

Environmental Ambiguity, Literature, and Ishimure Michiko □□ 環境問題の曖昧さ、文学、石牟道子

Karen Thornber

Environmental Ambiguity, Literature, and Ishimure Michiko

Karen Thornber

“We’d like to cut down the trees with nature in mind.” So declared Suzuki Takehiko, director of the Shōsenkyō Kankō Kyōkai (Shōsen Gorge Tourism Association), in August 2008. Part of Japan’s Chichibu-Tama-Kai National Park, Shōsen Gorge has for decades been labeled the country’s “most beautiful valley.” Years of deforesting meant that when the park was founded in 1950, little stood between tourists and the majestic rock formations for which the gorge is most famous. But by the turn of the twenty-first century visitors were frustrated that trees were now blocking much of the view. The park’s laissez-faire approach to the valley’s vegetation did not threaten its ecosystems—trees are hardly invasive species there. But this economically disadvantaged part of Japan depended on a steady stream of tourists who wanted to see cliffs, not trees; some even claimed that the trees were depriving the valley of its beauty. So Suzuki

argued that “trees” (part of nature) should be felled so that people could have a better view of “nature” (the gorge). Despite Suzuki’s appeal, most of the trees still stand and in fact are highlighted in the park’s promotional materials. The Shōsen Gorge Tourism Association’s website features images of colorful trees growing beside, and out of, majestic crags; in some pictures trees effectively obscure the cliffs. A banner running near the top of the website declares Shōsen Gorge the most beautiful in Japan, full of the [many] wonders of nature (*Nihon ichi no keikokubi o hokoru “Shōsenkyō” wa shizen no subarashisa ga ippai desu*).¹



Ōtaki in Shōsen Gorge

This episode encapsulates what my new book *Ecoambiguity: Environmental Crises and East Asian Literatures* (Michigan 2012) identifies as environmental ambiguity (ecoambiguity), the complex, contradictory interactions between people and nature. Many parks, although established at least in part to protect ecosystems from human abuse, ultimately depend on the human footprint for their existence; areas that do not attract visitors risk being developed. Likewise, calls to destroy one part of an ecosystem frequently stem from the desire to protect another; deer populations, for instance, are regularly culled so that vegetation can be

restored. But the ambiguity of people's relationships with Shōsen Gorge is particularly pronounced. The original requests for deforestation stemmed from the desire not to save but instead to see another segment of the landscape; some tourists wanted the trees removed not so the cliffs could be protected but so they could be photographed. Their calls have gone relatively unheeded; trees remain part of the appeal, their foliage, particularly in autumn, a highlight of visits to Shōsen Gorge.

Many parts of Japan have not been so fortunate. While some of East Asia's environmental problems have clearly been ameliorated as a result of increased ecological consciousness in the region, others have grown more menacing. In this sense East Asia is no different from most other world regions. Few places celebrate ecological destruction, instead giving lip service to "greening" environments, but many promote lifestyles that virtually ensure devastation. Today, the separation between practice and environmental protection rhetoric exists practically everywhere; the divergence is so ingrained it can be taken for granted.

East Asian literatures are famous for celebrating the beauties of nature and depicting people as intimately connected with the natural world. But in fact, much fiction and poetry in the Chinese, Japanese, and Korean languages portrays people as damaging everything from small woodlands to the entire planet. These texts seldom talk

about environmental crises straightforwardly. Instead, like much creative writing on degraded ecosystems, they highlight environmental ambiguities.

As I discuss in *Ecoambiguity* an excellent example is the acclaimed Japanese activist and writer Ishimure Michiko's novel on Minamata disease – *Kugai jōdo: Waga Minamatabi* (Sea of Suffering and the Pure Land: Our Minamata Disease, 1969), which incorporates two principal forms of environmental ambiguity.² The first is conflicts in attitudes: on the one hand idealizing symbiotic, mutually beneficial contacts between people and nature while on the other hand expressing concern about the health of nature primarily because people depend on it; the second is contradictions between behaviors and obvious physical evidence, especially the disavowals of pollution (including both active denials and conscious indifference) on the part of many in the Japanese government, the Chisso Corporation (whose mercury effluent in Minamata Bay caused the disease), and residents of Minamata and surrounding towns. Threats to the environment including global warming, destruction of habitat, and species extinction are even acuter now than when Ishimure wrote her classic work, making it all the more imperative that we confront directly the difficult issues that cut to the heart of the ways in which we live and work and how we think about and actually relate to the environment.

In the paragraphs that follow I'll overview *Ecoambiguity* and discuss briefly the importance of literature on environmental crises. I'll then explore manifestations of ecoambiguity in Ishimure's *Sea of Suffering*

Initially I had planned to organize *Ecoambiguity* around comparisons of Chinese, Japanese, Korean, and Taiwanese literary treatments of major environmental problems. After all, we expect area specialists and especially comparatists to highlight cultural, national, and regional differences. Separateness often is assumed to be more prevalent, and important, than similarity, not to mention commonality. But the more I read, the more it became apparent that something quite different was at stake. Throughout history people have routinely damaged both proximate and distant landscapes, despite vast differences in cultures, attitudes toward nature, and the resilience of the ecosystems they inhabit. Environmental damage has varied greatly, yet there are few if any places that have not been harmed by the human footprint, literal or metaphorical. I soon realized that it was important, indeed imperative, to analyze how literature as a form of discourse deals with the causes and consequences of ecodegradation writ large. Once I no longer looked at texts primarily through the lenses of individual societies or environmental problems, but instead examined how creative works from disparate places negotiated more generally with

ecological quandaries, their shared environmental ambiguity became unambiguously clear. The authorial, readerly, cultural, and environmental circumstances/identities behind the production of a particular text certainly mattered – including assumptions about target audience, as well as institutional control of literary production such as censorship practices – but not as much as I had presumed. Environmental ambiguity is a hallmark of everything from brief poems to multivolume novels; from the work of writers known globally to those scarcely recognized within their own societies; from texts discussing relatively isolated ecological damage to those concerned with ruin on a global scale; from those focusing on environmental distress, including ecological life narratives, to those mentioning it only briefly; from works that celebrate ecodegradation to those that decry it; in texts published everywhere from the Americas to Europe, Africa, Asia, and Australia.

