichi* emphasized

Tatsuta's detailed portrayal of everyday life at the power plant as a rhetorical resource for maintaining that the manga represented his observations and experiences accurately. For instance, *Yomiuri* noted that Tatsuta neatly illustrated how each nuclear worker actually engaged with the power plant. [18] Furthermore, *Mainichi* noted the illustration of everyday life at the power plant "from below," meaning that it painstakingly documented various aspects of everyday life at the power plant rather than generalizing what 'Fukushima' looked like. [19] Overall, major Japanese national newspapers viewed the detailed and concrete descriptions of his observations and experiences as a key rhetorical recourse for defining *Ichi Efu* as a factual reportage of the Fukushima Daiichi nuclear power plant for a general audience.

ICHI EFU AS A POLITICALLY NEUTRAL REPORT

A certain number of articles referred to *Ichi Efu* as politically neutral. In doing so, the major Japanese national newspapers – *Yomiuri* and *Mainichi* in particular – positively praised the manga for *not* making political claims on the Fukushima disaster. For instance, on June 1, 2014, *Yomiuri* featured Japanese sociologist Hiroshi Kainuma, who indicated that Tatsuta did not "speak for Fukushima" politically in *Ichi Efu*; unlike many other media covering the Fukushima disaster, the manga did not differentiate Fukushima from other areas in Japan, scrupulously avoiding the stigmatization of 'Fukushima.' [20] Similarly, *Mainichi* favorably noted on April 28, 2014 that it "neither discusses the pros and cons of nuclear power nor uncovers injustice [at the power plant]." [21] In doing so, *Mainichi* highlighted Tatsuta's silence on the issue of nuclear technology within the manga as a rhetorical resource for claiming that *Ichi Efu* is politically neutral (and thus trustworthy). Overall, both *Yomiuri* and *Mainichi* praised the manga for not making a political claim on 'Fukushima' and nuclear technology for a general audience in post-Fukushima Japanese society.

KAZUTO TATSUTA AS THE AUTHOR OF ICHI EFU

A number of articles referred to Tatsuta himself rather than the manga *per se*. For example, *Asahi* featured Tatsuta as the author of *Ichi Efu* in the long-running series titled *Prometheus Trap* from November 5 to November 21, 2014. Throughout this series in particular, *Asahi* portrayed a part of everyday life of Tatsuta favorably and thus helped praise the manga. For instance, it graphically portrayed how Tatsuta volunteered for service in a temporary house in the Fukushima Prefecture during the period when he worked as a cleanup worker at the power plant. [22] *Asahi* therefore highlighted Tatsuta's outgoing personality as a rhetorical resource for acclaiming his manga.

Except for the one instance, major Japanese newspaper articles widely applauded *Ichi Efu*; some referred to it as authentic nonfiction in comics form; others praised Tatsuta's matter-of-fact non-political illustration of 'Fukushima.' The question then becomes whether these favorable views by the media are perfectly valid. This is a socially significant question because Japanese national newspapers' portrayals of *Ichi Efu* helped inform a general audience about what the manga looks like, contributing to its definition as an artwork in post-Fukushima Japanese society. In turn, my critical investigation of *Ichi Efu* elucidates the extent to which the media's dominant assessment was acceptable.

PORTRAYING FUKUSHIMA IN COMICS FORM

Tatsuta combined his cartooning skills with his experience as a part-time cleanup worker and drew the manga *Ichi Efu*. According to his account, his main goal was to visualize everyday aspects of the power plant through his work experiences. In the weekly magazine *AERA*, for instance, he explicitly notes, “[the reason] why I represent everyday life of nuclear workers in *Ichi Efu* is to ‘record’ [their daily practices]. I never feel like appealing anything [to my readers directly].” [23] Tatsuta empathetically asserted that he did not attempt to uncover ‘hidden’ news using investigative journalistic practices. In short, he insisted that he visualized his observations and experiences at the power plant in a politically neutral way. His account of *Ichi Efu* comfortably fit with the view of the manga by the mass media. The question, then, is how Tatsuta transformed his observations and experiences into a narrative *in comics form*. In other words, how did he use manga as an art form to tell his readers his observations and experiences at the power plant? How did the comic forms matter when he “reported” information about the power plant?

