BETWEEN TEXT AND PARATEXT: *BŌKEN SEKAI* AS THE TEXTUAL SYSTEM FORMING THE IMAGINATION OF JAPANESE CLASSIC SCIENCE-FICTION

Giuseppe Strippoli

ABSTRACT

This article analyses the textual and paratextual dimensions of the boys' magazine *Bōken sekai* (World of Adventure, 1908-19) to explore the formation of the imagination of science fiction. It focuses, in particular, on a set of texts published in 1908 and 1910, which, in the magazine's history, are the two years showing the greatest number of fictional and non-fictional texts that nurtured the speculative imagination of science fiction. Essays such as Hashō sei's "Kūchū sensō kitei" (The Air Warfare of the Airships, 1908) give expression to three elements—namely, the speculative attitude, the future dimension, and an interest in the modern techno-scientific discourse. These elements are similarly present in the magazine's science fictional stories, such as Kimura Shōshū's "Kasei kitan" (A Strange Martian Tale, 1908) and Oshikawa Shunrō's "Tessha ōkoku" (Kingdom of the Steel Machine, 1910). This article suggests that these texts testify to the germinative phase of Japanese science fiction, whose beginnings are usually located in the postwar years, and that the formation of the science-fictional imagination is better understood when we focus on the complex system formed by the many texts of *Bōken sekai*.

Introduction

A recurrent advertisement in the boys' magazine *Bōken sekai* 冒険世界 (World of Adventure, 1908-1919) was "Bōkenka hitsuyō no saishin riki" 冒険家必要の最新利器 (The Latest Useful Tools Essential to the Adventurer), which promoted a series of objects, including light and comfortable shoes, a folding chair that can be used as a stick, bladed weapons of any sort and size, a new type of pistol, a metallic fire-spewing tube, and other technological gadgets like binoculars and a portable photographic apparatus necessary for observation.[1] The advertisement was just one of many others that conveyed the idea of "adventure" from different

[1] *Bōken sekai*, 1(3), front matter, 2.

perspectives. For instance, commercials of the latest publications, such as books on natural history and other science-related topics, intimated "adventure" as the intellectual enterprise of knowing the world through the scientific study of the natural environment. The commercial of the adventure kit reveals a complementary aspect of "adventure", namely its materiality. Adventure, in other words, was a broad theme the editors and writers promoted not only through books on a narrative level, but also in its practical implications.

Moreover, the advertisements of technical objects were not addressed only to young explorers. An advertisement published in 1908, for instance, announced a new type of electric cell as one of the latest inventions presented at the Second Industrial Exhibition for Patented Products, which took place in Osaka in May of that year. The electric cell was promoted as a "sophisticated and incomparable practical item that shall satisfy the desires of students and any kind of gentleman, including men of agriculture and commerce."[2] The advertisement also offered a short list of the possible applications of the product that the hapless consumer could employ for "wireless telegraph and telephone, capturing birds and fishes, preventing theft, electric fan, searchlight, ring bell, the cure of diseases, and many other things."[3] It is hard to imagine how an electric cell may be used for capturing birds and preventing robberies, not to speak of having a medical application. This multivalence, however, uncovers a crucial aspect of the technical object as seen through the lenses of the techno-scientific discourse of Meiji Japan (1868-1912): the potentialities of the technological innovation prompted speculation on the widest possible range of applications.

Aside from commercials, we can also detect such rhetoric about the technological object, and more generally about science and technology, in many fiction and non-fiction works published in *Bōken sekai*. The magazine abounded with texts depicting the latest technological developments made, for instance, in the aviation and military fields, or the field of power supply sources like electricity or uranium, which were praised for their potentially limitless

[2] *Bōken sekai*, 2(5), front matter, 7.
[3] Ibid.

applications. Both in fictional and non-fictional texts, authors thus brought the discussion on the benefits of technological innovation beyond the limits of real and contemporary developments, entering the speculative realm where they gave free rein to their imagination.

I want to suggest that such a speculative imagination, which rose from the intellectual efforts to foresee the future consequences of techno-scientific advancements, created the possibilities for the science-fiction stories published in the magazine. In order to understand what made possible the expression of science fiction, it is necessary to embrace a broad perspective that considers the fictional works alongside with the non-fictional pieces, which played a fundamental role in shaping the speculative imagination the stories developed on the narrative level. For this reason, this article shall not treat the science-fictional stories as individual works existing in a textual vacuum but as elements of a complex system: the magazine itself.

This article starts by presenting how scholars have considered the early stages of Japanese science fiction by pointing out that the role the magazines played in shaping the genre is a question yet to be fully explored. It then focuses on the editorial history of *Bōken sekai*, presenting the magazine within the context of other boys' magazines that were launched in the late Meiji era. Finally, the article provides a textual analysis of both fictional and non-fictional works to discuss the presence of a science-fictional imagination as the product of the interplay of the fantastic narratives of the stories and the speculative discussions of the essays.

The neglected role of the magazines in the formation of the science-fictional imagination

Sam Moskowitz and Mike Ashley have pointed out the importance of magazines in the history of British and American science fiction. They argued that the media history of anglophone science fiction did not begin with *Amazing Stories*, the magazine launched in 1926 by the engineer and entrepreneur Hugo Gernsback, and that is commonly considered the first science fiction magazine. Ashley claimed that *Amazing Stories* was the "next logical step in the progression of science fiction in the magazines, and in the

development of specialist genre magazines."[4] The launch of the first science fiction magazine, in other words, can be explained only by looking at the period preceding its creation, throughout which the genre developed within several other popular magazines.

