SOCIO-MATERIAL REALITIES OF MARINE WILDLIFE ENCOUNTERS IN BAJA CALIFORNIA SUR, MEXICO

Elisabeth Boon

Socio-material realities of marine wildlife encounters in Baja California Sur, Mexico

Elisabeth Boon

960915-097-090

13 August 2020

Wageningen University and Research

Department of Environmental Sciences - Cultural Geography Chair Group

M.Sc. Thesis Tourism, Society, and Environment

GEO-80436

Supervisor: Edward Huijbens

Examiner: Renee van der Duim

ACKNOWLEDGMENTS

ABSTRACT

This research investigates the complex and co-present realities of tourism wildlife encounters in Baja California Sur, Mexico. The species of focus are grey whales and whale sharks: these cases have similarities, but also notable differences that allow the research to go into processes of meaning-making and the role of material objects in mediating relations between actants.

The research puts forward the change in relations between human and nonhuman actors that took place in the tourism wildlife encounters, as the tourism activity developed, and as new management plans arose. A qualitative methodology and an Actor-Network Theory framework were used.

Science and the government were the most noticeable influences in the mediating of relations between actors. Two networks were observed to be present in the wildlife encounters; that of conservation and tourism. Both with their own narratives, practices, and use of materials.

The whale shark encounter changed from a dis-organised and chaotic activity to one that is organised and regulated. The shift occurred due to the modification of regulations for whale shark encounters, from a management plan to a demarcated protected area. This instigated changes in relations between actors involved in the encounter. Material objects, such as the GPS and radio, played a prominent role in the modification of regulations and now mediate relations between different actors.

The grey whale encounters were influenced by the global shift in human-whale interactions when the moratorium on whale hunting was signed in 1986. The creation of whale sanctuaries, biosphere reserves, and heritage cites in the lagoons of BCS have influenced the way in which encounters with grey whales are ordered. The boat with which the encounters take place was noted as the most visible nonhuman actor influencing relations between different actants in the encounter.

LIST OF ACRONYMS

ANT   Actor-Network Theory

BCS   Baja California Sur

CONANP   National Commission of Protected Areas

IWC   International Whaling Commission

PROFEPA   Federal Attorney for Environmental Protection

SEMARNAT   Secretary of Environment and Natural Resources

UNESCO   United Nations Educational, Scientific and Cultural Organisation

WSMX   Whale Shark Mexico

LIST OF FIGURES AND TABLES

Table of Contents

CHAPTER 1: INTRODUCTION

1.1 Choosing the research site

Choosing the region of Baja California Sur in Mexico came from a personal interest to travel to an area famous for its marine biodiversity. As a diver, the marine environment, the species found within, and human interactions with it, have always been a point of focus for any research, paper writing, or presentation I did during my bachelors and master's degree. I fell in love with whale sharks and whales when working in Mozambique for six months as a snorkel and diving guide. This is why I focus on these two species for my research. A curiosity about understanding and observing the interactions of humans with marine megafauna in a different part of the world, to compare them to my own personal experience, was what drove the idea of investigating human-wildlife encounters in Mexico.

La Paz is the largest city, and capital, of the state Baja California Sur in Mexico (Figure 1). The state is very interesting for marine biologists and tourists alike due to the abundance of ocean life that is found within the Gulf of California to the east, and the Pacific Ocean to the west. Tourism is seen by the Mexican government as providing economic benefits and job opportunities, thereby aiding with local economic development. La Paz had suffered a lag in economic development since the collapse of its pearling and mining industry in the 1940s due to overexploitation. The promotion of international tourism for economic development was seen as a viable solution to this collapse (Dutton, 2014). Since the 1940s, the area of Baja California Sur has seen changes and developments in tourism practices: the shift in classification (and therefore governance) of the areas in which touristic wildlife encounters take place, and plethora of actors involved in these encounters. Tourism in the area is primarily water-based, with snorkel, diving, fishing, or whale watching tours being the main attractions. For this research, a focus is placed on the whale shark snorkel tours in the bay of La Paz and whale watching tours in the lagoons of BCS.

La Paz was an important location for this research as many tour operators, researchers, and other organisations involved with the marine environment are based in the city. These tour operators and researchers commonly go to the lagoons of BCS to participate in the whale watching activity during the grey whale season. Therefore, La Paz was a valuable base for observing and speaking with various actors involved in marine wildlife encounters.

Figure 1: Map of Baja California Sur with indication on study areas (source: personal image)

1.1.1 Whale shark encounters

The Gulf of California has been dubbed by Jacques Cousteau as the aquarium of the world, due to the abundance of sea life that can be found. It is considered a natural laboratory for scientific research as almost all major oceanographic processes can be found to occur there (UNESCO, n.d, b). The bay of La Paz is the largest, and deepest, area in the Gulf of California, resulting in high oceanic productivity. The bay is therefore frequented by large marine species such as whale sharks, rays, sharks, and whales who come to feed on the plankton. It is home to 39% of the worlds' marine mammals, and a third of its cetaceans, with 11 species of whales visiting the area. Wildlife excursions began with trips to the Espíritu Santo island, classified as a UNESCO World Heritage site as of 2005, which is found an hour

away from shore. Diving and fishing excursions with private boats were the main marine tourism activity happening within the bay. Whale sharks were known to be present in the bay but were considered more of a bonus for the diving trips on the way to or back from the diving location. It wasn't until new tour operators in La Paz started offering snorkel trips with the whale sharks that this encounter started to gain popularity. Whale shark encounters are now the main selling tourism attraction along with a trip to the famous Espíritu Santo island, where you can also snorkel with sea lions.

Whale sharks are currently classified as endangered on the IUCN red list, which entails various conservation and protection measures. The rise in popularity of the touristic whale shark encounters caused a scientist doing her PHD on whale shark abrasions (caused by boat propellers) in La Paz bay to push the government for the creation of a protected area for whale sharks. The creation of this protected area instigated a change in governance from the Secretary of Environment and Natural Resources (SEMARNAT) to the National Commission of Protected Areas (CONANP).

1.1.2 Grey whale encounters

The lagoons of Baja California Sur (BCS) are an important area for the Eastern Pacific grey whales during their yearly migrations of around 20 thousand kilometres from Alaska to Mexico (Heckel et al., 2003). They come down South in order to give birth to their young, as the lagoons have warmer waters and are free from predators. The whales stay in the lagoons for three to four months, from around mid-January to March. There are 3 major lagoons where whale encounters are offered in BCS: Ojo de Liebre, San Ignacio, and Magdalena bay (Figure 1). Magdalena Bay has multiple ports from which boats leave for the activity of whale watching; namely, Lopez Mateos, San Carlos, and Puerto Chale.

Since 1972, whale watching has been a major tourism attraction for the region of BCS. Whale watching is different depending on the location in which it takes place, resulting in the implementation of case-specific rules and regulations. Relations between actors, and the creation of protected areas, influenced the regulations set in place for the management of whale watching in the lagoons of BCS. Whale's global status as a species to be protected has

influenced the creation of sanctuaries and biosphere reserves in order to aid with the multi-national conservation initiatives.

1.2 Research objective

The objective of this research project is to better understand how wildlife encounters with grey whales and whale sharks are constructed, communicated, and ordered in tourism encounters in Baja California Sur. The research draws inspiration from Actor Network Theory (ANT), as deployed in tourism studies, to unravel the way in which materialities and the nonhuman play a role in structuring realities of tourism encounters in this particular setting. Understanding the different realities that are constructed are important as they provide information which can be used to better manage and govern conservation initiatives.

1.3 Aim and Research question

The aim of this research project was to investigate the different realities that are present in tourism wildlife encounters in Baja California Sur, in order to understand the materiality, ordering, and multiplicity of reality and knowledge production. Further, to find out what actors are involved in the production of meaning-making of realities, in order to understand their connections and the networks they are engaged in, which will unravel the complexities of the wildlife encounters.

In order to achieve this aim, the main research question is:

- *What actors (objects, wildlife, and people) are engaged in meaning-making of marine wildlife encounters in Baja California Sur?*

As the main research question is complex and involves numerous sub-topics which could be observed, a set of guiding questions have been created to help in answering the main question:

- Who or what is acting when an action is observed in wildlife encounters? (Sub-RQ1)

        o   What are the 'invisible' actants?

- How do different actors imagine/describe marine wildlife encounters? (Sub-RQ2)

- What objects help to influence relationships in wildlife encounters in Baja California Sur? (Sub-RQ3)

- What are the power relationships that exist between human/human actors, human/nonhuman, and nonhuman/nonhuman actors? (Sub-RQ4)

1.4 Why and how of the research

The relations between actors, and different realities of wildlife tourism encounters in BCS, has not been extensively studied, with most research being scientific and focusing on the (marine) ecosystem of BCS and the islands within the Gulf of California. It appears that no research has yet been conducted on the interactions between tourism activities and specific marine areas, and the species found within them, in the context of BCS. As a result, this thesis is unique as no one has yet studied human-wildlife interactions in the area.

Investigating marine wildlife encounters can help to better understand the unfolding of different realities, relations, and processes of meaning-making. Which can contribute to comprehend why and how points of conflict between human actors arose, and why regulations are not being followed.

1.6 Outline of the thesis

In **Chapter 2**, an introduction on Actor-Network Theory and the concepts that are relevant to the research topic is presented. This also includes an explanation of how ANT is linked to tourism, practices, and tourism studies.

In **Chapter 3**, the conceptual framework for the research will be put forward, linking in the relevance of the concepts to the research questions and aim.

Chapter 4 involves an explanation of the methodology used for the research and how the methods help to answer the research questions.

In **Chapter 5 and 6**, an analysis of the data collected and discussion of this analysis through explanation of the history and development of wildlife encounters in Baja California Sur. Chapter 5 presents whale shark encounters in the bay of La Paz, and chapter 6 describes grey whale watching in the lagoons of Baja California Sur.

In **Chapter 7,** a discussion on the findings and how they relate to the theoretical framework and approach of Actor-Network Theory is presented.

Finally, in **Chapter 8**, a conclusion, through answering the main and sub-research questions, remarks on the research, and recommendations will synthesise the research.

CHAPTER 2: THEORETICAL BACKGROUND

2.1 Actor-Network Theory and its concepts

This thesis uses Actor-Network Theory (ANT) as a framework for understanding the interactions and realities that are created in tourism wildlife encounters in Baja California Sur, Mexico. The use of ANT as a framework allows for a deepened understanding of how marine wildlife encounters are constructed, reinforced, and reproduced by varying actors, including the wildlife and materialities of the setting. It considers the multiple orderings and constructions of reality, diverging from the dualistic understanding of what is 'real' and 'constructed' as being distinct, towards an understanding that what is real, or 'truth', is actually constructed and a result of relational orderings (Latour, 2005). ANT provides a new ontological perspective where reality is "performed through a variety of practices" (Mol, 1999, p.74), multiple, and affected by socio-political processes.

How marine wildlife, and encounters with them, are conceived, materialised, and ordered, for and by different actors is important and interesting to observe as differences in realities can lead to conflict, and similarities can help to reinforce objectives of these said actors. This chapter begins with a small introduction to ANT followed by an explanation of its main principles relevant to this thesis.

ANT arose from the realm of Science and Technology Studies (STS) through the writings of Michel Callon, Bruno Latour, and John Law. Moving past the common conceptions of social science studies, through unravelling the role and function of technological artefact, STS deconstructed categories of dualisms such as nature/culture. STS, and later ANT, take on a post-structuralist perspective and, through 'flat ontologies', examines the *how* of society and social orderings rather than the *why*. Flat ontologies entail that research and analysis should be conducted with no *a priori* distinctions between human/nonhuman, macro/micro, and global/local (Czarniawska, 2005). ANT investigates taken for granted realities, or what has been 'black boxed', in making for these dualisms, and aims to understand what constitutes them as such. What networks, relations, orderings have been set in place in order to maintain the taken for granted. In the process of black boxing, simplification is a natural form of ordering. ANT questions and aims to understand *why* certain concepts have been simplified (Law, 1992). This is done through studying realities as performative effects of a heterogenous

network. ANT then aims to understand *how* categorisations and distinctions are produced, and what are the objects, discourses, and actors involved in the shaping and stabilizing of the distinction.

2.2 Five controversies of ANT

ANT is the study of controversies, or sources of uncertainty. In *Reassembling the Social* by Bruno Latour (2005), the chapters are organised according to five controversies which ANT focuses on: the status of groups, agency, objects having agency, the status of facts, and how to study associations. A modification of these will serve as a basic structure for explaining ANT research in this thesis and the concepts that will be used. First, the status of groups and an explanation of the term Actor-Network will be explained. Followed by the concept of agency, in which nonhumans also have agency. This will link in to the five properties ANT ascribes to the nonhuman. Finally, the status of facts and how to study associations will be explained further.

2.2.1 The status of groups

The social world can be understood as the constant tracing of boundaries by people over other people (Czarniawska, 2005), groups do not merely exist but are constantly being made and remade. Groups are often taken for granted. The aim of ANT is to deconstruct these in order to understand what they are composed of. ANT therefore studies the work of group-making and unmaking. To begin then, the concept of 'Actor-Networks' should be explained. Previously referred to as the *collectif*, a product of interactions between elements that make it up, Actor-Networks consist of people and things, and how these are put together. The relations between these elements, and their heterogeneity, is what ANT focusses on. Van der Duim (2005) mentions how the actor and the network are "concatenated and one cannot be defined without the other" (p. 90). There is the actor who creates and networks heterogenous elements, while at the same time the network is able to change what it is made of. Networks are formed when two or more actors are connected, transforming from heterogenous to aligned (Rodger et al., 2009). In order to be more compatible with other actors and networks,

actors may align their activities in a specific manner. This is known as convergence. No networks are ever fixed, they involve the constant interaction between the actants of which it is composed. The term actant is introduced to underline that no distinction should be made between actors and things. Without the interactions and relations, there is no group or network. The strength and durability of a network is therefore determined by the relations that hold it together.

2.2.2 Agency

The choice of using ANT for this research is particularly due to its definition of an actor, and emphasis on the role of materials and the nonhuman in shaping realities. Within ANT research, many different terms are used when speaking of the nonhuman: material, object, actor. In this thesis, the terms are considered as interchangeable. Traditionally, an actor is often assumed to be human, as humans are capable of agency and acting. Under this definition, actors have specific motivations and aims in their actions. ANT uses a semiotic definition of actor, or better described with the term *actant* which is "anything that acts or receives activity from others" (van der Duim, 2005, p.86). This signifies that an actant can be anything as long as it is the site or source of action. Actors can be understood as network effects: they can take on the attributes of the network within which they are found (Bosco, 2006). The nonhuman therefore is also an actor, as the ability to act comes from the capability to engage in a network (Ren, 2011). Agency is then a result of relations, which are enacted in networks of heterogenous materials. A social science researcher would not be so without all the materials and things that make up its network: his books, computer, colleagues, ability to write articles, and so on.

This definition of an actor extends the concept of the 'social', previously being exclusively human, to including any actant that can be associated and create a network. It is important to note that while nonhuman actors have agency, it is not always the same "type and intensity of agency as each other or as given humans have" (Sayes, 2013, p. 142). In order to understand the concept of the nonhuman further, the five properties ascribed to nonhumans by ANT research, put forward by Sayes (2013), are explained below.

