

# Relations

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*Finding Agency in Nonhumans*

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# A Sea Cow Goes to Court

## Extinction and Animal Agency in a Struggle Against Militarism

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### ABSTRACT

*In Japan's southernmost prefecture, Okinawa, the Japanese government is constructing a new military base for the United States Marine Corps despite ongoing local opposition and protest. Sea grass beds, which are potential feeding grounds of the critically endangered Okinawa dugong, are situated within the construction area. Because of its critical status close to regional extinction, the dugong was declared a Natural Monument of Japan in 1972, arguably putting it under protection of the United States National Historic Preservation Act in context of the base construction. Based on this assumption, and the dugong's cultural significance for the people of Okinawa, the issue was brought to an American court, a rare case where an animal plays a central role in a lawsuit dealing with cultural property. Based on Eduardo Kohn's anthropology beyond the human and his thoughts on life as a semiotic process the article explores the entanglements between dugongs and people. I argue that in this process dugongs play an active role. Through their interpretation of the generated indexical signs at the construction site and their resulting behaviour, these animals give humans the opportunity to convert their presence and absence into the sphere of symbolic human interaction.*

*Keywords:* base; court case; dugong; Eduardo Kohn; environmental justice; extinction; multispecies ethnography; Okinawa; semiotics; symbols.

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### 1. INTRODUCTION

Because I'm a woman from Okinawa, I will shortly speak about Okinawa. The sea of Okinawa still looks beautiful. Looking down onto it from a hill, named the 'hill from where one can see the dugongs' by people who have never seen a dugong, the sea still looks so beautiful. Into that sea, the relocation of an American army heliport was decided and to start the con-

struction, the government has already installed machines measuring the sea floor [...] But last month dugongs came back to that very sea. Exactly at that sea, where the heliport will be moved to, right above the machines that were installed by the government to measure the sea floor, a video of two dugongs, swimming in that ridiculously beautiful sea, was taken and the news spread throughout Okinawa [...] I don't know to what extent this news was broadcasted in mainland Japan, but the dugongs were very beautiful [...] I want to sing the following song only for those dugongs. (Neko3\_Paradisez 2016: 01:35)<sup>1</sup>

With these words, Cocco, a pop singer from Okinawa, introduced her song *Jugon no mieru oka* (literally: hill from where one can see the dugongs) at the 2007 Live Earth event in Makuhari Messe convention center, located a convenient one-hour train ride away from Tokyo's governmental district. Using the international platform of a benefit concert in the heart of Japan's megalopolis, she shed a light on a local struggle taking place in the waters of Okinawa Hontō, her home island, 1500 kilometers down south. The charismatic dugongs she referred to play an important role in a story of militarism and resistance, environmental destruction and protest, extinction and multispecies entanglements – a story that people and dugongs alike are still writing today.

In this article, I give an example from Japan's archipelagic periphery in which the threat for the regional extinction of one form of life contributes to social action in powerful ways. By bringing together thoughts on extinction and Eduardo Kohn's approach of an anthropology beyond the human, I will embed this social action in a wider semiotic process, a process that acknowledges humans as well as nonhumans to shape the world we live in. In this semiotic process, inherent to all life, it is not just humans reacting to and producing signs, but dugongs as well. The article will shed a light on the multispecies entanglements that cluster around these gentle creatures and the cultural, political and ecological significance of their possible extinction.

## 2. EXTINCTION, NONHUMAN AGENCY AND THE SEMIOTIC PROCESS OF LIFE

Extinction is happening increasingly all over the globe to such an extent that many environmental scientists acknowledge humans to be the driving force behind what some call the Sixth Mass Extinction (McCallum

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<sup>1</sup> Translation by the author.

2015; Wagler 2018, 9). The United Nations estimates the ongoing disappearance of species to be 10 to 100 times higher than the natural occurring rate, with up to one million species currently threatened with extinction (United Nations 2019). Nevertheless, as much as humans influence the reduction of biodiversity, so does the disappearance of these species influence human life. Especially when endangered animals and plants are ascribed with not only ecological, but also cultural significance, species extinction can mobilize various forms of action and by doing so have the potential to expose and counter structures of inequality, environmental destruction, and nationalism. As the anthropologist Genese Marie Sodikoff puts it: “[...] extinction events have been experienced, recognized, interpreted, and deployed as catalysts for social change [...]” (2012a, 3).