Defining the fundamental elements of comics is not easy. [24] For example, Thierry Groensteen critically examined a wide variety of definitions of comics and suggested that one of the central elements of comics is *iconic solidarity*, defined as “interdependent images that, participating in a series, present the double characteristic of being separated — and which are plastically and semantically overdetermined by the fact of their coexistence in *praesentia*.” [25] From Groensteen’s perspectives, manga can be “described as a collection of separate icons and interdependent images.” [26] Given this conceptualization of comics, the role of gutter (or space between panels) in shaping the comics form is of interest. In the book *Understanding Comics: The Invisible Art*, Scott McCloud conceptualized comics as an art form with particular attention to the significance of the gutter. [27] In doing so, he maintained that the essence of the medium exists in the invisible partnership between creator and reader. In particular, he rightly pointed out that in a gutter, a reader necessarily combines various representations in two separate panels into a coherent story by using her experience-based imagination. [28] That is, comics as an art form requires a reader’s *closure* in order to engage her powerful, but more or less invisible, participation in creating the comic itself. Peter Gutierrez expounds on the concept of closure and further notes that it:

... refers to the audience’s participation in a text via extrapolating the whole from its parts, essentially coauthoring the text from fragments of representation. McCloud convincingly shows how closure lies at the heart of many diverse art forms, how it conjures a solid and accessible reality from all those carefully arranged slices of content. [29]

From McCloud’s view of comics, they are art forms that generally require audience involvement, in part through the importance of the gutter. Both Groensteen’s conceptualization of comics and McCloud’s emphasis on the role of gutter provided insight into a critical analysis of *Ichi Efu* as an art form. Rather than focusing exclusively on how Tatsuta’s observations and experiences were reconstructed in separate icons and interdependent images, the role of the gutter was also considered in transforming Tatsuta’s observations and experiences into a narrative in comics form. This is because what was left open in the gutter was a fundamental resource for his narrative, just as Julia Round summarized the characteristic of the gutter as “the site of major events with the result that readers are implicitly involved, investing the story with their own identities and experiences.” [30]

With the analytical framework for *Ichi Efu* as manga, I further examine it as a specific genre of comics. *Ichi Efu* is primarily based on Tatsuta's own observations and experiences that become nonfiction narratives. Randy Duncan, Michael Ray Taylor and David Stoddard rightly underscored that the origin of nonfiction comics can be traced to the Paleolithic Age when hunters beautifully illustrated their lives in French caves. [31] With the growth of nonfiction comics, such as Joe Sacco's *Palestine*, many scholars have discussed the notion of comics journalism, which "combines the form of comics with the conventions of journalism." [32] However, Dirk Vanderbeke differentiates conventional journalism and comics journalism as follows:

Comics journalism offers possibilities that traditional journalism cannot pursue. It makes use of subjective perspectives, visual metaphorization, fictionalization and artistic distortions of reality in its quest for an essential truth that cannot always be successfully transmitted by a neutral and seemingly detached form. [33]

He indicated that the form of comics provides opportunities for nonfiction narratives. Thus, it is necessary to account for the medium specificity of manga in an analysis of nonfiction narrative. In elaborating the concept of comics journalism, Benjamin Woo further aptly distinguished reporting information and communicating experience as follows:

Information, like journalism, is a form of representation that strives to transmit the real as objectively and transparently as possible, while the communication of experience is based on a model of intersubjective understanding. The latter serves not only to inform but also to constitute new collectives out of its audiences on the basis of the experience that they now share (albeit in a mediated form). [34]

While both Tatsuta and Japanese mainstream newspapers apparently thought that *Ichi Efu* was reporting information on 'Fukushima,' Tatsuta shared his inherently subjective observations and experiences in comics form. [35] A critical analysis of *Ichi Efu* as a nonfiction manga thus shows how he strategically and rhetorically transformed his vivid experiences into a coherent narrative in comics form, and at the same time indicates how his readers were involved in "co-authoring" his manga by using their individual experiences and imaginations.