The first property refers to nonhumans as stabilisers for the human collective. In this, interactions are seen to be mediated and stabilised by materials as they are more durable than interactions. Moving from the conception of inter-subjectivity to one of inter-objectivity. Similarly, Law (1992) mentions how some materials are able to maintain relational patterns for longer, making them more durable and stable than others. Relational materiality describes how practices and cultures are inscribed into material things that surround and are part of our daily lives, as these are more durable than words and actions. This allows for the perpetuation and durability of said practices and cultures. Our way of using technologies and materials becomes a routine which itself turns into a practice. Stable networks are those which are "embodied in and performed by range of durable materials" (*ibid*, p. 387). However, if the context or network changes, so can the purpose and durability of the material. As things are seen to be produced and performed through relations, when looking at performativity, one is observing relational effects between heterogenous things that are a result of a specific network organisation (Bosco, 2006). Therefore, embodiment and performance, as well at the role of nonhuman in social interactions and creation of networks, are all points of interest in ANT research.

The second property relates to nonhumans as mediators. Taken from Callon (1991, as cited in Van der Duim et al., 2012) who stresses the importance in distinguishing between intermediaries and mediators. An intermediary is merely the sum of its relations and constitutive parts, and a mediator plays a role in shaping relations. In this respect, nonhumans are mediators as they have the capacity of altering relations between actors: "they act and, as a result, demand new modes of action from other actors" (Sayes, 2013, p. 138). Furthering this is the concept of mattering, where the material plays an important role in the social. It represents symbolically by conveying certain meanings, maintains feelings of togetherness, belonging, and sameness, and can provide a sense of stability through the routinised performances enacted with them (Kien, 2016). Through observing material objects, ANT makes visible the symbolic categorisations that we use to make sense of and organise the world we live in (Nimmo, 2011).

Third, nonhumans are actors in moral and political associations. Sayes (2013) refers to Latour's example of the seat belt, where the use of a seatbelt is governed by a moral imperative that one *should* wear a seatbelt. Initially, this action remains at the choice of the user. However, when the moral imperative is combined with legal consequences if the

obligation is not followed, a political imperative is added. Nonetheless, this is restricted by the limits of legal sanctions. When complementing the imperative with nonhuman actors, the moral and political nature of the seatbelt usage changes. A car not starting until the seatbelt is put on can be seen as an example of how nonhumans play a role in altering the nature of morality and politics: in this case, from choice to obligation. Herein, we clearly note how nonhumans "change the very fabric of our moral and political obligations" (*ibid*, p. 139), and can be considered as moral or political actors.

Finally, nonhumans are seen as gatherings. Yet, these gatherings move past the common conceptions of temporality and spatiality. Through folding time and space, nonhumans enable for the gathering of actors from different times and spaces. Illustrated in the notion of the 'Actor-Network', in which actors of varying ontologies, times, and spaces are assembled together in a network. ANT observes materials and processes of communication, moving past ordering through time and focussing on ordering through space. The process of translation has to do with this multi-spatial ordering. Translation is the way in which relations between actors, as well as actors and Actor-Networks, are established and stabilised (van der Duim, 2005). It allows certain actors to speak, act, and represent others. These moments of stability are never fixed, they can always be contested and for this reason are an ongoing process. Certain networks are able to stabilise for longer; they can spread further and connect more. Consequently, it is a constant process, meaning that there can always be resistance and change possible. Translation aims to answer the question of how do certain interactions successfully stabilise and reproduce themselves?

2.2.3 Status of facts

The status of facts regards how to tell the difference between matter of fact and matter of concern, relating to the conception of 'truth'. For ANT, truth exists but can change over time. In this then, ANT studies how matters become either fact or concern. Everything that was before considered 'matter of fact' is now considered 'matter of concern' (Latour, 2005). ANT research provides the possibility to understand how things *become* 'matter of concern', and how these matters, through the process of translation, may then gradually turn into facts. Facts are in turn put forward as the 'truth'. This approach allows for a breaking away of traditional categorisations of the world, promoting the questioning of why such distinctions

(facts) exist in the first place, and how they exist. Modes of ordering can be seen as processes that contribute to the creation of facts. Franklin (2004) mentions three stages in the processes of ordering.

The first is where modes of ordering come into being through specific narratives, with some narratives having a stronger influence than others. Second, these narratives then become active through performance, and are therefore embodied and included in everyday practices. Finally, orderings involved strategies, which entails strategic arrangements of things, materials, and people to fit into the narrative and ordering. Orderings are everywhere, they can bind to others and produce new orderings, they are never fixed and are sites of constant movement. Complementing the concept of ordering is that of Foucault's (1995) Panopticon and disciplinary power, where humans self-regulate their actions due to the unceasing possibility of being observed and monitored. Ordering strategies can arrange materials and people to create the space for disciplinary power.

An example of a common distinction that is considered as fact is the differentiation between 'nature' and 'society', upon which further classifications and organisations of the world are based. This distinction shapes our socio-material life, as subjects and objects are associated with society and nature respectively. ANT sees nature/society as constructs of processes and interactions. This ontological approach entails that nature and society, along with all other concepts that stem off from this dualism, are not pre-existing entities. Rather, they are constructs, results of ongoing processes of stabilization and simplification (van der Duim et al., 2012). The world is therefore not as structured and organised as we make it out to be, it is a complex amalgam of networks and associations made up of messy objects.

2.2.4 How to study associations

The final controversy mentioned by Latour (2005) involves an explanation on how to study associations. Three main moves for how studying associations are mentioned: localizing the global, redistribution of the local, and the character of connections. These moves can be linked to the principle of general symmetry. The principle of general symmetry is especially useful for guiding the methodological aspect of research. It states that everything which is being researched should be approached in the same manner, with no *a priori* assumptions. No

distinctions are made between, for example, the micro and macro, the global and local, and especially the human and nonhuman. Therefore, the first move of 'localizing the global' entails a realization that there is no 'global', only a "chain of connected localities" (Czarniawska, 2005). The 'local' never occurs in one single location. Hence, there must be a redistribution of the local, which is the second move for studying associations. Materialities play an important role in this move, as they enable a redistribution of the local to occur. Finally, the character of connections investigates how certain connections remain stable while others do not. The world is organised in a specific manner, according to hierarchies of connections and networks. Connections which have been termed as 'global' or 'local' are composed of multiple associated times and places. This entails a flat ontology, where the local and global are not *topographical* but rather *topological*. Space is considered through the connections of networks, therefore there is no distinction between what is outside or inside and the world is shaped according to different orderings (Huijbens, 2015). Cultural topologies emerge from these orderings through organisation, naming, and categorising of the world in the aim to define its limits. ANT then aims to understand how these sites and networks are connected and how they emerge.

ANT observes the flow of information that occurs between and within Actor-Networks. In order for something to flow from one network to another it has to be put into a form that works and allows for acting at a distance through materials. These are known as immutable mobiles: things or objects that are produced by inscription which can surpass time and space (Law, 1992). An example of an immutable mobile is a map, it is mobile because it can move and immutable because it retains its shape as a network throughout its movement. Immutable mobiles often arise from standardizations and classifications about the world. Translation creates the space for the transmission of immutable mobiles.

The concepts of standardization and classification, and their role in shaping interactions and how they emerge from networks of connections, is a matter of interest for ANT research. In order for something to come to the fore, something else needs to be absent. Within standards and classifications, things that are absent have been 'othered'. In this manner, networks and objects can be seen as patterns of absences and presences (Ren, 2011). The concept of representation is important to consider as certain actors are capable of representing silent actors. This representation gives them a lot of power, as it provides them with the capacity to shape the situation to their advantage (Callon, 1984).

Studying associations involves observing the practices that arise from associations. Practice theory can easily be linked to ANT research due to the similarities they share in how to approach research. Both think in terms of flat ontology and the importance of the material in shaping and mediating the social. Placing attention on practices means looking at the social and material doing of something (Nicolini, 2012). For this thesis the three main elements put forward by Shove et al. (2012, as mentioned in Lamers et al., 2017) will be used to define practices. They remark how practices are composed of materials, competences, and meanings. Materials are the objects and nonhuman which ANT focusses on. Competences are the embodied skills and knowledge that actors learn and acquire. Finally, meanings are created from these, such as symbolic meanings or ideas related to the practices. The routinised use and interaction of these three interconnected elements creates specific social practices that are then seen as an entity.

Considering practices allows to understand how interconnected elements (human and nonhuman) are bundled together. This bundling provides the conditions for activities and performances to occur in specific contexts. This is referred to as the practice-arrangement bundle, that Lamers et al. (2017) define as "a set of social practices and material arrangements that 'hang together' and are interconnected in more or less strong and enduring ways" (p.57). Once again seeing the similarity with ANT in focussing on the role of the nonhuman.

2. 3 ANT and tourism

ANT is still quite recent in the field of tourism studies, with only around 10 years of use for research. Using ANT for tourism studies implies that the focus is placed on how tourism *works*: the way in which tourism is "assembled, enacted, and ordered; how it holds together; and how it may fall apart" (van der Duim et al., 2013, p.5). The world in this way is composed of continuous stabilizations of relations, rather than being pure and stable it is messy and multiple. Therefore, ANT has provided tourism studies with an alternative ontology for understanding this messy phenomenon, and messy objects involved in it, and a tool to provide in-depth descriptions of tourism practices. Tourism in this light is considered as a heterogenous assemblage, an ordering, which aims to understand the relations of technologies and objects of tourism. This process of ordering in tourism has been termed

tourismscapes. Proposed by van der Duim (2005), tourismscapes allows for the integration of ANT into tourism studies by considering how tourism is composed of heterogenous socio-material networks, and the way in which tourism connects systems found within tourism (transportation, environments, technologies, people, and organisations). Below is a brief explanation as to how the concepts of ordering, materiality, multiplicity, and practices are brought into tourismscapes, thus linking ANT to tourism studies and this research.

2.3.1 Ordering and representation

ANT helps to bring attention to the ordering of tourism, how scientific knowledge plays a role in shaping and creating knowledge, what features become stabilised, which are then classified as 'fact' or 'truth'. Franklin (2004) mentions how ordering is central to the way tourism operates, as tourism orders sites and mobilities as well as tourists themselves. He puts forward the focal question of how binaries, upon which tourism and tourism research is based, become operationalised. The main binary being the extraordinary versus the ordinary, in which the extraordinary is ordered as tourism and the ordinary is our everyday lives. The extraordinary is what is seen as missing to our everyday lives, and tourism offers us a way to experience this.

Tourism in itself is a mode of ordering that brings about specific realities and networks of heterogenous associations between human and nonhuman actors. A focus is placed on what people and things, individually and together, actually do. Investigating modes of ordering allows to understand what makes up tourismscapes, the materials involved in their shaping, and notions on how tourism should be enacted. These modes of ordering then in turn promote particular practices, space, and objects, which enact a specific conceptualisation of tourism. Different modes of ordering in tourismscapes can be present in the same area, which can lead to divergence or controversy (van der Duim et al., 2012). Modes of ordering allow for the conditions of possibilities. Certain networks and materials involved in these networks make particular modes of ordering easier than others. Through representation, actors formulate problems in such a way that their solution seems the most viable: shaping knowledge, actors, and materials to their advantage. Connections in tourismscapes are important to understand the ways in which different elements in a tourism network are ordered. Linking back to the process of ordering mentioned earlier, where narratives of the world are presented, become

active through performance, and finally are strategically arranged to benefit a specific ordering.

Due to ANTs conception on space, actors 'acting at a distance' need to be considered. Therefore, actions may not be visible directly in the field but still have an effect on orderings. Jóhannesson et al. (2016) state how tourism in itself is a mode of ordering: it "(re)arranges people, things, technologies, discourses and values in certain, rather than other ways" (p. 3). Tourism is seen as a mode of ordering: it has material effects on the organisation of the world. ANT sees power as a consequence rather than an origin, it is a result of associations between actors within a network. Materiality is seen as part of the process which produces possibility for power. Translation is the performance of the relationships which constitute this process, and ANT then studies these relations.

2.3.2 Materiality

The four properties of the nonhuman as a stabiliser, mediator, moral and political actor, and gathering can be taken into the use of ANT for tourism research with regards to the concept of materiality. This involves understanding the ways in which specific materials help to stabilize tourism practices and networks: how they enable the possibility for gatherings of tourism actors and mediate interactions, and if they play a role in maintaining or enforcing moral and political obligations. The principle of general symmetry allows for the by-passing of contemporary dualisms and categorisations found in social sciences. ANT does not reject the existence of categories but rather sees them as a result of interactions and associations, and later ordering, between heterogenous actors. Placing a greater focus on the role of not only human but also nonhuman actors in shaping tourism. This is complemented by the concept of vital materialism, where the material is involved in the construction of the social (which includes tourism). No distinction is made between the material and the social (Huijbens & Jóhannesson, 2019). Objects of study can be "discursively constructed, socially produced, and materially real" (van der Duim et al., 2012, p. 20). ANT sees actors as both human (tour guides, researchers, tourists) and nonhuman. Nonhumans can further be distinguished as objects (marine wildlife, boats) or information and media (travel guides, images, posters, articles). As a result, in tourism studies, "'informants' on how an Actor-

Network is constructed and held together" (van der Duim et al., 2012, p. 20) can be a wide range of human and nonhuman things.

2.3.3 Multiplicity

Reality is seen as produced. Entailing that there can be multiple versions of reality in different spaces, produced by different actors. This does not mean that multiplicity is the result of different interpretations of something. Rather, it is that different versions of a reality, and valid knowledge, are present at once (Mol, 2002). Reality is seen as a product of enactments and practices that emerge and stabilize for a moment, from specific relations and orderings. Therefore, tourism orderings can be observed through the relational practices involved and visible in tourism activities. Studying tourism through ANT entails understanding and demonstrating the ways in which tourism, and its practices, affects and is affected by different entities: how it is a relational process that shapes different realities. The practices which emerge from a certain epistemological perspective are a focal point in tourism wildlife encounters.

Multiple orderings additionally entail absences, also termed blank figures, in which there is always something absented or excluded when ordering occurs. Therefore, tourismscapes considers multiple realities and how these involve politics of absences and presences. Multiplicity brings our attention to the role of blank figures in tourism ordering. These blank figures have the power to either maintain the stability of the ordering or overthrow it (van der Duim et al., 2012). Further, multiplicity invites tourism research to move past common conceptions of Euclidian space, the conception of space as is seen in classical geometry. Rather, space can be regional, a network, or completely fluid. Network spaces entail that spatial-temporal formations are conceptualised within specific networks, and as a result all features of length, distance, power, size, are never guaranteed. This approach to a network means understanding how its topology is being "made, unmade, and remade" (van der Duim et al., 2012, p. 168).

2.3.4 Tourism practices

Tourism is seen as a practice in itself, with specific objects and performances enacted not only by tourists but also destination hosts. Together these performances produce destinations. Practices create spaces and destinations for specific touristic activities to occur. Cultural norms also influence the actions and performances of actors in the touristic activity, these include norms on interactions, local regulations, and codes of conduct. Tourism workers and destination managers will shape the tourism environment in a way that seems suitable for the industry, making particular tourism activities possible or impossible (Rantala, 2010). This notion of making a tourism activity possible or not can be extended to the nonhuman, such as weather conditions.