To be sure, ecoambiguity appears more prevalent in literature from East Asia than in other textual corpuses. And its irony is certainly deeper, considering the region's long cultural history celebrating the intimate ties between humans and nature even as its peoples severely damaged environments. But with several notable exceptions, these disjunctions and their many permutations do not depend as much on specific literary culture or environmental problem as one

might anticipate. And so I moved the focus to the concept of environmental ambiguity itself. Languages, genres, styles, and tropes differ within and across cultures, but the concerns raised have much in common.

In addition, although I had first thought of focusing on a few key writers and texts – most notably Ishimure Michiko from Japan, Gao Xingjian and Jiang Rong from China, and Ko Ŭn from Korea – the more I read and was exposed to the incredible variety and richness of East Asian creative negotiations with environmental problems, the more it became vital to counter the common perception that, with several prominent exceptions, East Asian literatures describe only harmonious human-nonhuman relationships. Examining a wide range of Chinese, Japanese, Korean, and Taiwanese texts that address ecodegradation makes us more aware of the many ways different societies have grappled with phenomena that are grounded in their specific cultures and histories but that also resonate with those of other places and peoples and have widespread regional if not global implications. It is important to consider the particular ways that ecological problems are negotiated in national literatures, while recognizing the many commonalities of human relationships with the nonhuman across time and space. This is not at all to deny the importance of context. Rather, it is to acknowledge just how frequently texts address – implicitly or explicitly

– matters of regional or global concern. *Ecoambiguity* hopes to work toward breaking down barriers of isolation, insularity, and exceptionalism, reminding us that although human societies, the environments in which they live, and the dilemmas facing different peoples and ecosystems are distinctive, they are not unique.

For most communities, limiting further ecological degradation and remediating damaged ecosystems of all sizes will require significant cultural change. Societies need to reconceptualize the actual and the ideal places of people in ecosystems. Perceptions need to be aligned with actualities, and ideals need to be implemented. Essential to these endeavors is developing deeper, more nuanced understandings of the fluid relationships both among peoples and between peoples and environments in specific places and moments, as well as over time and across space. Writing, reading, and analyzing literature – openly imaginative texts with clear aesthetic ambitions – can perform important roles in this undertaking. Literature has the power to move us profoundly as it exposes how people dominate, damage, and destroy one another and the natural world. It also allows us to imagine alternative scenarios. As the acclaimed environmental critic Lawrence Buell has argued, “For technological breakthroughs, legislative reforms, and paper covenants about environmental welfare to take effect, or even to

be generated in the first place, requires a climate of transformed environmental values, perception, and will. To that end, the power of story, image, and artistic performance and the resources of aesthetics, ethics, and cultural theory are crucial.”³

Literature’s regular and often blatant defiance of logic, precision, and unity enables it to grapple more insistently and penetratingly than many other discourses with ambiguities in general and with those arising from interactions among people and ecosystems in particular. More specifically, literature’s intrinsic multivalence allows it to highlight and negotiate – reveal, (re)interpret, and shape—the ambiguity that has long suffused interactions between people and environments, including those interactions that involve human damage to ecosystems. Ambiguity here emerges not primarily as an ethical or aesthetic value but as a symptom of epistemological uncertainty that is parsed both sympathetically and exactly as a deficit of consciousness and/or implicit confession of the impotence of writers and literary characters.

Environmental ambiguity manifests itself in multiple, intertwined ways, including ambivalent attitudes toward nature; confusion about the actual condition of the nonhuman, often a consequence of ambiguous information; contradictory human behaviors toward ecosystems; and discrepancies among attitudes, conditions, and behaviors that lead to actively

downplaying and acquiescing to nonhuman degradation, as well as to inadvertently harming the very environments one is attempting to protect.⁴

These imbricated forms of ecoambiguity are fundamental attributes of literary works that discuss relationships between people and the nonhuman world, including Ishimure's *Sea of Suffering*



Ishimure Michiko

Sea of Suffering is a stirring exposé of the environmental tragedy of Minamata disease, a horrific form of mercury poisoning involving severe brain damage, neurological degeneration, physical deformities, numbness, slurred and spontaneous speech, involuntary movements, unconsciousness, and death. The narrator includes accounts of her own interactions with Minamata patients and their loved ones and experiences fighting corporate and government bureaucracies that refuse to acknowledge, still less accept responsibility for, their pain and loss.

She also incorporates moving stories of Minamata patients in their own voices and those of their families and friends. In addition, she contextualizes the experiences of the Minamata villagers, discussing pollution incidents elsewhere in Japan and the world. By incorporating poetry, fictional and nonfictional prose, medical, scientific, and journalistic reports, accounts of the rich cultural history of the towns on Minamata Bay and the Shiranui Sea, and lyrical depictions of the region's landscapes, *Sea of Suffering* openly defies narrow definitions of genre and, more important, underlines the interdependence of scientific, social scientific, and humanistic interpretations of the experienced world. Including local dialect whenever possible, the narrator accentuates the distance of Minamata from Tokyo power centers.

Ishimure's novel loops back and forth in time, denying human suffering a beginning and an end. Demonstrating an explicitly ecocosmopolitan consciousness, it also refuses suffering any clear spatial borders. The narrator speaks repeatedly of the Ashio copper mine incident and Niigata Minamata disease, the latter of which creates in her mind the vision of a "deep, fissurelike pathway [*fukai, kiretsu no yō na tsūro*] that with a cracking sound ran the length of the Japanese archipelago" (218).⁵ With Minamata located on the western coast of Kyushu, well north of the Japanese archipelago's southern tip, and Niigata on the western coast of

Honshu, far south of Japan's northernmost point, the narrator indicates that the tragedies shared by these two cities have reverberated well beyond their axis; not only does the path (*tsūro*) of suffering join Minamata and Niigata, it also extends hundreds of miles farther, to Okinotorishima and Bentenjima, Japan's southernmost and northernmost points. The word *tsūro* is significant: it implies a well-established passageway, but one that separates even as it connects. Not only does it call attention to the fragility of the Japanese islands themselves, fragility accentuated by audible cracking, it also points to the country's many chasms, particularly between polluters and fishers/farmers, the wealthy and the impoverished, and the healthy and the infirm, gaps that threaten the stability of Japanese society. *Sea of Suffering* also moves outside Japan, exposing the Chisso Corporation's controversial history in colonial Korea, including its factories in Hŭngnam and damming of the Yalu River between China and Korea.⁶ The narrator discusses the plight of Koreans under Japanese control more generally, referencing Korean deaths in the atomic bombings of Hiroshima and Nagasaki. In her afterword, Ishimure condemns Chisso's clandestine attempt in the late 1960s to export to Korea containers of poisonous mercury effluent. Here and elsewhere the novel explicitly describes Minamata disease as having regional if not global implications.



