1.

On March 25, 2011, the Administrative Oversight Committee of the Japanese Diet requested that certain individuals appear for questioning on the Current Status of the Nuclear Accident and the Administrative Oversight System. As the public listened closely to statements by seismologists and the nuclear reactor's designers, and as the radiation from the Fukushima disaster worsened, an image distributed at the session alongside precise figures on radiation levels and earthquake rates really took me aback. A hand-drawn illustration, it featured data distributed by seismologist Katsuhiko Ishibashi. In that odd illustration, a gigantic black fish stood on the roof of a large dome-shaped building immediately identifiable as a nuclear power plant. The caption accompanying the illustration said: "Japanese Nuclear Power Comes with Catfish."

Japanese nuclear power is often dogged by earthquakes, which the Japanese have believed since antiquity are caused by catfish. Naturally, these days people chalk this up to superstition, but the appearance of this sort of illustration in a committee meeting of the Japanese Parliament showed its power despite the superstition. I believe that power has perhaps been accumulated by myriad images over the length of modern history.

2.

I am not sure what kind of reaction the illustration prompted in the Japanese Diet, but perhaps we could use it as a starting point for a little journey through images. That would bring us right to two types of images, the first being *Ukiyo-e* "catfish pictures" (*Namazu-e*) from the late Edo period. Following the Ansei Edo earthquake of 2 October 1855, woodblock paintings featured catfish, and came to be known as "catfish paintings" (*Namazu-e*). Edo had a population exceeding a million people at the time, making it one of the largest cities in the world, but the massive earthquake accompanied by a tsunami and fires devastated around 14,000 homes, killing an estimated seven to ten thousand people and making it a disaster of historical proportions.

There are many types of catfish paintings, the most famous being ones depicting the Kashima Daimyojin god holding the catfish beast's

head down. The stone in his hands, known as the *Kanameishi*, is used to immobilize the catfish and keep the earth from trembling. The *Kanameishi* is currently located deep in the woods at the Kashima Jingu Shinto shrine near Narita International Airport outside Tokyo. Speaking of the cause of the Ansei earthquake, October has traditionally been known as "godless month" among the Japanese, when all the gods gather in the Kingdom of the Clouds, somewhere on the Western side of the Japanese archipelago. The people of the Edo kingdom surely believed that the *Kanameishi* loosened just when the Kashima Daimyojin was absent, allowing the catfish to stir and cause trouble.

We can see how the catfish is given human traits. Dressed in human garb, the fish mingles with the people of Edo in various roles. For instance, in one painting the fish is arrested as the culprit behind the earthquake, and kneels before court officials confessing his guilt. Other catfish are shown spitting out gold coins or selling medicine. The latter form depicted the fish as a savior of the people, who yearned for the restoration of normalcy and prosperity following the disaster. Hence, the catfish visited disaster through the earthquake, while it also played the role of savior, illustrating the dualistic nature of good and evil.

The "black sails" had arrived not long before the great Ansei earthquake, making it come at a time of great national uncertainty and unrest. Japan experienced over a decade of serious chaos after the earthquake, the dissolution of the ruling Tokugawa Shogunate, and the Meiji Restoration, thereby making it a disaster at the dawning of the modern era. Upon noticing that the catfish had become a metaphor for popular dissatisfaction, the Edo Bakufu prohibited catfish paintings, showing that the catfish was not just an expression of superstition, but perhaps a sign that monsters only appear as a harbinger of tumultuous change.

The European and American sailing ships that knocked on Japan's door at the beginning of the modern era, especially those in Commodore Matthew Perry's armada that arrived at Kanagawa Ken in 1853 and forced the opening of the harbor, shaking the nation from top to bottom.

3.

Another type of image is known as the "catfish and gourd" (*Hyonenzu*) motif, and it is believed to have originated with a fourteenth-century ink painting held in the collection of the Taizo-in Zen temple in Kyoto. Zen priest Josetsu, whose life bridged the fourteenth and fifteenth centuries, crafted a painting depicting a man walking by a river and trying to catch a catfish with a gourd. Logically speaking, a smooth gourd cannot be used to catch a slippery catfish, making it a metaphor for futile human endeavors. Interpreted by D.T. Suzuki, the allegory is about the futility of humanity's attempts to capture truth with rationality. Suzuki believed that the painting took on notoriety as a meaningful Zen koan.