Focussing on performance to study tourism allows for research to see how habits and practices are reproduced, or challenged, in the social world. Tourism practices involve embodied performances, material objects, habits, and cultural norms. Specific performances in pre-determined sites occur through commodification, regulation, and representation. Therefore, tourism performances are "socially and spatially regulated" (Edensor, 2001, p. 63). Tourism is represented as something out of the norm. Practicing and performing tourism in touristic contexts allows for tourists to release their more 'authentic self', as "craving for self-actualisation and escape are built in tourism practice" (Rantala, 2010, p. 256). When a tourist chooses to partake in a specific activity, there are already pre-informed anticipations as to what role they must carry out. This role depends on the activity and context in which it will happen. What clothes to wear, how to take the photo of a wildlife landscape, being in awe at the encounters are all examples of the performance of tourists. All of which mediate the way in which it is appropriate to be a tourist. These performances are learned from previous trips, brochures, and stories (Rantala, 2010). Therefore, tourism practices involve specific organisations of activities and knowledge, through structured action and patterns of thinking, which mediate a way of interpreting the world (Balmford et al., 2009). The tourism encounter is an important aspect to observe as it spatialises: it produces specific spaces where distinct practices occur. What is interesting in this respect is to see how actors in such a tourism context may have different performances and knowledges, and what happens when these differences come into contact.

2.4 ANT and tourism encounters

When looking at ANT and tourism encounters, the concepts of practices and performance, previously mentioned, can be integrated into this explanation. According to Barua (2016), encounters create contact zones where space and identities are reconfigured. Therefore, encounters are spatial, as they are able to reconfigure how we conceptualise space and the human. The spaces created by these specific encounters can be seen as interconnected through heterogenous networks of actors. These are relational associations that arise between entanglements of networks of world-making actors. Encounters offered by tourism provide the possibility for tourists to have an active interaction with wildlife rather than merely observing it (Cloke & Perkins, 2005).

Value is attributed to these encounters. The encounter value involves the transactions and labour of nonhuman agents that "matter and make a difference to productive activity" (Barua, 2016, p. 269). Derived from the Marxist perspective that value, in a capitalist economy, is productive *human* labour. Encounter value takes this further by moving beyond the human-centred conception of productive activity and considers the nonhuman, and their role in producing and setting up the conditions for commodities to grow. At the same time, living things are commoditised: transformed into products for exchange through converting their identity into something which provides to the service economy (Barua, 2016).

It is important to consider how tourism, and its embodied practices, can create and perform specific spaces. These embodied performances need to take place in spaces where nonhuman conditions can also contribute to the thrill and creation of the performance. Cloke and Perkins (2005) observed how the power of the river, or the steepness of a gorge, contributed to the success of the adventure tourism activity. Similarly, wildlife tourism is composed of embodied performances occurring in wildlife places. This brings attention to the contributing role of the nonhuman in creating wildlife places: "nature is an integral element of the place which is being performed" (*ibid*, p. 904).

2. 5 ANT and studying wildlife

Wildlife tourism has increased in popularity over the years alongside a rise in demand for proximal interactions with wild animals in their natural environment, rather than experiencing them in a zoological context (Rodger et al., 2009). This is in part due to the conception of wildlife tourism as a minimal impact tourism activity, which follows the line of sustainable tourism, where the focus lies in being more conscious of the impact tourism has on the environment, local communities, and wildlife. Therefore, the rise in popularity of wildlife encounters in a natural habitat has been paralleled with a need to research the potential impacts in which touristic activities take place. Consequently, socio-scientific research is now commonly paired with wildlife excursions in the aim to obtain long-term data on the impact of the activity, further scientific information on the species of interest, as well as providing the possibility for education of tourists. Results from this research can contribute to developing management and education initiatives for marine conservation and wildlife encounters.

ANT allows for the deconstruction of commonly used concepts in order to understand how their meanings can be multiple, controversial, and "entangled with other spheres of the social" (Lamers et al., 2017, p. 144). Therefore, when using ANT to research wildlife encounters, the contemporary conceptions of 'wildlife' are questioned. This term is considered to be relational effects between people, things we consider to be part of nature (plants, animals), and other materials (official documents and technologies), which all together form a network that is then performed and embodied in heterogenous social networks. We can only know 'wildlife' through exploring the relational practices which enact it.

Whatmore (2002) explores the concept of 'wild animals' and 'wildlife', stating how we conceptualise them according to contemporary Western understandings of the wild as being without humans. Wild animals are "imagined and organised within multiple social orderings in different times and places" (*ibid*, p. 14). Two topologies of wildlife are provided in order to understand the concept of wildlife in terms of networks and embodied practices: networks of ancient Roman games, and species classification as 'endangered'.

In the Roman games, human-animal and inter-animal combat was a great attraction. Whatmore uses the example of a leopard. It has moved through networks in order to arrive

from its country of birth to Rome: hunting and capturing, transportation, training, and storing in dens. All these processes have altered and changed its character. Once in Rome, it is further passed through a network of heterogenous elements which will make it become *leopardus*, a specifically conceptualised performance of wildlife. The second topology regards classification of animals according to scientific biodiversity principles. These classifications place upon an animal specific attributes, physical features set in comparison to other animals, the area it inhabits, and behavioural features, which all fall in line with the drive for scientific organisation and standardization of the world. Animals become particular species through the network of science. Standardizations and 'facts' of wildlife are now globally used and applied, the network therefore compresses the notion of space and removes 'global-local' distinctions, as animals are translocated through sharing these immutable mobiles. Other elements have used these scientific classifications, such as wildlife trade regulations or endangered species lists. If an animal is classified under a specific category of endangered, it becomes engaged in a network of biodiversity which promotes its conservation and protection.

These two examples from Whatmore (2002) come to show that becoming a 'wild animal' is a result of specific networks of human and nonhuman actors which extend from the local to the global. The conception of wild animals is based on a contrast between inanimate things living 'out there' and us humans living 'here' within society, where animality is not present (*ibid*). It can be understood that wild animals come from a space that is separate from men and science. Therefore, 'wilderness' or 'the wild' entails a specific location devoid of human presence: in this construction it has been 'othered' (Cronon, 1996). Creatures found in the wild are the same "objects of intensive surveillance and regulation in the name of conservation, namely wildlife" (Whatmore & Thorne, 2000, p. 187). While still being othered through this process of conservation, wilderness and the creatures found within are now a product of scientific investigation and research. This paradoxically makes the objects of study be at the same time othered while also brought into society.

Wild animals are part of complex networks of heterogenous things, and conceptions of nature as a resource, and as a result they become 'objects' of tourism activities by acquiring economic value (Braverman, 2015; Curtin, 2009). Through these complex networks, certain wildlife become matter of concern. Their conservation and management are then based on matters which have been turned into facts through the process of translation. The question

that can be asked here is does tourism help in creating this new perspective on topologies of wildlife, where we consider the 'wild' as something that is on the inside (of society) rather than out there? If yes, what are the effects of this? Tourism studies through ANT could contribute to looking at wildlife through what Foucault has termed heterotopic spaces, in which outsiders are brought into society as we are forced to see these outside worlds as constructed: "it is a place of our own making" (Huijbens & Benediktsson, 2007, p. 145). This 'inner space' of society, constituted of knowledge and practices, and the relations between actors, comes into contact with the socially produced 'outer space' through the tourism encounter and the materials that are used for the encounter to occur.

Wilderness is seen as social and becomes a place in which the infrastructure of its management can be exposed, challenging the binary of nature/society (Whatmore & Thorne, 1998). To question wilderness is question and investigate contemporary ethical parameters and orderings created by actors who have, through scientific or environmentalist credentials, come to act as representatives for nature. Whatmore & Thorne (1998) state how these actors undertake the role of "nature's interpreters and custodians" (p. 436).

2.6 Wildlife, encounters, and practices

Other than the networks of biology, wildlife encounters are now more and more commonly occurring within an ecotourism context. So called non-consumptive tourism has been on the rise as an alternative to viewing animals in their natural habitat rather than in a zoological context. Paradoxically, this cannot truly be the case as the nature of tourism as an industry entails that its practice will always be premised upon the consumption of something. Rather than selling the wildlife as a material, the experience is being sold, which creates this perception of non-consumption. Reynolds and Braithwaite (2001) comment on how the growth in the relationship between humans and wildlife is based on three issues: the re-evaluation of wildlife and its place in society, the increasing trend of wildlife-related tourism, and the changing attitude society has towards specific species. This final issue relates to the classifications of species by science, which places more attention on some animals than others. There is a bias towards more charismatic creatures, as well as animals which seem 'closer' or more similar to humans in their behaviour, drawing more attention and demand for

encounters. This involves the process of anthropomorphising the nonhuman to fit human needs and desires, more specifically in the context of consumptive tourism (Huijbens & Einarsson, 2018). As a result, not all encounters with wildlife are deemed as equal (Curtin, 2009).

Despite claiming to be a manner in which animals can be experienced in their natural environment, (eco)tourism wildlife encounters still involve an aspect of spectacle and performativity. The very presence of tourism in an area entails its staged nature: "a mix of the zoo and spectacle experience punctuated by magical 'trophy moments' of encounter with animals 'in the wild'" (Cloke & Perkins, 2005, p. 907). Enacting wildlife encounters within a tourism context therefore involves embodied performance, processes of mediation and ordering, and co-constitution of place. Wild animals help in constructing places. Simultaneously, the tourist encounters them in a specific way that is relevant to the place in which the encounter occurs. Therefore, presence and performance of wildlife is crucial to the assemblage of (eco)tourism wildlife encounters (Cloke & Perkins, 2005). Tourism companies act as mediators to our access into another world: from our 'social' world into their 'wild' world. Further, tourism has impacted the change in the conception of wildlife: from a utopian space to a commodity that can be used as marketing for a destination (Hujibens & Einarsson, 2018).

As mentioned above (see section 2.4), encounter value is an important aspect considered in this research. Animals are transformed into commodities and used to market destinations. This is where we see how, for example, charismatic animals are used for conservation funding and wildlife encounters, tuning to the affective connections' humans have to specific species: "biodiversity practices organise around their nonhuman charisma" (Barua, 2016, p. 726). The anthropomorphising and humanizing of animals make them seem more as friends and is a profitable way of increasing the value of interactions with them. Tourists want to reconnect with nature, this can be done through wildlife encounters which allow for a connection to environmental sensibilities through visual consumption of wildlife (Huijbens & Einarsson, 2018). Tourism has also played a role in the alteration of wildlife: from *literal* consumptive resource to non-consumptive resource, such as whales shifting from 'meat' to 'non-resource' through emphasising their human-like properties. This touristic construction of animals, and the wildlife in which they can be found, is maintained through pre-reflexive practices (Rantala, 2010).

CHAPTER 3: CONCEPTUAL FRAMEWORK

The material and social processes behind wildlife epistemologies in the context of Baja California Sur (BCS) are the main focus for this research, as these allow for a deeper understanding of the political processes behind conservation initiatives and wildlife encounters. These processes are composed of varying actors (both human and nonhuman) who form networks of associations and perform specific (tourism) practices. *Wildlife* for this thesis refers specifically to grey whales and whale sharks, as these are two species with which humans interact the most in the time of year the research was conducted in BCS. How this wildlife, and encounters with it, is conceptualised, imagined, performed, and communicated across time and space, and the role of tourism in this, will be investigated. Therefore, the research will involve considering the relations between heterogenous agencies that make up the orderings of the network that is 'tourism wildlife encounters' within a tourism context in BCS. Understanding the materialities, orderings, embodiments, and multiple realities associated with grey whales and whale sharks encounters in BCS allows for the distinguishing of networks the animals are engaged in and producing.

The consideration of materiality in ANT will be the main focus for guiding the research on which objects or materials (help to) determine relationships in the encounters, and the way in which they are used for conceptualisations and imaginations of wildlife. Once these materials have been noted, their role can further be investigated through consideration of the properties of nonhuman as stabilisers, mediators, moral and political actors, and gatherings.

The process of ordering and the three stages it is composed of (narratives, performance, and strategies) will help to better understand who or what is acting (either visible or not) when an action is observed in wildlife encounters, and the effects this has in the network. Narratives are conceptualisations and imaginings of specific actors that are communicated in the aim of benefitting particular practices. Developing this further involves looking at how power is held or wielded by specific actors: the strategies they use, the actors and materials they mobilize, which in the end results in the creation of heterogenous networks and modes of ordering in which ideas of wildlife are accepted and adopted, therefore performed in (embodied) practices. The materials, competences, and meanings which are involved in the practices that can be observed in the wildlife encounters also help to grasp the (social) practices aspect of

this type of tourism; why actors act the way they do. These practices involve performances that arise in part due to processes of ordering.

Investigating processes of translation and tourism practices allows for an understanding of how certain things or concepts came to be in a 'natural' way and are then regarded as fact, in other words, the processes of ordering that took place. Orderings further encompass making matters of concern into facts: the normalizing and creation of 'black boxes' of certain concepts, in this case the 'black box' that is 'wildlife' (grey whales and whale sharks). Networks of science play a role in the creation of normalised concepts, in this context the branch of marine biology specifically, as information from scientific research is used to support certain regulations of wildlife interactions. The role of tourism and tourists in these networks are also observed to understand if tourism is altering or contributing to the networks and conceptions of wildlife.

ANT takes as a starting point that human and nonhuman actors *equally* have agency. As a result, the research needs to take into account all actors when observing wildlife encounters. This entails considering actors that may not be visibly present during the encounter but may still have an influence on how the encounter is performed. Through investigation, one can unravel the actors which have more extensive networks and therefore more ability or greater degree of power to have effects on changing orderings of networks. Therefore, the first sub-research question tackles the actants who are present during wildlife encounters, how they are acting, as well as considering the actants who may be present but do not seem to be acting at first glance.

Grey whales and whale sharks can be conceptualised by a multitude of human actors involved in the tourism of BCS, such as tour operators, captains, guides, tourists, the government, marine biology researchers, and conservation organisations. Links between actors and the role of the nonhuman within these networks are explored. The aim of ANT is to follow and understand what actors do, observing their interactions with other human and nonhuman actors. Therefore, the starting point for this research will be the two species of wildlife (grey whales and whale sharks). Then, through the method of 'following the actor', the networks they are part of will be explored. This allows for a better understanding of how (tourism) practices *spatialise* wildlife encounters, and the ways in which different actors describe, perform, interact in, and imagine the encounter. For this research, the topology of

tourism wildlife encounters is the point of focus. The 'space' of study will be determined by the networks that are found within this theme.

The concepts of tourism encounter and encounter value are useful to delve deeper into how wildlife has been constructed as a commodity, in what way, and for what reason. Using the practices approach allows for a greater understanding of the embodied skills used and needed in wildlife encounters, and how a lack of this can have an effect on the overall experience and constructions of realities.

The way in which ideas of wildlife are constructed (materially and socially) will affect how humans behave towards the nonhuman and view the enactment of wildlife, each individual having their own perspective of nature and wildlife. A scientist may view a whale shark, and thus their encounter with it, in a different manner than a tourist, a guide, or a boat captain. These perspectives depend on factors such as pre-existing knowledge, purpose of encounter, competences, and meanings. These constructions of the encounter produce multiple realities, these realities in turn are performed in a variety of practices. This multiplicity entails that different valid knowledges are present at the same time. One of the main interests with regards to this is: has tourism played a role in shaping these imaginaries of wildlife and wildlife encounters in BCS?

