



## ABSTRACT

Namazu, the earthquake-causing subterranean catfish of Japanese folklore, is a well-known icon of earthquake folklore. Following the Ansei Edo Earthquake in late 1855, anonymous entrepreneurs produced and sold hundreds of varieties of catfish picture prints (namazu-e). Many of these 1855 prints were sophisticated expressions of thinly-veiled political views, using the earthquake-catfish and other symbols as cover to avoid censure by the military government.

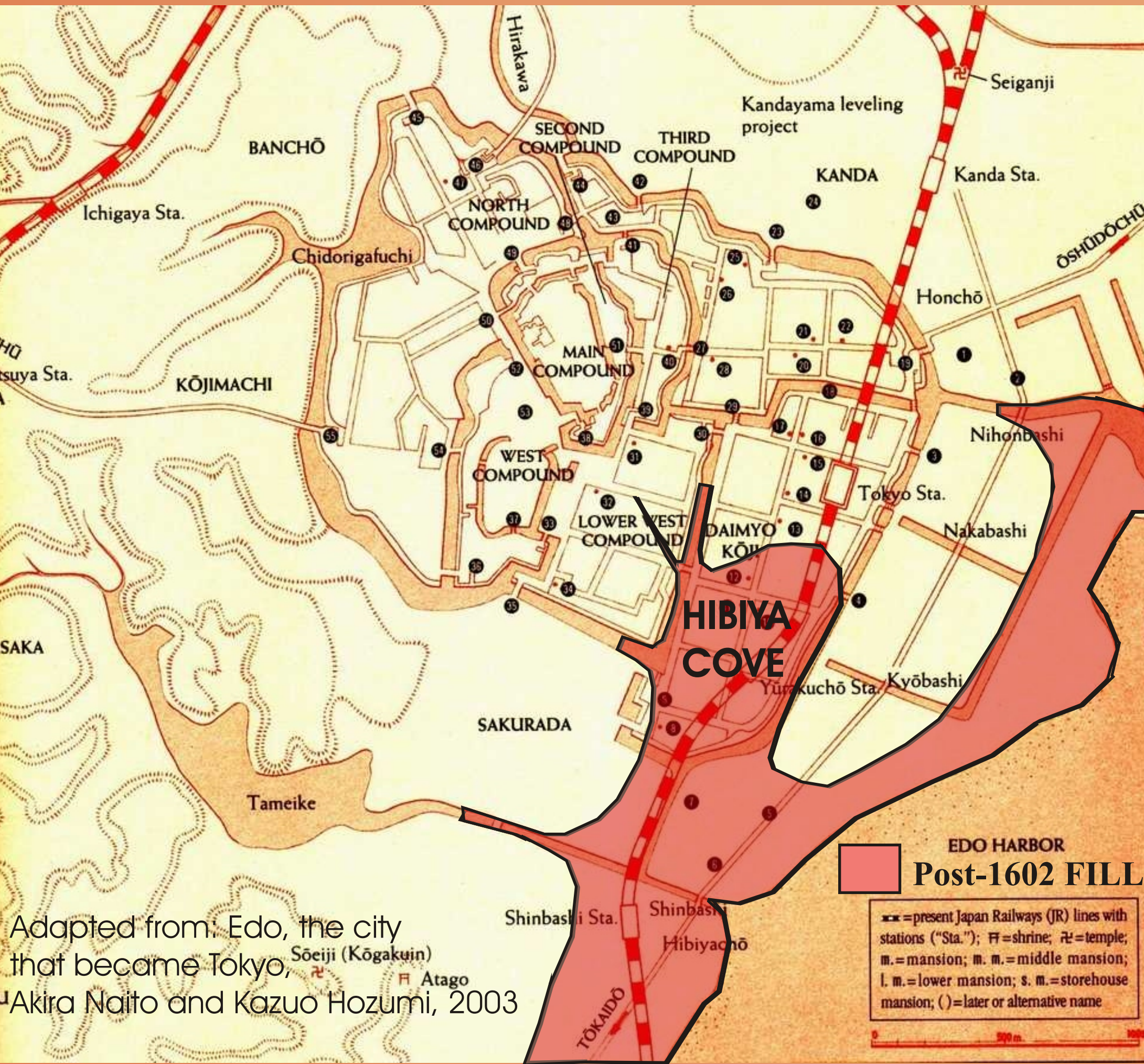
Geology textbooks and works dealing with the social or historical ramifications of earthquakes commonly suggest an ancient origin for the earthquake catfish (Bolt, 1993; Zeilinger de Boer & Sanders, 2005; Hanada Kiyoteru, 1972). However, primary sources indicate that the earthquake-catfish only began to manifest itself in Japanese culture in the seventeenth century, and was not well known until at least a century later. Throughout the early nineteenth century, images of giant catfish occasionally appeared in the popular press in connection with stories about earthquakes, and the Namazu came to full prominence following the Ansei-Edo earthquake of 1855, when the overturning moment of the earthquake coincided with social unrest, advances in printing technology and the need for discretion.