I intend to apply the same rationale to the Japanese case. Tatsumi Takayuki 巽孝之 argued that "the origins of Japanese sf as an organised movement are best located in the publications of the first successful fanzine, *Uchūjin* 宇宙塵 (Cosmic Dust, 1957[-2013]), and the first successful commercial magazine, Hayakawa's *SF Magazine* [*SF Magajin* SF マガジン] (1959)."[5] In the 1960s, science fiction finally emerged as a commonly recognised literary genre due to the conjunction of a community of writers and readers and the right editorial conditions that allowed *SF Magajin* and *Uchūjin* to acquire a place in the publishing market. However, although these two periodicals herald the beginning of Japanese science fiction as an "organised movement," I contend to see them as the "next logical step" in the process of genre formation in the periodicals, and in the development of specialist genre magazines.

Denis Taillandier has recently claimed that "contemporary Japanese science fiction did not […] emerge ahistorically in the post-war period" and proposed a genealogy that traces the genre back to the pre-inter-war era.[6] Before being an "organised movement," Japanese science fiction developed throughout the pre-inter-war period within the framework of other genres of popular literature—*mirai-ki* 未来記 (records of the future), *taken shōsetsu* 探検小説 (exploration novel), *bōken shōsetsu* 冒険小説 (adventure novel), and *tantei shōsetsu* 探偵小説 (detective fiction)—within both literary magazines, such as *Bōken sekai* and *Shin seinen* 新青年 (New Youth, 1920-1950), and scientific periodicals, including the magazines of popular science *Kagaku sekai* 科学世界 (Science World, 1907-1922) and *Kagaku gahō* 科学画報 (Science Pictorial, 1923-1961), as well as more technical publications, such as the magazine *Musen denwa* 無線電話 (Radio, 1924-1936). All these magazines played a role in the formation of the literary imagination of science fiction. They acted as an archive of the possible expressions that led to the establishment of the genre in the post-war years.

[4] Ashley, 2000, p. 1.
[5] Tastumi, 2000, p. 105.
[6] Taillandier, 2021, p. 173.

Previous scholarship on Japanese science fiction has highlighted the presence of the genre in the pre-inter-war period, exploring several aspects of its early stages; Japanese scholars of early science fiction call this genre "koten SF" 古典SF (classic sf). For instance, Saitō Kumiko has recently focused on the role science fiction played in the dynamic process of translation during the first decades of the Meiji era.[7] Further, Michal Daliot-Bul has explored the literary production from the same period by focusing on the political implications hidden in Yano Ryūkei's 矢野龍渓 (1851-1931) novel *Hōchi ibun: ukushiro monogatari* 報知異聞浮城物語 (Hōchi's Strange Rumors: Tales of the Floating Castle, 1890).[8] Great attention, finally, has been paid to those science fiction works that appeared in the guise of detective novels to discuss, for instance, the ways the genre questioned the vision of literature as pure entertainment in *Shin seinen* and to explore Unno Jūza's 海野十三 (1897-1949) oeuvre.[9]

Previous scholarship has pointed out that newspapers and magazines were the original place of publication for many works of early Japanese science fiction. This is the case of Yano Ryūkei's novel *Tales of the Floating Castle* that was serialised in the newspaper *Hōchi Shinbun* 報知新聞, and Unno Jūza's numerous *henkaku tantei shōsetsu* 変格探偵小説 (deviant detective fiction) that were printed in *Shin seinen*. However, this particular piece of empirical data has not led to a thorough examination of the media dimension of the genre. In other words, the role periodical publications played in the formation process of the genre is a topic that science fiction scholars have simply left outside of their inquiries. I suggest that in order to reconstruct the genre's formation during the pre-inter-war period the media dimension, composed of the whole set of texts, made of both words and images, published in the periodical publications, is equally essential.

One of the magazines which played, albeit in a marginal way, a role in the formation of the science-fictional imagination is *Bōken sekai*. This magazine forms with *Tanken sekai* 探検世界 and *Bukyō sekai* 武侠世界 a triad known in the literature as the "three great

[7] See Saitō, 2023.

[8] See Daliot-Bul, 2019.

[9] For a study of science fiction in *Shin seinen*, see Suter, 2011. For an analysis of Unno Jūza's short stories, see Jacobowitz, 2016.

adventure magazines of the Meiji era" (*Meiji sandai bōken zasshi* 明治三大冒険雑誌), publications that addressed a young readership between fifteen and twenty years old.[10] *Bōken Sekai*, founded by the publishing company Hakubunkan in 1908, was a direct cultural product of the Russo-Japanese war (1904-5). During the conflict many journals were created to provide updates on the war. Many artists and intellectuals – such as Kunikida Doppo 国木田独歩 (1871-1908), Tayama Katai 田山花袋 (1872-1930), and Oshikawa Shunrō 押川春浪 (1876-1914) – were involved in the publication of these magazines. One of these was *Nichiro sensō shashin gahō* 日露戦争写真画報 (Russo-Japanese War Photographic Pictorial, 1904-1905), which Hakubunkan launched immediately after the eruption of the war under the editorial direction of Oshikawa Masaari 方存 (Shunrō's real name) to present the conflict through the then-innovative device of photography. The end of the war led the editors of most of these magazines to cease the publication. However, *Nichiro sensō shashin gahō* persevered and found new life first as *Shashin gahō* 写真画報 (Photographic Pictorial, 1906-1907) and later as *Bōken sekai* under the direction of Oshikawa.[11]

Nagayama Yasuo 長山靖生 explored *Bōken sekai* within the framework of the adventure novel, which was a central form of popular literature in the late Meiji era. He considered the magazine as one of the publications where to look for early instances of science fiction, pointing out some of the magazine's features, such as the striking visual aspect and the editors' attempt to stimulate the curiosity of the readers.[12] Furthermore, Yokota Jun'ya 横田順彌 and Aizu Shingō 會津信吾 clarified the role of the magazine in the biographical vicissitudes and literary career of Oshikawa Shunrō. Oshikawa first appeared in the magazine world as a writer. For instance, he serialised in the magazine *Kaikoku shōnen* 海国少年 (Boys of the Sea, 1897-?) *Kaitō tanken: Tōchū no kai* 海島探検塔中の怪 (Exploration of an Island: The Monster in the Tower, 1901), which Yokota and Aizu considered a "science-fictional adventure novel with a mysterious atmosphere."[13] The first magazine where

[10] Yokota 1984, p. 141.