The figure below provides a visualisation of how the core concepts of ANT, relevant to this thesis, link to the main research and sub-research questions.
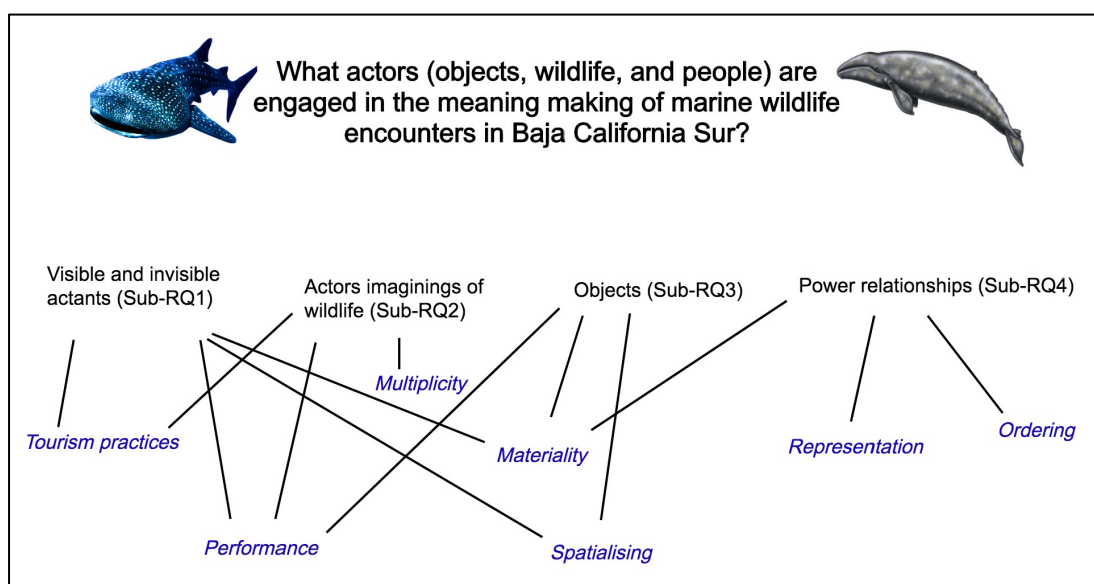
Figure 2: Combining research questions with concepts

CHAPTER 4: METHODOLOGY

ANT research is conducted with the principle of general symmetry, or flat ontology, in which all elements of a network are described in the same way with the same starting point for analysis (Farías, 2012). It allows for the understanding of how certain things come to be, how some remain for long periods of time and others don't succeed. Further, considering all human and nonhuman actors as having the capacity to shape and mediate relations within a network. Rather than providing coherent representations which can be used in similar contexts, ANT brings forth the thick description of the situation being observed through stories and examples of mundane practices, which comes with ethnographic research. Empirical research in ANT involves a method of 'following the actor'. With an aim of better understanding the relations that are created between actors, and how power – in terms of representation and ability to stabilize a certain reality – is defined and established. ANT allows an understanding of the structure and networks of tourism in a specific location. This therefore involves the tracing of network associations in the field. A non-territorial approach is taken to the research, where there is technically no end to the extent to which the investigation can go, the research 'field' in itself is not limited to BCS and will extend as far as the network under investigation reaches.

ANT provides two advantages to qualitative research: reflexivity of the researcher, and the liberty to choose from multiple methodological approaches. A combination of different qualitative data collection methods, such as interviews and participant observation will be used for this thesis. Thick description of the situation, with a focus on processes, allow to portray the "complexity and entanglement of place, events, phenomena, actors and objects" (van der Duim et al., 2012). When researching practices Nicolini (2012) mentions two perspectives that can be taken, that of 'zooming in' and 'zooming out'. Where zooming in involves focussing on the accomplishments of the practice in a specific context or locality. This is done mainly through participant observation. Zooming out considers the broader scope of the practices and their relational associations. For this research, a combination of the two will be done. Greater focus will be placed on the zooming in, looking at the visible actors involved in the encounters. This will help in answering the first sub-research question regarding which actors are acting in wildlife encounters, as well as the second sub-research question on how different actors describe the encounters. The invisible actors as well as networks created between all actors are revealed through the zooming out.

In qualitative methods, the research is "informed by the experiences, aims and agency of those performing the research" (Ruming, 2009, p.452). Research in itself is seen as a performance in which both the researcher and research construct the field and object of study. As a result, the positionality of the researcher is considered in the context of the investigation. I have had previous encounters with marine wildlife through boat encounters, snorkelling, and diving, both as a tourist and working as a guide. Additionally, I have taken some courses in environmental sciences, providing me with knowledge on the processes involved in scientific data collection and report writing. All of the above influence the manner in which observations, reflection, and the performance of the research are conducted. Therefore, the final report of this research itself will involve processes of translation, inclusion, and exclusion as some aspects will or will not be included in the presentation of research findings. This is the reflexivity that ANT brings with regards to the positionality of the researcher.

Participant observation provides information on what actors are doing, and in-depth interviews can bring deeper understanding as to what motives lie behind observed actions. In-depth interviews provided information for answering the research question on the invisible and visible actants, actors' imaginings of the encounter, the objects used, and the power relations present.

Moving past the common conception of wildlife to take into account the agency of nonhuman actors in human-wildlife encounters, ANT provides an understanding of how actors within a network create their realities and their world through relationships, these realities are based on specific epistemologies, or knowledges. When researching through an ANT framework, the way that materialities and the nonhuman play a role in shaping wildlife encounters can be understood. Observations of material objects make visible the categorisations that we use to make sense of the world. In order to better understand the multiple realities of wildlife encounters in BCS, it is important to look at how wildlife is defined by different actors who interact with it, what practices are involved in the encounters, and the relationships between the actors. Therefore, attention during fieldwork was also placed on material objects present in wildlife encounters and constructions of wildlife in BCS, as well as the role of wildlife in itself. This was done through noting down what materials were used during the encounter and *how* they were used, during participant observation. Specific materials that were noted during observations were then used as a reference for questions in the interviews.

Interviewing actors on why they used specific materials and their perspective on their use of it helped to better understand the role these materials play in the encounters, as well as the perspective actors have on their interaction and relation with it. This analysis was complemented looking at field artefacts I collected, either personally or on the internet. These artefacts included written fieldwork notes, pictures, and interviews. The notes helped to answer the questions of what the visible actors in the encounter are, what materials and objects are used, and speculation of the researcher on the power relations involved. The data collected from these was coded according to themes the researcher found interesting or relevant to helping in answering the guiding questions. The main methods used for data collection and how they relate to the sub-research questions is illustrated below (Figure 3).
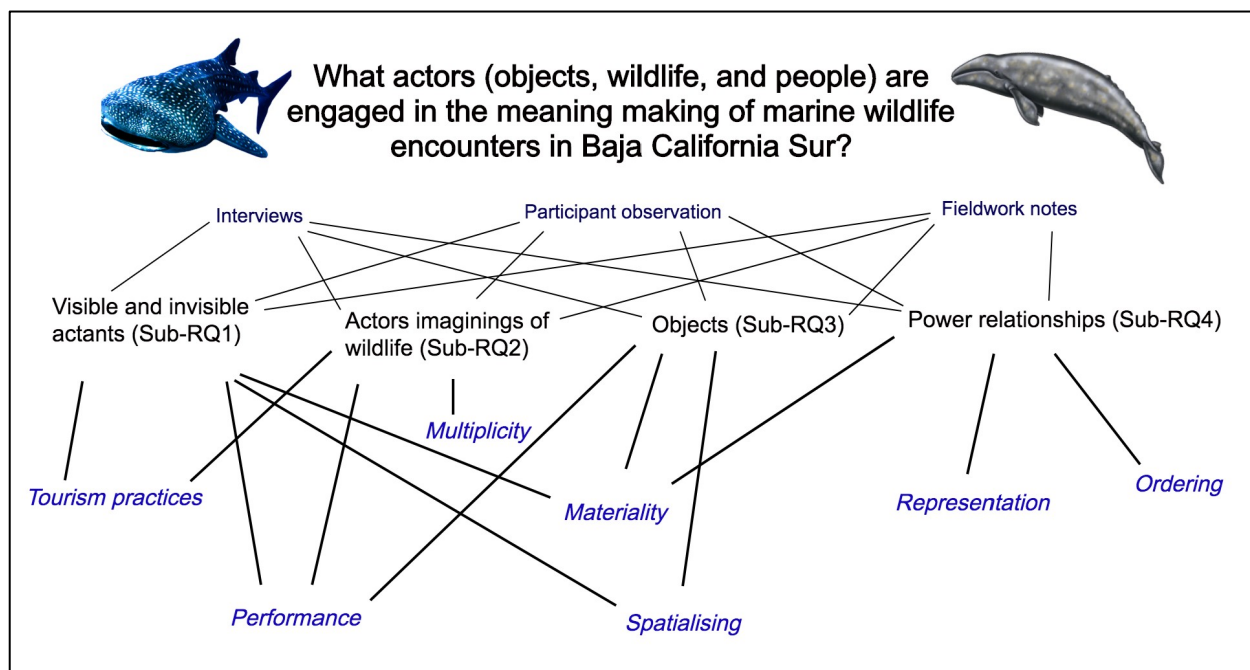
Figure 3: Connecting research methods with research questions

4.1 PART 1 – Interviews with key actors and participant observation

In order to research how wildlife in the bay of La Paz and lagoons of Baja California Sur (BCS) is constructed, and the role or influence of tourism in this, relevant actors (or materials) involved in the enactment of wildlife have been identified. These include human actors (guides, boat captains, tourists involved in wildlife tourism), wildlife itself (grey whales and whale sharks), and objects (technologies, permits, radio, GPS). The first part of the research involved looking at direct users of wildlife and gathering data on these from

participant observation and semi-structured interviews with participants of the encounter. Therefore, the primary in-depth interviews were conducted with one key actor of interest from the following groups: tour guides, captains, tourists, and researchers. These were determined by preliminary research and availability/willingness of interviewees, the questions asked were based on key themes relevant to the conceptual framework and aiming to answer the sub-research questions. A total of four interviews were conducted in this initial phase, one with an actor from each group. Three of the interviews were conducted face-to-face during the time in which I participated in the activities. The 'tourist' interview involved a group interview in a bus with six tourists returning from the whale excursion, therefore there are multiple actors responding in one interview. This means that their responses were shorter and mediated by the presence of other tourists and me. The interview with the researcher was conducted via Skype.

The initial themes for questions asked related to how human actors describe their encounter experience, their relation to wildlife and other humans involved in wildlife encounters, and what are the stated rules and regulations.

4.1.1 Participant observation

The focus of ANT on materiality recognises that embodied practices, shown through speech and gestures, subjectivities, and materials, are all to be observed and considered as part of strategically thought out performances. Participant observation can provide a 'thick description' of on-site observations in encounters and how they are structured as well as how objects mediate and shape these interactions. The focus during participant observation in this research was on how actors (inter)acted in wildlife encounters: gestures, use of materials and objects, speech, and key words, what rules and regulations are presented and in what manner. Data for this was collected by noting observations. Linking and cross-checking observations to information obtained from interviews allowed for a rich and deep understanding of the way actors imagine/describe the wildlife encounters, which is the second sub-research question.

Boeije (2010) proposes three interesting questions to ask when undergoing participant observation: what people are doing, what people know, and what people create and use.

These are all relevant for understanding the processes of meaning-making in wildlife encounters in BCS. Participant observation helped in answering the questions of who the visible actors of the encounters are and what objects are being used.

The main method for data collection during participant observation was fieldwork notes. Notes were taken based on observations while participating in the wildlife encounter activities. This involved mostly scratch notes, or jottings, that I noted down during the water-based activities. Anything that seemed important was written in a small notebook, more elaborate notes from these prompts were then typed up into a word document upon returning from the activity. Any conversation snippets about whales or whale sharks were also quickly written down in a fieldwork notebook. This proved to sometimes be challenging due to the nature of the fieldwork: being in a wet, windy, and mobile environment.

4.2 PART 2 – Secondary interviews and content analysis

After initial field observations and interviews, a snowball sampling method was used to identify which other relevant actors were important or useful to interview. This was done through following the connections and actors that the primary interviews mentioned, following up on recurring themes and networks that were found through preliminary analysis of the first set of interviews, and questions that came up. The second round of interviews[1] were conducted until theoretical saturation (for each actor group), when the information being obtained was no longer providing anything new to the topic of research. Guiding questions for these interviews involved the same ones used for the preliminary data collection as well as additional ones that came up from the interviews. A total of 10 interviews were conducted in this second phase (4 tour guides, 1 tourist, 3 researchers, and 2 boat captains). All interviews were conducted through Skype or WhatsApp.

This second round of data collection consisted of semi-structured interviews with actors such as tour operators, tourists, tour guides, and researchers. One tourist was interviewed in this second phase. To compensate for this lower number, the tour guides who were interviewed were also asked if they had participated in the activity as a tourist and could answer some of the questions from this perspective. A boat captain from San Ignacio lagoon was interviewed,

---

[1] A list of the interviewees can be found in Appendix I

having grown up with the development of whale tourism in the lagoon and working in the industry since he was 15. Another captain from Magdalena Bay was also interviewed in order to obtain the perspective from the same actor doing the same activity but in a different spatial location.

4.3 Additional data

The interviews and observations are complemented by a brief overlooking of websites from tour companies, the government, and a non-profit organisation, as well as any other signs found within the areas where encounters occur. This allowed for a better understanding of keywords used to describe wildlife and tourism encounters and the tourism/conservationist organisations' ontology of wildlife. Further, documents published by governmental bodies and conservation organisations also complemented the research with understanding the legal structures, management, and organisation of tourism wildlife encounters. If an interviewee mentioned a specific law, I went to the governmental website to read that law in order to fully understand what it consists of.

The websites which were looked at included the governmental (SEMARNAT) site, RED travel, and UNESCO World Heritage (full list in Appendix II). Official documents from these websites were mainly regarding different standards set in place by the government or classification standards.

4.4 Positionality of the researcher

The aim of the research was to insert myself into a network to better understand it, thus I had to try to be as neutral as possible, not being influenced by specific narratives. My presence as a researcher sometimes incited comments from the tourists on being 'observed' or joking that the researcher would put that down in her notes when someone acted in a comical manner. Being a young female, and a master student doing research, strongly helped in obtaining interviews with different actors. I noted how willing people are to help you when they find out that you are doing research, especially the boat captains. They were more than happy to

sit with me for an hour-long interview, answering all of my questions, and even providing me their personal contact information if I had any further questions. The tourism network that exists in Baja California truly aided me in obtaining more interview subjects via contacts I made with tour guides during my fieldwork.

Knowing Spanish also provided me the ability to speak with and befriend those working in the tourism activity who communicate very minimally with the tourists. I was considered part of the staff rather than being a tourist: I stayed in the 'staff tent' when I joined on the whale watching activity. This produced a more intimate and trusting environment for interviews with tour guides and captains. I was aware of this positionality and did try to play both roles of tourism provider and tourist at the same time, in order to try and obtain both perspectives on the tourism activity.