### Tokyo 1855 - Government offices on unconsolidated fill

On the site of the former Hibiya Cove, Government offices and the mansions of major warrior households were heavily damaged in the earthquake of 1855. In striking contrast, the commoner neighborhood just across the moat, built on firmer ground, was only lightly damaged.

Printers took advantage of government disarray to avoid censorship. None of the catfish prints include the required censor's seal. Eventually the military government reasserted their authority and publication of the prints stopped about two months after the earthquake.

Catfish prints from 1855 typically expand an immediate visual joke with texts that portray the earthquake as a frightening disaster, a divine retribution, and as a financial opportunity.



# Evolution of the Catfish (namazu) as an earthquake symbol in Japan

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The major censor seal used from ca. 1790 to 1842. Literal translation: "Investigated Thoroughly" [http://www.pennstatepsu.com/edu/Geology/J\\_Lit/Lit.htm](http://www.pennstatepsu.com/edu/Geology/J_Lit/Lit.htm)

## Origin and historic development of the Catfish as an Earthquake symbol

### 1 A Brief Account of the Catfish (Namazu) as a Cultural Symbol in Japan, 15th-20th Centuries

The Japanese word *namazu* refers to a wide variety of fish that in English might be called catfish or bullheads. Generally, *namazu* does not refer to a specific species of fish. In artistic and literary contexts, it is often best to think of *namazu* less as actual fish swimming around in the waterways of Japan than as cultural symbols. And what did *namazu* symbolize? When it first made an appearance in a work of Japanese highbrow art at the start of the fifteenth century, we cannot determine with certainty what *namazu* symbolized. As time went on, however, these metaphorical fish gradually began to symbolize disorder. By the late eighteenth century, the *namazu* typically stood for one specific type of disorder: earthquakes. After a large earthquake struck the shōgun's capital of Edo in 1855, hundreds of varieties of catfish picture prints (*namazu-e*) came pouring off the printing presses for sale to the public. Many of these prints were highly sophisticated and contained veiled political messages. During the Meiji and Taishō eras, *namazu* in political cartoons generally stood for self-important (puffed up) government officials, but sometimes *namazu* also symbolized upheavals such as a shakeup of the cabinet. These slides introduce a few of the many aspects of this complex symbol in Japanese culture.



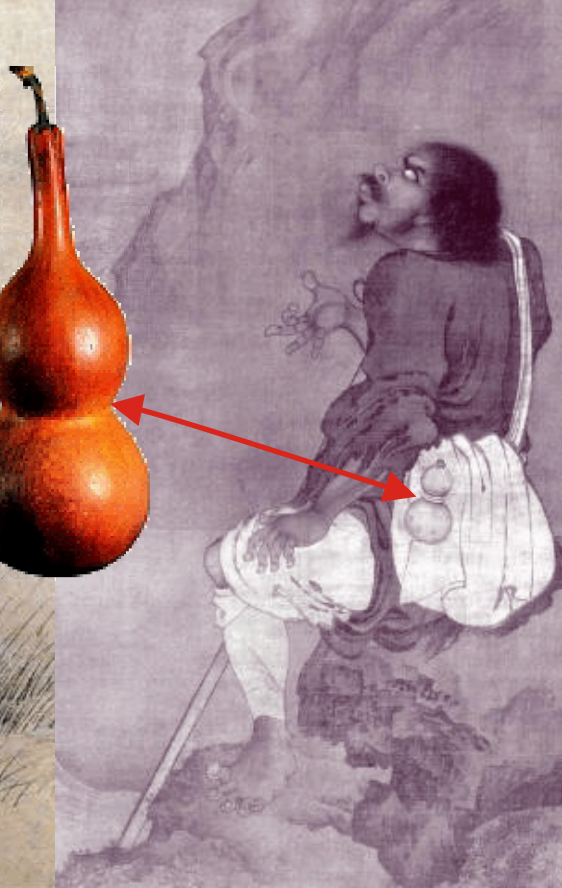
### 2 Bottle gourds symbolize the entrance to the supernatural world.