Minamata, and the Minamata Bay within the Shiranui Sea

Taking place in a developmental state, *Sea of Suffering* depicts government-sanctioned environmental exploitation for economic development; Chisso's close ties with the government are part of an industrial policy organized by private businesses and the national bureaucracy.⁷ So, not surprisingly, the narrator of *Sea of Suffering* explicitly condemns state-sanctioned capitalism for encouraging the sacrifice of human life for financial gain. She repeatedly censures the unchecked desire for profits that led Chisso first to dispose of its untreated waste in the waters surrounding Minamata without ascertaining that this would not harm local residents, then to continue doing so even after the toxicity of its emissions became indisputable; she denounces the analogous greed that for decades enabled the Japanese government to condone Chisso's actions, in practice if not always in legislation. The narrator also frequently reproaches Chisso and the Japanese government for failing to admit responsibility, much less compensate or provide

medical care, for people suffering from Minamata disease. And she asserts that not only the government and Chisso are to blame; many living in the long-impooverished Minamata region were so grateful to the company for improving their standard of living that they turned against neighbors who had contracted Minamata disease and refused to acknowledge their plight. As the narrator observes: "Minamata disease is becoming more and more of a taboo topic among the people of Minamata. They think that if they speak of the disease, then the factory will collapse, and if the factory collapses, the town of Minamata will disappear" (233). On the other hand, the novel does not depict this fear as entirely unfounded. The narrator indicates that some residents of Minamata and its environs were so impoverished before the arrival of Chisso that they fled Japan for China and Southeast Asia, where they toiled as laborers and prostitutes. Nonetheless, highlighting both the physical suffering and the emotional isolation of Minamata patients, the narrator and many of the characters in *Sea of Suffering* condemn economic, political, and social systems that make it relatively easy to damage human lives.

The narrator's and many Minamata residents' deep concerns with human anguish and human-on-human cruelty contrast sharply with their attitudes toward the natural world. On the one hand, the narrator and most Minamata patients idealize symbiotic, mutually beneficial contacts

between people and environments, contacts that in light of Chisso's widespread pollution now exist mainly as memories or aspirations. On the other hand, these same individuals show concerns about the health of the nonhuman primarily because of its direct impact on human health. Moreover, some Minamata patients explicitly state their belief that the natural world exists for their benefit, to do with as they please and to pass down to their progeny. To be sure, neither the narrator of *Sea of Suffering* nor her characters seem aware of their contradictory attitudes toward their surroundings, not quite grasping their anthropocentrism. In addition, *Sea of Suffering* does not explicitly discuss actual or potential effects of this type of anthropocentrism (local people believing nature exists primarily for human consumption) on environments. When *Sea of Suffering* was published, the actual consequences of these conflicting outlooks appeared minuscule in the areas around Minamata; they still do today, more than four decades later. But factories, power plants, and commercial farming, fishing, and whaling are not the only elements capable of damaging ecosystems, and it is important that we step out of our usual comfort zone of blanket condemnations and commendations alike and think more closely about how we all relate to environments.

The narrator of *Sea of Suffering* celebrates the harmonious interactions Minamata residents

once enjoyed with their surroundings; the novel's opening passage depicts the town's ecosystems before Chisso's arrival as healthy, well-integrated places where people, their cultural artifacts, and the nonhuman all flourished. The narrator accentuates the synchronization of human and nonhuman life by portraying them as undulating together peacefully: boats and baskets float on gently rippling water, while voices meander through foliage. People disrupt the sea, but only superficially; their splashes in open water are insignificant, while gushing springs enclosed in wells are safe havens for animals. In fact, as the narrator stresses in the novel's opening line, nature, in the form of typhoons, is more disruptive than people:

The village of Yudō surrounds a small bay where the waves billow only with the typhoons that come once or twice a year.

In Yudō Bay, small boats, sardine baskets, and the like floated atop gentle ripples that were akin to tickling eyelids. Naked children played there, jumping from boat to boat and splashing in the water.

In the summer, the voices of those children rose through tangerine groves, oleanders, tall sumacs with coiled bumps, and stone walls, and could be heard in the houses.

At the lowest part of the village, at the base of the terrace right by the boats, there was a large old well—the communal washing place. Small minnows and cute red crabs played in the shadows of the moss on the stone walls of the large four-sided well. This kind of well where crabs lived was without a doubt fed by a pure gushing rock spring of soft-tasting water.

Around here springs gushed even at the bottom of the sea (8-9).

Speaking first of a human settlement (the town of Yudō) as surrounding a small, peaceful nonhuman body (a bay of the same name), then homing in on human cultural artifacts (boats, sardine baskets), followed by people (children) interacting with the larger nonhuman space (Yudō Bay), *Sea of Suffering* points immediately to the water as a peaceful site of human/nonhuman intermingling. Although they take life from the waters, small boats and sardine baskets seem almost to have become part of them.

The second sentence indicates that waters gently rise and fall, but not because of human intrusion; boats float on rather than cause ripples. In fact, by following the references to fishing vessels and equipment with mention of children jumping among boats and splashing in the water, the narrator emphasizes how little impact trawling

has on the waters of Yudō Bay. Interestingly, even as boats take life from water, they also to a certain degree protect the water from people; some children jump from boat to boat rather than into the water. Fishing boats and baskets are left behind in the third paragraph, as the narrative moves slightly inland. Here children's voices rise through various nonhuman bodies (plants) and human cultural artifacts (stone walls) and infiltrate other human cultural artifacts (houses) some distance away – water, air, land, people, human creations, and flora all are tied together by voices at play. Even more significant is the scene at the well. The nonhuman home (the bay of the first two paragraphs) and the human home (the house of the third paragraph) here blend into a home integrated in both composition and occupancy. Also noteworthy is how the stone wall and the house merge into the stone well. A small body of water, the well, is surrounded by rocks arranged by people and fed by a rock spring; the gathering place of moss, marine life, and people, this structure built and used by humans is also a comfortable home for the nonhuman. In the fifth paragraph, which shares with the fourth a reference to gushing springs, the spotlight shifts back to the sea. The narrator's careful choice and placement of images in these opening lines reinforce impressions of human/nonhuman symbioses.