During interviews, certain individuals did begin to feel uncomfortable when mentioning more sensitive topics, always iterating that it was 'just their point of view'. I did feel that the information I received from captains was very positive and science-oriented, whereas other interviewees mentioned how sometimes the captains did not understand the regulations or agree with them. Therefore, the network within which the captains are involved in affects their perspective. One of the captains worked with RED travel Mexico (a pioneer in responsible and sustainable tourism in La Paz), thus he supported the reality that the company is creating. The captain was very reflective on how his perspective has changed thanks to the job that he now has.

4.5 Data analysis and coding

The process of data coding is already a process of ordering and translation, as some information is withheld while other information is deemed as interesting and important.

The data which was collected from Part 1 interviews was segmented into groups of common themes. A data coding tree was created from the themes which were found (See Appendix III). The largest categories or codes were: Encounter, Ordering, Activity Management/ Governance, Network, Practices, Nonhuman, Knowledge. These general and very broad categories were chosen as they seemed to fit well with the concepts mentioned in the

theoretical and conceptual framework. Within these categories, more specific sub-categories were created. Interviews from Part 2 were then coded according to the data coding tree created from Part 1. If any new information or category arose in the interviews from Part 2, the researcher went back to the interviews of Part 1 to see if it appeared anywhere there. If it did, this became a code. The websites information was used to support or develop further certain codes or information that was lacking.

4.5.1 Anonymity of interviews

Certain controversial topics of discussion were slightly sensitive. Consequently, the anonymity of interviewees needed to be ensured. This was done through creating actor 'tags' for each different category of actors interviewed: tourist, boat captain, tour guide, and researcher. The interviewees were then numbered according to when they were interviewed (i.e. first tourist interview is tourist 1). Their gender and age are mentioned when quoting as this provides context and more information for the quotation. The age of certain interviewees was not divulged, so an estimation is provided (e.g. early 30s). The estimation was the choice of the researcher. I only added the age of the interviewees after having conducted the interviews, therefore was required to contact the interviewees again. Most interviewees willingly gave their age, those whose age is unknown is because I did not have direct contact with them after the interview to ask their age.

CHAPTER 5: SHIFTING REALITIES AND RELATIONS OF WHALE SHARK ENCOUNTERS IN LA PAZ BAY

The development of whale shark encounter activity in La Paz is important to understand as it shows the shifts in relations between different actors and constructions of realities. Moreover, shifts in e.g. governance from mere management to a protected area induced the use of certain objects for the regulation of the activity. Understanding how the use of these objects have changed through the years animates that history. The relations between actors reflect these changes in regulations and the use and power of specific objects in the tourism activity. Allowing for a better understanding of the creation of wildlife encounter networks. Further, it provides insight into how whale sharks came to be conceptualised as an iconic and protected species in La Paz. Finally, the development of the whale shark activity is important to human actors involved in the encounters as they all mention the change in the management and organisation before and after the protected area. The theme of changing from a chaotic, dis-organised activity without any knowledge or care for the whale shark to a better-regulated and more aware practice of the activity was mentioned in all interviews with tourism actors.

This chapter begins with a brief explanation of the history of the development of whale shark encounters, with a further focus on the shift in realities for the whale shark from an invisible to a visible species. Followed by an exploration on the different actors who played a significant role in shaping and changing the relations and realities of whale shark encounters. The relations between different actors will be explained next. And finally, a small summary of the findings concludes.

5.1 History of whale shark encounters

Since the early 2000s the bay of La Paz was visited by tourists eager to take a trip to the well-known World Heritage site of Espíritu Santo island or for a diving trip in the deeper areas of the bay, rich with ocean life. On the boat trips to and from the islands and key diving spots, tourists would sometime be treated to a chance encounter with a marine animal: the whale shark. Juvenile males visit the bay year-round as it is a prime feeding ground for them, safe from predators. The problem with these chance encounters was that most boats drove fast

within the bay, resulting in many abrasions and injuries to the whale sharks from the boat propellers.

Whale sharks became more and more popular to tourists coming to La Paz. Starting in 2006 the government, working together with scientific researchers, created an initial management plan to try and regulate the activity. Certain individuals saw the opportunity to make a profit from this rising demand in whale sharks. Therefore, beginning in 2008, new tour operators offering snorkel tours, specifically aimed at encounters with this large marine species, started to appear. The issue was that the tourism actors did not know about the rules set in place by the government for the protection of the species, and the government did not care to inform them of these rules when they were implemented: "All these new companies started to go to the area without authorisation, without following any rules, because they didn't know that." (Researcher 1, female, 41, personal communication).

One whale shark could be seen surrounded by a multitude of boats, both private and touristic, all full of people eager to swim with the species. The activity was not regulated in any manner, which made the whole experience seem very chaotic to tour guides who had gone as tourists before being certified:

> There was just a bunch of people jumping in the water randomly trying to reach the whale shark, following random screaming instructions of the captain in the boat for where to go and where he was looking at. (Tour guide 4, female, 34, personal communication)

A guide was not required to accompany the captain for the activity. So, the captain was playing two roles at once, that of guide and captain. The perception of the activity as chaotic was a recurrent theme noted in the interactions between different human actors involved in the activity, and was always set in comparison to the now less-chaotic feeling of the activity thanks to new regulations and use of materials for the practice of whale shark encounters that arose from the creation of a protected area.

5.2 Changes in realities – from invisible to important species

5.2.1 Management plans and ideas for a protected area

Dr Deni Ramirez, a leading PhD researcher in marine biology, had been investigating whale sharks since 2001 in the bay of La Paz, and saw the damage that was being done to the species by boat propellers. She decided to use her scientific data as justification for the creation of a management plan for boat interactions with whale sharks and created an NGO called Whale Shark Mexico (WSMX)[2] to continue with her data collection. The interactions between whale sharks and boats were the main reason for injuries: "The boats were very fast in the area, these diver companies, they were in the area searching for the whale shark in a very high speed and sometimes hitting them." (Researcher 1, female, 41, personal communication). As a result, the initial management plan from 2006 aimed to create rules to regulate boating traffic.

The purpose of the management plan was to reduce the pressure placed on sharks by having too many boats and people around one shark: "we have rules and basically we try to avoid to put a lot of pressure on the whale sharks and um… basically we keep our distance all the time, we reduce the number of people in the water" (Tour guide 5, male, 27, personal communication). Tour guides noted that this management plan was more common-sense rules and recommendations than actual regulations with consequences if not followed. As a tour guide reflected on the regulations: "I think it was like a co-working project they got to at least get these recommendations out, but it was not something official." (Tour guide 4, female, 34, personal communication). This decision-making and creation of regulations was not inclusive of all actors:

> So, I worked with the government to generate the rules but here there was no
> interaction between tourists and government. It started from management in the past,
> from 2006, but none of the companies know that they need a permit and follow rules.
> And the government doesn't care to show to the tourism that they now need to do this.
> (Researcher 1, female, 41, personal communication)

---

[2] The organisation has two websites, one with the Spanish name (*Tiburon Ballena Mexico*) and the other with the English name of the organisation. This could be considered as catering to different people of interest. The English website has additional pages offering day trips and volunteer opportunities, the Spanish website provides more information for different actors on the regulations regarding the species.

In 2009, Dr Ramirez worked with the government to create workshops informing the tourism companies on the management rules regarding whale shark encounters. As previously noted, the government had not 'cared' to promote or ensure that actors knew of the rules that had been created. Thus, this new initiative to inform tourism providers[3] of the rules came as a shock, and some resistance was met:

> All of them hated it, because in the past they were doing whatever they wanted. (…) It was the first approach. They didn't like it. My idea was like having a feedback between government and rules and companies, and here the government didn't care and said these are going to be the rules and you have to follow. And the companies, disappointed. So, I think that we started very bad because in other parts the people were part of the generation of the rules, and here the government really didn't allow them. (Researcher 1, female, 41, personal communication)

The rules and regulations were only 'paper rules' as Dr Ramirez calls them, written down on paper but without any patrolling or enforcement of the rules out on the water. A permit was required to do the encounters with whale sharks. However, the government gave out permits to an excessive amount of people, showing little consideration for the well-being of the whale sharks, resulting in more and more boats going out to do the activity with the shark and overcrowding the species.

5.2.2 Shifting constructions of La Paz Bay – creation of a protected area

The rise in permits led Dr Ramirez to approach the environmental ministry of Mexico, SEMARNAT, with the proposal of creating a protected area where the whale sharks are most commonly found within the bay. The creation of a protected area, as opposed to a management plan, meant that fishermen and private boats could be involved in this regulation. Further, spatializing the regulation meant that control and management of encounters with the species in a designated area would be easier and a more visible practice.

A lot of negotiations between the government and tour companies, and changes to the activity management, occurred during the process of creating this protected area:

---

[3] Tourism providers, in this context, refers specifically to the grouping of tour guides, captains, and operators

The next meeting with the community and the government it was like another change, until we can get into the best way to get into the area and get out of the area. So, it has been a lot of changes, like tiny little details. (Researcher 1, female, 41, personal communication).

There were a lot of problems to begin with, and many discussions on decisions to make such as the pick of the season, or the number of boats allowed within the area considering that others would be waiting outside with their guests. The final result was a polygon-shaped protected area divided into three zones, each with a different access permission (Figure 4).
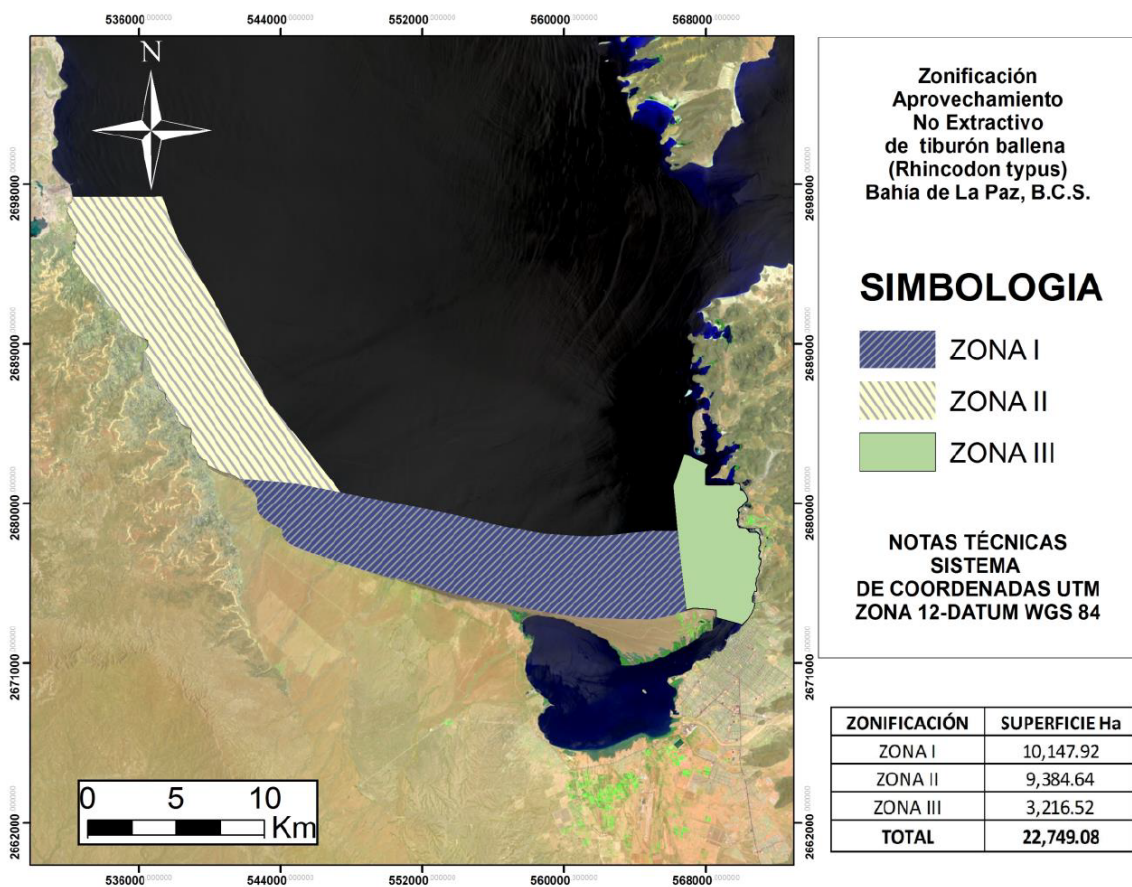
Figure 4: Zones for the activity of observation and swimming with whale sharks in La Paz bay (source: Tiburón Ballena, n.d.)

Zone 1 is where the practice of observation and swimming with the whale sharks can occur. Zone 2 is designated as a conservation area; therefore, the activity cannot occur. Zone 3 is a transit area for boats, the activity cannot take place in this zone either. The speed of vessels in

all three areas is limited to 13 km/h and needs to be reduced to a speed of 5.5 km/h when a whale shark is present (Tiburón Ballena, n.d.).

In order to ensure that all these changes "will not end on paper" (Researcher 1, female, 41, personal communication) the idea of the GPS was put forward. Including this material into the management of the activity meant that all boats doing the activity could be tracked at any moment, thus ensuring that the maximum amount of boats allowed within the observation area and the maximum speed within the area would not be surpassed.

Initially, permission to enter into the area was obtained through radio communication the day of the activity. The tourism provider would ask for permission by radio to the person working in the National Commission for Protected Areas (CONANP) office. This method proved to be dis-organised, chaotic, and unfair: "So, it was crazy because sometimes people with bigger radios, with like more powerful radios, will go inside of the area" (Researcher 2, female, 27, personal communication). The power of one's radio often determined if they could be heard better by the person in the office and get a spot in the first boats to enter into the protected area. Some had to drive their boat as close as possible just to be in range of the authorities' radio:

> By radio is how they make the list, so you need to be sure that you have your space. So, in a non-working radio, it was a lot of problems and disappointments because it was basically random if you can have the communication or if the government hears you and then you are in the list or you are not in the list. That generated a lot of things like 'oh but I was first, but my radio was not listened', so yes it was a lot of problems. (Researcher 1, female, 41, personal communication)

5.2.3 Role of the government and NGOs in shaping realities of whale sharks (regulatory environment)

The regulatory environment of whale shark encounters is composed of various governmental bodies which determine the regulations of encounters as well as manage and ensure that compliance to the regulations is met. Below is a short explanation of the different governmental bodies involved in the whale shark encounters.

SEMARNAT is the environmental ministry of Mexico, it is in charge of the protection, conservation and use of natural resources in the territory. SEMARNAT is further divided into other decentralised bodies which focus on specific natural resources, such as the ocean and coast, regulation compliance or protected areas. CONANP is a decentralised body of SEMARNAT in charge of the management of protected areas.

The Federal Attorney for Environmental Protection (PROFEPA) is also a decentralised administrative body of SEMARNAT. Its main role is to ensure the compliance with environmental regulations. Interviewees mentioned that they are in charge of ensuring regulations within the protected area are followed through vigilance boats going into the area to observe the tourism boats. Boats doing the activity can get a ticket for non-adherence to the rules. However, illegal boats in the area cannot get a ticket or have their nautical permission removed as they have not signed the new management plan.