For more details on the meaning of bottle gourds in east Asian cultures see: <http://www.east-asian-history.net/textbooks/bottle-gourds.htm>



The large image above is Josetsu's Hyōnenzu (Gourd and catfish painting), produced at some point between 1408 and 1415 for the 4th Muromachi shōgun, Yoshimochi. The painting is the first known appearance of a catfish in Japanese high culture, and it is an enigma. Nobody seems to be able to come up with a convincing reading of the painting as a whole, even though every single part of it has been analyzed in excruciating detail. We know, for example, precisely which Chinese painting served as a model for the bamboo stand jutting out from the lower left into the space just above the man's head. Hyōnenzu was accompanied by thirty poems, one of which explains that this man is trying to suppress the *namazu* with a bottle gourd. Contrary to many surveys of Japanese art, suppressing a catfish with a gourd was not a Zen riddle (*kōan*). The bottle gourd would have brought to mind in viewers the image of magical power, loosely associated with shamanism and Daoism. This image of suppressing a catfish with a gourd later became a stock metaphor in Japanese culture.

### 3 Daoist Immortal Li Tiegua



A catfish from 1855 has a dragon's tail.

### 4 "Earthquakes Explained" Islands of Japan surrounded by a dragon/serpent



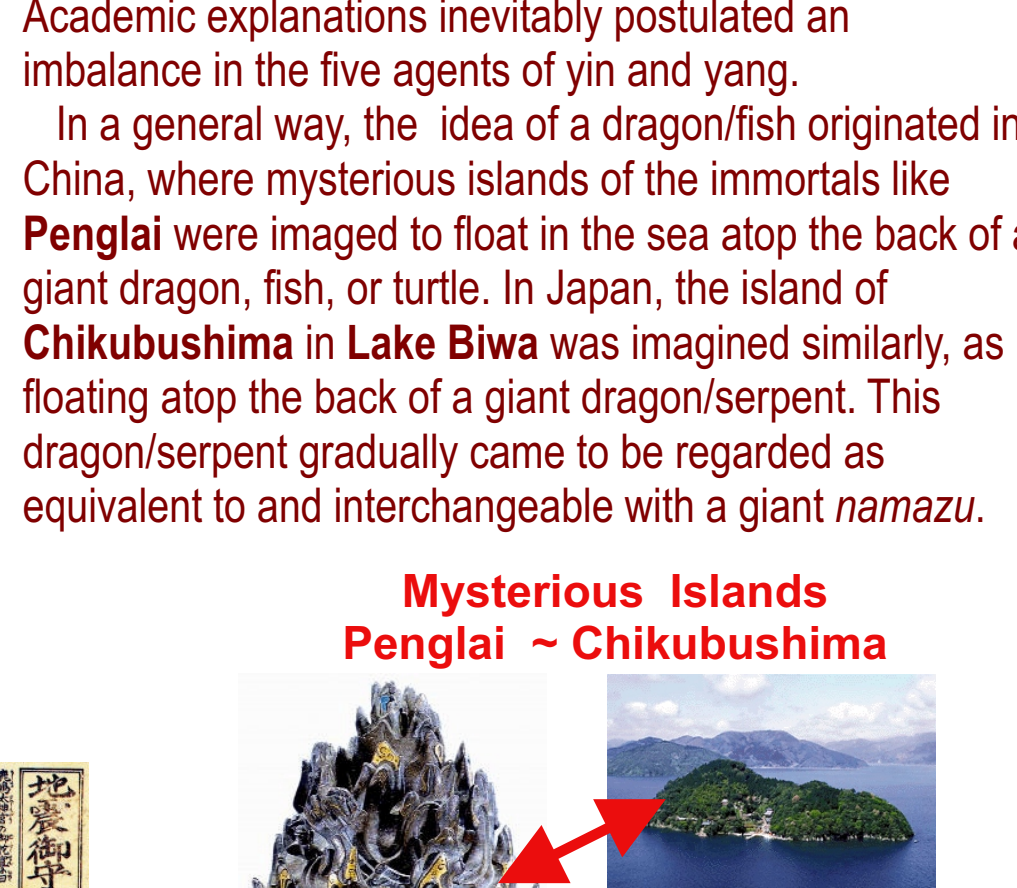
At the time of Hyōnenzu (15th c.), popular earthquake explanations often imagined a giant dragon or serpent moving around under the earth. These maps show the Japanese islands encircled by a serpent-like dragon. Academic explanations inevitably postulated an imbalance in the five agents of yin and yang. In a general way, the idea of a dragon/fish originated in China, where mysterious islands of the immortals like *Penglai* were imagined to float in the sea atop the back of a giant dragon, fish, or turtle. In Japan, the island of *Chikubushima* in Lake Biwa was imagined similarly, as floating atop the back of a giant dragon/serpent. This dragon/serpent gradually came to be regarded as equivalent to and interchangeable with a giant *namazu*.