During the Edo period, images of trying to catch a catfish with a gourd became popular around Japan as art pieces known as "Ōtsue." There are many versions of this type of painting, the most common of which show not the Kashima Daimyojin holding the gourd, but rather a monkey or a god of wealth. Gourds were also depicted as medicine containers or instruments of magic, which can surely be attributed to a Chinese influence. Gourds and catfish are similarly shaped, makin g for humorous images that gained popularity and are now even used as patterns on kimonos and handkerchiefs. The term *Hyonenzu* is also used in popular vernacular as a metaphor for something impossible, but without carrying negative connotations. Most often it is seen as a fun and auspicious symbol.

4.

To understand how the image of pacifying a catfish with a gourd became a popular motif, one must consider how gourds were used in antiquity. Generally speaking, the bottle gourd comes in myriad shapes and sizes, with all kinds of uses. Opinions differ on when mankind began using gourds, and while the precise period is uncertain, seeds have been found in fairly ancient ruins, with the oldest in the highlands of Peru dating from approximately 11,000 to 13,000 BCE. In Asia, gourd seeds dating from 6,000 to 10,000 BCE were found in a cave in Thailand. So generally speaking, the gourd was a known

vegetable as early as the Jōmon period, and predated the invention of earthenware as a tool. Perhaps it does not stand out compared to such staple crops as wheat or rice, but as a vessel it was a necessity for life that accompanied mankind daily for at least ten thousand years.

There are many ways to grow and cultivate, to utilize and process gourds, making it a dominant plant compared to others. It all begins with its shape, and the top three ways of using gourds as containers can be categorized as follows.

The first method involves cutting the gourd from the vine for use directly as a container. Maybe because this is the most common method, the English term for the plant is "bottle gourd." Tying a gourd at the waist as a water flask is a common practice around the world. For instance, people in Santiago de Compostela, a city made famous by the Crusades, carried walking sticks with this sort of gourd on them. Two types of gourds commonly known as "bottle gourds" normally refer to a barbell-shaped gourd narrow in the middle with larger, bulbous ends.

The second variety is sliced horizontally into two halves for use as a bowl. A knife makes an incision on the tapered area at the center to form different shapes. If the cut is made closer to the bottom it becomes a plate, or a bowl when cut at its widest section. Sliced yet higher up the gourd, it can be used as a bottle.

The third type consists of a vertical division, where the two sides are finished as soupspoons or ladles. In this case, the larger bottom section is used to scoop up liquid, and the narrower upper section as a handle. North American gourds are only bulbous in one area, and ones with an especially long narrow portion are known as "dipper gourds"; they are also known by a similar name in Japan. Cut open along their length, they are used as rice scoops as well as soup ladles. Interestingly, when used for such purposes they are known as "round ladles," or *otamajakushi*—, a homonym for "tadpoles," which are shaped somewhat like catfish.

5.

The various treatments and uses for gourds described above can be found wherever gourds are grown across Africa, Asia, North and South America, Europe, and the Pacific Rim, thus giving rise to related mythology and folk beliefs around the world. For instance, in Africa the gourd is often seen as a feminine symbol, as it represents the mother's body. This is certainly related to the shape of the fruit, but others note that gourds produce countless seeds and are thus a symbol of fertility. Moreover, using gourds as utensils and vessels for food is traditionally a woman's job. But surely this feminine association does not imply that humanity originates from the gourd.

Winding a cord around an immature gourd can form it into almost any shape. In China, techniques involving placing gourds into a mold and carving the surface are well developed. In addition, gourds can be utilized not just as water-resistant containers, but, as their surfaces are easily treated in many regions, they are decorated with drawings and patterns. Most of these designs are related to various local tales or customs, one such type being Ōtsue. Thus the gourd has been invaluable to humanity as a "body" for transmitting oral traditions.

6.

The gourd is also one of nature's musical instruments. When a dried gourd blows in the wind, the seeds inside rattle softly. In fact, the earliest use of the gourd as a musical instrument was probably as such a "shaker," which can be found in civilizations and cultures around the world. Sometimes they are fashioned specifically for ceremonial use as maracas. Thus gourds are vital plants not just as containers, but also as musical instruments.