Since the area of La Paz bay changed from a free movement zone to protected area, the authority managing this changed from SEMARNAT to CONANP. However, CONANP did not have enough manpower and funding to conduct regular patrolling. An NGO called Paralelo 28 initially took charge of the patrolling. Paralelo 28 is a combination of four different organisations (Sociedad Civil Pronatura Noroeste A.C., Sociedad de Historia Natural Niparajá, A.C, and Red de Observadores Ciudadanos La Paz) with the aim to join different actors (tourism organisations, fishermen, civil society) in La Paz for the vigilance and safeguarding of protected areas. In order to fund their patrolling, the idea of a bracelet was created (Figure 5).

Figure 5: Bracelet poster of Paralelo 28 (source: Niparajá, 2018).

The text on the bracelet mentions that the individual who is wearing it is a hero, as he/she chose to do the activity with a company that is dedicated to the conservation of the whale shark in La Paz. Each tourist participating in the activity paid a small additional fee, in exchange for a bracelet as visual confirmation they had paid. The bracelet was added to the required materials that a boat should contain in order to be allowed to enter into the area to do the activity. It facilitates the rapidity at which surveillance boats can see if the tour boat is adhering to the rules by doing a visual check that all tourists have a bracelet around their wrist, confirming that they are allowed to be in the area.

Whale sharks are classified as vulnerable in Mexico according to the NOM-059[4] (Flores, 2010). This standard aims to identify the level of risk of extinction for species of flora and fauna found in Mexico:

---

[4] This norm has four categories of risk: probably extinct in the wild, at risk of extinction, threatened/vulnerable, and subject to special protection.

Because vulnerable is almost as high as endangered, that's why we've been doing well in these terms. Probably we will have more and more attention, and probably more protection if we level to endangered but so far because it is vulnerable the government has been really paying attention. (Researcher 1, female, 41, personal communication)

The classification according to the Mexican norm entails that it is a species of high importance for conservation. In this situation then, the whale shark becomes involved in the network of protection and conservation of wildlife. There is a general understanding that this level of classification calls for measures to be taken for the protection of the species. The animals found within this space then are monitored and surveyed for their conservation. Thus, the reasoning for a protected area and management plan for encounters with the whale shark.

5.2.4 Role of science in changing realities and relations

Scientific data from WSMX was used to back up decisions made for the creation of the management plan and protected area, such as the creation of zones of the La Paz bay (Figure 4). The scientific data is a combination of data by Dr Ramirez on whale shark injuries and research conducted by interns from WSMX on the carrying capacity of the whale shark area for the amount of boats allowed at once, the speed of boats within the area, and the optimal season for the activity to take place. The shape of the area was also altered in the process: "We changed the polygon (shape) because before it was a huge area and it was impossible to be at low speed in the whole area, so we changed that too." (Researcher 1, female, 41, personal communication).

Monitoring and data collection on the whale sharks are carried out by individuals working with WSMX. In the data from WSMX, whale sharks are identified according to photo IDs, making each individual unique. Names are given to the whale sharks which are identified. A tour guide and researcher mentioned how the tourists love to hear the names of the whale sharks. Following this identification, each individual whale sharks' injuries are tracked by WSMX, observing if there are new injuries and if a whale shark comes back the following year. The percentage of injuries on all sharks who come to the bay serves as a measure for

success of the protected area and regulations that surround it, especially the effectiveness of the patrolling, which ensures boats are interacting with the whale sharks in a non-harmful way:

> But sometimes you can see 5 boats on one whale shark and it's not fair, I mean… all this effort to protect the sharks (…) The whale sharks are…I mean, they are more happy I guess because now only 14 boats, which is great, I think it's great, but the injuries are still very high. We need to finish, but… the last season it was still more than 50 percent. (Researcher 1, female, 41, personal communication)

5.2.5 Role of regulations in changing realities

The establishment of rules provided a feeling of organisation and removed the feeling of chaos to the activity. The regulations changed the tourism practice of whale shark encounters through ordering it. Roles for different actors are pre-determined and managed through these regulations. Practices put in place to maintain the conservation and biological narratives are the strict rules regarding human and nonhuman (boats) interactions with the whale shark. The boat with tourists in the water needs to maintain a 5m distance from the whale shark, if another boat is waiting for its turn with the same whale shark, it must wait at a distance of 50m. Captains and tour guides need to complete a mandatory course in order to be certified to do the whale shark activity. The course is provided by the government and contains a section where researchers from WSMX come to explain about the biology of the whale shark. Through these courses, the relations between actors have been altered:

> Really when they give us the courses, they don't just give us the course like "the shark, the shark...". If not more: "hey you guys, look at each other... Turn to one side. The one who is next to you sometimes is also at sea working next to you. Respect each other, support each other, help each other." They tell us that too. Like little children. For us to get this, little by little, so that the gears work. (Boat captain 1, male, late 30s, personal communication)

There is a two-meter limit around the head and three-meter limit around the tail. This distance proved to be difficult for tourists to adhere to during the encounter: "It's also the

stress of being told you can only go two meters from the shark at one point, three meters at certain points. You go, how close am I to the whale shark?" (Tourist 2, male, 47, personal communication). The practice of the encounter with the whale shark, within the pre-determined site of the protected area, is regulated through these distances. The stress that is noted by the tourist comes from the pre-informed anticipation of the role they need to carry out as a tourist in this situation: to listen and follow the regulations set in place for the activity.

The second rule is that of no touching: "The other rule was not to touch them. So that was part of why if we were face to face we wanted to sort of glide above them and try not to touch." (Tourist 3, female, 36, personal communication). Justification for the 'no touching' rule is that it would result in harm done both to the human and the shark: "Until I learned that when you touch the species, the fibres of its skin break, open up, and infections can happen on both the species as to oneself." (Boat captain 1, male, late 30s, personal communication). Once again it can be noted how the bodily movement of tourists during the activity are regulated, with recommendations as to how they should move and behave during the encounter. The life jacket and wetsuit, which tourists are obliged to wear, helps with this floating and gliding above the whale sharks. The behaviour of the whale shark was noted to determine the practice of tourists swimming with it. If the whale shark is feeding tourists can, as mentioned above, merely float above it and observe. If it is swimming this proves to be more difficult to remain still without moving. Many tourists mentioned the difficulty in keeping up with the whale shark's swimming: "We had fins to help us kind of glide along because I think, probably someone has already mentioned, it was quite hard work trying to keep up with the whale sharks." (Tourist 6, female, early 30s, personal communication). As a result, the physical capacity of a tourist allows him/her to keep up with the shark and enjoy a longer encounter.

Regulations also construct what is a 'respectful encounter' with wildlife with three main qualifications: distance, freedom of choice, and speed of the boat. Giving the wildlife its space: "For me it's ok as long as we respect them and keep our distance. We are not forcing ourselves on them, it's also very important" (Tour guide 2, female, 32, personal communication). Allowing the wildlife to have the choice in if they want the encounter to happen or not: "We try to have an interaction with the animals but not harassing them. The interaction is always if they approach you, but not following them all the time, that kind of

stuff." (Tour guide 3, female, 27, personal communication). Finally, the speed of the boat: "If people drive fast around the whales and clutter the boats around whales of course it's not… then it's obvious when you are there you start seeing it's not to be stressful for animals so there are right ways to do it!" (Boat captain 3, male, 48, personal communication). The distance and limited speed of the boat is meant to ensure a minimum human impact on the whale sharks.

5.2.6 Role of tourism in changing realities and relations

The actor in charge of vigilance soon changed as the tourism companies were not trusting of where the money was being placed by Paralelo 28 (the NGO in charge), deciding to take matters into their own hands and doing the patrolling themselves. The patrolling was ordered and managed by the association of tourism providers PRESERTUR (*Prestadores de Servicios Turísticos)*. The new bracelet now contained the name of PRESETUR and a different text: La Paz Bay Whale Shark Protection Program (*Programa de proteccion de Tiburon ballena de la Bahia de La Paz)*.

The rise in whale shark tourism popularity has made the encounters with the species the main selling point of the bay. A tour guide noted how whale sharks now represent everything:

> Well right now, they represent like everything. Because like… with the past years more people want to work with the whale sharks, because of course, it is a really, really profitable activity. But at the same time for example, uh… it's like a symbol. (Tour guide 5, male, 27, personal communication)

La Paz is advertised as the 'home of the whale shark', as seen on a large placard adorning the road leaving the La Paz airport to get into town (Figure 6). Upon arrival, tourists know what wildlife they can see and what the area is famous for.

Figure 6: "Welcome to the home of the whale shark" placard outside of the La Paz airport (Source: personal photo)

Interviewees referred to the whale shark is an icon or symbol of La Paz. The space within which the species is found is also constructed as important: "So I think that yes, it is good that the whale shark is this icon, and that there is the area now as well. It is a special place the Mogote and I hope the people will see that." (Researcher 1, female, 41, personal communication). In this we see how the utopian space of wildlife and species found within has been transformed into a touristic commodity to promote the destination of La Paz:

> So also, La Paz is a really tourist place, they have a lot of things you can do in the ocean, like visit the islands, Espíritu Santo island. To dive, they have a lot of dive sites. And also, the whale sharks. So, it's a really, really good place for the whale sharks because you know that it's a special place for them because they are juveniles, so in here they just started feeding, they are protected from predators, so they are just in the perfect situation. (Researcher 2, female, 27, personal communication)

An interviewee noted how this rise in whale shark tourism has provided s benefits not only to captains and tour guides, but also other members of the community:

> And now it has a very important role in terms of economy, a lot of families depend on the whale sharks. Like captains, guides, even the ladies that make burritos for the companies, even hotels and hostels. Now that more people are coming because of the whale shark, in the past it was more the island and other things but now I think whale

sharks actually have a role in La Paz in terms of economy. (Researcher 1, female, 41, personal communication)

In this we see the network of relations that have been created, through tourism practices, around interactions with the whale sharks. Where the local community is now also involved and connected to the network created by the presence of the whale shark in the bay.

5.3 Nonhuman actors shaping realities of tourism encounters

5.3.1 Classification of the area

A protected area entails that only responsible and regulated practices can occur within the space. This is noted in the management plan (Manzur et al., 2019) published by SEDETUR, where it states that the aim of the plan is for sustainable non-extractive use of the resource, i.e. the whale shark. This key phrase is repeated throughout the plan as justification for the different regulations that are put forward. The controlled access into the area via a physical checkpoint entails that there is a monitoring of who came in and out, with only those who had the proper permit being allowed to enter to do the activity.

5.3.2 Materials used in the tourism practice

Whale shark encounters occur in an environment in which certain human actors are not as comfortable or accustomed to being in, i.e. the water. As a result, the activity itself requires certain capacities and materials to fully enjoy and participate in the practice of whale shark encounters. The ability to swim is one of the most prominent competences that impacts the encounter experience:

> I think another thing that may help in that is the physical abilities that they have. Sometimes they are not really good swimmers or they are sometimes we take older people and they don't feel really confident about swimming really fast… so I think that's another thing that would make them say: "I've seen it once, I've seen it very well and that's enough for me". (Researcher 2, female, 27, personal communication)

The ability to swim was also a noted theme by tourists, who often mentioned the difficulty in keeping up with a swimming whale shark:

> Because they look like they are spending no energy whatsoever, but it was actually quite hard to keep up with their speed sometimes and sort of stay within view of the whale shark. That was really helpful to have the fins I thought. (Tourist 6, female, early 30s, personal communication)

In this we see how a nonhuman material (fins) help the tourist in the encounter. The materials required for the tourism practice of swimming with whale sharks are mainly gear used in order to better 'adapt' the human actors to the aquatic environment; namely, mask, snorkel, fins, wetsuit, and life jacket. The mask and snorkel allow to see and breathe underwater, the fins provide a means to move faster in the water. The wetsuit protects the skin, keeps warm and helps with buoyancy. Finally, the life jacket provides even more buoyancy and ensures that the tourist will not attempt to dive down to see the whale shark from closer.

> Sometimes a lot of people just go with the whale shark and don't… like they have never used a wetsuit before, or they haven't used a snorkel or a mask before and if it's the first time you are using a snorkel it's kind of tricky to know… to feel confident about breathing. (Researcher 2, female, 27, personal communication)

The encounter occurs in an environment where the very essence of human life is altered, as the tourists have to learn how to breathe in a manner they are not accustomed to. This change in routine life and practices contributes further to the feeling of thrill in doing the encounter and reinforces the notion of wilderness space where the encounter takes place. As it is 'out there' where different materials and practices occur, and nature plays a more visible role in what is possible. The GPS and radio were noted as two nonhuman actors of key importance in ordering the practice of whale shark encounters in the protected area.

The GPS emerged as a means to control the movement and activity of boats entering into the whale shark protected area. Each tourism organisation that receives a permit from the government to do the activity is fitted with a GPS. It has been observed as serving a very important role in ensuring that rules are followed:

> I think it's a very important fact, well the GPS, because it helps us to follow the rules, no? We in Mexico like to play a lot to bend the rules. It's a very good motive for them to maintain the allowed velocity. Of course, in order to keep the animals healthy no, but I think it's a very good incentive to say something. (Tour guide 2, female, 32, personal communication).

When the rules are followed, the whale sharks are kept healthy and the activity is therefore non-intrusive and respectful of the wildlife. The GPS ensures that the boat drives at a certain speed and only remains within the area for a maximum of two hours in high season, and three in low season. It also serves as a means to identify the different captains who do have the permit:

> Because we have, on every boat there is a GPS. The speed, the location, and with your data they now know how many, how, and what you are going to do. They are starting to identify us a little (*with this*). (Boat captain 1, male, late 30s, personal communication)

When management through the GPS was first installed, tour companies noted that only boats who have a permit were fitted with a GPS. Consequently, there is always the possibility for 'pirate boats' (those without a permit) to enter into the area without being seen by the authority monitoring the GPS activity. Therefore, actual visual patrolling within the area was added as a complement for vigilance, ensuring boats within the area have the authorisation to be there and that the tourism providers are following the regulations regarding the activity: "So the government said ok you put the GPS and I will do more patrolling" (Researcher 1, female, 41, personal communication). The difficulty here is that the authorities cannot give a 'ticket' or remove the nautical license of the pirate boat as they did not sign the new management plan. They can, however, remove the illegal boat from the protected area.

The GPS' partner is the radio, used for communication between a multitude of actors: captains, the captaincy, tour operators, and the government. Returning to the recurrent theme of chaos, interviewees noted how radio-usage previously was chaotic and unfair, but how it now serves as an actor in creating teamwork and coordination between actors: "That's what the radio is for: to coordinate." (Boat captain 1, male, late 30s, personal communication).

Previously, only a total of 14 boats could be in the area at the same time, and there were three turns per day. As mentioned before, the radio was used for asking for permission of access into the observation area: "So, it was super problematic because could you imagine like 20/30 people just saying by radio the name of their boats. Basically, it was like almost impossible to listen." (Tour guide 5, male, 27, personal communication).