VISUALIZING THE NEGOTIATED PROCESS OF RECOVERY

I will focus on the story from *Ichi Efu* titled, "Goanzen ni!" or "Stay Safe!" This 37-page story was chosen for this study largely because it was the first episode of the manga and apparently epitomized ways in which Tatsuta transformed his observations and experiences into a narrative in comics form. The story was initially published as *Ichi Efu: A Tour of the Fukushima Daiichi Nuclear Power Plant* in *Morning* with Tatsuta acting as a tour guide at the nuclear power plant. While the story was based mostly on Tatsuta's first-person storytelling, the fundamental narrative structure of "Stay Safe!" was more complex. Indeed, acting as a tour guide was merely one of his roles in the story; he strategically positioned himself in several other ways: as the protagonist, an on-scene commentator, and a stand-in for readers. Moreover, his nonfiction narratives were largely divided into three types: his own observations and experiences on the scene, his own comments on drawing the manga, and stories of others he had heard. I examine how Tatsuta strategically transformed his onsite experience into a nonfiction comics and pay particular attention to the role of gutters in the manga.

In the story “Stay Safe!,” Tatsuta appears as a protagonist-narrator at the very beginning of the story. [36] On page 3, the first panel of the story portrays a non-operative traffic light with the Fureai Intersection marker inside the Fukushima Daiichi nuclear power plant. In the second and third panels, a white van is taking four nuclear workers, including Tatsuta, to a reactor within the power plant. In the fourth panel, one of the workers says, “OK. Here we go,” in a local dialect. [37] Bringing the local dialect into the first word balloon in the story serves to introduce Tatsuta’s conceptualization of ‘Fukushima’ for its readers. Throughout the entire story, he carefully and vividly documented and represented the dialect that his co-workers used at the nuclear power plant and even ‘translated’ certain dialects into ‘standard’ Japanese language for readers not familiar with the dialect. [38] According to his account in the manga, most workers at the Fukushima Daiichi nuclear power plant were local residents in the Fukushima Prefecture. [39] As such, he carefully documented and illuminated everyday aspects of the nuclear workers at the power plant with particular attention to the vernacular they used. In so doing, readers were invited to view his portrayal of cleanup workers as more or less ‘authentic.’

In the second panel on the sixth page, Tatsuta introduces himself to readers by saying “my name is Kazuto Tatsuta. Sorry, but it’s pseudonym. I am working at the TEPCO’s Fukushima Daiichi nuclear power plant.” [40] After the brief self-introduction, he disappears in the third panel, saying, “Today, I will show you our work venue, Ichi Efu.” [41] Here, readers vicariously view the Fukushima Daiichi nuclear power plant as if they were there. In the fourth panel, however, he adds a caption, “The early morning,” describing ways in which Fukushima workers start to engage with the power plant early in the morning. In the gutter between the third and fourth panels, the story moves backward in time, and for the remainder of the story, Tatsuta focused mainly on illuminating routine activities of nuclear workers in greater detail for the readers. Thus, Tatsuta used the gutter to get his readers engaged so effectively that readers were invited to fill in the gutter by imagining that they were participants in a tour given by the author. Furthermore, he strategically used multiple gutters to describe the details of cleanup workers’ routines. For instance, on pages 18 and 19, Tatsuta presented as many as 11 panels describing how to don basic equipment. [42] Each transition between the panels demanded relatively little closure, which successfully illuminated each process in greater detail; readers were invited to capture how Tatsuta gets certain equipment inside the power plant in a sequential order. Therefore, Tatsuta strategically used gutters to transform his experiences into a coherent and detailed narrative in comics form for a general audience.



Figure 2. *Ichi Efu: Fukushima Daiichi Genshiryoku Hatsudensho Rōdōki (1)*, 2014, Kazuto Tatsuta, Japanese manga, ©Kazuto Tatsuta (Used with permission)

Thus, Tatsuta vividly portrayed himself as a protagonist/narrator in the story, engaging as a tour guide for the readers, prompting readers to become a part of the story. In certain word balloons, he talks down to readers directly, and he invites readers to ‘experience’ being his junior colleague at the power plant. On page 18, for example, he appears in the story and strongly states, “Be careful not to close the rubber headband too tightly. Otherwise, you will get headaches,” when putting on a full-face mask. [43] He invited readers to feel as if they were alerted to do so within the story. This does not mean that Tatsuta visualized tension-filled scenes throughout the manga; he also carefully portrayed how nuclear workers took breaks inside the power plant. On page 34, for instance, he appears in the story taking a nap with his colleagues after lunch. [44] Taken overall, Tatsuta portrayed cleanup workers so vividly that they were all individualized in the form of comics, prompting readers to ‘experience’ the workers as if they were colleagues. His detailed and vivid portrayal of cleanup workers apparently fit comfortably with Japanese mass media’s view of *Ichi Efu*.