Gourds are used around the world for percussion instruments as large as African drums or as small as maracas. In Hawaii they are essential as accompaniment to hula dancing, and in Latin American music they are rubbed on their curved surfaces to make a unique percussive sound. In Africa they are widely used not only as drums but to make such harmonic instruments as the balafon and sanza (thumb piano). Probably the most widely known stringed instrument using

a gourd is the Indian sitar. In medieval Europe, the gourd was used as the body for string instruments as well. From Africa to Asia, the most prevalent shape for string instruments derives from the gourd. Gourds are also used as woodwind instruments throughout South and Southeast Asia, from India to Vietnam, but small gourds are also used as harmonic flutes in southern France and Corsica.

It is impossible to ascertain exactly when gourds were first used as musical instruments; however, this function definitely goes back at least as far as its use as a container. The gourd is doubtlessly the first plant used as a harmonic instrument. From tropical to temperate regions, it is still used as a musical instrument nearly everywhere across the globe, the music produced having a unique character not easily duplicated by other instruments. Without the gourd, music might not be what we know today.

7.

The gourd was also used in ancient techniques for controlling the flow of water and air. If it hadn't been used to store and transport river water, humans would likely never have been able to migrate over long distances. In fact, such ancient methods were instrumental in aiding humanity's spread around the globe. Capturing beasts was also an ancient technique for humanity, making the gourd a magical device for peoples around the world through the present day. In Chinese celestial thought the gourd is a type of time machine, in which the flow is different on the inside and outside. If one accepts this observation, then there should be a Gourd Age in addition to the Stone Age. The Stone Age began when humans started fashioning implements out of stone, and ended when they ceased doing so, whilst the Gourd Age has no beginning and no end—because the gourd created mankind.

In From Honey to Ashes, the second volume of his four-part work of cultural anthropology entitled Mythologiques, Claude Lévi-Strauss attempted to understand the meaning of the gourd as a mechanism for controlling the flow of air and water. He recognized its utility as a container for holding water and as a musical instrument, also observing its third type of use: gourds filled with air can be used as

floats or buoys in water. Gourds make different sounds when filled with water or air, and looking closely into the sounds made by gourds by the riverside in South African mythology, Lévi-Strauss noted that these myths corresponded with humanity's various mechanisms for coping with nature.

People living along rivers use ladles or oars to scoop water, propelling their boats forward and, as they row, making audible sounds for certain life-forms inhabiting the water. If one makes an audible sound, against the counsel of myths, one could very well be dragged into the water by a devil or monster and drowned. Snakes with gourd decorations inhabiting the Amazon River entice people near the water, and people making forbidden noises could end up falling in. In this way, if mythology ponders the human condition, so does the gourd.

Over three-quarters of Japanese catfish are this type of beast. One must presume that the motif of the gourd and the catfish existed prior to being incorporated in a fourteenth-century Japanese Zen painting. Catfish normally nest in the muck underwater, and are considered portents of earthquakes because it has been widely held since antiquity that, whenever catfish come to the surface, earthquakes follow. In contrast, dried gourds won't sink even if they fall into the river. The catfish and gourd have an opposite relationship—one that seemingly employs expressions of emotion and reason (or rational effort taken to the extreme). Attempting to capture something as unpredictable as an earthquake is like trying to catch a catfish with a gourd, thus the logic of mythology and Zen koans meet through agnosticism.

8.

Perhaps an accidental philosophy can be found within the humorous shape of the gourd. Speaking of which, let us return to the "Japanese Nuclear Power Comes with Catfish" illustration. At first blush, the image with the catfish on the top of a nuclear power facility appears to be precisely the opposite of the Namazu-e painting, because the catfish is subdued by a rock in the latter, whilst here the catfish presses down on the nuclear power plant; however, from an agnostic standpoint, both are saying the same thing.

With the earthquake and tsunami now more than a year in the past, we still do not know what happened inside that reactor core.

People that build nuclear power plants on the shores of earthquake-prone countries are no different from those that walked with gourds by the water in the fourteenth century. Both are guilty of doing something that is forbidden in close proximity to water—probably because they made containers that violated the laws of nature. Sealed nuclear fuel containment compartments in nuclear reactors can never be opened up. The nuclear power plant with a catfish on the roof is a container in which nuclear fission takes place repeatedly in a sealed space. This in and of itself is incompatible with natural containers premised on flow, so that when an accident happens and the inside is exposed, we once again awaken to the fact that it can only end in tragedy.

Can humanity endure peacefully through the Atomic Age? Will a man walking by the water trying to catch a beast with a gourd end up falling in? People born in the Gourd Age must once again look inside the gourd, for the seeds of hope might lay inside that little plant.