Extinction is not a singular event. It is not merely the passing of a last individual creature, an “endling” (Jørgensen 2016), from this planet, but the vanishing of a particular “way of life” with all its “entanglements” as field philosopher Thom van Dooren points out (2014). Thousands of these lifeforms have died before this last individual and by that, the species’ relations to other beings have already been altered (*ibid.*, 8, 12). Along with their gradual decline, surrounding phenomena (humans, non-human animals, plants, or even landscapes) may change their behavior, adapting or failing to adapt to the loss of a unique “way of life”. Thus, we cannot deny that extinction events have impact on multiple other life forms including us.

The gradually increasing absence of ways of life puts the last of a species more and more into the focus of human attention. Becoming present by being absent, they spark social action of sympathetic humans on their behalf, but they also empower groups of people that hold special relations to these vanishing creatures. Some of these groups are themselves entangled in wider nets of minority-state relations or inter- and intracommunity struggle, and also facing extinction of cultural forms of expression and ways of life. I refer especially to indigenous communities and different kinds of minorities from all around the globe struggling to secure their cultural heritage and traditional (ecological) knowledge. The specific relations between these groups and vanishing species are often historically explicit, manifesting themselves in mythology and prayer, hunting practices and taboos (Coté 2010; Sodikoff 2012b).

How can we detect agency within these processes of loss and their impact on humans and other nonhuman life forms? Does it lie merely with humans and in their interpretation of extinction events or also with nonhuman beings, such as the last of a species kind?

Human communities are never exclusively human. We share the world with countless of other beings and with each of them we hold particular relations. This does not mean that other life forms are merely marginal notes in human culture, but that they coproduce a network of relations in which humans are just one of many continuously evolving ways of life. We therefore live in a world where “being is always becoming, becoming is always becoming-with” (van Dooren *et al.* 2016, 2). In other words, we live and die in a shared world (van Dooren 2019). Consequently, to fully understand what it means to be human, we need an approach that opens itself up to nonhumans and engages in interspecies connections. This is what Eduardo Kohn called an “anthropology beyond the human” (2013, 7). Also known as “multispecies ethnography”, this approach “centers on how a multitude of organisms’ livelihoods shape and are shaped by political, economic, and cultural forces” (Kirksey and Helmreich 2010, 545).

For Kohn semiosis is at the core of human-nonhuman relations and therefore life itself is inherently semiotic (2013, 74). Looking at Ecuador’s rainforest, he explains how all its inhabitants, humans, animals and plants constantly interpret and react to surrounding signs. Be it a monkey who reacts to the sound of a falling tree by jumping to another one as it interprets the branches’ movements as deriving from potential danger (*ibid.*, 30), or a dog mistaking a brown-furred big animal in the bushes for a deer, and therefore prey, before realizing that it is actually a dangerous mountain lion (*ibid.*, 71-73). All these (mis-)interpretations of signs show us that humans are not the only ones who make sense of their surrounding and therefore constitute selves. As all these selves stay in relation to each other when interpreting the world, they form an “ecology of selves” (*ibid.*, 78).

But why is this important in our search of nonhuman agency in a time of anthropogenic extinction? Both humans and nonhumans, are in a constant process of interpreting the world, reacting to phenomena, to signs that surround us, including other forms of life, other selves. These forms of interpretations and the resulting actions do not necessarily have to be conscious, but they themselves cause others to react. As Kohn puts it: “Selves, human or nonhuman, simple or complex, are outcomes of semiosis as well as the starting points for new sign interpretation whose outcome will be a future self. They are waypoints in a semiotic process” (*ibid.*, 34). This constant chain of interpreting each other’s signs and reacting to them means that nonhuman selves have an impact on human behavior, although the results of this impact might differ, depending on how their actions are interpreted. This is a crucial point, because it is

here that humans interweave this semiotic process with yet another layer, using a form of signs that is, according to Kohn, exclusively human: symbols (*ibid.*, 31).