### 5 Mysterious Islands Penglai = Chikubushima



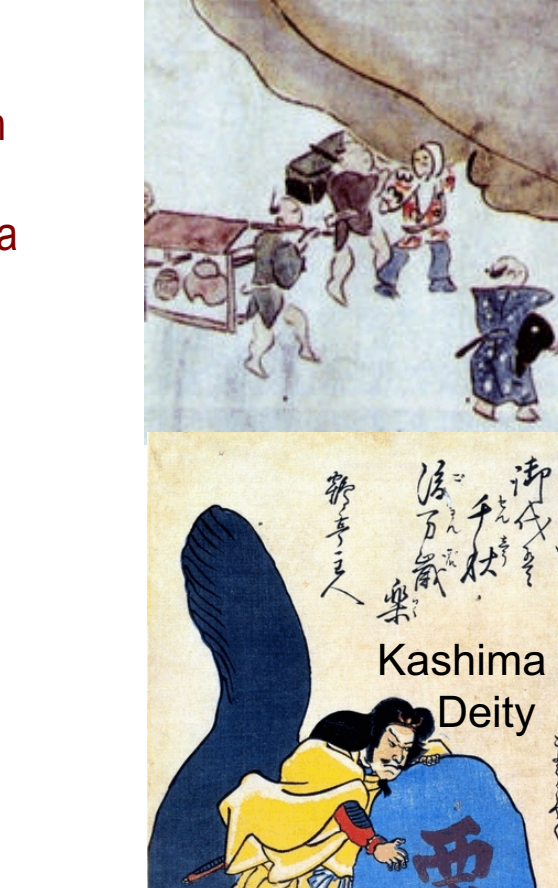
Chikubushima Island in Lake Biwa, the Japanese version of Penglai.

### 6 Incense burner shaped like Penglai, a island from Chinese mythology rooted in the gold layer, or floating on a monster.



During the 17th century, *otsu-e* emerged as a popular art form. *Otsu-e* were images produced by certain temples in the city of Otsu on the shores of Lake Biwa for sale to tourist-pilgrims. During the eighteenth century, one popular motif for *otsu-e* was the image of a person, or more typically, a monkey, suppressing a giant *namazu* with a bottle gourd. Among other things, these images were a metaphor for the effort and determination needed to accomplish something seemingly impossible. Indeed, the word *hyōnenzu* (*namazu* (gourd)-*namazu* (in contemporary Japanese has precisely this meaning (although hardly anyone would be familiar with this term today). During the eighteenth century, the notion developed that the deity of the *Kashima Shrine* just NE of Edo (Tokyo) pressed down on an oval-shaped boulder called the *Foundation Stone* (*Kamame-ishi*). This boulder, in turn, pressed down on the head of a huge underground *namazu*. Unfortunately, there were times when this deity had to be out of town for meetings. At these times, or at any time the deity slackened in his attention, the giant catfish was liable to wiggle around, thus causing earthquakes. The image at top left is a float in an urban parade in Edo. It is the earliest known depiction of a giant catfish being pinned down by the foundation stone. Such images were common in popular prints made in 1855 after a large earthquake shook Edo.

