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Seeing the Unseeable: Cultivating "Response-ability" in Aquariums¹

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Introduction

Loach died today. Or, maybe, yesterday or a few days ago; I can't be sure.² I found the dead body on a cold day in February when snow fell for the first time in the winter in Tokyo. After I took care of the body, I searched online, trying to find out a possible explanation for its death. A website says that loaches could die from hunger or freeze to death during hibernation.

Actually, it was the seventh loach to die since we adopted a group of eight when my son's elementary school had the traditional loach-catching festival in late August. There were thousands of loaches dumped into a shallow pool of water made by the PTA fathers in the school yard for the special event. My son looked very proud, catching eight by hand, but then anxiously asked me what to do with them. A mother told us that we could leave them in the pool or take them home with us. "They are tasty to cook, I heard," she added. My son gasped and yelled that he wanted to keep them. So we went to a nearby aquarium shop to buy the necessary equipment for keeping the loaches. Since we had no knowledge of how to live with loaches, we appreciated the detailed instructions and suggestions that the shopkeeper gave us.

I thought that it would be a good educational opportunity for my ten-yearold, learning about loaches and also the responsibility of caring for animals. I also thought that it would be a good ethnographic opportunity for me to learn about companionship with non-human species. At the time, I had recently begun my fieldwork at aquariums in Tokyo, where I hoped to explore two things: the multispecies relationship between fish and humans — that are maintained in the artificially created aquatic environment — and also the role of aquariums as a space to help to build a sustainable relationship between human and the ocean. Unsurprisingly, my son soon lost his interest in the loaches. But I continued my ethnographic fieldwork with them.

The first thing that I learned through living with the loaches was how easily they can die. It was a bit of a surprise to me since I was hoping to learn about human-nonhuman companionship. I thought that we both had to be alive in order to develop or maintain our companionship. Death, I thought, would end the intimate relationship. But loaches died one after another. I lost the first loach into a drainpipe when a couple of them jumped out of a bucket right after we came home from the loach-catching festival. The next day, another one died in the fish tank. There was an open wound on its back, so my son and I assumed that he was injured during the loach-catching festival. The following day, wounds appeared on other loaches, and two of them died by the evening. The remaining loaches did not have wounds but developed weird white spots all over their bodies. We found another one belly up the next morning.

It turns out that the wounds were caused by a bacterial disease called "fin rot," and the white spots were caused by a parasitic disease called "white spot." Both of them are common fish diseases, especially popular among aquaculture fish species as well as those kept in aquariums. Because they live in fish tanks, infectious diseases spread easily among fish. And like those viral diseases that are familiar to us (such as COVID-19, flu, and herpes), individual fish develop symptoms when their immune systems are weak due to malnutrition or stressful environments. As soon as I found out about the diseases, I went back to the aquarium shop and bought the necessary meds and a separate fish tank for medical treatment. After two weeks of special care, the remaining three loaches became well. Then, two months later, one morning, one of them was found on a room floor as its body dried up like a mummy. Apparently, it jumped out of the fish tank from a narrow corner where there was a gap between the fish tank and its lid. It was the sixth loaches to lose before the most recent one that died during hibernation. The last one of the eight loaches is still alive so far.

The death of the loaches made me think about companionship with nonhuman species. A few questions arose. While I felt sorry for their death and disappointed, feeling like a failure as their companion, what does death actually account for building multispecies companionship? Does companionship come to an end when a companion dies? How are we supposed to respond to the death of our companions? What can we learn from our losses? Based on these questions and through my ethnographic research with the loaches at home as well as marine species at aquariums in Tokyo, this paper aims to meditate on the death of non-human companions and discuss how it might help us to cultivate what Donna Haraway (2008) calls "response-ability," or our ethical sensibility toward non-human species and ability to respond accordingly, in order for us to step toward more livable futures for all species.

The Death Exhibition: Starting from the End

As we currently live in the time of the so-called Anthropocene, we face death not only at the personal level but also at the species level. Extinction is the death of a species. As part of her comments on a new report from the UN's Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), Joyce Msuya — an acting head of the UN Environment — stated, "Nature makes human development possible but our relentless demand for the earth's resources is accelerating extinction rates and devastating the world's ecosystems."³ Agonizing about the rapidly increasing rate of extinction, some conservation experts warn us about the probability of "the Sixth Great Extinction." The threats of extinction are accumulating all over the world. The ocean is no exception.

"The ocean is in trouble, we need the ocean, and the ocean needs us," said the American marine biologist Dr. Sylvia Earle in her speech for the April 2021 virtual launch of the United Nations' Second World Ocean Assessment.⁴ In urging us humans to recognize that "this is the time to step back and dive in to look really at the problems and look at the solutions, to see the interests of humans are so connected to the ocean,"⁵ she also emphasized that we need to learn more about the ocean beyond the one-tenth of it that humans have explored thus far. While marine experts are diving further into the unexplored parts of the ocean, how can the majority of others — who are not oceanic experts and do not have diving ability or access to deep-sea submarines learn about the unseeable undersea world and its troubles? In 2018 at the 10th International Aquarium Congress held in Fukushima, Japan, aquarists who work in aquariums around the world offered a joint statement that they pledged to take the leading role in providing opportunities to learn about the marine environment to those non-experts and laypeople.