Moreover, Tatsuta illuminated himself in the manga by putting his comments on the meaning of drawing the manga into a narrative. In doing so, Tatsuta strategically constructed the time frame of the story. In the first panel on page 23, for example, he appears in the story, looking at the wrecked third reactor. He then starts to talk about his background. [45] In the second panel, he visualizes the hydrogen explosion as a decisive moment of pause for the readers, inviting them to participate in defining the explosion as the beginning of the disaster. Defining the origin of the story as the hydrogen explosion is crucial precisely because it necessarily involves a forward-looking approach that relegates Japan’s history of nuclear technology to the past. In other words, the manga did not engage with the disaster from an historical perspective, prompting readers *not* to think critically about *why* the Fukushima disaster happened in the way it did because it already happened. As such, Tatsuta strategically constructed a narrative in comics form in a way that focused exclusively on visualizing the negotiated process of recovery.

Tatsuta described his background on the same page, prompting readers to share his forward-looking view of 'Fukushima.' Between the first and second panels, Tatsuta declared that he is *not* a Fukushima native and subsequently, provided major reasons why he came to work for the power plant. [46] In the second panel, he appears in the story and applies for a job at the power plant at an employment security office in the wake of the disaster. According to his account, he applied for the job because he was struggling to find a job at that time; moreover, his curiosity, the high salary, and the spirit of chivalry were additional factors that prompted him to apply for the job. [47] Starting with the next page, he further elaborated his curiosity and the spirit of chivalry. In the first panel on page 24, he noted:

[I'd] be lying if I said that I was not concerned about my safety, but after investigating the accident and radiation on my own, I understood that things [issues] that certain mass media and 'citizen groups' raised were not that sensational. On the contrary, if the 'hidden truths' they assert exist, I feel like venturing to see them. [48]

His critical view of certain mass media and 'citizen groups' was based on an assumption that both overestimated the health effects of radiation in Fukushima, which triggered him to visualize everyday life inside the power plant in comics form. Tatsuta thus used his observations and experiences as cultural and aesthetic resources for making a counterargument against the claims made by citizen groups and the media outlets in comics form. On the other hand, he portrayed an anti-nuclear demonstration in a way that invites his readers to confound anti-nuclear protests with those who are concerned about the adverse effects of radiation. In the same panel, a crowd of angry-looking anti-nuclear demonstrators brandish banners that say, "No more nuclear power," "Don't resume operations [at nuclear facilities]," and "Protect children in Fukushima." [49] What is left out of the representation of citizen groups are individualized faces of people who comprised the groups. This is fundamentally important, particularly when comparing with the individualized faces of the part-time cleanup workers. A more or less monolithic portrayal of citizen groups further indicated Tatsuta's view of the groups as others or masses. In regard to the concept of mass, Raymond Williams famously noted, "the masses are always the others, whom we don't know, and can't know...there are in fact no masses; there are only ways of seeing people as masses." [50] If Williams was right, we must note that Tatsuta used the manga as a cultural and aesthetic resource to de-individualize each protestor *politically*, prompting readers to stigmatize a group of protestors as others; *Ichi Efu* was not necessarily a politically neutral report of 'Fukushima.'

Furthermore, Tatsuta criticized media outlets, a weekly magazine in particular, for the portrayal of 'Fukushima.' He took advantage of the form of comics and used all of page 33 to describe how a weekly magazine concocted a story of 'Fukushima.' [51] In the first three panels on that page, what actually happened in the power plant is illuminated: one of the nuclear workers died of cardiopulmonary arrest in 2012. In the fourth panel, however, a counterfactual image concocted by an investigative journalist of the Japanese weekly magazine was visualized; the nuclear worker came back to life temporarily because the automatic external defibrillator worked well, but he ended up being dead because of a flaw in the medical aid system. In the fifth panel, Tatsuta illustrated a medical aide attesting that the nuclear worker did not regain consciousness at the scene. Tatsuta's portrayal of the death of the nuclear worker may not have been based on his direct experience largely because he used the aide's account to support his argument on the falsity of the news reported by the weekly magazine. As such, Tatsuta strategically used other people's

stories as rhetorical resources for criticizing the weekly magazine and thus validating what he perceived as ‘Fukushima.’