Taking the reader back to the well and then out again into open waters, the next several

paragraphs continue in a similar vein. The narrative lens pans out: to Yudō, both town and bay, are added the names of adjacent bodies of water, pieces of land, and human settlements. Then suddenly, in the final paragraph of the novel's first section, the narrator indicates that this region also is home to the greatest number of Minamata cases. After listing the towns and villages most affected by the disease, she concludes: "The Chisso Corporation's Minamata factory had its drain in Hyakken Harbor" (9-10). This abrupt turn is one of many in *Sea of Suffering* the narrative constructs a scene of enduring, near perfect harmony only to undermine it almost completely by displacing fresh, gushing springs that nourish everything from small wells to the sea with factory effluent that poisons ecosystems of all kinds.

Besieged in turn by devastated environments, people are both the polluters and the polluted. The narrator later explains, "Organic mercury never appeared directly in front of people. It lurked densely where people went through the routines of daily life – where they fished the mullets, caught the octopuses under the clear sky, and angled in the night, surrounded by the nocticulae. It infiltrated deep into the human body together with people's food, their sacred fish" (107). This passage reveals how the very animals on which the fishers depended for livelihood and life, for physical and spiritual fulfillment, now hasten their deaths, economic

and corporeal. The narrator emphasizes that mercury is not an obvious opponent; it does not simply appear in front of people for them to dodge at will. Instead, it first “lurks densely” (*bisshiri hisonde i*) in the nonhuman and then, having been consumed, “infiltrates deep into people’s bodies” (*hitobito no tainai fukaku moguri*)-insistently.

Repeating the character 潜 (*hisomu*); *moguri*) the narrator stresses not only mercury’s stealthy invasion but also its deep penetration of both humans and animals.

Yet this reality, even when recognized, does not dampen local people’s deep emotional attachments to poisoned waters and animals. For instance, as Yuki, one of the patients, exclaims: “Is there anything more beautiful than fish? . . . I believe the Palace of the Dragon King [*ryūgū*] really does exist on the bottom of the sea. I’m sure it’s as beautiful as a dream. I just can’t get enough of the sea . . . I long to go out to sea again, just one more time” (123). By evoking the Palace of the Dragon King (i.e., the palace of the sea god), a frequent presence in myths and legends including that of the fisherman Urashima Tarō, whose reward for rescuing a turtle is a visit to this magical place, the narrator points to a more innocent time, however constructed. Also noteworthy is her conviction that despite what has happened to Minamata’s ecosystems, not everything has been destroyed; great splendor is still to be found, albeit far from Minamata. Asking rhetorically if there is anything more

beautiful than fish, Yuki underscores her wonder for the natural world; she implies that even the magnificent, imagined Palace of the Dragon King is not as glorious as these aquatic animals. The sea that houses fish (in actuality) and palaces (at least in the imagination) pulls at her ever more



Shiranui sea scene

The nonhuman continues to entrance the residents of Minamata, but for the most part *Sea of Suffering* portrays it as discussed – by government and corporate officials, scientists, journalists, teachers, activists, fishers, Minamata patients, and the narrator alike – primarily in terms of its service to people, whether as a vital source of human physical and spiritual nurture or as a convenient space for dumping waste. Clearly, concern for human suffering trumps concern for nonhuman suffering. People are alarmed by the mercury levels in fish primarily because they depend on fish for nourishment. Likewise, people grow worried when confronted by cats with visible symptoms of Minamata disease mainly because they fear the fate of the

cats might soon be their own; for their part, scientists study cats precisely because they believe that understanding the suffering of these animals will provide insight into human distress. Few passages in *Sea of Suffering* decry or even mention animal suffering without immediately linking it to human trauma.⁸

These priorities are to be expected considering the severe human anguish caused directly by contaminated fish and prefigured by cats; human and nonhuman suffering are intimately connected. Likewise, violence by people against people is a central part of the Minamata story, one that, as the hybrid and whirling narrative structure of Ishimure's novel suggests, needs to be continuously repeated in words, lest it be repeated in behaviors even more frequently than it already is. But those characters in *Sea of Suffering* who believe nonhuman suffering worth considering regularly suggest that this is because of its direct connection with human distress.

Such privileging of human suffering raises several important questions. How severely must animals, plants, and other elements of the nonhuman damaged by people in turn harm people before people are moved to remediate and prevent further devastation of environments? To what extent are ameliorating and foiling destruction of environments deemed important only when human health is clearly at stake? Ishimure's novel emphasizes that, in the case of Minamata disease, the people who

become concerned about or even protest ecodegradation nearly always have little to lose. This includes those who have already become ill (Minamata patients) or even more deeply impoverished (fishers with nothing to catch) as well as concerned outsiders (journalists, intellectuals, artists) who champion causes without making significant personal sacrifices. *Sea of Suffering* contrasts these two groups with those threatened by economic catastrophe: Chisso, the Japanese government, and the many local residents not afflicted with Minamata disease who are terrified that Chisso will be forced to close its doors.

What these groups often fail to realize is that although they in some ways have much to lose economically, they are not as far removed as they might imagine from the experiences of those whose suffering is already visible. Most obviously, the residents of the Minamata area who oppose the anti-Chisso protests are themselves at some risk of contracting Minamata disease. Also important is the narrator's suggestion that Tokyo – home to the Diet officials who eventually are persuaded to travel to Minamata – might in fact be just as polluted as the environs of the Shiranui Sea. Suffering as well from overpopulation and overconsumption, especially of automobiles, the Japanese capital hardly provides a benchmark of ecological health. As the elderly fisher Ezuno notes partway through his rhapsody on the beauties of the sea:

“I heard that in Tokyo cars line up on the roads, outnumbering people, who can’t walk on the roads. Houses and people both are rapidly multiplying, and even sunlight doesn’t filter down to them . . . They say the people in Tokyo live pitiful lives. From what I’ve heard the fish paste they eat is made of rotten fish . . . People who live in Tokyo never get to know the taste of fresh fish. They live their entire feeble lives without seeing the sun” (159-60). Ezuno first claims that cars outnumber people and then that people and their homes multiply rapidly, effectively filling up horizontal and vertical space. City dwellers live under extreme conditions: their homes and automobiles thrive, but they lack space, light, and fresh food, and even their fish paste comes from putrid animals. Ezuno suggests, however unwittingly, that Tokyo officials, already inured to environmental degradation, simply take for granted, however unconsciously, much of what has happened in the Minamata region. In fact, the area’s bright sunshine and relatively clear skies can make it appear more ecologically robust than the Japanese capital. On the other hand, if Minamata disease had affected only cats (i.e., if people, unlike cats or fish, could tolerate mercury), would the fishers have had sufficient resources to investigate why these animals were sick? More important, are people who suffer or watch a loved one suffer from an illness as debilitating and horrific as Minamata disease capable of reflecting on nonhuman suffering? Should they

be expected to do so? *Sea of Suffering* implies that these three questions merit a negative answer and that this is part of what makes preventing and repairing ecodegradation so difficult. The best hope may be concerned outsiders, including the journalists, intellectuals, and artists to whom Ishimure refers, who seemingly have less at stake. But the narrator exposes these persons as fickle: their interest in human and nonhuman suffering lacks the deep roots required for finding solutions.