[11] Nagayama, 2018, pp. 124-127.

[12] Ibid., p. 124.

[13] Aizu and Yokota, 1989, p. 124. The novel was published as a book by the editor Bunbudō in 1901. The dates of the serialization in the magazine are unknown.

Oshikawa worked as an editor was *Shashin gahō*. He later occupied a central position in the launch of *Bōken sekai*, for whose creation he took inspiration from *Tanken sekai*, a magazine launched in 1906 by the publishing house Seikō zasshi-sha for which Oshikawa worked as a contributor of short stories.

Paratextual considerations

As Gérard Genette theorised, paratext is the textual place mediating between the text and what remains out of it. It is "a zone not only of transition but also of *transaction*" that conveys the desire of the creator of the text to lead the public to receive, read, and therefore interpret it in a certain way.[14] In the case of the magazine, the paratext includes the editorial information printed on the cover, the titles and subtitles of texts, its sections, the editorial comments, pictures and illustrations, and the rest of the elements that guide the reader through the magazine. Because Oshikawa used *Tanken sekai* as a model for *Bōken sekai*, the two magazines presented several similarities. Both targeted the same readership, both offered a similar heterogeneous content of fictional and non-fictional pieces, and both relied on the widespread use of pictures and illustrations. As Nagayama has pointed out, however, *Bōken sekai* had some elements of originality, such as the narration of sports. We can add to this another peculiarity: the keener awareness of the editors in considering the magazine as a medium, which they understood not as a mere succession of individual and independent contributions but as a complex space formed by the totality of texts published in a single issue and across the series. Such an editorial attitude is revealed on both the textual and paratextual elements.

Several elements reveal an editorial policy aimed at prompting the reader to move within the textual space of the magazine. For instance, *Bōken sekai*'s index, in contrast to *Tanken sekai*, marked the contents with page numbers, which function as a precise guide to the internal space of the issue. Another element is the use of illustrations to encourage the reader to move further within the magazine. For example, the picture printed on the first page of the second issue (February 1908) represents two men playing with a cannon. One man is sitting astride the cannon holding in his hand a

[14] Genette, 1987, pp. 1-2. Emphasis in original.

round-shaped rope he hangs in front of the cannon's mouth; the other one is standing on the ground and is about to fire. The illustration includes the following words: "What an unprecedented great adventure! What are these peculiar gentlemen planning? Look at page twenty-six of this issue!"[15] The reader who goes to page twenty-six following the instruction will find another illustration that provides the answer—the man who was sitting astride the cannon is now flying in the starry sky, drawn by the rocket. Finally, other elements encouraged the reader to explore other issues, hinting at the serial character of the magazine. For instance, the second instalment of Oshikawa's novel *Bōken shōsetsu kaijin tettō* 冒険小説怪人鉄塔 (The Monster of the Iron Tower: An Adventure Novel, 1908) ends with an editorial comment that asks readers how the story will continue and promises to give a prize to those who will provide the correct answer.[16] These three elements—that is, the page numbers in the index, the illustrations and the editorial comment—reveal that the editors were keenly aware of the magazine as a textual space to explore and looked at the reader as its active explorer.

Whereas the abovementioned elements illustrate the editors' attitude in actively shaping the media dimension of the magazine, the paratext is also the place where one can detect the expression of a speculative vision that contributed to the formation of the science-fictional imagination. For instance, such a speculative vision is expressed through the rich array of images the editors used to allure the reader. In the first year of publication there are two cases in which the image and the accompanying caption hints the connection between the techno-scientific progress and the speculative dimension.

The first image is the full-page oil painting entitled "Mirai no sensō" 未来の戦争 (The War of the Future) and signed by Kosugi Misei 小杉未醒 (Kosugi Kunitarō's 国太郎 *nom de plume*, 1881-1964), an artist of Western-style pictures that contributed regularly to the graphics of the magazine. The painting, included among the first pages of the issue published in May 1908, depicts a violent air battle between peculiar flying machines that look like winged airships.

[15] *Bōken sekai*, 1(2), p. 1.
[16] *Bōken sekai*, 1(2), pp. 25-26.

The war scene captures the puff of the cannons installed on the airships and a man falling from his vehicle torn apart by bombs. The caption to the painting reads as follows: "The future of war is in the air. Expressions like 'the supreme rulers of the world', that is, those who holds great power in the air, have recently gained popularity. Look over at the article 'Future Air warfare' in our magazine."[17] The page foreshadows the theme of the technological advancement, which the text cited in the caption fully expresses, and offers a vivid visual realisation of the techno-scientific imagination that the writers developed through words in their works published in the magazine.

The second case is a collage of pictures entitled "Kūchū sensō jidai wa chikazukeri!" 空中戦争時代は近づけり！(The age of the air war is approaching!) and included in the issue of October of 1908. The photographs illustrate one of the flight experiments Ferdinand von Zeppelin attempted during the same year, ending up in tragedy with the disastrous emergency landing of the airship and its consequent destruction. Whereas the text included in the same issue and cited in the caption narrates in detail the technological adventure of the German general, it is worth noting that the editors used the image, and the recent news story the photographs depicted, as a starting point to speculate about the possible application of the new technology of aviation in the military field.

