

Selections from NDL collections

Records of earthquake disasters in the NDL Digital Collections: Archiving earthquake disasters (2)

Junichi Nakamura, Humanities Division, Reader Services and Collections Department

Tomoko Okuda, Systems Infrastructure Division, Digital Information Department

Tomoko Fuji, Resources and Information Division, International Library of Children's Literature

This article is based on the article in Japanese in [NDL Monthly Bulletin No. 659 \(March 2016\)](#).

Contents

<Part 1 (No. 206, June 2016)>

Let's read the materials!

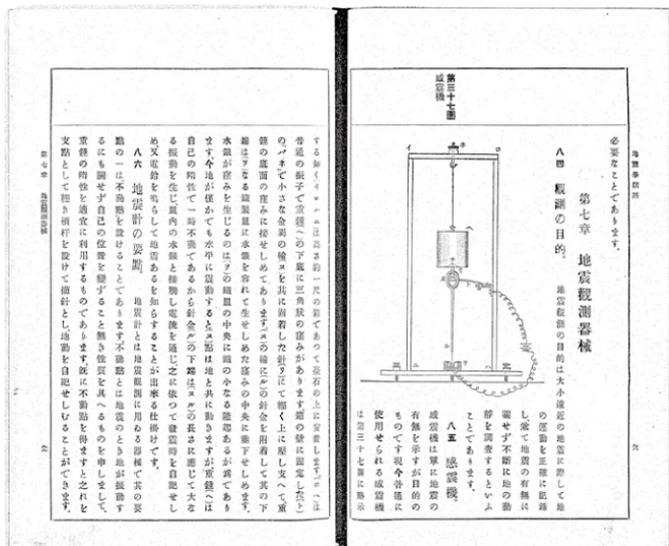
1. Introduction
2. Earthquakes in the end of the Edo period and Namazu-e
3. Establishment of the Seismological Society of Japan and the spread of seismological observation networks
4. Nobi Jishin and establishment of the Earthquake Investigation Committee

<<Part 2>>

5. Fussing notice of the Tokyo Daijishin
6. Shock of the 1923 Great Kanto Earthquake and "disaster preparedness"

5. Fussing notice of the Tokyo Daijishin

In December 1897, Fusakichi Omori (1868-1923), a young seismologist and professor at the Imperial University College of Science, was appointed secretary of the Earthquake Investigation Committee. From that time on, he was a tireless researcher and authority on seismology until the 1923 Great Kanto Earthquake. Some of his work, including a book on seismology entitled *Jishingaku kowa*, are available in the NDL Digital Collections.

<<Image 1: *Jishingaku Kowa* [Call no.: 78-82]

Edited by Fusakichi Omori, published by Kaiseikan, 1907

An Introduction to Seismology [*Available on the Internet](#)>>

Akitsune IMAMURA (1870-1948) was two years younger

than Omori and had immersed himself in researching earthquake prediction as an assistant professor for some 20 years. He succeeded to Omori's position as professor after the sudden death of Omori shortly after the 1923 Great Kanto Earthquake. His interest in seismological research was said to have been sparked by the *Nobi Jishin* (See Part 1). His research into the relationship between crustal movements and earthquakes is still highly regarded today.

In September 1905, he published a paper in the magazine *Taiyo* (The Sun) [Call no. 雑 54-35], entitled "*Shigaichi ni okeru jishin no seimei oyobi zaisan ni taisuru songai wo keigen suru kanpo*" (lit. Simple Methods for Mitigating Loss of Life and Damage to Property due to Earthquakes in Urban Areas). In this article, he stated that earthquakes of the same scale as one during the Edo era that caused more than a thousand deaths would occur on average once every 100 years. It had been 50 years since the last great earthquake in 1855, and he called for awareness of the fact that a huge earthquake shook the Kanto region in 1703 only 54 years after the previous one in 1649. He warned that there was not a single day to lose in preparing for the coming disaster and he even predicted the extent of damage that would occur if an earthquake hit the Tokyo area.

