

The Leviathan's Playing

Retrospective on Mediations with Gray Whales in the Ojo de Liebre Lagoon (Mexico)

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ABSTRACT

"The Leviathan's Playing" cycle is a multidisciplinary research project interacting with gray whales in the Ojo de Liebre lagoon in the Baja California peninsula (Mexico). The project started with a single premise: to read poetry to the whales. After an encouraging initial response to human lyrical stimulus from these cetaceans, the cycle's efforts were directed toward developing a mediation system with this species and attempting to understand their behavior during close interactions with humans. This paper discusses the project's findings from 2017 to 2021.

READING POETRY TO WHALES

For five years (2017–2021), I have coordinated multidisciplinary research with gray whales entitled "The Leviathan's Playing" through the Stultifera Navis Institutom platform [1]. This project was developed in natural areas of El Vizcaino Bay in the Baja California peninsula (Mexico). The project began with an expedition to the Ojo de Liebre lagoon with a unique purpose: to read poetry to the whales. This activity was designed to engage with the history of humans and this species of cetaceans in this remote territory. In a place where humans once hunted whales, one of the best human gestures is offered to them.

During the decade after its discovery in 1857, the Ojo de Liebre lagoon was the site of the most brutal whale slaughter made in a single zone [2]. With the gray whale population decline, the lagoon was abandoned as a hunting area, but the legacy of whaling remained for more than a century. Gray whales were well known in the region for their aggressive behaviors toward humans [3,4], which slowly began to change during the twentieth century. In 1972, the first "friendly" encounter with a gray whale in the Baja California lagoons was documented [5]. This behavior gradually spread along the winter calving grounds in the Mexican peninsula until it became common [6], remaining remarkably unusual in any other zone of their annual migration. Today, whale-watching



Fig. 1. *The Leviathan's Playing: The Poetry*, 2017. The capture of the first expedition. (CC-BY Stultifera Navis Institutom)

has become an important tourist industry on which hundreds of families in the region depend [7]. The reasons for the noticeable change in whale behavior in the region are uncertain [8]. Still, it has become a compelling reason for preserving nonhuman animals in contemporary culture.

We proposed the poetry reading as a site-specific counteract against the legacy of whaling and the extractivist relationship with gray whales. Our reference for this plan was the performative practice of artists such as Dmitri Prigov. He gave poetry readings in peripheral venues to express his positioning "in the margins" [9]. Our crew carried out the first reading 28 February 2017. We read the poems from an anthology specially prepared for the occasion and accompanied by the harmonica. During the two-hour session, seven whales approached the boat. They appeared to be listening and made gestures that dynamically interplayed with the reading (see online supplemental Appendix 1), which suggested an intriguing agency [10]. The general sense was that they were responding to the reading and, in some cases, coming to the surface and allowing us to touch them (Fig. 1).

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This first experience modified our understanding of the action we initially attempted and the role we assumed in it. The whales' responses made us reconsider them as an "audience." We also started to see our practice as part of a process in which the whales directed a dynamic selection of the poems that would be recited—a decision giving particular emphasis to phrases and intonation nuances and, a recreative process of "recomposition," with the previous features of "poetry as performance," as understood in archaic cultural traditions [11]. Taking the role of an individual who, in a limited space (a boat), refers to another realm of reality (gray whales) by a rhythmic movement (performative poetry), we defined our practice as a "playing" [12].

Inspired by innovative studies on cetacean culture [13,14], I started to wonder about the possibility of a genuine mediation between both species through the tools of performance. In answer to that interest, "The Leviathan's Playing" emerged as a cycle of multidisciplinary research.

We have developed the project in three dimensions: (1) recording the response of gray whales to performative stimuli made by humans, (2) the study of the whales' environment from an ethnobiological perspective, and (3) human strategies for approaching the mediation with gray whales. These dimensions, including historical and biological background, result from historical and ethnographical archives that gave us more information about previous similar interactions between gray whales and humans.