Having a 'stronger' radio gave you more advantage in being heard by the individual working in the CONANP office noting down the names of the boats asking for permission to enter into the area. A recurrent observation from tour guides was that because of this non-visible management, people could easily lie or cheat with regards to being ready when asking for permission to enter. The solution to this problem was to reduce the amount of communication between boat captains and CONANP and add a visual component to the granting of access into the area. So, in the season of 2019 a checkpoint was created where one person notes down the boats who come to ask for permission, then contacts CONANP with the list of the first 14 boats allowed to enter zone 1. The request for permission was now done in a visible way rather than having a material intermediary (the radio) which could be blamed for bad communication and allowing the possibility of lying about being ready to do the activity.

The main authority communicating through the radio is still CONANP as they are the ones tracking the GPS and giving authorisations for movement:

> "You can't accelerate if you haven't been spoken to over the radio, if you haven't been given authorisation. Sometimes I ask the office for support, because the radio is overloaded or something. I tell them to help me with the GPS, for where I am... they sometimes tell me to wait, because I'm still inside the area. They also monitor me." (Boat captain 1, male, late 30s, personal communication).

Therefore, the radio serves as a verbal complement to the authority of the GPS, which tracks the movement of the vessels doing the whale shark encounter activity. Interviewees noted the importance in the radio with its two main roles of communication between actors and asking for permission to enter the area: "So, channel 8 is where we ask for permission to go into the whale shark area, but also that channel is being used as a tool between boats that we are doing the activity." (Tour guide 4, female, 34, personal communication)

During the activity the radio is used as a tool for teamwork between captains on the water, as well as ordering the practice. A vigilance boat is sometimes present in the area and communicates with the captains when they are not doing the activity according to the rules:

> Sometimes they are watching and with the radio (*they say*) "hey, so and so boat, I ask you to please mind the distance of your people". On occasion they also tell you "such and such a boat, you are congratulated for doing the activity well". They say it on the radio, and there are those who say: "hey, they gave you a star, they gave you a good grade". And the little positive jokes begin. (Boat captain 1, male, late 30s, personal communication)

This communication between the authorities and the captains instigates a kind of 'ego contest' among the captains where they all want to 'get their star' and have a verbal affirmation of their good practice in the activity. The patrolling boat is not always present, but the feeling of pride when doing the activity remains, and so captains call each other out when they are not adhering to the rules. They know that everything they say is still being heard by the authorities over the radio. A captain's comment on the vigilance boat reinforces this responsibility of acting according to the rules as you never know when the boat will be there:

> They are there, right when you are doing the activity and you are doing your thing, sometimes you do not realise that they have arrived. Sometimes they are watching and with the radio (*they say*) "hey, so and so boat, I ask you to please mind the distance of your people". (Boat captain 1, male, late 30s, personal communication)

The vigilance boat does not have to be constantly present on the water as just the possibility of it being in the protected area and observing the practice of captains is enough for the control of their behaviour. Further, guides and captains have taken on the role of the authorities in ensuring that only boats with a permit are allowed in the area: "Because even though there is no vigilance there, we… all of us, we act as a vigilance too. So, for example if we see a boat that we recognise they don't have the flag, so they don't have permission to do the activity, immediately we call the authorities." (Tour guide 5, male, 27, personal communication). The radio is used for the tourism provider to notify the authorities of illegal practice.

The radio creates the possibility for cooperation and teamwork to occur between captains, where they can ask one another to wait until they are done with the activity before putting their guests in the water.

5.3.3 The wind and waves as an actant

> Basically, one of the most important factors that affects us is the wind. (…) And those winds make a lot of waves in the water and its dangerous to do the activity. Actually, it's like, we really need to be aware of the winds one day before the activity, or all the time. Because if it's super strong, the port *capitania* they close the dock, you are not allowed to go there. But sometimes like, it's not strong enough and they say like yes you can do the activity but with caution. (Tour guide 5, male, 27, personal communication)

The activity can be cancelled if it is considered too strong. The wind can also cause tourists to choose not to do the activity due to the cold. Being wet and having a strong wind blowing on you is not the way tourists imagined the encounter to be like. Another nonhuman element which was noted to impact the experience, and perceived success, of the activity is the visibility in the water:

> Sometimes there is not good visibility in the water because of the particles that are there in the water, which is actually what they are eating, and the reason why they are here because they feed. So, it depends on the day you jump with them, if there is a good or bad, or so-so visibility. (Researcher 3, female, 33, personal communication)

These two nonhuman actors play a role in the perceived success of the activity and, with regards to the wind, the possibility of the activity to take place at all.

5.4 Varying relations between actors

5.4.1 Fearful, thrilling, and respectful relations – tourists and whale sharks

Tourists who come to snorkel with the whale sharks mostly have never been in an encounter with this marine species before. When they are told they will be swimming with a whale *shark*, the only thing they truly hear is the latter name. Leading to a sense of fear at entering into the water with a wild animal which, according to contemporary media, has a habit of attacking and eating humans:

> So, when you mention the word shark, most of my guests and most of the people there are always afraid of that word. Why? Because we have a misconception of how um… how is the sharks' behaviour in the water, because basically we watch a lot of movies that taught us about that the sharks are a killing machine. (Tour guide 5, male, 27, personal communication)

This fear of the tourist towards the whale shark was observed by both tourists and tour guides. Many tourists in interviews mentioned the aspect of fear of entering into the water:

> The whole experience was, yea, exciting, thrilling, and a bit scary I'd say. Particularly diving into the water in front of the whale shark. Even though I suppose they don't eat humans it's always a slight concern that they might change their mind. (Tourist 1, male, early 30s, personal communication).

The first jump in the water with the whale shark is therefore always very impressive, as the tourist comes face to face with the actual size of the shark:

> So I think that's a lot of what happens is that the first jump is really impressive jump because it's a big animal and… sometimes the first jump is really the first impression, the shark is there and you can see all the way like all the shark is passing in front of you and you have a really good view. I think that's enough for them. I think that it's because of the impression they get the first time because it's a big animal. (Researcher 2, female, 27, personal communication)

It was noted how some tourists are satisfied after the first jump, not wanting to do the encounter again with the species. Along with the name is the unpredictable behaviour tourists

mention when describing wildlife, making a comparison to the predictable behaviour of their domestic pets:

> I suppose with wildlife I just think about how potentially it is unpredictable. Because we have domestic animals and pets you understand more about how they will act and what they respond to, whereas with wildlife you don't necessarily know. (Tourist 2, male, 47, personal communication)

This aspect of unpredictability is what contributes to the feeling of excitement and thrill when coming into contact with the species; a chance encounter in an unfamiliar environment. The conception that having this encounter is based on chance, as the animal is free to move around as it pleases, makes the encounter seem even more special. A recurrent observation was how the experience is seen as life-changing, the perspective of the participant is changed: "I'm just happy to be a part of that and kind of have my worldview turned around a little bit. And uplifted, I guess. Take more responsibility, you know, my role in the circle of life…" (Tourist 2, male, 47, personal communication). This responsibility of tourists was a recurrent feeling from tourists. They understand they can contribute to the conservation and preservation of a wild animal, that they can be a part of something bigger. The unpredictability of the encounter makes them reflect on their role in helping to preserve the beauty and uniqueness of wildlife with which they are interacting:

> I think that's why it feels extra special when there are moments when you interact with wildlife and it looks like there is just that connection for a split second. And it might just be all in the, in my mind, and the animals might just be reacting to some other factor that we don't know about but it just feels extra special that you've had this almost chance encounter even if that chance encounter was manufactured to a certain degree by you being there and actively going out there. (Tourist 4, female, early 60s, personal communication)

This connection with the whale shark mentioned by the tourist is what helps to gain more support for the conservation and protection of specific species. The potential of the encounter changing a tourists' perspective towards a species was also mentioned by a tour guide:

> But this activity for me is the best way to show them that, like we need to break these bad thoughts about sharks. I know that this is a filter feeder shark, it's not like a

regular shark, but it's a really good step to teach them that we don't need to be afraid of the water. Especially those animals. (Tour guide 5, male, 27, personal communication)

Entering into the water with the whale shark allows for this removal of fear for the species when the tourists see that the sharks are not bothered by them and sometimes even simply swim away. The nonchalance of the whale shark towards people was commonly commented by tourists and tour guides.

Intertwined with this are feelings of respect and awe for the wildlife. Tourists mentioned how they want to respect and not intrude on the animal: "I also wanted to respect the fact that these are wild animals and we are just visiting… and we should respect the fact that we shouldn't be encroaching on them." (Tourist 4, female, early 60s, personal communication).

5.4.2 Relations of responsibility – guides and whale sharks

The theme of responsibility for the whale sharks was commonly mentioned in interviews with tour guides. Tour guides have to take a course on the behaviour and biology of the whale shark, the species is presented to them through the narratives of conservation and the management plan regulations. Working closely and frequently with the whale sharks has caused many tour guides to grow affectionate and close to the species. As a result, they feel a responsibility towards the protection and conservation of the species. For example, when a guide mentioned that she feels like a mother towards the sharks:

> With the whale sharks I feel very… compromised with them because in La Paz we have specifically a juvenile population that visits this area. We don't have the big grown adult, so I feel very responsible of them like a mom. (Tour guide 4, female, 34, personal communication)

Most tour guides actually have a marine biology background of some sort, therefore researchers and tour guides in their relation to whale sharks are quite similar. With the only difference being that researchers have a slightly different practice when interacting with the species where their main goal is to collect as much information on the individual with which they are swimming, as opposed to a guide focussing on tourist satisfaction and safety.

5.4.3 Relations of awareness – Captains and whale sharks

The creation of regulations around the encounter, and the obligatory course that captains have to take, changed the relation captains have to whale sharks. Fishermen did not really care too much about the whale sharks, seeing them just as a species in the waters in which they were fishing:

> Local fishermen used to call whale sharks *pes sapo*, which means toad fish because they when they are eating, they kind of look, when they are eating vertical and they are just pulling all this water inside their mouth they kind of inflate this gull. They look like a huge toad when they inflate that. That's why they used to called them *pes sapo*. (Tour guide 4, female, 34, personal communication).

The description of the whale shark as a *pes sapo* (toad fish) shows how they placed little attention to the species. This is further reinforced by the fact that the fishermen did not eat the species, so they were of little interest to them: "what I've learned or what I've heard from a lot of captains or local people is they said that whale sharks don't make good *machaca* (meat). That means they have never tried to eat them, or at least if they have tried it doesn't really taste good because it has a lot of fat on its meat." (Tour guide 4, female, 34, personal communication). As the demand in tourism rose, so did the interest of the fishermen towards the species, as they saw it as a way to gain money through touristic whale shark encounters.

The mandatory courses and regulations changed the awareness of fishermen, who were now certified as captains, on the necessity to protect the whale shark and do the activity correctly:

> Before we didn't have so much awareness. I went to the first times on the shark tour, for example, when there were five or six boats. It was not a strong tourist attraction here in La Paz. This was about 15 years ago. We used to see the sharks and actually we would touch the shark, in those times when we didn't know, we didn't have the awareness. We touched it because we saw it as docile, we saw it as very calm. (Boat captain 1, male, late 30s, personal communication)

The practices which the captains were accustomed to before when encountering a whale shark were altered by the creation of a protected area and management plan. The courses which came along with this management plan helped in informing the captains on how their

interaction with the whale shark could be damaging if not done correctly. Where previously they did not really care about the whale shark, they now see it as a source of income and therefore need to protect this source of income.

5.4.4 Conflicting and collaborative relations 1 – captains, guides, and tourism owners

What was striking between captains, guides, and tourism owners was the simultaneous collaboration and conflict relations present. Captains a tour guides were seen to both collaborate for the tourism activity, while also have some points of conflict as to who has the authority. Collaboration between captains was noted through the use of radio and unofficial rules. These relations of conflict and collaboration will be explained further below, beginning with conflicting relations.

The most common observation in interviews was how the age of the captains affects their willingness to change their traditional cultural practices. Most older captains used to be fishermen. Therefore, it is difficult for them to adapt to the new ways of going out into the water and interacting with a whale shark: "I understand like a lot of them were fishermen, and now they are doing an ecotourism, so it's a huge step." (Tour guide 5, male, 27, personal communication). Their practices as fishermen have been changed due to the rise in whale shark tourism in La Paz, providing an alternative livelihood to fishing. Before the management plan and protected area, captains took tourists out to see the whale sharks without any kind of control or limit to how to do the activity. The difficulty with older captains adapting to new ways of doing the activity was noted to cause some tension between captains and guides:

> Well I've had bad experiences with captains before. Sometimes they are really… they are just staying with the tradition that they have, and they are… it's really hard for them to change. So, they are people that have been working with the ocean for a lot of years. Like they have a lot of experience. But also, they have this certain way to do things and they don't want to change so… when normally it's a group with only women in the group, it's kind of hard for them to hear that they need to follow rules

from a younger person and a woman. (Researcher 2, female, 27, personal communication)

Tour guides often indirectly referred to themselves as more knowledgeable on the new ways of doing the activity; how the practices of whale shark encounters which occurred before the creation of the management plan and the protected area were not centred towards the conservation of the species. Understanding that older captains may have a harder time adapting, they try and advise on the right practices without offending them. The factor of age was also reflected upon by a younger captain: "Those of us who are a little younger are a bit, at this moment, a little bit more conscientious. Sometimes those who are a little more unaware are the older gentlemen, the fishermen." (Boat captain 1, male, late 30s, personal communication).

There seemed to be a constant shift of power between the captain and the guide for who has more control over the activity. Many guides noted how they share their knowledge on the rules and regulations with the captains, making it seem that they are more up to date regarding the proper practice of the activity. They did mention that captains have a deeper understanding of the whale shark behaviour, due to their longer experience in the water as fishermen. At the end of the day the captain is the one controlling the boat, as this is the material that determines the course of the activity and the interaction between humans and the whale shark, and so they are able to make the final call:

> What affects the whale sharks is how the captain interacts with the whale shark. I'm sorry I have to say it is the captain. Because even if the guide says something to the captain, the captain in the end does whatever he wants. (Researcher 1, female, 41, personal communication)

This important role of the captain determining the end result of the interaction made them be included in the mandatory courses, beginning in the season of 2017, provided for the whale shark encounter activity, where previously only the tour guides had to take it and it was voluntary.

The relation between captains doing the activity of whale shark encounters has changed over time, with the use of the radio strongly influencing this change in relation. Before the creation

of the protected area unofficial rules included captains 'sharing' whale sharks only with their colleagues who lived in the same neighbourhood:

> It has evolved a lot in the aspect that before it was like more individual and more of groups, of companions from the neighbourhood, those who work at sea: people from other neighbourhoods grouped apart. (…) It's no longer because they don't live where you live, or because you don't have a beer with them over the weekend, that you don't work with him. (Boat captain 1, male, late 30s, personal communication)

This illustrates the shift from captains working individually or only with people they knew well from their neighbourhood, to working together in a team with everyone who is in the water doing the activity. The theme of teamwork is an important one in ensuring that the activity runs smoothly, and the rules are adhered to. Using the radio for communication between captains has allowed for the development of this teamwork.

Alongside the current official governmental rules from the management plan for the protected area, there are also unofficial rules between captains in whale shark encounters activity. The main unofficial rule between captains is to try and look for your own shark:

> If you are arriving and a shark has already been found, you go look for your own shark, to make the activity more enjoyable… not because someone has already found it, you go look for that boat. (Boat captain 1, male, late 30s, personal communication)

This was a recurring unofficial rule (or courtesy) mentioned by many tour guides as well. All know and agree on that each boat should have their own shark. This ensures that rules are maintained, and the activity is more enjoyable for the tourists.