### 7 After 1855 . . .



The image at right is the cover of a humor magazine from 1923, showing Prime Minister Yamamoto Gorochosei being propelled into prominence by the great Kantō Earthquake of that year. Notice the *namazu*, which remained a well-recognized metaphor for earthquakes, and, in the context of parliamentary politics, a symbol of cabinet shakeups and other major changes. More commonly, *namazu* symbolized government officials, especially arrogant ones, in Meiji and Taishō era political cartoons. In the case of the 1923 earthquake, the previous prime minister, Katō, had just died. Yamamoto had been named as his successor, but had no time to appoint a cabinet before the earthquake struck. Because of the earthquake, Yamamoto was able to appoint a cabinet the very next day, thus avoiding the often lengthy wrangling and horse trading that would normally be part of that process. Today, the *namazu* is still a symbol of earthquakes. At least two recent scientific books on earthquakes, for example, have *namazu* in their titles.

### 8 The image at right is the cover of a humor magazine from 1923, showing Prime Minister Yamamoto Gorochosei being propelled into prominence by the great Kantō Earthquake of that year.



For more details on *namazu* in Japanese culture, see: <http://www.east-asian-history.net/textbooks/172/ch8.htm>

### Subduing the Catfish

The Kashima deity and Thunder God pin down the dragon-tailed *namazu*. The little catfish are labeled with references to earlier earthquakes that damaged urban areas; in Kyoto (M 6.5, 1830), Shianano (M 7.4, 1847), Odawara (M 6.7, 1853) and Ise (1854).

Matsudaira Shungaku, a prominent official of the military government, wrote that these severe earthquakes, coupled with other natural disasters and unwelcome visits of American, Russian and British naval vessels "definitely constitute a heavenly warning."



Not necessarily. First, it is important to remember that nobody knew what caused most earthquakes until the acceptance of the theory of plate tectonics in the 1960s. Elaborate, sophisticated theories of earthquakes existed in China and Japan, and although a thorough understanding of them was generally the province of scholars and other highly educated people, ordinary people were aware of the gist of these theories. The catfish print pictured here from 1855 contains much text: an elaborate theory of earthquakes that relies in part on Chinese notions of geomancy and in part on the idea of a balance between the five agents of yin and yang. The giant catfish is a metaphor for this more complex process. In a different catfish print, a giant catfish declares his innocence before an angry crowd, stating that everyone knows that earthquakes are caused by imbalances in yin and yang forces and that a catfish could not possibly cause them. Introductory geology texts sometimes point out that "the Japanese" all believed that a giant catfish caused earthquakes, but it is not at all clear how many Japanese really believed this notion literally. For most, the catfish was a metaphor.



In this print following the 1855 Ansei Earthquake that shook Edo, a crowd attacks the giant *namazu*. The letters in the yellow box are special Buddhist characters indicating the 4 directions plus the center, and the whole print functions as a talismanic charm to ward off further earthquakes (aftershocks continued for days afterward).

### Foreign Treaties

Commodore Perry and the Namazu in a contest of strength. Referee awards points to the namazu.

Beginning in July 1853, Commodore Matthew Perry brought armed fleets to Edo (Tokyo) and pressured the military government to negotiate a trade agreement with the U.S. A preliminary treaty was reached in March 1854 because the military government was not strong enough to resist Perry's demands entirely. This image suggests that only divine intervention can counter international pressure.

Near the end of 1854, a Russian warship attempting to negotiate a trade agreement was damaged by a tsunami when two great tsunamiogenic subduction-zone earthquakes (Ansei-Tōkai and Ansei-Nankai) occurred on subsequent days. The text here refers to that incident.



### Prayers for the Dead

A catfish dressed as a wandering priest uses a Buddhist rosary to pray with a carpenter, a plasterer, roofers, a physician, a lumber merchant, and a rickshaw puller. These professions benefitted from the earthquake and offer prayers to assuage their guilt over profiting at the expense of the dead.

The ghosts of the dead include a samurai drawing his sword against an unseen opponent. Samurai are rarely depicted in *namazu-e* prints, and this samurai may be Miyamoto Kakuzo, a bannerman who lost his house in the earthquake, went mad, and killed himself.



### References

Noguchi Takichio, Ansei Edo jishin: saigai to seiji kenryoku (The Ansei Edo Earthquake: calamity and political authority) (Tokyo, 1997).

### Acknowledgements

We are grateful for the work of anthropologist Cornelis Ouweland (1920-1996) on *namazu-e*, and to seismologist Bruce Bolt (1930-2005) and seismologist photographer Harry T. Halverson (1919-2001), for their interest in the impact of earthquakes on culture and society.