A concern for nonhuman health because of its link to human health closely relates to the view that the nonhuman is in the service of humans, a perception shared even by those with deep emotional connections to nature. In fact, in highlighting such environmental ambiguity (respecting the nonhuman and believing it to be at their service), *Sea of Suffering* unwittingly posits certain congruencies between local people’s attitudes toward the nonhuman and the outlooks of the Japanese government and the Chisso Corporation.⁹ Japanese authorities and Chisso officials, like high-ranking employees of most governments and corporations, believe ecosystems are at their disposal, to be used as they see fit. And in certain ways, paradoxically, so too do the people of Minamata, largely because of their profound attachments to these bodies of water.

Sea of Suffering cites Minamata residents as claiming that the sea “resembles” or is “like”

both their own garden, and, even more strikingly, their own sea. The people of Minamata generally stop short of declaring the sea to be “theirs,” preferring to focus on its similarities with rather than identification as personal property, but their repeated assertions of near ownership put them in some awkward positions. At times such attitudes stem at least in part from desperation. As one of the local residents asserts, “I’ve neither rice paddies nor fields to leave my family. Just the sea, which I think of like my own sea [*umi dake ga, waga umi to onaji yō na mon de gozasu* ^{lit.} Only the sea, which I think of as something that is the same thing as my own sea]” (167). The language could not be clearer. At the same time that this individual laments his destitution, he reveals that it accentuates his perceptions of ownership; lacking rice paddies and fields, he claims the much greater area of the sea. Here poverty, not wealth, enables exaggerated declarations of ownership.

Other characters in *Sea of Suffering* liken the sea to personal gardens that are in no danger of disappointing their owners. Yuki, for instance, reassures her husband Mohei that they will have little difficulty finding fish. She reminds him, “I’ll take you to a place teeming with fish. I’ve been at sea since I was three; I grew up on a boat. The area around here is like my own garden [*kokora wa waga niwa no gotaru to* ^{lit.} And anyway, they say Ebisu [the Japanese god of fishers; one of the

Seven Gods of Good Fortune] has deep compassion for boats with women” (112). Not only is the sea nearly one’s own, it is treated as a garden; harvesting the sea as one would a garden is not simply sanctioned, but encouraged. Belief that Ebisu regulates the sea, or at least that he helps ensure a steady catch, appeases concerns that the couple will go hungry. But in so doing it also liberates Yuki and Mohei from responsibility for this space. The area around her home is “like” her garden, but it is not actually hers, so she is not responsible for maintaining its fecundity.

For Ezuno, the sea not only is the natural extension of people or their property, from which they can harvest food at will, it also makes them believe the entire planet is at their disposal: “There was the sea, like a field or garden stretching from our houses, and whenever we went, there were fish [*waga uchi ni tsuitoru hatake ka, niwa no gotaru umi no soko ni atte, sakanadomo ga itsu itatemo, soko ni otto de gozasi* ^{ken} Out on the sea, it’s as though the whole world is yours [*umi no ue ni oreba waga hitori no tenka ja mi* ^{ne} (159-60). Ezuno does not pronounce that people own the sea, and he stops just short of claiming that the sea resembles their private gardens, declaring instead that the waters stretch out from their houses like fields or gardens of undetermined provenance (*hatake ka, niwa no gotaru umi* ^{vs.} Ezuno’s *waga niwa no gotaru* [*umi*] and the *waga umi* of the Minamata resident cited above). But these more ambiguous conditions

stimulate more grandiose understandings of possession: it is the world, not the sea, that they believe their own.

Perceptions like Yuki's and Ezuno's leave little allowance for endangered stock. To be sure, some fishers advocate gluttony, if only in jest, the narrator noting that the favorite saying of the fisher Masuto was "A fisher who can't eat a bucket of sashimi in one sitting is no fisher" (128). But most who believe fish a gift pride themselves on taking from the sea only what has been sanctioned from above. Ezuno stresses that "Fish are a gift from heaven. We take as much as we need . . . All our lives we have eaten what heaven has given us" (162-63), implying that the sea is bountiful and heaven generous. And the narrator remarks that for Yuki and Mohei "the catch was not terribly large; they spent their days fishing in moderation" (112). Together, these and many similar statements underscore the ready fusing of feelings of connection with those of usership rights, a combination that is not inevitable but one that is strikingly prevalent and can have potentially grave consequences for environments.

Indeed it is significant that Yuki and Mohei believe there is nothing wrong with continuing to fish even when the supply of marine life has notably decreased; they are proud that they do not take more than they need, but they do not stop to consider what will happen when what they need is more than the waters can provide, a

possibility that is not purely hypothetical. Immediately before remarking that the sea is like her own garden and that Ebisu is looking out for her, Yuki notes, "I remember that at that time [when Yuki and Mohei were looking for fish] fish had already disappeared from the sea around Hyakken. But I knew better than the Minamata fishers where there were fish" (112). Not surprisingly, fish populations in Hyakken harbor, where Chisso discharges its wastewater, have plummeted. Pockets of fish remain in other locations, and people believe that knowledge of the waters, and guidance from the gods, will help sustain Minamata fishers. But Yuki is seemingly undisturbed about these losses and by the fact that she and her husband need to travel farther to find food. Yuki appears unconcerned about both piscine and human futures; the sea is so abundant and the gods so generous that even if one space is depleted there are infinite substitutes just a short boat ride away.