On January 16, 1906, the *Niroku Shimbun* (lit. Niroku Newspaper) [Call no. 新 -509], published a sensationalized report of this information in an article entitled "*Daijishin shuraisetu - Tokyoshi dairisai no yogen*" (lit. A Great Earthquake Will Hit Japan—Tokyo Will Suffer). The article inflamed public anxiety, particularly given the common superstition of the time that said "fire breaks out more often during *Hinoeuma* (the 43rd year of the Chinese sexagenary cycle)." To counteract this hysteria, Omori published an article entitled "Groundless Rumors of Tokyo and a Great Earthquake" in *Taiyo* in March of the same year, stressing that there was no scientific basis to the rumor that a huge earthquake would devastate Tokyo in the near future.

17 years later, on September 1, 1923, a great earthquake struck the Kanto area, and Omori died not long thereafter. In 1926, Imamura wrote a book, *Jishin no Seifuku* (lit. To Conquer Earthquakes), in which he emphasized again the correctness of his prediction for the damage caused by a great earthquake in Tokyo and his steadfast faith in

earthquake prediction and disaster prevention. *Jishin no Seifuku* is also available in the NDL Digital Collections.

***Kanto shinsai ni tsuite* by Akitsune Imamura (available only at the NDL and partner libraries) in [the Historical Recordings Collection](#)**

“The great earthquake that occurred in Sagami Bay in 1923 caused tremors and fires that resulted in the deaths of nearly 100,000 people and the loss of 5.5 billion yen . This was a new record for damage caused by an earthquake in Japan, even though this was no more than ordinary earthquake in size.” So begins this lecture by Akitsune Imamura, as he explains the importance of disaster prevention measures.

The NDL Historical Recordings Collection also has another lecture by Imamura, entitled “*Jishin no hanashi*” (lit. The Story of Earthquakes). These recordings from the NDL Historical Recordings Collections are available only at the NDL and its [partner libraries](#)*.



*[Historical Recordings Streaming Service to libraries](#)

6. Shock of the 1923 Great Kanto Earthquake and “disaster preparedness”

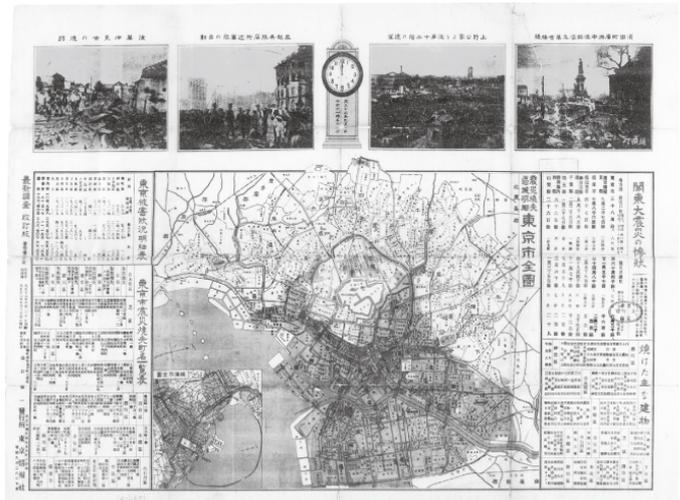
The 1923 Great Kanto Earthquake was a massive earthquake of Richter magnitude 7.9. The quake caused unprecedented damage, leaving some 105,000 people dead or missing. Damage from fires after the earthquake were particularly severe, since it struck just before the noon at a time when people were cooking over fire to prepare lunch at homes and restaurants everywhere. It was presumed that 90% of the deaths were caused by the fire. Numerous stories and photographs that describe the terrible extent of the damage have been published.



<< Image 2: *Kodomo no shinsaiki* [Call no.: 526-64]
Edited by Shoto Kyoiku Kenkyukai and published by Meguro Shoten, 1924

It contains stories told by the children of the elementary school attached to Tokyo Higher Normal School about their experiences in the 1923 Great Kanto Earthquake.

