

Aftershocks: Japanese Earthquake Prints

Educator Resource



How can humour help us cope with trauma and advocate for social change?



ROM



How are catfish and earthquakes linked?

From Japanese folk belief, Namazu is a giant catfish that lives beneath Japan and causes earthquakes when it moves. To prevent earthquakes, Kashima Deity, the god of Thunder and War, placed a heavy stone called Kaname-ishi on top of Namazu to prevent it from moving. But sometimes, Kashima left Namazu under the care of a lesser, weaker deity, who couldn't control it. That's when earthquakes happen.

Around 10 pm on November 11, 1855 in Edo, Japan, an earthquake measuring 6.9 – 7.0 on the Richter scale happened. No tsunami was triggered, but there were up to 80 aftershocks per day for 9 days afterwards.

Broadsheets reported on fires and damages. It is reported that 7,000 – 10,000 people died. Within several weeks, over 300 variations of prints, often featuring catfish, were produced.

How may stories, myths, and folk beliefs be informed by observations about the physical world?

What may this suggest about how we process and interpret knowledge?

SCIENTIFIC CONTEXT

What may be scientific evidence for the folk beliefs about Namazu? Japanese seismologists Dr. Shinkishi Hatai and Dr. Noboru Abe found that catfish are sensitive to earthquakes. In their experiments, catfish in an aquarium jumped or were agitated 6 hours before an earthquake.

Out of 178 earthquakes recorded during the experiment, the catfish correctly predicted 80% of the shocks. Dr. Hatai and Dr. Abe suggest catfish may be sensitive to electric changes in the Earth.



What role does humour play in these prints?

Some prints show people pooping wealth. It was believed that merchants hoarding wealth caused the 'social/collective' body to become 'constipated', and Namazu 'relieved' the constipation. Scatological humour can sometimes help people process traumatic experiences.

In this case, the visual poop joke may serve multiple purposes. It suggested a sense of wealth being redistributed (from merchants to townspeople like carpenters and roofers, who were hired to repair the damages). The format also helped people reframe the massive upheavals to their lives as something funny, and perhaps more manageable.

How might humour and folk beliefs have helped the people of Edo cope with the aftermath of the earthquake?

QUESTIONS FOR DISCUSSION & ACTION

- How do we use humour and comedy today to talk about difficult, and possibly, traumatic topics?
- How can comedy be an effective tool for social change?

What makes media powerful?

The catfish prints are similar to today's social media reactions to big events. News about the 1855 Edo Earthquake began with sharing facts about the aftermath before people used catfish illustrations to share their views about relevant social themes. Similarly, people learn about big events today from news reports and live tweets, then process their responses through online commentary and memes.

Both situations reveal a shared oral and visual vocabulary, which, like catfish symbolism, convey multiple layers of meaning with a single image or pithy tweet.



QUESTIONS FOR DISCUSSION & ACTION

- What are examples of oral or visual vocabulary that are used in media today?
- How are memes, TikTok video, reels, etc. used to inform and influence people's opinions about events? How is humour used in these pieces of media?
- How can we know what we're seeing is accurate?
- What should we keep in mind when sharing material on social media?

RESOURCES

- Media Smarts: mediasmarts.ca/digital-media-literacy
- Association for Media Literacy: aml.ca



What might these prints suggest about people’s relationship with nature?

Japanese during the Edo period saw our relationship with nature as one of balance through deities. As people witnessed earthquakes throughout Japan that coincided with major geopolitical events, such as the arrival of Commodore Perry, people started to fear there was an imbalance in the five agents of yin and yang with the Earth.

Part of maintaining this balance meant that humans and nature were in dialogue with each other. In fact, many of the catfish in the prints are shown as half-human, demonstrating the Japanese understanding of humans as being part of nature rather than apart from it.

QUESTIONS FOR DISCUSSION & ACTION

- How do choices you make as a consumer (what you buy, use, throw away, etc.) impact the environment?
- What differences and similarities do we see in how people around the world view our relationship to nature?
- In what ways do we see humans and nature in dialogue with each other?
- How may our view on the relationship between humans and nature affect choices we make?

RESOURCES

- Assembly of First Nations: afn.ca/honoring-earth
- Yale Program on Climate Change Communication: climatecommunication.yale.edu/for-educators
- David Suzuki Foundation — Living Green: david Suzuki.org/living-green

How might these prints have brought about change?

In this image, the debris symbolize social problems, and the catfish, representing the earthquake, rescue people. Many prints show wealth being redistributed among people in Edo, Japan. Because of the strict class structure at the time, many may have felt an injustice in their position in society. What parallels can we draw with our society today?