Relying on Peirce's idea of signs being divided into three categories in relation to the object it refers to (iconic, indexical and symbolic), Kohn acknowledges nonhuman selves to be able to react to and compose iconic and indexical signs, but not symbols (*ibid.*, 55). Whereas icons are a close representation of the original object of reference (e.g. a photograph of a tree represents an actual tree to a human; the indifference between mammals all just representing a body to feed on for a tick; *ibid.*, 85), indices are pointing towards something else (e.g. a picture of a skull representing poison to a human; the sound and movements of a crashing tree representing danger to a monkey). Symbols, on the other hand, are so abstract that they can only be understood and acted upon in a cultural context (e.g. lines and dots that together form letters, constituting written language). However, these symbolic references are based on the other two categories of signs, as symbols "emerge" out of them (*ibid.*, 54). This also means that only humans can translate a specific semiotic process from the sphere of icons and indices into one of symbols. After translation, it evolves as a human semiotic process. These humans find themselves in their own cultural, spatial, and temporal context.

In the case that follows, this context consists of an anti-base protest movement in Okinawa evolving in a time of anthropogenic mass extinction and international militarism. Taking Kohn's attempt seriously means that human symbols are only one part of a wider semiotic process, a process that humans constitute together with nonhuman selves, namely dugongs in this case study. It is in this sense that I will reflect on nonhuman agency on the pages to come.

The dugongs' embeddedness in the semiotic process of life enables humans to further translate the generated indexical signs into a symbolic context. It is this hierarchical relation between the indexical behavior of the dugongs and the symbolic context of human culture that Kohn stresses when writing: "[S]ymbols are the product of higher-order relations among indices, also with novel emergent properties with respect to indices. This only goes in one direction. Symbolic reference requires indices, but indexical reference does not need symbols" (*ibid.*, 171). While the strong connection between humans and symbols acknowledges human agency, this approach also gives room to the fundamental importance of indices produced by nonhuman selves. It therefore finds a place for the dugongs' agency in the story. To understand these thoughts

on multispecies entanglements, let us now turn to a place humans call Okinawa, its human and nonhuman selves and how their “ways of life” are interwoven into a specific semiotic process.

### 3. OKINAWA

From the southern tip of Kyushu, one of Japan’s main islands, we could draw a slightly curved line from one small isle to the next until our pen reaches Taiwan. This line roughly corresponds to the Ryukyu Archipelago of which the southern half encompasses the Japanese prefecture of Okinawa. Once a semi-independent kingdom, built on a vast network of trading routes in East and Southeast Asia, it fell under direct Japanese rule in 1872 and was reformed into a modern prefecture in 1887. Once incorporated into the Japanese Empire, the inhabitants of the former Ryukyu Kingdom entered an ambivalent state, being assimilated into mainland Japanese culture, while maintaining a status as outsiders resulting in severe discrimination (Rabson 1996; Meyer 2020).

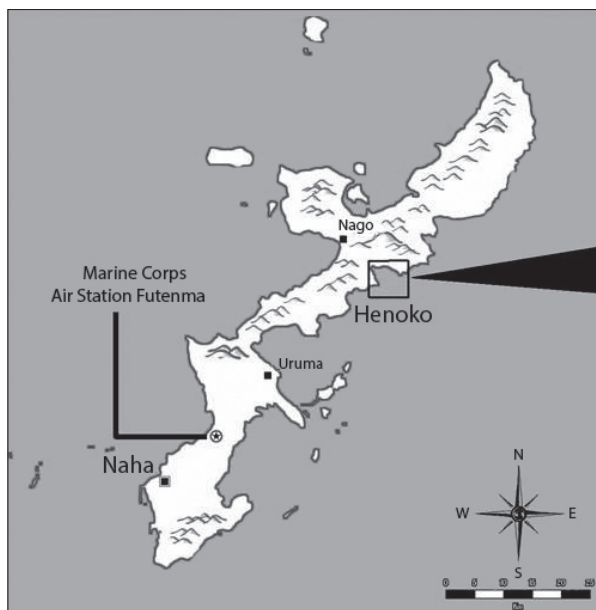


Figure 1. – Okinawa Hontō (© Fynn Holm).