And it is not just Yuki; the narrator indicates that over the years many local fishers have exhibited similar tendencies. Earlier in *Sea of Suffering* she describes the time-honored custom of gray mullet fishing in Minamata. She notes that fishers long had "competed with one another for the season's largest gray mullet catch" (63). Beginning in the early 1950s neither they nor their counterparts in nearby Tsunagi could get a single gray mullet to bite, no matter how carefully they tweaked conventional fishing

techniques; the populations of other animals also decreased dramatically. The fishers talked with one another about these strange conditions, but their discussions appear to have become snagged in a debate about whether the depletion of marine life in Tsunagi had anything to do with similar events in Minamata. The fishers appear to be uninterested in investigating the reasons behind the sudden disappearance of the mullet, shrimp, gizzard shad, sea bream, lobsters, and other creatures on which they have long depended. Instead, they are said to have sold their fishing supplies and invested in flashier nets, which were not only ineffective but were also quickly consumed by a rat population that exploded because of a dearth of cats. Not long thereafter, the narrator reveals, the newly bankrupt fishers began poaching to survive. Lacking the perspective to seek more sustainable alternatives, they believed this was their only choice.

Without question, industrial pollution usually involves more rapid and severe damage to the biotic and abiotic nonhuman than do conventional fishing, hunting, and farming by local peoples. But corporate and local attitudes vis-a-vis environments, particularly perceptions of appropriate relationships between people and other species, are not as dissimilar as might first be assumed. *Sea of Suffering* implicitly raises an extremely important question in this regard. How different is it for a corporation to think it

appropriate to use the sea as a dumping ground from a town to assume it can use the sea as its source of nourishment, even if so doing involves hunting down its last remaining fish? Although these two outlooks seem to diverge greatly, when translated into behaviors, as they often are, distinctions can become more ambiguous. As Jared Diamond's *Collapse* and much other scholarship has shown, there is little to prevent what seems to be sustainable use from eventually triggering catastrophe.

The narrator of *Sea of Suffering* distinguishes clearly between the villagers' directly killing animals for survival and Chisso's indirectly killing animals for profit; the former is portrayed as sustaining people, the latter as destroying both people and environments. But a persistent question remains: what will happen when nonhuman reproduction no longer keeps pace with human demand? As Gregory M. Pflugfelder notes, paraphrasing Conrad Totman:

When we try to understand the dynamics of human-biosystem relations, it is well to bear in mind that how we humans think about other animals (or about plants) carries little weight when compared to the level of our capacity to manipulate or otherwise affect the world around us. If we need or want something badly enough, and have

the capability to obtain it, it seems, we will soon devise a rationale to justify doing so. Sadly, the record of human history suggests that it is a matter of little consequence [as people see it] whether any other members of the biosystem – including weaker humans – are inconvenienced by the enterprise.¹⁰

Sea of Sufferings foremost a stirring portrait of the physical and psychological anguish of the human victims of Minamata disease, one that includes many painful passages on the suffering of Minamata patients and their families. Employing local discourse, the narrator never allows the reader to forget that despite the environmentally cosmopolitan implications of Minamata disease, this illness was for many a deeply personal ordeal. Yet Ishimure's novel also sheds important light on conflicting attitudes toward ecosystems, not only between but also within groups and individuals. Most frightening, perhaps, is how regularly these ambiguities go undetected. The novel does not directly address the potential impacts of local people's attitudes, when translated into behaviors, on the long-term health of ecosystems. But it does reveal attitudes toward the nonhuman as complex, and often contradictory, particularly in cases of significant human suffering brought about by a degraded environment. Manifesting ecocosmopolitanism most directly are the narrator's references to

cases of Minamata disease in places far from Minamata and her mention of other instances of human-induced suffering in Japan and elsewhere. Likewise, the narrator acknowledges Minamata disease as but one manifestation of the problematic relationships among people and between people and the nonhuman, relationships frequently independent of culture and nationality. Just as significant, but not addressed explicitly, is the prevalence in many societies of ecoambiguity such as that found in *Sea of Suffering*. Although often unrecognized, the attitudinal clashes exhibited by Minamata fishers differ little from those of fishers and rural peoples in other parts of Japan, East Asia, and elsewhere in the world.

Conflicts between behaviors and physical conditions are just as frequent as those among attitudes, and many literary works that address human-induced environmental disruption portray disavowing this damage – acquiescing to it by denying responsibility for ecodegradation and/or knowing about but dismissing (potential) ecodegradation – as a common response to and facilitator of compromised ecosystems. This disjuncture between behaviors and irrefutable physical conditions plays a central role in *Sea of Suffering*. Ishimure accentuating the extent to which governments, corporations, citizens' groups, and individuals will go to refute that environmental degradation exists or, when overwhelming evidence to the contrary makes

such denial impossible, to reject responsibility for it, minimize its seriousness, and strive to expunge it from public consciousness. *Sea of Suffering* shows disconnects between obvious physical evidence (nonhuman spaces that are clearly polluted; people who are unquestionably disfigured) and the behaviors (disavowals, including both active denials and conscious indifference) of many in the Japanese government, the Chisso Corporation, and residents of Minamata and surrounding towns.

Although most creative texts concerned with damage to environments address indifference toward and denials of this damage, *Sea of Suffering* is one of a subset that stresses the central role of these behaviors in causing and facilitating environmental degradation. More so than many narratives, it also specifies the reasons behind such disavowals, as well as their consequences. The novel devotes significant attention to alternatives, contrasting denials of Minamata disease with the great compassion for the afflicted demonstrated not only by the families and close friends of Minamata patients but also by the Japanese medical community and sometimes by members of groups known primarily for their disavowals. Incorporating other instances of industrial pollution both in Japan and abroad, Ishimure's text eloquently exposes denial of environmental degradation as a nearly global phenomenon, one endemic in human societies. On the other hand, the

disavowals do not go unchallenged.

Many individuals featured in *Sea of Suffering* not to mention the narrator and the novel itself, actively reject their validity. Early in the novel the narrator cites Sensuke, an elderly man who succumbed to Minamata disease, as having declared his a "disgraceful, unsightly illness." The narrator claims that these terms describe not only the disease but also those "who caused this incident, concealed it, disregarded it, and tried to make people forget about it" (57). Most reprehensible, according to the narrator, is the Chisso Corporation. In 1959 scientists prepared a report indicating that Chisso's daily discharges of toxic, mercury-laden wastewater into Minamata Bay were the likely cause of Minamata disease. Yet rather than cooperate in subsequent investigations, for many years the corporation did everything it could to deny its role in propagating this disease, including pumping wastewater under cover of night and prohibiting scientists from taking samples from the bay. The narrator describes some Chisso employees as sympathetic to the plight of Minamata patients, even alerting residents of Minamata to Chisso's plans to divert their wastewater channel to another location; similarly, researchers from the Chisso company hospital contribute to efforts to understand the disease better. And at its August 1967 meeting the Chisso First Union issued a declaration condemning its own failure to fight Minamata disease and affirming its commitment

to do so in the future. But for the most part, *Sea of Suffering* paints Chisso as an absolute villain, one that denies any connection between factory wastewater and Minamata disease yet prohibits scientists from studying the wastewater; one that does everything it can to avoid paying indemnities and instead continues to discharge poisonous effluent, thus expanding the number of people who may demand compensation; and one that delays dispatching employees to visit hospitalized Minamata patients until 1965, more than a decade after the outbreak of the illness. The narrator comments:

Looked at from today's perspective, the noble and strong personality and the superior investigative research of Dr. Hosokawa [one of the premier researchers of Minamata disease] into the outbreak and spread of Minamata disease provides a fantastic contrast with all the attitudes [and behaviors] exhibited by the Chisso Corporation (69).¹¹

Acknowledging Minamata disease belatedly in 1968 and only with great reluctance, the Japanese central government is described as largely responsible for facilitating Chisso's disavowals. This contrasts with local political bodies, which although relatively ineffective, show considerable concern with the spread of

Minamata disease and establish various investigative groups.

Yet throughout *Sea of Suffering* the narrator highlights the tragedy of this situation: the greater and more widespread the suffering of those affected physically or economically (fishers with no market for their contaminated catch, or even with nothing to catch), the greater and more persistent the efforts of those not affected to disregard their suffering, both Chisso and bystanders in the local population. Commenting on the presumably deliberate misperceptions of the local Public Health Department concerning Minamata disease, the narrator notes that "The strange illness continued to work its way steadily along the coast of the Shiranui Sea, moving from one village to another. The true nature of the strange illness was not officially declared, but the incidents and their ramifications slowly continued to tear apart people's lives and hearts" (179).

Sea of Suffering underscores how national politicians and other government employees downplay if not disavow Minamata disease. To be sure, the central government is depicted as initially being concerned about the illness. The narrator notes that in 1957 the Ministry of Education established the Minamata Disease Comprehensive Research Group, a unit composed primarily not of Chisso officials but instead of presumably impartial doctors from Kumamoto University Medical School. The

group's report identified organic mercury as the most likely cause of the disease and pointed to Chisso's practice of pouring untreated wastewater into Minamata Bay. Despite these findings, the Japanese government for many years did not prohibit Chisso from continuing to deposit outflow, nor did it enact measures to clean polluted waters or to help those stricken with Minamata disease. These disavowals of the significance of this illness marked the beginning of decades of frustrating struggles by Minamata patients and their families with both the central government and Chisso.

Like Chisso officials, national politicians and bureaucrats are depicted as disavowing Minamata disease for a variety of reasons: financial dependence of the town, region, and nation on industries like Chisso; inability to appreciate the suffering of Minamata disease patients and the significance of the damage inflicted on local ecosystems; and simple heartlessness, including the belief that because Minamata disease affected such a small, rural, and impoverished segment of the Japanese population it did not merit attention. This is particularly true of Japan's central government. In his report on the Minamata Disease Policy Committee's visit to Tokyo in 1957, City Assemblyperson Hirota Sunao recalls that officials in the Welfare Ministry not only had never heard of Minamata but upon learning that the disease affected mostly indigent fishers,

claimed it too trivial a matter to pursue. Those who listened to their petition did so only to be polite and were eager to see them depart (79).

The meeting in Minamata between Diet representatives and the Municipal Assembly two years later (November 2, 1959) is no more productive. The narrator describes this encounter as resembling a "cross-examination" (76). Diet members take advantage of the recently elected mayor's inexperience with politics and his relative unfamiliarity with Minamata disease and its effects on the town. The narrator laments: "Both the regional administration and the Diet were supposed to be looking out for the people, but it was inevitable that the meeting between the two sets of officials, with their different agendas, would become a confrontation between the authority of the Diet and the powerless impoverished" (77).

The narrator speaks on several occasions of the national government's long history of disavowing industrial pollution, and of its failure to confront much less prevent such occurrences. She reminds readers of the Ashio copper mine incident (1880s) and how the rights of local farmers near Ashio have yet to be recognized nearly a century later, indemnities have yet to be paid, and a commission has yet to be established to study Japan's first modern pollution event. And she accuses the Japanese government more generally as having "a policy of abandoning its people" (*kono kuni no kimin seisa*)⁽²³⁴⁾. In 1968

– fifteen years after the first instances of Minamata disease and four years after the first cases of mercury poisoning in Niigata (Niigata Minamata disease) – the Japanese government at last declares Chisso entirely responsible for Minamata disease. But the narrator is quick to note that this admission by no means resolves the struggles of those afflicted with the disease.

The most troubling disavowals of Minamata disease come from residents of the Minamata area who fear that acknowledging both the severity of water pollution and Chisso's culpability in instigating it will further destabilize the region's already precarious economy. Although a number of local government bodies take the disease seriously, many individuals chastise Minamata patients and other activists for threatening the welfare of their town. The narrator includes an article from the October 19, 1968 Kumamoto edition of the *Mainichi shinbun* (Mainichi Newspaper) describing the Development of Minamata City Citizens' Conference. The conference prospectus chastises those residents who have been intent on having Chisso admit its wrongdoing and modify its behavior; conference participants support those afflicted by Minamata disease but insist on continued cooperation with Chisso.

Significantly, disavowals by Chisso, the central government, and residents of the Minamata area forestall not only the prevention of further outbreaks of the disease, compensation to

Minamata patients and their families, and remediation of environments, but also further protests by Minamata activists. The narrator emphasizes what a difference it makes to be taken seriously by the authorities, not only in the form of increased outside intervention (more government regulation of and sanctions against polluters) but also in empowering the afflicted. One sad example is a meeting with Minamata fishers when Diet members visit the town (November 2, 1959). The fishers are delighted at the opportunity to share their experiences with the Japanese authorities, who treat them with respect and listen solemnly as they detail the crises facing their community. They are so emboldened by the compassion shown by Diet members that later that day several thousand of them hold a protest rally at the Chisso factory; the rally quickly turns violent, injuring several factory workers and dozens of fishers and police. The narrator declares it unlikely that the principal cause of these riots, as often is argued, was the inability of union leaders to control their subordinates. Instead, she claims that "The real essence of the problem lay elsewhere. The situation probably resulted from the fact that measures to fight Minamata disease have until today been almost entirely neglected . . . We can say that responsibility for the inauspicious incidents of November 2 lies with the lethargy of the authorities" (97-98). Had authorities at almost every level not had a history of disavowing the seriousness of Minamata disease,

the meeting with Diet officials likely would not have made as deep an impression on the fishers and would not have inspired a riot. Yet the question is not whether the fishers storm the Chisso factory, but when. Had their problems been taken seriously by the authorities from the outset, those physically and economically affected by Minamata disease might, as the narrator suggests, never have felt the need to resort to violence. But there is also a strong possibility that they might have marched on the factory sooner. Earlier activism could have resulted in increased repression, but it also might have motivated the authorities to respond more quickly to the pollution of the waters around Minamata, saving no small number of lives.