Previous scholarships have clarified *Bōken sekai*'s editorial history, highlighted its formal peculiarities, and identified early instances of science fiction. However, an in-depth analysis of the science-fictional stories themselves and the connection they kept with their context (the magazine itself) are two areas that need further enquiry. The following section will focus on such a connection by analysing a group of texts published in 1908 and 1910, which are the years in the magazine's history that show a significantly higher number of science-fiction stories and speculative texts.

Textual analysis

Since each issue of *Bōken Sekai* included a great variety of texts, the magazine exceeded the scope of any single, precise category. The highly heterogeneous content consisted of a patchwork of texts that

[17] *Bōken sekai*, 1(5), front matter's 9.

included fictional and non-fictional stories, news from around the world, articles of popular science, and journalistic articles dedicated to sports such as baseball and sumō. The sections of the magazine reveal what strategies the editors employed to organise these varied texts.

The inaugural issue's index offered the content through the following sections: "Bōken tanken shōsetsu" 冒険探検小説 (Adventure Exploration Novel), "Tanken jitsudan" 探検実談 (True Reports of Exploration), "Shinten dōchi" 震天動地 (Earth-shattering), "Sōkai sekai" 壮快世界 (Thrilling World), "Bōkenteki seikōdan" 冒険的成功談 (Successful Stories of Adventure), "Shōbu sekai" 尚武世界 (World of Militarism), "Ryokō sekai" 旅行世界 (Travel World), "Chindan kidan" 珍談奇談 (Strange and Bizarre Tales), "Buyū kōdan" 武勇講談 (Heroic Tales), "Undō sekai" 運動世界 (Sports World), "Enmoku jihi" 猿目兎耳 (Monkeys' Eyes and Rabbits' Ears), and "Chinbun manga" 珍聞漫画 (Illustrated Curious News). Some of these sections had titles that directly pointed out the genre of the texts they included. For instance, the sections "Bōken tanken shōsetsu", "Tanken jitsudan", and "Ryokō sekai" included fictional stories, non-fictional texts of real geographical explorations, and brief travelogues. However, most of the sections had more vague titles. For instance, "Shinten dōchi", "Chindan kidan", and "Sōkai sekai" expressed through their titles a general ambiguousness, as they do not employ any specific generic designation. This means that the editors followed an editorial policy that did not focus on the question of literary genres.

The section "Shinten dōchi" was present in almost every issue of the first volume, after which it gradually became less common until the editors discarded it in the third volume in favour of another section named "Fushigi sekai" 不思議世界 (Mysterious World). "Shinten dōchi" offered in total twelve texts, including articles on machines and inventions, such as Hashō-sei's 嘯羽生 "Kūchū sensō kitei" 空中戦争気艇 (The Air Warfare of the Airships, 1908)[18] and Abu Tenpū's 阿武天風 "Mamono no gotoki ichirin kisha no hatsumei kushindan" 魔物の如き一輪汽車の発明苦心談 (The Invention of the Monster-like Train: A Story of Efforts, 1908);[19] essays of popular

[18] *Bōken sekai*, 1(1), pp. 33-37.
[19] *Bōken sekai*, 1(11), pp. 43-50.

science on the explanations of natural phenomena, such as U.N.-sei's ユーエヌ生 "Tenkai no fūraibutsu insei kidan" 天界の風来物隕星奇談 (Erratic Celestial Objects: The Strange Tale of the Asteroids, 1908)[20] and Tengan Tsūjin's 天眼通人 "Tenkai daikaibutsu Harē suisei monogatari" 天界の大怪物ハレー彗星物語 (The Giant Monster from Space: The Story of Halley's Comet, 1910);[21] journalistic non-fiction pieces like Kokumen Shōshō's 黒面少将 "Beikoku hikōki chindan" 米国飛行機珍談 (The Strange Tale of American Aeroplanes, 1908);[22] and, finally, the short-story "Zendai mimon chitei sekai ryokō" 前代未聞地底世界旅行 (Journey into the Underworld: An Unheard-of Story, 1908),[23] which Mishima Sōsen 三島霜川 wrote as an adaptation of Jules Verne's *Voyage au centre de la Terre* (1864). Such content diversity reveals an editorial policy that refused to pigeonhole the texts within the limits of a specific literary genre. Rather, it aimed at grouping texts that, despite generic differences, shared a specific trait—namely, the interest in events so sensational as to 'shake the world' as the section's title suggested.

Two texts published in "Shinten dōchi" allow us to see how the section expressed such a sensationalistic tone by narrating the latest development in science and technology. The first is "Kūchū sensō kitei" by Hashō-sei. It is an article of popular science focused on the latest advancement in aviation that shows the wonder for the experiments of the flying machines invented at the beginning of the twentieth century in America and Europe. In particular, Hashō-sei described the experiments with *jirijāburu* ジリジャーブル (dirigible) of the French engineers, wondering how the new machine might influence war and bring social changes. Hashō-sei considered the airship a "wondrous weapon" that doubtless will play a pivotal role to win future wars, though he recognised that the airship still had structural limits that, if not overcome, would hinder its offensive role in future wars. Such a connection between technological development and the future informed the author's speculative attitude that is expressed in several passages, like the following: "The invention of the *jirijāburu* led the ordinary people

[20] *Bōken sekai*, 1(3), pp. 70-76.
[21] *Bōken sekai*, 3(4), pp. 59-64.
[22] *Bōken sekai*, 1(12), pp. 57-61.
[23] *Bōken sekai*, 1(7), pp. 21-37.

unexpectedly to think that the future battlefield will not be limited to sea and land but will extend to include even the endless sky." [24] By suggesting how a specific technological change (the airship) can lead people to imagine the future, the author established a connection between technological expansion and the speculative dimension.