QUESTIONS FOR DISCUSSION & ACTION

- Why do different groups of people experience the same event differently? How can humour help facilitate understanding?
- What recent events led to changes in your community, city/town, province, country, or the world?
- Does societal change tend to happen quickly or over time?
- What social justice causes matter to you? How can you become involved in your community?

ACTIVITIES

- Make your own print for a modern cause
- Find a piece of media related to climate change or a social justice issue. Analyse it — what elements were included? Why do you think the person who made the piece chose them? What were they trying to communicate? How are they trying to influence you?

RESOURCES

- Elementary Teachers Federation of Ontario teaching resources: etfo.ca/resources/classroom-resources
- World Vision (The Beginner's Guide to Social Justice): worldvision.ca/youth/blog/social-justice-guide
- Learning for Justice: learningforjustice.org

Earthquake stories around the world

What do our stories suggest about how we view our relationship with nature? In Japanese folk belief, a giant catfish, Namazu, lives under Japan and causes earthquakes whenever it moves.



INDIA

Seven serpents hold up the Earth. Every time one serpent passes the Earth to the next serpent, it causes an earthquake.

NEW ZEALAND

In Maori tradition, Mother Earth has a baby (the God Ru) in her womb and whenever the baby moves or kicks, it causes an earthquake.

WASHINGTON STATE, USA

According to Quileute and the Hoh peoples, a megaquake in the 1700s, was the result of Thunderbird and Whale having a terrible fight that caused mountains to shake, trees to be uprooted and the ocean to rise and cover the whole land.

RESOURCES

- Earthquake Legends:
[usgs.gov/programs/earthquake-hazards/earthquake-legends](https://www.usgs.gov/programs/earthquake-hazards/earthquake-legends)

WANT MORE PRINTS?

- See the entire collection at:
collections.rom.on.ca/search/2004.38.1

IMAGE CREDITS

(Title page) Detail of *Untitled (Monster catfish, Kashima deity, and the kaname-ishi stone)*. 2004.38.147.
(Page 2) Actor Nakamura Fukusuke as Fuku of *Kaname-ishi*. 2004.38.111.
(Page 3) *Wealthy Men Expelling Money*. 2004.38.166.
(Page 4) *Kashima Osore (Parody of Kashima Dance)*. 2004.38.163.
(Page 5) *For the Sake of Peace*. 2004.38.180.
(Page 6) *Mercy of Social-Mending Catfish*. 2004.38.184.
(Page 7) Detail of *Song of O-tsubure ("Hard-crushed")*. 2004.38.165.

Curriculum links

Elementary

GRADE	SUBJECT	STRAND
1	Language Arts	Media Literacy, Reading
	Science	Everyday Materials, Objects and Structures
	Social Studies	Our Changing Roles and Responsibilities, Local Community
2	Language Arts	Media Literacy, Reading
	Social Studies	Global Communities
3	Language Arts	Media Literacy, Reading
	Science	Forces and Motion, Strong and Stable Structures
4	Language Arts	Media Literacy, Reading
	Science	Habitats and Communities; Rocks, Minerals and Geological Processes
	Social Studies	Early Societies to 1500 CE
5	Language Arts	Media Literacy, Reading
	Science	Forces Acting on Structures, Conservation of Energy and Resources
	Social Studies	The Role of Government and Responsible Citizenship
6	Language Arts	Media Literacy, Reading
	Social Studies	Canada's Interactions with the Global Community
7	Language Arts	Media Literacy, Reading
	Science	Interactions in the Environment; Form, Function and Design of Structures
	Geography	Physical Patterns in a Changing World
8	Language Arts	Media Literacy, Reading
	Science	Systems in Action
	Geography	Global Settlement: Patterns and Sustainability, Global Inequalities: Economic Development and the Quality of Life

Curriculum links

Secondary

GRADE	SUBJECT	STRAND
9	The Arts	ALC1O, AVI1O
	English	ENG1D, ENG1P
	Science	SNC1D, SNC1P
10	The Arts	ALC2O, ASM2O, AVI2O
	English	ENG2D, ENG2P
	Science	SNC2D, SNC2P
11	The Arts	ASM3M, ASM3O, AVI3M, AVI3O
	Canadian & World Studies	CGF3M
	English	ENG3U, ENG3C, ENG3E, EMS3O
	Interdisciplinary Studies	IDC3O, IDP3O
	Science	SVN3M
	Social Studies & Humanities	HSE3E, HRT3M, HRF3O
12	The Arts	ASM4M, ASM4E, AVI4M, AVI4E
	Canadian & World Studies	CHY4U, CHY4C, CHM4E
	English	ENG4U, ENG4C, ENG4E
	Interdisciplinary Studies	IDC4O, IDP4O
	Science	SES4U
	Social Studies & Humanities	HSE4M, HSC4M, HSB4U