Our crew has executed 30 performances dedicated to whales during the last five years and recorded using various video and audio technologies, including hydrophone recordings (Color Plate C). We have also explored the whales' surroundings to gain a thorough perspective of the environment in which these interactions occur. The results are a catalog of 58 online recordings of these performances and various artworks related to some discoveries made through archival and field research (see online supplemental Appendix 2).

Although our initial intention was not to collect scientific data, we maintain that these materials could be used as empirical field information for ethological studies like those framed in the Interspecies Collaborative Research [15]. Considering our main objective to develop a mediation system with gray whales through performative tools, we also share here an account of how, in our view, we created this system.

DO GRAY WHALES LISTEN TO US?

Both natural and artificial noise has a decisive effect on gray whales' behavior [16]. Because of this, we concluded that any approach to this species should consider modifications to their acoustic environment. Related art and science projects that experimented with cetaceans suggest that the marine animals hear the human-produced noises and respond to them [17–19]. Following that notion, we started with a "behaviorist" scheme [20], in which we researched whether our stimuli (the input, in this case) could be effectively received. That would allow us to discover if the gray whales' behavior might be interpreted as a response (an "output"), that is to say, to understand our interaction with them under the

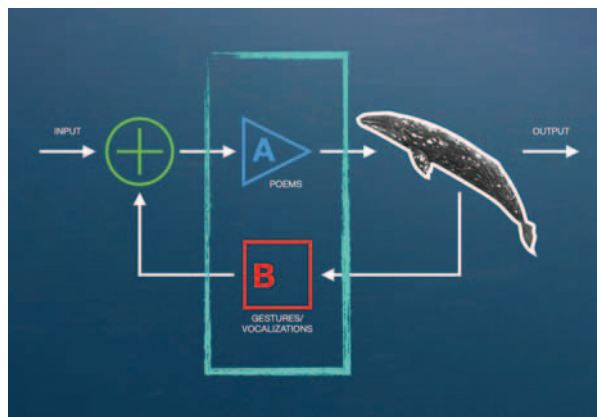


Fig. 2. The behavioristic scheme applied to our interactions with gray whales. (© Fernando Martín Velazco)

scheme of a "feedback" system (i.e. purposeful active behavior [21] Fig. 2). In other words, rather than finding a causal relationship between poetry reading and whales' approaches, we wanted to confirm that there are moments where this listening could happen, and to analyze their responses in that context qualitatively.

In the 2019 expedition, we recorded some of the human vocalizations we produced onboard, including the poetry reading, in our underwater sound recordings. Analysis of the recordings ended with formulating a Scheme of Acoustic Impedance Between Gray Whales and Humans in the Baja lagoons. The report describes favorable physical conditions for "playing" to be tested (see online supplemental Appendix 3). The human voice could be heard underwater without the need for underwater speakers. If there was any place where a gray whale could listen to a poem out of captivity, it might be in the Baja California lagoons during the winter season. The fact that the lagoons are the site where "friendly" behavior with humans has been more commonly observed may be more than a coincidence.

Furthermore, we noticed that the whales' responses might not be carried out in the same underwater acoustic channel where they received the human vocalizations. The responses included gestures that we could easily identify at the surface, such as snorts, bubbles, smelling emissions, or approaching humans to be touched. These responses are a mediation system that goes beyond the linear communication model.

TRANSIENT AND SEASONAL NATURE OF MEDIATIONS

During the 2019 expedition, we noticed that gray whales changed their behavior with humans throughout the winter season. While diagramming how to approach cetaceans in physical terms, we realized the necessity of adding a schema capable of describing mediations with gray whales in temporal terms: historical and cyclical.