In another passage, Hashō-sei conveyed a similar speculative attitude, writing:

> If I were to speculate on such a situation [the ongoing experiments with flights in many European countries], I believe it will not take long for an airship fleet to become a powerful and active part of the military forces. The research on the *jirijāburu* will influence the conflicts, which, in the end, will not be only between the *jirijāburu* and the cannon shooting from below but also between the airships themselves. The fantasies of our imagination will turn into reality.[25]

The passage illustrates the interplay between imagination and science and technology. It suggests that technological development prompts the imagination, which, in turn, pushes further the limits of technology and questions speculatively its possibilities. This kind of interplay between imagination and technology informed three elements—namely, the speculative attitude, the future dimension, and an interest in the modern techno-scientific discourse—that in the post-war years marked the establishment of science fiction as a commonly recognised literary genre. All three elements, for instance, were fully expressed in Abe Kōbō's 安部公房 (1924-1993) *Daiyonkanpyōki* 第四間氷期 (Inter Ice Age 4, 1958), a novel that Tatsumi Takayuki considered "Japan's first modern work of science fiction."[26]

The second text is "Kūchū sensō mirai-ki" 空中戦争未来記 (Records of Future Air Wars, 1908) by Hatenkō-sei 破天荒生. Halfway between essay and fiction, it reports in detail the chain of wars that will erupt in the foreseeable future in Europe. Its content is almost

[24] *Bōken sekai*, 1(1), p. 33.
[25] Ibid., p. 37.
[26] Tastumi, 2000, p. 106.

identical to that of "Shōrai no kūchū sensō" 将来の空中戦争 (The Air Wars of the Future, 1907), which Mitsugi Shun'ei 三津木春影 (1881-1915) composed for *Tanken sekai* as an adaptation of a work written by the German writer Rudolf Emil Martin (1867-1916) and originally published in the English magazine *Review of Review*. Although "Kūchū sensō mirai-ki" is not presented as a translation or adaptation, the similarities with Mitsugi's work reveal that Hatenkō-sei may have composed it as an adaptation of the same source. The publication of two adaptations of the same text underscores the interest of the editors of adventure magazines in the speculative dimension.

"Kūchū sensō mirai-ki" describes the rise of a new Russian state after the collapse of the Russian empire and the war caused by its antagonism with the German empire. Although the focus is on the narration of the war, the text includes numerous passages where the narrator considers what changes the new aviation technology will bring to society. The narrator believes that future engineers will develop not only bombing airships, which with their military power will play a hegemonic role in warfare, but also airships for ordinary people. According to the narrator, the airship will change the geographical perception of the world by making possible air journeys that can cover great distances in short time. Future women will escape the summer heat wave simply by taking an airship for a quick visit to the North Pole. Furthermore, airships equipped with printing machines and radio systems will quickly spread the news all over the world. Finally, the airship will influence people's health because of the scientific discovery that high-altitude travel aboard the airship benefits the human body and helps doctors to treat lung diseases, such as tuberculosis. Like the advertisement of the electric cell I mentioned at the beginning of this article, this text presents a technological advancement (the airship) as an endless source of uses and benefits. Moreover, like "Kūchū sensō kitei", this text expresses three peculiarities of the science-fictional imagination—namely, the speculative attitude, the future dimension, and an interest in the modern techno-scientific discourse.

Bōken sekai's fictional pieces, such as the short stories by Kimura Shōshū 木村少舟 (1881-1954), included, similarly to the speculative texts, peculiar elements of the science-fictional imagination. Kimura contributed to other magazines from Hakubunkan, such as

Shōnen sekai 少年世界 (The Youth's World, 1895-1933), where he published the short story "Yukihime monogatari (kagakuteki otogibanashi)" 雪姫物語（科学的お伽噺）(The Story of Princess Snow White [A Scientific Fable], 1899), and is known as an author of *rikadan* 理科談 (scientific tales), hybrid texts that combine literature with popular science.

In 1908, Kimura wrote three science-fiction short stories for *Bōken sekai*. The first is "Kasei kitan" 火星奇譚 (A Strange Martian Tale), published in the section "Chindan kidan." The story is inspired by a scientific premise: according to contemporary astronomers, extra-terrestrial life on Mars may be a scientific fact. Scientists saw as proof for their theories the existence of canals and lights flashing on the surface, which they interpreted as signals the civilised Martians were sending to Earth. The narrator concludes relating the scientific premise about the presence of extra-terrestrial life as follows:

> Ah, what an interesting question! These [facts] stimulate our curiosity to conduct even more thorough research on that world. Perhaps, it would even be possible to figure out a way of reaching Mars. Have we not, people from Earth, already invented the radio and constructed giant telescopes? If we can precisely observe Mars, communication with the planet will sooner or later become real. By the same token, the exchange of our populations is doubtless not impossible to achieve.[27]

The narrator employs the scientific premise as a door leading to a fantastic world, whose access, however, is possible only through a speculative imagination that can surpass the limits of the actual techno-scientific level. What would make interplanetary communication and travel possible is techno-scientific advancement. However, as long as techno-scientific progress does not make them possible, literature can convey them through the imagination.