Figure 3. *Ichi Efu: Fukushima Daiichi Genshiryoku Hatsudensho Rōdōki (1)*, 2014, Kazuto Tatsuta, Japanese manga, ©Kazuto Tatsuta (Used with permission)

At the end of the story “Stay Safe!,” Tatsuta portrayed the wrecked nuclear reactor and emphasized his absolute determination to work toward decommissioning reactors, prompting readers to imagine the future of ‘Fukushima’ accordingly. [52] In doing so, he clearly *defined* the end of the disaster as the completion of the decommissioning project for his readers. Readers were invited to imagine what ‘Fukushima’ would look like if the decommissioning project were completed. With this goal in mind, Tatsuta transformed his experience into a progressive narrative of the disaster in comics form and portrayed ‘Fukushima’ with a particular focus on developing a process for achieving the ultimate goal. Analyzing the visual production of the Great Kantō Earthquake of 1923, Jennifer Weisenfeld described the role of progressive narrative as follows:

As the capital went through the classic stages after a major catastrophe—it became clear, however, that the overriding productivist ethos of reconstruction was generating an authoritative “progressive narrative” of the disaster – a forceful reiteration of modernity’s logic of creative destruction—aimed at legitimating urban development and renewal. Eventually, this became the metanarrative of the event, enfolding individual interests and sacrifice with remembrance of the quake itself, but only after a vigorously contested process took place in which the residents of the capital were both audience and patrons in the sphere of visual culture. [53]

Weisenfeld’s view of progressive narratives of the earthquake gave insight to my critical analysis of *Ichu Efu*. Tatsuta’s progressive narratives of the disaster gave the productivist ethos of recovery through a vivid portrayal of everyday life of individualized cleanup workers for a general audience. However, his detailed narratives of the contested process of recovery were not necessarily politically neutral, because they prompted readers to embrace and ultimately *promote* a forward-looking approach for recovery, *constraining* a space for better understanding those concerned about the health effects of radiation. Taking a forward-looking approach for recovery was necessary, but its inherent progressive narratives alone may not have necessarily contributed to creating a space for communication between those with different views of the consequences of the disaster.