Available only at the NDL and its partner libraries >>

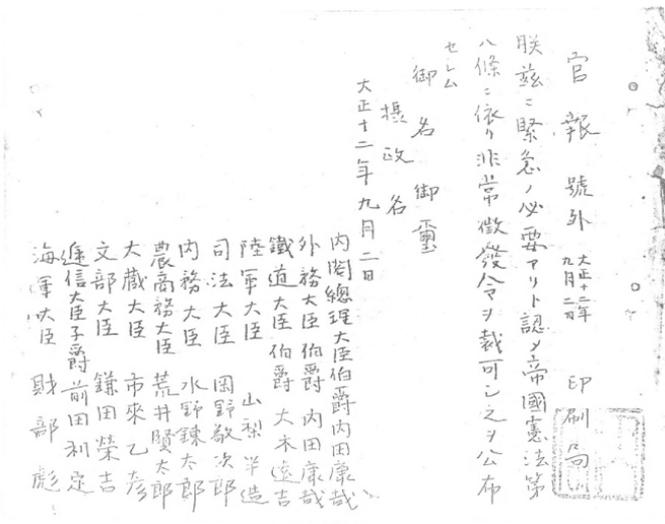


<<Image 3: Kanto daishinsai gaho: Shashin jiho [Call no.: 415-30]
 Edited and published by Shashin Jihosha, 1923, shows the partially collapsed Ryounkaku in Asakusa and burnt fields in Yoshiwara in the aftermath of the 1923 Great Kanto Earthquake
[*Available on the Internet](#)>>

<<Image 5: Shinsai shoshitsu kuiki meisai tokyoshi zenzu [Call no.: 526-17]
 Tokyo Johosha 1923 *Available on the Internet>>

The Earthquake Investigation Committee published a record of the 1923 Great Kanto Earthquake in the 100th issue of the *Shinsai yobo chosakai hokoku*. The pictures and figures filled five volumes: *Jishin* (lit. The Earthquake), *Chihen oyobi Tsunami* (lit. Ground Faults and Tsunami), *Kenchiku* (lit. Buildings), *Kenchikubutsu igai no kousakubutsu* (lit. Structures Other than Buildings), and *Kasai* (lit. Fires). This issue featured analysis based on geophysics, which were applied extensively for the first time here.

In 1925, the same year as the publication of this issue, the Earthquake Investigation Committee was dissolved and the Earthquake Research Institution was established. Thus, this publication became the final testament of the Committee's activities.



<<Image 4: Kanpo [Call no.: YC-1] of September 2, 1923 [edited by Ookurasho Insatsukyoku] 1924
 Handwritten Kanpo Gogai (an extra edition of Official Gazette) was mimeographed and several dozen copies were published on the day after the 1923 Great Kanto Earthquake, because the printing presses at the Printing Bureau were completely destroyed in the earthquake. A printed version was later issued the following day. *Available on the Internet>>



<<Image 6: Shinsai yobo chosakai hokoku [Call no. 14.4-115]
 The 100th issue (*Chihen oyobi Tsunami*), edited and published by the Earthquake Investigation Committee, 1925 *Available on the Internet>>

The Urban Building Law of 1920 underwent drastic revisions after this earthquake. Among these, a seismic coefficient proposed by the architect Riki Sano (1880-1956) was introduced, and became the first instance of standards for seismic resistance being incorporated into the law.



<<Image 7: Kaisei shigaichi kenchikubutsuho kaisetsu
[Call no. 14.7-307]

Edited by Fujiharu Hoshi and published by Suzuki Shoten,
1924 *[Available on the Internet](#)>>

After the disaster, Imamura began to develop disaster prevention methods and distinguished in his writings between “*jishin*,” which are a natural phenomenon beyond human control, and “*shinsai*,” which are the damage caused by earthquakes that can be mitigated through human effort. Torahiko TERADA (1878-1935) was another researcher who took a keen interest in disaster preparedness. In addition to his discussions not just of earthquakes but other types of natural disasters, he is credited with having coined the Japanese word *bosai*, which means disaster preparedness.

References (in Japanese):

- Yoichiro Fujii. *Nihon no jishingaku: Sono rekishiteki tenbo to kadai*. Kinokuniya Shoten, 1967 [Call no.: 453-H921n]
Takahiro Hagiwara. *Jishingaku hyakunen*. Tokyo Daigaku Shuppankai, 1982 [Call no.: ME71-105]
Itoko Kitahara, Ritsuko Matsuura, Reo Kimura. *Nihon rekishi saigai jiten*. Yoshikawakobunkan, 2012 [Call no.: EG77-J1000]
Tatsuo Usami, Hisashi Ishii, Takamasa Imamura, Masayuki Takemura, Ritsuko Matsuura. *Nihon higai jishin soran 599-2012*. Tokyo Daigaku Shuppankai, 2013 [Call no.: ME75-L20]