The story is narrated through the first-person voice of the protagonist. Although the text does not provide any detail about the physical appearance of the narrator-protagonist, an illustration representing a student in school uniform helps the reader to visualise

[27] *Bōken sekai*, 1(1), p. 85.

him as a young boy. At the beginning of the story, the boy is looking upon the starry sky, lost in his fantasies about Mars, when, suddenly, he feels his body getting as light as a soap bubble and he begins to ascend to the sky. He loses consciousness during the ascent, and when he comes to his senses, he realises that he has become a guest in the "other world" (*bessekai* 別世界) of Mars.[28] The boy learns about the planet from its inhabitants, placid human-like creatures who freely move in the air using their wings. They welcome the boy to their utopia, an "ideal paradise" (*risō no rakuen* 理想の楽園) with neither war nor disease.[29] The exploration of the planet abruptly ends when the boy wakes up, realising that it has been nothing but a dream. However, although the Martian adventure has been just a figment of his imagination, the boy keeps looking at the starry sky. Mars still fascinates him as a scientific object that, as the narrator finally comments, "certainly prompts the utmost interest for astronomical research."[30]

Kimura's second short story is "Kaitei ryokō: Umi no himitsu" 海底旅行海の秘密 (Journey at the Bottom of the Sea: The Secrets of the Ocean), published in the section "Sōkai sekai." The story relates an undersea adventure that begins with the failure of the protagonist and his friend in "trying to do something that no one has ever attempted before, a so-called incredible enterprise"—that is, the exploration of the cosmos aboard a self-made air balloon.[31] The depiction of the attempted air journey has several similarities with the accounts of flight experiments with air balloons, airships, and aeroplanes featuring in many fictional and non-fictional texts included in *Bōken sekai*. For instance, Kimura's story, like other air adventures, introduces the air exploration as an unprecedented enterprise through the then-modern medium of newspapers. The two explorers announce their intentions through a letter to the newspaper:

> We have suddenly thought that soon we want to attempt to fly to the cosmos aboard our self-made air balloon. First, we want to reach the moon and then tour the other planets. When are we going back to this land? Are we going to reach our

[28] Idib.
[29] Ibid., p. 86.
[30] Ibid., p. 88.
[31] *Bōken sekai*, 1(2), p. 90.

> destination? Since ours is an unheard-of enterprise, we have no answer to these questions. Let us take this opportunity to say goodbye. P.S. The departure is tomorrow at 1 p.m. from Musashino Plain.[32]

The letter, announcing with a sensational tone the unprecedented enterprise, reveals how the newspaper presented it as a happening of public interest. The departure, indeed, is an event that a large crowd of people wishes to witness. Finally, the description of the "world below" (*gekai* 下界) seen from the standpoint of the two explorers aboard the air balloon that highlights the wondrous aspect of exploration is another element in common with other similar texts[33]. The failure of the enterprise, however, marks the departure from the pattern of the typical air adventure, leading the story that started as a space journey to develop as an undersea exploration. The oceanic abyss replaces the promised lunar world setting as the beginning of a heroic tale. The two explorers, in fact, bravely fight with a giant octopus and other fierce marine creatures, and at the end of the story, discover the haunted relics of the Russian fleet that sank there during the battle of Tsushima in 1905.

Kimura's third work is the apocalyptic tale "Taiyō keitō no metsubō" 太陽系統の滅亡 (The Extinction of the Solar System), published in the section "Chindan kidan." The story begins with the narrator announcing that "in a near future, the Sun and the other planets will come to extinction."[34] The so-called end of the world, however, is not a prophecy but a scientific fact that has its causes in the phenomenal world. The narrator argues that the apocalypse will be the consequence of an astronomical event, such as the death of the Sun due to the exhaustion of all its gases or the fatal encounter between the moon and the Earth's orbits that will end in a catastrophic collision. The narrator describes these astronomical menaces as scientific problems humans hope to solve by bringing together their knowledge and efforts. The narrator recounts how the people gather to discuss the question in the newly funded "Union for the Construction of a New World," whose goal is to create a new home that can host Earth's life

[32] Ibidem.
[33] *Bōken sekai*, 1(2), p. 91.
[34] *Bōken sekai*, 1(5), p. 73.

forms.[35] During the meetings of the union, every sort of person has a chance to express their view about the question and propose their solution. However, among all the astronomers, religious people, and "fantasisers" (*kūsōka* 空想家), it is simply impossible to reach an agreement.[36] There is no time to argue further, because the scientists of an astronomical observatory have announced that the moon is now on a collision course with Earth. Although the world is drawing near its inevitable end, the story concludes with a happy ending: the end of humanity does not necessarily mean the end of life itself, and, after the extinction, it remains nonetheless the hope that life will rise again, albeit in a new form.

Kimura's short stories reveal several elements that nurtured science-fictional imagination, such as the use of technological objects as a narrative device to rationally inform the access to "other worlds" that do not correspond to any accepted model of reality. This use of a technical object is present in "Kaitei ryokō: Umi no himitsu," in which the narrator describes the self-made air balloon as the machine that may make possible the unprecedented enterprise of interplanetary exploration. Moreover, these stories reveal, albeit in a germinative way, the possibility for science fiction as a genre that, as Abe Kōbō would later define it, "resembles Columbus' discovery for its being the combination of the setting of an extremely rational hypothesis with the extremely irrational passion of what we call fantasy [*kūsō* 空想]."[37] The three stories are all instances of a literature of "hypothesis" that employs speculative narration to reflect on a scientific conjecture. More specifically, all three stories narrate the possibility of realising the interplanetary journey aboard a flying machine, the existence of an alien population and encounter with it, and the catastrophic end of the world due to natural phenomena. Each hypothesis is grounded on the set of knowledge that characterised the techno-scientific discourse at the turn of the century. In particular, these stories referred to the latest development in the aviation field as well as the newest data obtained through astronomical observation. Although "Kaitei ryokō: Umi no himitsu"

[35] *Bōken sekai*, 1(5), p. 73.

[36] Ibid., p. 75.

[37] Abe wrote this definition as a congratulatory note to the launch of *SF Magajin*. Abe's words first appeared on the opening page of the second issue and were reprinted in the following ones of the first volumes.

and "Kasei kitan" are informed by a scientific hypothesis, they undermine the rational framework by introducing fantastic elements, such as ghosts and dreams. Nonetheless, these are works that, precisely because they mingle both science fictional and fantastic elements, reveal both the possibilities and the failures of the literary expression of early Japanese science fiction.