Typical storytelling about humans and gray whales in the Baja Californian lagoons starts with the arrival of the American whalers in the nineteenth century. A meticulous historiographic examination of this narrative reveals the



Fig. 3. Cochimi calendar related to gray whales. (© Fernando Martín Velazco)

silenced legacy of indigenous and Hispanic peoples before that time. Our historical study of the human presence in the lagoon before the Europeans' arrival suggested that recovering ethnobiological information was essential to understand better how this ecosystem works. The Cochimi groups who originally inhabited the area experienced the disappearance of their nomadic way of life, language, and cultural traditions [22]. For that reason, there are few surviving testimonies about their use of the lagoons or their practices related to the gray whales before the establishment of the Spanish missions. However, examining the seasons in which gray whales are in the area, we were able to see an overlap in the cetaceans' presence and the Cochimi's six-season calendar [23]. In this calendar, the short season called "Meyijbén" coincides with the phase in which the gray whales seem more likely to have closer and long-term interactions with humans or other species (Figs 3 and 4). There is also a period called "Meyijbén-maayí," during which few whales remain in the

lagoon, and their behavior is remarkably more elusive. In the Cochimi language, "maayí" means "bad thing." It is also the time when our project comes to a close.

Once this ethnobiological temporality delineated our field experience, we became able to identify and even predict some of the gray whales' behaviors. During the 2019 expedition, we discovered a secret cetacean ritual: a massive group of whales, together and in synchronicity, made strong exhalations on the water's surface during the night that could be easily heard from the coastline. The phenomenon only occurs once a year. Associating it with a Yuman myth in which a sea serpent teaches their magic chants and dances to human beings, we called it "The Maihaiowit's Lullaby" (Fig. 5). We again registered the phenomenon in 2020 and forecasted it for 2021 [24]. After this event, a period of intense whale interaction begins.

Interpreted ethnographies revealed to us that this phenomenon concurs every year with the immediate low winds and neap tides that surpassed the second new moon after the winter solstice. As in the Cochimi account of time, the moon defined when close and long-term interactions with gray whales begin and when our "playing" could have more opportunities for complex responses. Also, our role as mere performers was newly modified, complemented with the capacity to interpret the signs of change in the lagoon's environment, which affects the behavior of the gray whales and the coeval species.

It seems unlikely that native Cochimi hunted gray whales in the Baja California lagoons [25], but there are strong inferences about the existence among them of shamanist practices and beliefs [26]. Given the cetaceans' fertilizing role in the lagoons [27] and their described tendency to close interactions, we could surmise that humans and gray whales could have constituted a



Fig. 4. Gray whale and dolphin playing at the Ojo de Liebre Lagoon, 2021. (Photo © Fernando Martín Velazco)

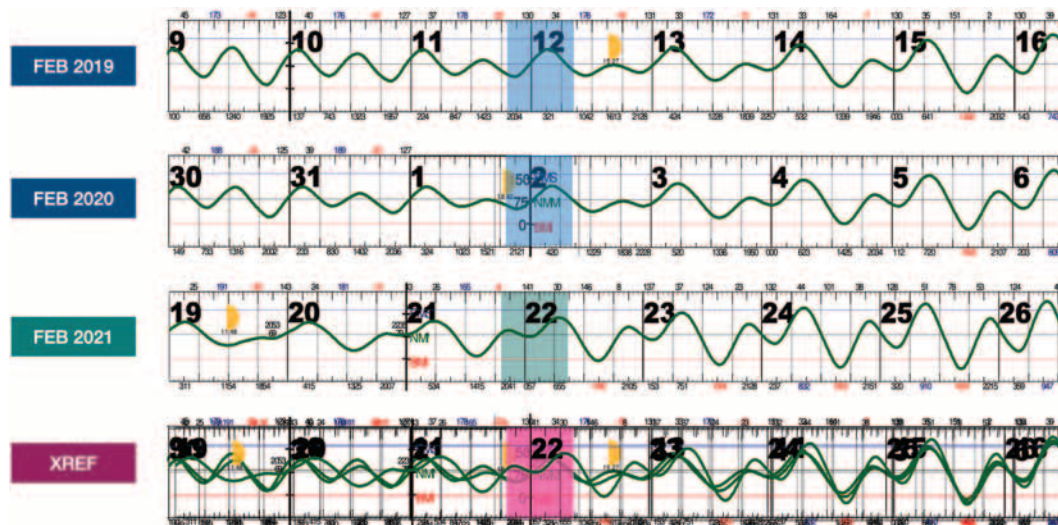


Fig. 5. Tides behavior during The Maihawaiwit's Lullaby, 2019–2021. (CC-BY Stultifera Navis Institutum)