Of the 160 islands that form the prefecture, Okinawa Hontō, the main island, houses not only the majority of the prefecture's population, but also roughly 70 percent of American military personnel within Japan. The fact that the population of Okinawa has to endure such a massive exposure to military (and all the accompanying problems like accidents, sexual violence, noise and environmental pollution), although it constitutes merely 0,6 percent of Japan's landmass, led to various forms of protest since the end of the Pacific War<sup>2</sup> (Tanji 2006). The reasons for this overwhelming presence are to be found in Japan's defeat, an U.S. occupation period (1945-1972) during which private landowners were stripped off their property for the construction of military facilities<sup>3</sup>, and the importance of the United States-Japan Security Treaty into which Okinawa Prefecture was included after its return to Japan in 1972. During the Korean and Vietnam Wars, the American bases on Okinawa held high strategic importance as bombers and troops regularly departed from the island. To understand how this highly militarized prefecture is entangled in a web of multispecies relations, let us zoom into a specific site, Cape Henoko surrounded by the waters of Henoko and Oura Bays, where anti-military protest formed unexpected alliances with nonhuman actors, the dugongs. These alliances, I will argue, are especially fruitful, because they reveal multispecies entanglements with reference to cultural practices, while linking a local struggle to the field of international relations.

#### 4. AN UNEXPECTED ALLY

Dugongs (scientific name *Dugong dugon*) are relatives of the manatee, together forming the only surviving species of the *Sirenia* order. They are the only strictly herbivorous marine mammals on earth and depend on specific types of seagrass<sup>4</sup>, which grow close to the shore (Ikeda 2012,

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<sup>2</sup> The inhabitants of Okinawa Prefecture were the only civilians to experience ground warfare on Japanese soil during WW II, resulting in the death of one quarter to one third of the main islands civilian population and the destruction of up to 90 percent of all buildings. Not only the fierce attacks by the Americans (commonly known as the Typhoon of Steel) contributed to this tragedy, but also instructions by the Japanese military to commit mass suicide instead of falling prisoner to the enemy. Additionally to this, many were slaughtered in suspicion of being spies when they used their local dialect, reminding the Okinawans of their ambivalent position within the Japanese society. The experiences of the Battle of Okinawa told and retold over generations contribute significantly to the current local identity (Allen 2002, 33-38).

<sup>3</sup> About 15 percent of the island is currently under control of the U.S. military.

<sup>4</sup> The local Okinawan expression for seagrass beds is *jan gusa numī*, which literally translates to "dugong's grass sea" (Jugon hogo kyanpēn sentā 2002, 28).

42-45). This specialized diet and its low reproduction rate make the species highly vulnerable to environmental change. Its habitat stretches from the Red Sea and coastal areas of the Indian Ocean, to coasts of the South-West Pacific (e.g. Papua New Guinea and Australia) and South-East Asia. The dugongs around Okinawa make up the northern most population of this species. Despite its broad habitat, overfishing (sometimes as bycatch), boat collisions, habitat fragmentation and destruction, as well as marine pollution and climate change are putting significant pressure on the populations, letting the dugong be categorized as “vulnerable” by the International Union for Conservation of Nature (IUCN) (Marsh and Sobtzick 2019).

However, the situation of the Okinawan dugong is even more severe. Once a more common sight during the Ryukyu Kingdom (1429-1879), it played a vital role in myths and ritual practices, including festivals and songs. In stories from Kouri Island for example, it is affiliated with humans’ development, describing how humans became aware of their own sexuality and nakedness after witnessing two dugongs having sex (Tōyama 2011, 175). In other myths it is perceived as a mermaid-like creature calling tsunamis or warning kind-hearted people of the big waves (Manabe 2002, 51-54; Tōyama 2011, 176). For some it even represented a divine existence, visiting from the world of the gods, *niraiikannai* (Jugon hogo kyanpēn sentā 2002, 74). During the Ryukyu Kingdom period the islanders of Aragusuku-jima were the only ones who were officially allowed to hunt the dugong and pay their taxes with its meat, which developed into a delicacy at the court in the capital Shuri, reserved for the nobility and foreign delegations (Tōyama 2011, 186; Ikeda 2012, 152). With the kingdom’s downfall hunting restrictions were abolished, leading to a decline in the population<sup>5</sup>. This was exacerbated by poverty-driven overfishing in post-war years as well as coastal development projects (Tōyama 2011, 188). Due to the shrinking population, the dugong was declared a Natural Monument (*tennen kinenbutsu*) under the Okinawa Law for the Protection of Cultural Properties in 1955 and was then included into the corresponding Japanese law after the prefecture’s reversion in 1972 (Welch *et al.* 2010, 23-32).