The texts considered so far were all published in 1908 in sections like "Shinten dōchi" and "Chindan kidan." The magazine's issues published in 1910 likewise included a consistent number of speculative essays and science-fictional stories that the editors placed in the section "Kaiki shōsetsu" 怪奇小説 (Bizarre Novel). Although this section contained purely fantastic works in later years, such as "Kyokunan no meikyū" 極南の迷宮 (The Secret World under the South Pole, 1913) by Abu Tenpū,[38] in 1910 it gathered exclusively science-fictional stories, including apocalyptic tales, such as "Kaiki shōsetsu: Sekai saigo no daihigeki" 怪奇小説世界最後の大悲劇 (The Great Tragedy of the End of the World: A Bizarre Novel)[39] by Kokumen Majin 黒面魔人 and futuristic/futurological tales, such as "Issen nengo no kobutsu tenrankai" 一千年後の古物展覧会 (The Exhibition of Antiques: Thousand Years in the Future)[40] by Kawaoka Chōfū 河岡潮風 (1887-1912). Furthermore, in 1910 the editors published the special issue "Sekai mirai-ki" 世界未来記 (Records of Future Worlds), which presented a variety of texts—including fictional pieces, speculative essays, and satiric illustrations—that reflected different perspectives on one question: the future. The editors put together the issue by juxtaposing fictional works with speculative essays. This editorial choice reveals that the editors saw no reason for separating fiction from other kinds of writings, both of which, together with the series of comic illustrations, were considered valid intellectual instruments to explore and evoke the future dimension.

"Kyōtan subeki mirai no sekai bunmei" 驚嘆すべき未来の世界文明 (The Astonishing Civilisation of the Future), one of the essays of the special issue, expresses a paradigmatic way of understanding the

[38] *Bōken sekai*, 6(1)-6(3).
[39] *Bōken sekai*, 3(6), pp. 44-49.
[40] *Bōken sekai*, 3(11), pp. 51-58.

future. According to the essay's anonymous author, it is impossible to precisely assess the future because the point of view of the assessor inevitably belongs to the present. Nonetheless, the author argues that it is possible to express a partial opinion about the future if one sees it as the continuation of the present. In other words, as the present comes from the past, one can speculate what future will succeed the present. From such a rationalistic standpoint, the author writes about the future focusing on material and scientific developments, discussing, for instance, the question of transportation by referring to flying machines that, thanks to their unprecedented speed, will make the world appear smaller. Easy flight journeys will lead people to travel more often to different countries, generating a sense of world community that will mark the end of all wars. The author then explores other questions, such as artificial production and urban development, which will transform cities into megalopolises composed of one gigantic building. The author, finally, reflects upon the problem of energy sources by arguing that in the foreseeable future, when coal reserves will be depleted and renewable sources like solar and hydroelectric energy will not be enough, humans will start to rely on the latest discoveries made in chemistry, such as uranium.

The essay is closely related to the other speculative texts and fictional pieces. For instance, Oshikawa Shunrō's short story "Tessha ōkoku" 鉄車王国 (Kingdom of the Steel Machine) offers a similar way of considering the future and speculating about chemistry as the field where to look for new types of energy sources. Oshikawa opens the story with an introduction, where he argues that future "race wars" (*jinshu sensō* 人種戦争) will involve Japan in international disputes: "It is the destiny of our Eastern race (*tōyō minzoku* 東洋民族) to prove, sooner or later, our supremacy over the Western race. Whichever way you consider it, race wars will be huge upheavals that the future world cannot avoid."[41] The story consists of the narration of such speculation that the narrator depicts by focusing on the imagined geopolitical situation, in which, due to the uncontrolled rise in the global population and the consequent natural difficulties, Eastern powers feel the urge to occupy new territories. To fulfil their colonial desires, they gather their combined military might in an immense

[41] *Bōken sekai*, 3(5), p. 1.

army that threatens the whole of Asia. Within such a volatile geopolitical framework, the story focuses on Harushima Namio, a Japanese man living in Berlin and working as a spy. He meets a group of Japanese workers led by General Takeki, who left Japan a few years earlier to colonise south Asia and establish a "New Japanese Domain."[42] Hidden on a desert island, general Takeki and his crew of engineers and scientists have constructed a giant steel machine that has no match on both the offensive and defensive sides. The secret of the ultimate weapon is the "eternal superpower" (*itānaru mōryoku* イターナル猛力), a new chemical element whose application generates an amount of energy much bigger than the one produced with either radium or polonium.[43] The story ends with the announcement of the "race war" that finally erupts when Japan replies to the outrageous demands of the Western powers by sending the giant steel machine to Europe.

"Tessha ōkoku" connects to the anonymous futurological essay via two elements, namely, the future dimension and the use of chemistry as an energy source. Oshikawa created his literary fantasy by employing the piece of futurological speculation the anonymous author expressed in the essay as a narrative device to impart a sense of reality to his story. The essay and the short story are thus two sides of the same literary 'coin', or the fictional and non-fictional counterparts of a speculative imagination based on the late Meiji discourse of technoscience.

Conclusion

As Paul Kincaid claims, "there is no starting point for science fiction."[44] Like any other literary genre, science fiction does not begin at any precise point in time and from some Urtext, a supposedly originating text from which the critics may derive a comprehensive genealogy of the genre. However, as John Rieder avers, even without an origin, it is still possible to debate the history of science fiction by exploring its beginnings, which must be conceived in their plural and multi-layered forms. According to Rieder, a beginning in the development of a genre is "a turning point, not an event that

[42] Ibid., p. 11.
[43] Ibid., p.34.
[44] Kincaid, 2003, p. 409.

establishes a paradigm but rather one that introduces a discontinuity."[45] *Bōken sekai*, together with the other "great adventure magazines of the Meiji era," was the event that brought a twist to already existing genres, namely the adventure or exploration novel, and the *mirai-ki* (futuristic/futurological records), by introducing in their narratives a speculative imagination grounded on the late Meiji techno-scientific discourse.