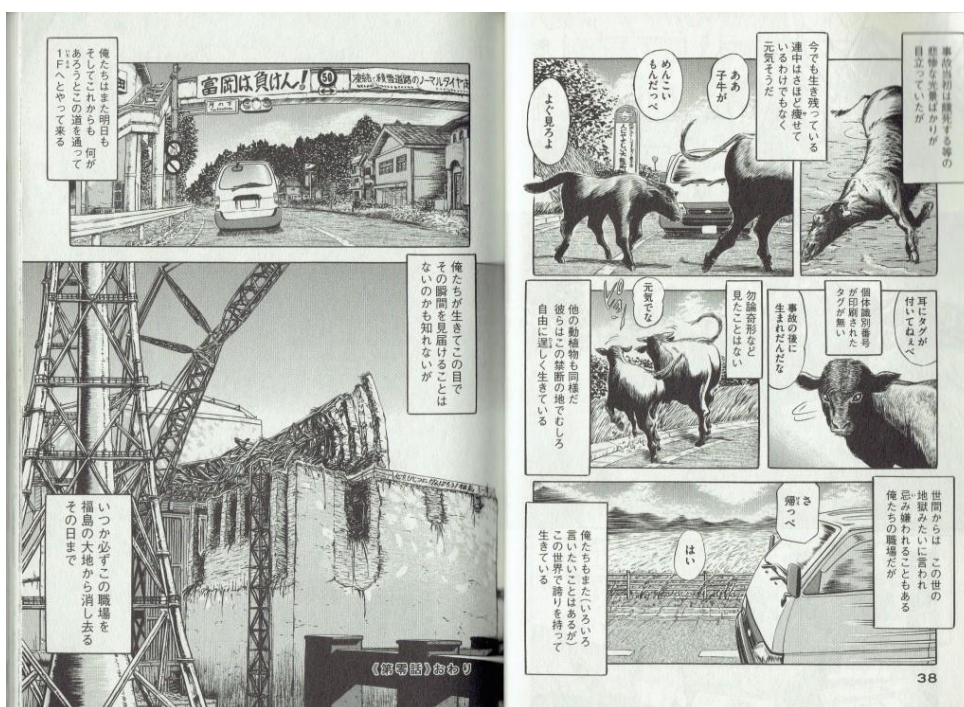


Figure 4. *Ichu Efu: Fukushima Daiichi Genshiryoku Hatsudensho Rōdōki (1)*, 2014, Kazuto Tatsuta, Japanese manga, ©Kazuto Tatsuta (Used with permission)

The distinctive characteristic of *Ichu Efu* as an art form was clarified for me when I compared *Ichu Efu* with an art exhibition in a radioactive exclusion zone in Fukushima, called “Don’t Follow the

Wind.” [54] This exhibition was introduced on March 11, 2015, the fourth anniversary of the 2011 Tohoku Earthquake and Tsunami. [55] The exhibition, originated by Chim↑Pom, a Japanese art collective, was a collaborative artwork by twelve artists from Japan and around the world. [56] According to the exhibition’s website, the title was derived from the personal experience of one of the collaborators. [57] After the disaster, the collaborator, a hobby fisherman, did not follow the Japanese government’s announcement. Instead, he acted on advice from a friend who worked at the power plant and successfully traveled in the opposite direction of the wind carrying radioactive materials. [58] The theme of the exhibition is stated as:

What can art do in an ongoing catastrophe, when destruction and contamination have made living impossible? “Don’t Follow the Wind” is an ongoing exhibition taking place inside the restricted Fukushima Exclusion Zone, the radioactive evacuated area surrounding the Daiichi Nuclear Power [Plant] – owned by TEPCO – established in the wake of the 2011 disaster that contaminated the area separating residents from their homes, land, and community. New works developed by participating Japanese and international artists have been installed in the zone at four sites lent by former residents – a home, warehouse, farm and a recreation center – all of which are contaminated and were evacuated immediately after the disaster. As the Fukushima exclusion zone remains inaccessible to the public, the exhibition will be ongoing but largely invisible – a condition akin to radiation itself – only to be viewed in the future, if and when it becomes safe once again for the residents to return. The exhibition opened on 11 March 2015 [,] but there is no clear timeline for public access to the sites, perhaps 3 years, 10 years, or decades – a period of time that could stretch beyond our lifetime. [59]

Contrary to *Ichi Efu*’s vivid visualization of ‘Fukushima,’ the exhibition was designed to be invisible, leaving its audience to imagine what the artwork would look like inside the restricted exclusion zone. In other words, “Don’t Follow the Wind” transformed ‘Fukushima’ into an invisible art form by articulating the power of invisibility. In the interview article, Ryūta Ushiro, a member of Chim↑Pom, describes the reason behind the exhibition:

Immediately after the earthquake, we did with certainty what we could do at that moment. We jumped at every chance to visit [an area] near the Fukushima Daiichi nuclear power plant for ourselves. [We then] took [the surrounding] landscape and engaged to produce [artwork accordingly]. From this point of view, it was like a journalistic practice. Yet, one year and two years have been passed [since the disaster]. Problems remain unresolved, and people’s interests [in ‘Fukushima’] increasingly wane. We believe what’s now effective is not something journalistic; rather, it is something more abstract...Now that it will take an unpredictably long time for the problem [to be solved], we thought [we] would need something to allow many people with various positions to get engaged eternally rather than instantaneously. Given that the ban to enter [the exclusion zone] will not be lifted for foreseeable future, we thought that in some ways, we would like to share ‘the time’ until evacuees can repossess their ‘homes,’ whether or not they return there. [60]