Among various efforts to accomplish the shared goal, in 2023, the Sunshine Aquarium in Tokyo opened a special exhibition focusing on death. The title, "The Ending as Beginning Exhibition: the Death of Creatures," reflects the aquarium's wish to provide an opportunity for visitors to reflect on "living" by learning about death, as stated in the press release.⁶ It also explains that because we currently live in a "chaotic world," which forces us to pay attention to death regardless of generation (implying the global warming, the COVID-19 pandemic, the war on Ukraine, and so forth), getting to know how marine creatures live and die in the harsh environment in order to survive as species helps us to consider death and what comes after it.

This unusual exhibition was opened as a night aquarium after the regular daytime open hours ended at 6 PM. During the night hours, visitors learn various forms of death from special displays as they walk from one fish tank to another. To give a couple of examples, in front of a fish tank of schooling Pacific sardines, visitors would learn from a special panel that only a few in a half-million eggs can survive to become adults, but their early deaths support the survival of many other creatures. Or, as they observe a Giant Pacific octopus spreading its legs against the glass wall, visitors would also learn that female octopuses meet the ends of their lives after they devote their last few months to nurturing their eggs until they hatch. During this period, they do not eat and use all of their remaining energy in order to send fresh water for their eggs as they occasionally rub their eggs gently so that fresh water can reach every egg.

In addition to those live creatures in fish tanks, the night aquarium also presented a stuffed sea otter. Before its death and display after taxidermy, the sea otter used to be one of the members of the aquarium. And it was the last sea otter that the aquarium owned. Sea otters are "endangered species" due to over-hunting by humans for their fur. For that reason, trading wild sea otters for aquariums is prohibited, and therefore, only three sea otters currently exist in all Japan's aquariums. But in recent years, the population of wild sea otters has been recovering, thanks to various conservation efforts. The stuffed sea otter exhibit, however, also introduces a new issue that challenges the symbiosis of the ocean. As the population of sea otters increases, they become competitors with humans for those marine species — such as shellfish, sea urchins, and sea cucumbers — which sea otters and humans both love to eat. In many areas around the world, commercial fishers and local governments have developed various conservation programs in order to harvest these marine resources sustainably. But the population of these marine species has been sharply declining due to the increased number of sea otters. The sea-otter exhibit begins with the story of the death of the individual sea-otter and ends with open questions for visitors to meditate on. Given the history and the current problems that sea otters and humans, as well as other related marine species, are facing, how do we think about our responsibility as humans? How can each of us respond to the stories of death? What comes after then?

Companion Species and Death

Donna Haraway, a prominent feminist scholar and philosopher of science and technology, proposes that we should "make kin" with not only human others but also nonhuman species in order to direct our societies toward more livable futures (Haraway 2016). By making kin with human and nonhuman others, we are able to build more intimate relationships with care and response-ability. I generally agree with this. But a practical question still stays with me. How do we make kin with other species in real life? From my perspective, it is not so difficult to imagine that humans make kin with other species when the relationship is personal and individual, as we see in Donna Haraway's stories of multispecies companionship with her dog, Cayenne Pepper (Haraway 2008). Perhaps most animal lovers would share a similar opinion. But how can we make kin with nonhuman species at the species level? Such examples do exist. Deborah Bird Rose (2008) tells us about a story of Aboriginal people in the Tanami desert, who make joint efforts with wildlife ecologists to save wallables, which are part of their kin, based on the Aboriginal worldview. Thom van Dooren (2014) narrates multiple stories of birds from different parts of the world, in which humans try to save endangered avian species, through which they develop kin-like relationships. But these stories ultimately seem exceptional. Without having the aboriginal worldview or without having been trained as conservation ecologists, how can we make kin with nonhuman species? How do we develop love toward them as kin?

My argument is that death might help us to answer these questions. Through observing my interactions with the loaches and also the special exhibition on death at the Sunshine Aquarium in Tokyo, I suggest that responding to death is key to making kin with other species. By responding to the death of nonhuman species, we can nurture our sense of kin with them.

Notes

- This paper is based on a conference paper presented at the Annual Conference of the Association for Asian Studies in Boston on March 17th, 2023. I am grateful to Aya Kimura, Shiho Satsuka, Victoria Lee, and Karen Thornber for their helpful comments and stimulating discussions and to the panel sponsor, the Japan Foundation, for their generous support. This work was supported by JSPS KAKENHI 22K01083.
- 2. I begin this paper with a deliberate reference to the famous opening lines of Albert Camus's *The Stranger* (1946), which begins with the protagonist's subtle expression toward his mother's death. As narrated in the novel, the discussion of how we are supposed to feel about the death of others impels us to question who we are as humans. Inspired by the novel, this paper explores how narrating the death of nonhumans allows us to discuss human-nonhuman relationships for more livable futures.
- The UN report is available at https://www.un.org/sustainabledevelopment/blog/2019/ 05/nature-decline-unprecedented-report/ (last accessed, November 27, 2023).
- The April 2021 virtual launch of the United Nations' Second World Ocean Assessment is available at https://www.un.org/regularprocess/woa2launch (last accessed, November 27, 2023).
- Dr. Sylvia Earle addresses the statement quoted in this paper at 5:12 in the video file

 entitled Launch of the Second World Ocean Assessment (WOA II) available at
 https://cdnapisec.kaltura.com/index.php/extwidget/preview/partner_id/2503451/uiconf_
 id/43914941/entry_id/1_jtn88x6v/embed/dynamic (last accessed, November 27, 2023)
- 6. The translation of the title and the quotes from the press release are done by the author. The original title of the special exhibit reads, "Owari wa Hajimari Ten: Ikimonotachi no Shūen." The aquarium's press release is available at https://co.sunshinecity.co.jp/archives/ 007/202209/771ed193583dee33808886e5707a9b52.pdf (last accessed on November 27, 2023).

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