One possible way to view such an event is to understand stories such as "Tessha ōkoku" not as an entity existing independently but as a text participating in the construction of the context (the magazine itself) in which it existed. It is only when analysing the early instances of science fiction within such a context that the formation process of the literary imagination of the genre becomes visible. Germinative elements of science fiction, such as the speculative attitude, an interest in the modern techno-scientific discourse, and the expression of the future dimension, are all present in *Bōken sekai*'s fictional and non-fictional texts. As the analysis of the magazine's literary works and speculative essays has revealed, it was the coexistence of these different texts within the textual space of the magazine that created the possibilities for the development of the speculative imagination of science fiction.

REFERENCES

ABU Tenpū, "Mamono no gotoki ichirin kisha no hatsumei kushindan", *Bōken sekai*, 1/11, 1908, pp. 43-50.

ABU Tenpū, "Kyokunan no meikyū", *Bōken sekai*, 6/1-6/3, 1913.

ASHLEY Mike, *The Time Machines: The Story of the Science-Fiction Pulp Magazines from the beginning to 1950*, Liverpool: Liverpool University Press, 2000.

AIZU Shingo, YOKOTA Jun'ya, *Nihon SF no so: Kaidanji Oshikawa Shunrō*, Tokyo: Panrisāchi Insutityūto, 1987.

"Bōkenka hitsuyō no saishin riki", *Bōken sekai*, 1/3, 1908, front matter's 2.

[45] Rieder, 2017, p. 66.

DALIOT-BUL Michal, "*Hōchi's Strange Rumors: Tales of the Floating Castle*: A Critical Reading of an Early Japanese Hard Science Fiction Novel", *Japanese Studies*, 39/3, 2019, pp. 313-332.

GENETTE Gérard, *Paratexts:Thresholds of Interpretation*, New York, Melbourne: Cambridge University Press, 1987.

HASHŌ sei, "Kūchū sensō kitei", *Bōken sekai*, 1/1, 1908, pp. 33-37.

JACOBOWITZ Seth, "Unno Jūza and the Uses of Science in Prewar Japanese Popular Fiction". In Ken Gelder (ed.), *New Directions in Popular Fiction: Genre, Distribution, Reproduction*, Palgrave MacMillan, 2016, pp. 157-176.

KAWAOKA Chōfū, "Issen nengo no kobutsu tenrankai", *Bōken sekai*, 3/11, 1910, pp. 51-58.

KIMURA Shōshū, "Kasei kitan", *Bōken sekai*, 1/1, 1908a, pp. 85-88.

KIMURA Shōshū, "Kaieti ryokō: Umi no himitsu", *Bōken sekai*, 1/2, 1908b, pp. 90-95.

KIMURA Shōshū, "Taiyō keitō no metsubō", *Bōken sekai*, 1/5, 1908c, pp. 73-80.

KINCAID Paul, "On the Origins of Genre", *Extrapolation*, 44/4, pp. 409-419.

KOKUMEN Majin, "Kaiki shōsetsu: Sekai saigo no daihigeki", *Bōken sekai*, 3/6, 1910, pp. 44-49.

KOKUMEN Shōshō, "Beikoku hikōki chindan", *Bōken sekai*, 1/12, 1908, pp. 57-61.

"Kyōtan subeki mirai no sekai bunmei", *Bōken sekai*, 3/5, 1910, pp. 86-89.

MOSKOWITZ Sam (ed.), *Science Fiction by Gaslight: A History and Anthology of Science Fiction in the Popular Magazines, 1891-1911*, Cleveland and New York: World Publishing Company, 1968.

MISHIMA Sōsen, "Zendai mimon: Chitei sekai ryokō", *Bōken sekai*, 1/7, 1908, pp. 21-37.

NAGAYAMA Yasuo, *Nihon SF seishinshi (kanzenban)*, Tokyo: Kawade shobō shinsha, 2018.

OSHIKAWA Shunrō, "Bōken shōsetsu: Kaijin tettō", *Bōken sekai*, 1/2, 1908, pp. 2-26.

OSHIKAWA, Shunrō, "Tessha ōkoku", *Bōken sekai*, 3/5, 1910, pp. 1-40.

RIEDER John, *Science Fiction and the Mass Cultural Genre System*, Middletown: Wesleyan University Press, 2017.

SAITŌ Kumiko, "Reframing Modern Japanese Literature: Translation and Science Fiction in Meiji-Era Japan", *The Journal of Japanese Studies*, 19/1, 2023, pp. 57-83.

SUTER Rebecca, "Science Fiction as Subversive Hypothesis: *henkaku tantei shōsetsu* between Entertainment and Enlightment", *Japanese Studies*, 31/2, 2011, pp. 267-277.

TAILLANDIER Denis, "Literary Science Fiction in Japan: The Story of a Secret Infiltration", *Mechademia*, 14/1, 2021, pp. 167-184.

TATSUMI Takayuki, "Generation and Controversies: An Overview of Japanese Science Fiction, 1957-1977", *Science Fiction Studies*, 27/1, 2000, pp. 105-114.

TENGAN Tsūjin, "Tenkai no daikaibustu Harē suisei monogatari", *Bōken sekai*, 3/4, 1910, pp. 59-64.

U.N.-sei, "Tenkai no fūraibutsu insei kidan", *Bōken sekai*, 1/3, 1908, pp. 70-76.

YOKOTA Jun'ya, *Nihon SF koten koten (1) uchū he no yume*, Tokyo: Shūeisha, 1984