Today the Okinawan dugong stands on the verge of extinction. The population is estimated to be critically low, less than a dozen individuals, although due to the lack of observational data, no exact conclusions can be made. As sightings became rarer and rarer, scientist rely on indirect

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<sup>5</sup> Hunting records show that at least 327 specimen were killed between 1894 and 1916 (Uni 2003).

forms of presence detection such as so-called dugong trenches, trace lines in the seagrass bed left over from grazing. One of the presumably last three dugongs (referred to as individuals A, B, and C) in the waters of northern Okinawa was found dead in March 2019 and the whereabouts of the remaining two are currently unknown. Hence, the IUCN declared the regional population to be “critically endangered” that same year (Sirenia Specialist Group 2019, 2).

The aforementioned Henoko and Oura Bays play an important role in the extinction story of the Okinawan dugong. Seagrass beds, the dugong’s feeding grounds, are situated within the area, which was declared a construction site for a new military facility in 2005. After years of opposition land reclamation to fill up ca. 160 hectares of bay area started in 2014. This is the *American army heliport* singer Cocco mentioned in her short speech at the 2007 Live Earth event. Constructed by the Japanese government for the American military, its official purpose is to replace Marine Corps Air Station Futenma<sup>6</sup>, although many protesters see the new facility as more than a mere replacement. With direct access to the sea<sup>7</sup>, they perceive the Futenma Replacement Facility (FRF) as an upgrade of the old base and yet another example of American militarism and discrimination by the Japanese government, which is not willing to move the base from the prefecture to mainland Japan. Moreover, the construction will not only affect the feeding grounds of the dugong, but the livelihoods of hundreds of other species too, including rare blue corals. In an official letter to the U.S. Secretary of Defense and high-ranking military personnel the governor of Okinawa Denny Tamaki, quotes numbers of 5,300 different species living in the bay areas, including 263 endangered species (Tamaki 2020). Some of them were only discovered recently such as *Uruma ourana* and *Rayllianassa rudisulcus*, two small crabs (Diving Team Snack Snuffkin 2015, 113).

An Environmental Impact Assessment (EIA), conducted by the Okinawa Defense Bureau (a local branch bureau of the Japanese Ministry of Defense) and completed in 2012, came to the conclusion that

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<sup>6</sup> Labeled by former Secretary of Defense Donald Rumsfeld “the most dangerous base in the world”, this facility is located in the densely populated Futenma area of Ginowan City, lacking “clear zones” at each end of the runway where accidents are most likely to occur during take-off and landing procedures. This happened several times, including the 2004 crash of a helicopter into a building of adjoining Okinawa International University and the drop of a helicopter window onto the playground of Futenma Daini Elementary School in 2017 (Lummis 2018).

<sup>7</sup> The deep waters of Oura Bay would enable large vessels to approach the facility, making missile storage possible (Fukumoto 2019).

the construction of the new base will have “no adverse effects” on Okinawa’s dugong population (Yoshikawa and Okinawa Environmental Justice Project 2020, 2). Shortly after survey drillings commenced in 2014, no dugong activities, neither direct sightings nor feeding trails, could be detected in Oura Bay and the construction site proper anymore. Dugongs, however, had visited the area before (Okinawa Defense Bureau and Idea Co. quoted in Yoshikawa and Okinawa Environmental Justice Project 2020, 8). This is a crucial point. Individuals A, B, and C had been sighted in the waters of Oura Bay in the past. Especially individual A and C visited the area more frequently.