Sea of Suffering exposes not only the terrible suffering experienced by those stricken with Minamata disease but also the many political, social, and economic forces that, in denying this suffering, allow it to proliferate. Ishimure's novel trenchantly reveals that even the most obviously debilitating conditions – as photojournalism such as the work of W. Eugene Smith and Aileen M. Smith revealed, Minamata disease is anything but a silent killer – are repudiated in the name of social stability and commercial profit. People are depicted not only as doing nothing when faced with ecodegradation but also as actively fighting against measures to remediate existing damage and prevent future harm to environments. In her afterword, Ishimure declares hers a “fragment of

a book” (258). The novel is hardly a fragment. But one important question it raises yet leaves unanswered is whether, with disparities between conditions and behaviors so extreme, with even the most obviously debilitating and painful disease so readily disavowed, there is any real hope of diminishing, much less preempting, environmental crises.

Discourse on environmental and disciplinary crises abounds. Many contend that ecological calamities are likely to be the most pressing issues of the twenty-first century. Many also argue that literature scholarship and the humanities more generally are in flux. These dilemmas will not be easily resolved. But scholarship on individual cultures provides vital foundations for comprehending specific contexts of ecological abuse. The fields of comparative and particularly world literature help us appreciate more fully how creative writing and scholarship on creative writing can both reinforce and defy national, cultural, linguistic, geopolitical, and ecological divisions. Ecocriticism and other branches of environmental humanities demonstrate especially clearly the exciting possibilities for humanistic intervention in ecodegradation. Yet there is much work to be done. To understand better the cultural products to whose study we devote our professional lives, humanists need to increase their collaboration not only with one another, but also with colleagues in the social,

physical, and life sciences. Even more important, we need to become and to encourage our students to become more actively involved in the social and ecological movements that address the key issues of our times.

This article was prepared as an introduction to the author's **Ecoambiguity: East Asian Literatures and Environmental Crises**. (Michigan 2012)

Karen Thornber's Harris K. Weston Associate Professor of the Humanities in the Department of Comparative Literature at Harvard University. Having earned her Ph.D. in East Asian Languages and Civilizations at Harvard in 2006, she is the author of *Empire of Texts in Motion: Chinese, Korean, and Taiwanese Transculturations of Japanese Literature* (<http://www.amazon.com/Empire-Texts-Motion-Transculturations-Harvard-Yenching/dp/0674036255>) (Harvard 2009), which won both the Association for Asian Studies John Whitney Hall Book Prize (2011) for the best English-language book on Japan and the International Comparative Literature Association Anna Balakian Book Prize (2010) for the best book in the field of Comparative Literature in the last three years by a scholar under age forty. *Ecoambiguity: Environmental Crises and East Asian Literatures* (<http://www.amazon.com/Ecoambiguity-Environmental-Crises-Asian-Literatures/dp/0472118064>) (Michigan 2012) is her second book. Her

translation of the atomic-bomb writer Tōge Sankichi's *Genbaku shishū* (<http://www.worldcat.org/title/genbaku-shishu/oclc/033678529>) (Poems of the Atomic Bomb, 1952), published as an e-book (<http://ceas.uchicago.edu/japanese/Genbaku%20shishu.pdf>) by the University of Chicago Center for East Asian Studies, won the 2012 William F. Sibley Memorial Translation Prize in Japanese Literature and Literary Studies. She is currently studying Hindi and Urdu for her current book project, *Global Health and World Literature: East Asia and the Indian Ocean Rim*.

Recommended citation: Karen Thornber, "Environmental Ambiguity, Literature, and Ishimure Michiko," *Vol 10, Issue 24, No 2, June 11, 2012*.

Notes

¹ <link (<http://www.shosenkyo-kankoukyokai.com/b/>)>. Chichibu-Tama-Kai National Park is mainly in Yamanashi prefecture, approximately two hours west of Tokyo.

² Ishimure has worked for decades to educate people the world over about Minamata disease and to compel Japanese authorities to compensate more adequately Minamata disease patients and their families. *Sea of Suffering* her most famous literary work, is the first part of her trilogy on Minamata and one of her many writings on this tragedy.

³ Lawrence Buell, *The Future of Environmental Criticism: Environmental Crisis and the Literary Imagination* (Malden, MA: Blackwell, 2005), vi.

⁴ Although the two frequently overlap, attitudes are best understood as mental states and behaviors as actions we carry out toward other entities, including the nonhuman. Barbara Almond, *The Monster Within: The Hidden Side of Motherhood* (Berkeley: University of California Press, 2010), 8.

⁵ Translations are my own, based on Ishimure Michiko, *Kugai jōdo: Waga Minamatabyōn* [Ishimure Michiko *zenshū*]. (Tokyo: Fujiwara Shoten, 2004), 7–254.

⁶ During the colonial period Chisso built a network of factories in Korea, China, and Taiwan.

⁷ In a developmental state, business leaders and national economic bureaucrats together plan an industrial economy, but the means of production are in private hands.

⁸ The principal exception is an article from a supplement to the January 1957 issue of the *Kumamoto Igakkai zasshi* (Journal of the Kumamoto Medical Society), included in the novel's third chapter, that discusses the symptoms of a cat afflicted by Minamata disease (118–20). The narrator also includes several graphic descriptions of poisoned fish.

⁹ *Sea of Suffering* likewise reveals contradictions between local people's attitudes and actual behaviors toward animals, most significantly between the fishers' deep affection for and killing of fish.

¹⁰ Gregory M. Pflugfelder, "Preface, Confessions of a Flesh Eater," in Gregory M. Pflugfelder and Brett L. Walker, eds., *JAPANimals History and Culture in Japan's Animal Life* (Ann Arbor: Center for Japanese Studies, University of Michigan, 2005), xv.

¹¹ The narrator of *Sea of Suffering* frequently alternates references to Chisso's heartlessness with those to the dedication of medical researchers.