Fig. 6. *The Leviathan's Playing: Meyijbén*, 2021. The capture of the fifth expedition. (CC-BY Stultifera Navis Institutum)

transaction system [28] that took part in the dynamics of “ritual, play, and performance” [29].

Understanding that we were probably not the first people to “play” with the whales in that territory highlighted how interactions with gray whales have developed and evolved through time. To consider ourselves as part of a genealogy that has approached gray whales by performative tools invited us to heed the main relevance of the diachronic features in any attempt of direct interaction. Following this idea and expanding the scope of our ethnological references, we found some North Pacific Indigenous practices and beliefs related to gray whales to complement our research and observations [30]. Among some of these groups, there are special seasonal chants and dances dedicated to the gray whales during their migration, an exuberant collection of interspecies stories, as well as the consideration among them of the cetaceans as spiritual entities or nonhuman equals; a rich and complex system of interspecies interactions. We understood ours as a post-ethnobiological context regarding the Baja California lagoons. In response, we proposed our practice as a way for the resurgence of symbolic ecologies in that area.

A FESTIVITY OF “PLAYING” AS INTERSPECIES MEDIATION

Our 2021 expedition was based on guidelines established by our previous findings. We looked for optimal weather conditions and followed the moon's seasonal pattern.

We conducted ethnological research to find descriptions of close interactions between humans and gray whales (among other animals) preserved in the traditions of the North Pacific indigenous cultures whose legitimate territory coincides with the route of the gray whales' migration. This research revealed many mediations with whales, including guttural chants, repetitive cantillations, and depositaries of ambiguous meanings. Also, the prevalent use of percussion was worthy of attention. Cetaceans were part of seasonal celebrations in some practices, and special measures were commonly taken in the weeks before approaching them [31]. Besides cultural similarities between the traditions of North Pacific indigenous peoples, these traditions related to our scheme of ideal physical conditions for “playing” with gray whales.

Inspired by various indigenous traditions of the North Pacific, we composed a series of original chants accompanied by drums specially designed to strive against the water impedance. The result was executed as part of the festivities for the beginning and closure of the rediscovered Meyijbén season, with the number of whales in attendance being unknown (Fig. 6). In addition to the presence of our underwater vocalizations and music, we captured a new frequency of gray whale vocalizations—from 0.41 vocalizations per minute recorded in 2019 to 2.07 in 2021—the diversity of their gestures, and the samples of agency registered in the context of these forms of mediation. The experience was “a common playing, a celebration of mutual care and hope for the continuity of life's cycles” [32]. We accomplished our goal of developing a mediation system with gray whales using performative tools.

Acknowledgements

Thanks to Claudia Sánchez for her help and inspiration. To Paco Jimenez Franco, for all his teachings. To Rodrigo Iturralde and Guadalupe Lobos for their vital complicity. To Angel Hernández, for believing. To Juan Ferrari, for his mentorship. I am grateful to Eva and Martín, my parents, and Isabel Cardenas for their continuous support.

Thanks to all the volunteers and donors who supported the cycle for five years.

This project has been supported by the 2018 FONCA-UNAM ACT grant program and the Quo Artis Foundation.

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Manuscript received 8 April 2021.

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COLOR PLATE C: **THE LEVIATHAN'S PLAYING: RETROSPECTIVE ON MEDIATIONS WITH GRAY WHALES IN THE OJO DE LIEBRE LAGOON (MEXICO)**



The Leviathan's Playing: Breath of the Sea, 2019. Captures of the third expedition. (CC-BY Stultifera Navis Institutum)
(See the article in this issue by Fernando Martín Velazco.)