*Figure 2. – Construction Site for the FRF (© Fynn Holm).*

Although the whereabouts of individuals A and C (with individual B being the one who was found dead) are unknown and there have been no direct sightings of dugongs in the area, an underwater recording device installed by the Okinawa Defense Bureau in the middle of Oura Bay detected high pitched sounds in February and March 2020. According to experts, these sounds are most likely dugong calls (Okinawa bōeikyoku 2020, 11). As Yoshikawa and the Okinawa Environmental Justice Project pointed out, nearly all of the calls were recorded during times when

there was no construction work going on (2020, 9). Taking the change in behavior of individuals A and C as well as the recordings seriously would mean that dugongs are most likely reacting to the environmental changes at Henoko and Oura Bays. In other words, they are interpreting and reacting to signs of a changing surrounding. The drilling with big machinery, the dumping of massive concrete blocks into the ocean to construct barriers, land fillings of millions of cubic meters of soil and vessel traffic are just some of the changes the area has seen over the last years. I want to take Kohn's approach as life as a semiotic process to make sense of this situation. The signs of change are interpreted by the dugongs leading them to react: they decide to avoid the area during construction hours. Whether this is a conscious decision or not is not relevant. The relevant point is that the dugongs as selves have the capacity to interpret the signs produced by humans in Oura Bay, signs that point to an undesirable environment. Only when these indexical signs are missing, so it seems, do the dugongs approach the area.

As a part of an ecology of selves, the dugongs are entangled with the bays' seagrass beds and during the last couple of years, they became part of a new semiotic process, relating to the construction work in their own way. And so, without knowing, they also became part of a struggle against militarism.

## 5. CROSSING THE PACIFIC OCEAN

In 2003 a network of Okinawan individuals, Japanese and American environmental groups brought the protest against the FRF construction to yet another battleground: the U.S. District Court in San Francisco. The case was filed as "Okinawa Dugong vs. Donald Rumsfeld"<sup>8</sup> and went through various stages of trial. In 2008 the United States District Court for the Northern District of California dismissed the Okinawa dugong as a plaintiff, reasoning that animals do not have legal standing in American courts. However, three (human) individuals living in Okinawa and four of six organizations were granted standing (United States District Court 2008, 16-20).

The law-suit's main focus lies on the fact that the dugong is enlisted as a Natural Monument under Japan's Law for Protection of Cultural

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<sup>8</sup> Named after the former Secretary of Defense, the case was renamed several times, depending on who was in office at that stage. After the dugong was dismissed as a plaintiff, the leading plaintiff became the Center for Biological Diversity.

Properties which is argued to be the equivalent of the U.S. National Historic Preservation Act of 1966 (NHPA). It was the first time NHPA was used in a court case dealing with a situation outside the U.S. and with an animal. It states under Section 402 added in 1980 that

[p]rior to the approval of any Federal undertaking outside the United States which may directly and adversely affect a property which is on the World Heritage List or on the applicable country's equivalent of the National Register, the head of a Federal agency having direct or indirect jurisdiction over such undertaking shall take into account the effect of the undertaking on such property for purposes of avoiding or mitigating any adverse effects. (United States National Historic Preservation Act of 1966 as amended through 1992)

The National Register that is mentioned here refers to the National Register of Historic Places, America's "list of districts, sites, buildings, structures, and objects significant in American history, architecture, archeology, engineering, and culture" (National Park Service). Whereas the plaintiffs pointed to the equivalency of America's National Register and Japan's Law for Protection of Cultural Properties and are convinced that the Department of Defense (DOD) should not have approved Japanese construction plans without taking its impact on the dugong as a Natural Monument into account, the defendants argued that the American list only refers to places, meaning that only properties that correspond to this definition have to be dealt with (United States Court of Appeals for the Ninth Circuit 2020). The DOD commissioned a study on the dugong's cultural significance to the people of Okinawa after being obliged to conduct further research on the construction's effects on the dugong (Welsh *et al.* 2010). Based on this report and the EAI conducted by the Okinawa Defense Bureau, the DOD came to the conclusion that "the construction and operation of the FRF will not have adverse effects on the local Okinawa dugong population" (U.S. Marine Corps 2014, 17). The plaintiffs declared both studies to be insufficient: the DOD's researchers failed "to consult with Plaintiffs as interested parties" and "seek public involvement" (United States District Court for the Northern District of California San Francisco Division 2014, 15) and the EIA did not represent the importance of Henoko and Oura Bays as dugong habitat adequately (Yoshikawa and Okinawa Environmental Justice Project 2020, 10-13). Despite these objections against the military's findings the U.S. Court of Appeals for the Ninth Circuit eventually ruled in the DOD's favor in May 2020 bringing the Okinawa dugong case to an end after seventeen years. This is a disappointing decision from the eyes of the protest movement, but the seventeen-year long trial arguably con-

tributed to a significant delay of construction work in Henoko, involving money, manpower, sweat and tears.