The exhibition therefore defines the end of the disaster as the time when all the evacuees reclaim their “homes.” Given that the exhibition is relatively new, it remains to be seen to what extent its artistic intervention will be effective in Japan and around the world. Nevertheless, this artistic

intervention further highlights the distinct characteristics of *Ichi Efu*'s vivid portrayal of 'Fukushima.' On one hand, Tatsuta's detailed and vivid portrayal of part-time cleanup workers in *Ichi Efu* contributed to generating a progressive narrative that invited readers to take a forward-looking approach to the end of the decommissioning project as the end of the disaster. On the other hand, Chim↑Pom represents the un-representability of 'Fukushima' by the exhibition, prompting a general audience to share their view of the end of the disaster – when all the evacuees return home. What is common in both is their engagement with cultural and aesthetic intervention as *ethical* practices, which were embodied in their individual artworks of 'Fukushima.' While Tatsuta visualized the everyday lives of part-time cleanup workers as a cultural and aesthetic resource for progressive narratives for the completion of the decommissioning project, Chim↑Pom engaged with the exhibition to prompt a wide variety of audience members to get engaged with their own imaginations. Though both engaged with ethical practices through artistic intervention, each also had its own problems. Tatsuta focused on portraying everyday life at the power plant effectively, but his progressive narrative may constrain space for a better understanding of the everyday life of those concerned about radiation. On the other hand, Chim↑Pom's artwork created space for a wide variety of people to get engaged for a long period of time with the power of their imaginations, but it did not communicate the contested and gradual process for recovery. An analysis of *Ichi Efu* in relation to "Don't Follow the Wind" reveals the difficulties that artists faced after the Fukushima disaster.

Both Tatsuta and Chim↑Pom engaged with cultural and artistic interventions as ethical practices after the Fukushima Daiichi nuclear disaster, yet Tatsuta took advantage of the manga to effectively transform his observations and experiences into a narrative in comics form. His detailed and vivid portrayal of cleanup workers contributed to generating progressive narratives of the disaster. On the other hand, the exhibition "Don't Follow the Wind" created an alternative space for the audience to recognize the un-representability of Fukushima. This does not necessarily mean that Chim↑Pom resisted against progressive narrative of recovery; instead, it invited a wide variety of people to share its definition of the disaster.

CONCLUSION

This investigation of the manga *Ichi Efu* as a nonfiction comic and how the aftermath of the Fukushima Daiichi nuclear disaster was represented in comics form revealed two key findings. First, while Japanese national newspapers unanimously applauded *Ichi Efu*, their portrayals of the manga failed to contextualize the manga in a broader context. Specifically, Japanese newspapers failed to consider how Tatsuta transformed his subjective observations and experiences into a nonfiction narrative in comics form and to discuss the extent to which his detailed and vivid portrayals of everyday life inside the power plant allowed readers *notto* imagine those concerned about radiation outside the plant. This finding suggests that Japanese newspapers' portrayals of the manga contributed to promoting Tatsuta's progressive view of 'Fukushima,' transforming the disaster into a kind of history.

Second, while Tatsuta's artistic intervention in the nonfiction comics form involved his own ethical practice, this did not mean that his forward-looking narratives in the manga were politically neutral. He effectively took advantage of the form of comics and vividly portrayed uncommon aspects of the power plant, individualizing the faces of the cleanup workers as agents for recovery of 'Fukushima.' In contrast, he reduced the complexity of everyday life of those who

are concerned about the health effects of radiation, stigmatizing them as others. In doing so, *Ichi Efu* may constrain the space for readers to think seriously about why they were concerned about the health effects of radiation. Tatsuta's progressive narratives of the disaster may contribute to legitimizing the stigmatization of those concerned about the health effects of radiation in post-Fukushima Japanese society. *Ichi Efu* reduced the complexity of 'Fukushima' as other art forms did.

This study focused exclusively on analyzing *Ichi Efu*'s first story, "Stay Safe!" To fully understand *Ichi Efu*'s portrayal of 'Fukushima,' it is necessary to investigate other stories portrayed by this manga. That said, the findings of this study suggests that the Fukushima disaster provided both challenges and opportunities for artists to engage with cultural and aesthetic practices as ethical practices.

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AUTHOR BIO

Yasuhito Abe is Assistant Professor in the department of media, journalism and communication at Doshisha University Kyoto, Japan. He received his doctorate in Communication from the Annenberg School for Communication and Journalism at University of Southern California. His dissertation is titled as "Measuring for What: Networked Citizen Science Movements after the Fukushima Nuclear Accident" (2015). His research involves citizen science after the Fukushima Daiichi nuclear disaster of 2011.