Let us now look at the court case from the proposed perspective as life as a semiotic process. A lawsuit is without a doubt a context bursting with symbols constantly generated and interpreted by human actors. Arguments and counterarguments are made in human language, in which sounds are abstracted to convey meaning, behavior in the court room, from appropriate clothing to timekeeping, is shaped by culturally set rules and even the physical space is arranged in a highly symbolic manner, assigning each party, from judge to plaintiff, defendant and audience, a specific place at a specific time in the court room. Even the listing of the Okinawa dugong as a plaintiff in the first stage of the trial is a symbolic act conducted by humans, so is the dismissal of legal standing for an animal by the judges. The dugong is not physically present. It is only as a symbol in documents, speech and thought that it enters this specific sphere of human culture. At the utmost we could speak of a borrowed agency as humans represent the dugong in a context the dugong itself does not have access to.

This lawsuit finds itself embedded in a wider highly symbolic interaction between humans: the conflict about the FRF, involving parties like the protest movement, the Japanese government and the U.S. military<sup>9</sup>. Concerning the protest movement, affiliated with the plaintiffs, the presence of the dugong in Okinawan culture and its status as a Natural Monument are driving factors to include it into the struggle against the base. So is its state of being critically endangered, a species on the verge of regional extinction that is at the same time a cultural figure. However, including the dugong into this sphere of symbolic, and therefore human, conflict is only possible because of the dugongs' presence as physical beings and the actions of those beings. If dugongs had not frequently visited the construction site, there would be no argumentative possibility to include it into the anti-base struggle. This is also why the DOD contests the very presence of dugongs in the area. In other words, it is the dugongs' interpretation of the seagrass beds as signs of a habitable environment that is translated into a symbolic context of human interaction. Without that very interpretation of the seagrass (and maybe other factors, we are not aware of) as a place worth visiting, the semiotic process would

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<sup>9</sup> I am aware that even among human actors there are more parties involved: construction companies, riot police, media, etc. All of these groups are in themselves again highly diverse, each member being involved differently. Other nonhuman selves have much at stake too, as the bays compose rich ecosystems.



be a different one. Maybe other highly endangered species living in the area would have been included into the court case, but if so, this would have happened on different grounds of argumentation, as they lack the cultural context the dugong is embedded in, especially the status as a Natural Monument. Certainly, the high mobility of the dugong, moving in and out of the bays, results in signs that are interpreted by various humans very differently. This becomes clear if we compare the argumentation by the opposing conflict parties. To argue that the dugong and its mobility have no effect at all however would dismiss its entanglements with humans.

According to Kohn's multispecies approach, dugongs play a significant role in the chain of interpretation of and action upon different kinds of signs present in the bays. Being attracted to seagrass beds and repelled by construction, the dugongs react to signs, again leading humans to interpret these absences and presences in certain ways. Only because of the dugong's interpretation of the construction area, is it possible for the protest movement to translate the resulting behaviour into the symbolic sphere of a courtroom. The dugong's action therefore constitutes, if not a starting point (as life itself is a continuous semiotic process), a precursor to human symbol-based interaction.

## 6. IT IS THEIR VERY EXISTENCE THAT MATTERS

In this article, I explored Kohn's thoughts on life as a semiotic process in a time of extinction. To grasp the full meaning and the limits of the dugong's agency, we have to look at the wider picture the dugongs and humans of Okinawa are embedded in. This means to turn to the dugong's relevance for a distinct Okinawan identity, which is highly intertwined with a struggle against neo-colonialist structures and militarism, but also to the specific condition the Okinawan dugong population finds itself in: a state of emergency, on the edge of extinction. While agreeing with van Dooren that "extinction is never a sharp, singular event" but rather "a slow unravelling of intimately entangled ways of life that begins long before the death of the last individual and continues to ripple forward long afterward" (2014, 12), we cannot deny that there lies a miraculous power with these last individuals and the uncertainty about their numbers. The discovery of dugong calls after the absence of any live signs for months illustrates how these last survivors show us the limits of our knowledge about their current state. Being absent but present at the same time, they enabled the protesters to interpret the construction site



as a relevant dugong habitat under threat. By that, they gave the protesters the opportunity to push the movement forward into new directions and to such a degree that plaintiffs and attorneys were willing to fight for them in an American court.

The symbolic power of these dugongs derives from a combination of their critical state close to extinction, their cultural significance, their charismatic character and the uncertainty that hovers around their very existence. Regardless of what the actual numbers are, the court case contributed considerably to the protest movement, possibly delaying the base's construction, as the DOD was required to conduct research on its impact on the dugong population and its cultural relevance. The fact that the judges of the United States District Court dismissed the Okinawa dugong as a plaintiff tells us more about the anthropocentric legal system the court is embedded in and how it operates in the symbolic realm of human communication, than about animal agency. The fact that a species on the verge of extinction becomes part of a protest network against neo-colonialist structures and militarism may say something though. It shows that the impression these beings leave on humans is stronger than those of other species, which are equally endangered by the construction of the facility<sup>10</sup>. This impression resulted in a renewed cultural significance, and combined with the species' critical condition, let the dugong become a Natural Monument. Only by virtue of their status as a Natural Monument did they qualify at all for the anthropocentric spheres of a legal court. What is more important, however, is their role in the semiotic process that eventually leads to the court case. Here their back and forth between physical presence and absence at the construction site based on their own interpretation of the environment, enables a human engagement in the first place. In other words, the dugongs still possess agency, although they only enter the legal sphere as symbols.

It is also noteworthy that the lawsuit is not filed in connection to biological diversity laws (as for example the Endangered Species Act), but on grounds of a law explicitly referring to the protection of cultural properties. Although the word "property" might be inappropriate in a paper dealing with nonhuman agency, the complex concept of culture in this case is connected to the dugongs as *living* entities, a way of life, embedded in a network of entanglements that stretches far wider than just playing a part in a local ecosystem. They matter to humans not only

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<sup>10</sup> I do not want to deny that other life forms are actors too and equally shape multispecies entanglements, but in connection to the court case example, the dugong plays an outstanding role.

because songs are sung and myths retold, but because their very aliveness (not the memory of it) is relevant to members of the local community. Although it is true that humans project symbolic power onto these animals, it is also true that the dugongs are more than just a canvas. They are moving, breathing, grazing, calve-raising beings, who coproduce connections through their behavior together with human counterparts. The relevance of their endangered existence has the power to send people to court, because with the extinction of those gentle creatures their impact on human culture changes and multispecies entanglements are unraveled. In the context of Okinawa, this means that future generations will not be able to experience a presence that contributes to a unique identity, which sets them apart from a mainland society that for the last 150 years has tried to assimilate, yet rejected and sacrificed Okinawans and their way of living at the same time<sup>11</sup>. No matter from which angle one looks at it, in connection to ecological diversity, cultural diversity or environmental justice, it is always the dugong's very existence that matters in the semiotic process of life.

After the dugongs revealed themselves in 2007, Cocco dedicated her song to them, expressing the deep impression those creatures left on her as an Okinawan woman. Her quote in the beginning of this article is yet another example how humans translate the physical presence of an animal into the semiotic sphere of symbols. Thirteen years later, the court case orbiting around the dugongs' regional extinction is over, but people are still protesting. As trucks dump soil into the sea of Henoko and Oura Bays, still no dugongs have been sighted in the area. Yet, the recorded dugong calls, audible on days construction pauses, point towards their presence, which will be interpreted in one way or the other by the diverse humans entangled with the bays. What kind of impact these new signs will have on the conflict has yet to be seen, but the agency of the dugongs in the semiotic process of life and their impact on human forms of cultural expression cannot be denied.

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<sup>11</sup> By this, I do not mean to reduce Okinawan culture to questions of Japan-Ryukyu dichotomy. Instead, I want to present one aspect of the ever changing, fragile, complex and sometimes contradictory concept of identity. Allen (2002) showed that it does not make sense to reduce Okinawan identity only to political issues and Tanji (2006) explained in detail how diverse the protest movement in the prefecture is. On the other hand, it is important to acknowledge which role the treatment of Okinawa by the Japanese government played in the formation of individual and collective identity.

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