The relation between tour guides and captains within the area also contains aspects of collaboration. They see themselves as responsible for the conservation of the whale sharks, they work together to ensure this is possible:

> And we also, as I told you, we work as a vigilance and that's so amazing. Most of the guides and captains and the owners, they know each other. So basically, we try to do the activity, not only taking care of the whale sharks, obviously taking care of ourselves. Because we are partners in the water so basically, for example, if we see

that there is only one shark or two sharks, well we try to share it with the other boats. (Tour guide 5, male, 27, personal communication)

The sharing of the shark is another unofficial rule repeated in interviews with tour guides and captains. This community feeling among the tourism providers allows for the creation of a surveillance network which does not directly involve the authorities. Rather, the tourism providers contact the authorities if they observe illegal practice within the area.

5.4.5 Conflicting and collaborative relations 2 – researchers, NGOs, and tourism providers

Conflicting and collaborative relations were also noted between researchers, NGOs, and tourism providers. More conflicting relations were noted between these actors. Collaboration was only observed when tourism providers asked researchers for help when the management plan was being created.

The initial lack of communication between actors when creating the management plan is the root for tension between researchers and tourism providers (mainly captains and guides). The creation of the protected area was justified by the conservation narrative and the associated need to continue with scientific research within the area. The scientific data is seen as necessary to continually adapt and improve the management plan for the species' conservation. It provides information on whale shark health, measured primarily through injuries, to determine the success of the protected area. This construction of the importance of scientific data makes it seem as if a boat conducting scientific research has an advantage over the others:

The other companies think that we have some special treatment because we are the research. I think that's a lack of information to the others about what we do. Because we are the same, we don't have any special treatment, we make the line like everyone else, we are just waiting like everyone else. I think that in some kind of way, they think that we are just like "hey we are doing tourist research trips" and they just let us pass without any kind of waiting, and that's not true. And that's all lack of

> information that puts all this noise in our research. (Researcher 2, female, 27, personal communication)

Further, as the data is providing information on shark injuries, which is caused by (tourism) boats, the issues between tourism providers and researchers are reinforced. The tourism companies are not happy with what the data shows, and therefore often discredit it: "So they are saying like 'hey we are not the ones, we are following the rules. There are lies in your studies'." (Researcher 2, female, 27, personal communication)

Due to this relation between certain tourism operators and the researchers, the possibilities of practices for researchers within the protected area were altered by the government. Previously, scientific research was conducted with tourists on board, whereas now there is a clear distinction between touristic and scientific activity within the protected area. A researcher reflected that the government most likely implemented this differentiation to pacify the tourism companies and remove any further complications. Nonetheless, the scientific boats are observed more closely by other captains:

> Just like to do the rules that are supposed to be done because we are doing research and we are making all this noise about the injuries and the rules. Everyone is seeing us very carefully. Everyone is waiting for us to make something bad so they can just like "hey you are not following the rules". So, we are very careful to always do everything that we need to be doing correctly. (Researcher 2, female, 27, personal communication)

In this we see how science may have the power to make changes in a management plan and protected area, as well as representing the silent actor, but this power can have a significant effect on the perception other actors have on those who are associated with scientific research. Especially if the knowledge produced from this research is showing a negative side of a tourism activity that claims to be sustainable.

The fact that tourism companies now control the surveillance of the area does not suit very well researchers, saying that it does not make sense to have tourism companies control the tourism activity:

Well the first two years it was this patrolling boat with the government and the NGO, so let's say it was neutral. The tourism companies were very disappointed, they saw the money, they saw the opportunity in controlling everything. So now the tourism companies receive the money for the bracelets, and they have their own boat and do their own patrolling. Since it happened, the government so far, I haven't seen very much the government on this patrolling boat. Of course, its tourism doing, regulating their own, and I still see these three rules that they don't follow. (Researcher 1, female, 41, personal communication)

The perspectives of actors towards who is seen as 'neutral', and who is not, is interesting to observe as it shows the relations and associations between actors in the network of wildlife encounters. The government and NGO are seen as neutral parties in the regulation of the tourism activity, whereas the tourism companies are not, since they have an economic interest with regards to the encounter. The mistrust in the tourism companies doing the vigilance was also noted by a tour guide, who observed that there was more tourism in the area the past year, but the vigilance boat was not present all the time. Which lead to him to question where the money was actually going.

When the discussions between different actors were occurring for the creation of the protected area, tour operators asked researchers to prove to the government that there were whale sharks all year round and that therefore the activity should be allowed to occur year-round. However, the number of sharks present at different times of the year varied: "We developed the seasonality of whale sharks in terms of number of whale sharks. When we have enough whale sharks for the boats." (Researcher 1, female, 41, personal communication).

5.4.6 Mediating relations – Tourism providers and tourists

Tourism providers act as mediators in allowing tourists access into another world (from a social to a wild world), that of a protected area. They represent the authority and ensure that rules that were set in place are followed. The tourism practice of wildlife encounters for tour guides occur within a work context. Consequently, guides' relation to tourists, and practices they are involved in, is determined by this context:

It's part of my job being a nice host, teaching them, and also telling them what is the right thing to do every time we go and do the activities. So, share the word about doing responsible practices and respectful visiting. (Tour guide 4, female, 34, personal communication)

For tour guides then, the encounter is more about working than enjoying the activity as much. The tour guide's actions are mediated by their responsibility towards the tourists. They are responsible not only for the safety of the tourist during the encounter but also that of the whale shark. Therefore, they need to explain the rules tourists have to follow when doing the activity. This role of responsibility during the tourism practice is reinforced by competences that the guide needs to have, especially strong swimming skills. Guides who are involved in the whale shark encounters have to take a course which provides them with the necessary skills and knowledge to conduct the practice of whale shark encounters.

Within this relation between guide and tourist, the life jacket and wetsuit help the guide in completing their role in ensuring that risks to tourists and whale sharks during the encounter are minimised, and rules are adhered to:

So, what I do with the people who don't know how to swim is I put the life jacket because they feel a little bit safe, but I take them by the hand and I go with them. Because if they don't know how to swim, even if they are using the life jacket, they don't feel really confident about being in the water just with the life jacket. (Researcher 1, female, 41, personal communication)

The life jacket was noted by some tourists to provide them with an extra sense of security, as well as limiting their ability to dive down with the species. Many tourists often vocalise their fear for the whale shark and entering into the water with an unpredictable wild animal, the guides often play the role of reassuring them and trying to make the whale shark seem more docile:

So, every time I go in the water, I tell people: "remember you are just going to be swimming with a big bunch of boys", so they are going to be more scared of you than you of them. (Tour guide 4, female, 34, personal communication).

5.5 The whale shark tourism encounter

In this context of wildlife encounters whale sharks are thingified according to different qualifications, which together reinforce the necessity for the ordering of the tourism practice and the creation of a protected area. The construction of the whale shark as a vulnerable species in Mexico makes its protection and conservation of high importance. Their status as vulnerable makes the species of interest for scientific research, as the information gathered from this research on their behaviour and life contributes to more effective conservation and preservation measures. Due to the economic importance of encounters with whale sharks in La Paz, a complete ban of the activity was not possible. Therefore, scientific data is used to create regulations that ensure the activity can continue, people can still swim with the whale sharks, but no (or less) harm is brought to the animal: a respectful encounter can take place. The most effective way to ensure this protection is through the creation of a protected area, as opposed to merely a management plan.

The relation among captains, and between captains (specifically ex-fishermen) and the whale sharks is the most influenced and altered by the new management plans and creation of the protected area. Where before captains used to see the whale shark as just another fish in the bay, it then became a source of income through the rise in tourism demand, finally they have been constructed as something to be conserved and protected through scientific narratives.

The similarities and differences between the two wildlife encounters that occur within the La Paz bay and lagoons of Baja California Sur can be compared in order to obtain a more extensive understanding of wildlife encounters, processes of meaning-making, the practices, interactions, and heterogenous networks of relations. The following chapter explores the development of the wildlife encounters with grey whales in the lagoons of BCS with reference back to similarities it has to the whale shark encounters.

CHAPTER 6: SHIFTING REALITIES AND RELATIONS OF GREY WHALE ENCOUNTERS IN THE LAGOONS OF BAJA CALIFORNIA SUR (BCS)

This chapter puts forward the findings from the fieldwork on grey whale encounters. Focus is placed on new information, provided by the grey whale encounters, which supplements the empirical data obtained from fieldwork with whale shark encounters in La Paz bay. It is important to understand the development of the now famous encounters with the grey whales as it notes a visible difference in relations between local fishermen and whales. It provides further detail and reinforces the information obtained on the realities and meaning-making that is constructed, the materials used, and processes of ordering in wildlife encounters of BCS.

A brief summary of the history of whale encounters is provided to set the scene for the changes in realities and relations between actors that occurred. A table showing the similarities with the themes found for whale shark encounters is provided. This is then followed by an exploration of the changes in realities and relations which are different from the whale shark encounters.

6.1 History of whale encounters

The lagoons of BCS are an important area for the grey whales during their yearly migrations across half the globe. They come down South from the Arctic seas in order to give birth to their young in the lagoons, as they have warmer waters and are free from predators. Many tour operators based in La Paz travel to the lagoons of BCS, which are on the other side of the state, to do the whale watching activity.

For many years, fishermen in the area of BCS were afraid of grey whales when going out to fish in the lagoons and along the coast. The grey whale mothers were known to be aggressive with boats, crashing into them and killing people, in order to protect themselves and their young as best they could from what they seemed to perceive as threats. This defensive behaviour was due to the whaling boats from other countries who came to the lagoons to hunt

the whales, Mexican fishermen did not participate in the whaling practices. Despite the whaling boats being international and not Mexican, the whales did not tell the difference and attacked any boat out on the water. In these times, the whales were referred to as *pes diablo* (devil fish) by local fishermen.

Whale watching in the lagoons began in the early 60s, when US researchers would come down to study them. In the early 70s only American tourists came to whale watch, no Mexican tourists and no Mexican tour companies offered the activity. The American tourists arrived in large ships and would get onto smaller speed boats to go observe the whales from closer. Resulting in no contact with the local communities living around the lagoon, who still remained with this fear of the whale.

It wasn't until an encounter in the San Ignacio lagoon in 1972 that the interaction between fishermen (and Mexicans in general) and whales began to change. Pachico Mayoral was the first fisherman to have a friendly encounter with the grey whales. Before, fishermen would bang something on the boat to scare the whale away, on this day they were too focussed on fishing to make the sounds, so the whale was able to approach the boat. Pachico tentatively touched the whale and had an amicable encounter with it. No one from the village believed him when he returned that first day:

> They just went back to the fishing community and they told the story to the other people and they totally did not believe it. Like "you are crazy there is no way". So, the locals were still afraid and thought he was crazy, that he was just playing with fire and that at some point he is going to get burnt. That's what everybody said for a long time. (Boat captain 3, male, 48, personal communication).

A group of American tourists who were travelling down BCS got stuck in the sand road near the lagoon and were helped by Pachico and some other locals. Through their conversations, Pachico mentioned his encounter with the grey whales, the tourists immediately wanted to join him on his next outing. This is what got the ball rolling for whale encounters in the lagoons and began changing the perspective locals had on whales. Researchers heard of the friendly whale encounter and so began to travel to the lagoon to study the behaviour and biology of the whales: "The researchers, the top researchers on grey whales had been working in San Ignacio since 1978. That's where the whole thing started, that's why they

went there." (Boat captain 3, male, 48, personal communication). In the beginning, it was mainly American researchers studying the grey whales in the lagoons.

6.2 Changes in realities – from demon to friend

6.2.1 Similarities with whale shark encounters

The conception of grey whales has transformed across the years due to different influences. These mainly include the global ban on whaling, making the species change from meat to species of interest for conservation, and the rise in the tourism practice of whale watching in the lagoons of BCS.

Theme		Grey whale watching activity
Role of actors in changing realities and relations	*Role of the government in shaping realities and relations*	The governmental bodies involved is SEMARNAT, who created the management plan for what watching activity in the lagoons. The most current Norm dates from 2010. It regulates how boats can manoeuvre during the encounters, the speed and distance to maintain between boat and whale, and the requirement that any boat going out for commercial or scientific whale-watching should obtain an official authorisation from the government. In Mexico, grey whales are classified under the NOM-059 as subject to special protection.
	Role of science in shaping realities and relations	A zoning of the area where the whales can be found in the lagoons was also implemented in the Northern lagoons, delimiting a zone for the touristic activity to occur. This zoning was not implemented in Magdalena Bay. Scientific data is collected on them through photo IDs and behavioural observations. Due to

		their migration, scientists from the different countries (Mexico, Canada, and the United States) have collaborated in order to create an international catalogue on the grey whales. Monitoring of grey whales is also conducted in the lagoons of Mexico.
	Role of regulations in shaping realities and relations	Captains need to complete a course order to obtain the permit to do the activity. Boats should maintain a 50m distance from the whales. Putting their engine on neutral and allow the whale to approach.
	Role of tourism in shaping realities and relations	Grey whales are a symbol for Mexico. Whale watching is a profitable activity for local fishermen who choose to also become captains during the grey whale season. This changed the relation fishermen have with whales. The reality which was changed was the conception of the whale as a demon to seeing it as a friend.
	Classification of the area	Only responsible and regulated tourism practices can occur within the biosphere reserve of el Vizcaino. Monitoring of entrance and exit of the area, as well as movement within the area, also occurs in the Northern lagoons.
Materiality and nonhuman actors	*Materials used in the tourism practice*	The life jacket was referred to as tourists 'ticket to the boat', if they do not wear a life jacket, they cannot get on the boat to go do the whale observation activity. The radio is also used for communication between captains on whale behaviour or if there is any technical failure with a boat and it requires assistance.
	The wind and waves as	Before getting onto the boat, the guide notifies tourists to choose where to sit in the boat

	actant	according to comfort: the front being more bumpy but dry, the back being less bumpy but may have a few splashes. The ocean thus contributes to how tourists organise themselves within the boat to do the activity.
Relation between actors	*Relations of responsibility – guides/researchers and whales*	The guides and researchers are often also involved in the whale shark activity of La Paz. Therefore, their perception of responsibility is also present in their relation towards the grey whales.
	Relations of awareness – captains and whales	The regulations and management plans, as well as captains' interactions with guides provided the space for the captains to increase their awareness on the grey whales. It was commonly noted that captains have a sort of affection, awe, and respect for them. This respect most likely comes from the history of interactions, where fishermen know what the whales are capable of if they feel threatened. As the captains are also fishermen, their knowledge and experience in interacting with whales is extremely extensive. They have lived with and seen the whales in the lagoons long before the tourism activity arrived.
	Conflicting and collaborative relations 1 – captains, guides, and tourism owners	Guides and captains have a conflicting relation as the captains (who are also fishermen) sometimes have a different practice for the whale watching than guides. As a guide is not required for the activity, the captain has more authority. However, there is also mutual knowledge sharing between captains and tour guides, where the captain has more knowledge and longer experience in doing the activity of whale watching and interacting with the whales.

		Collaboration between captains and tourism owners was noted in the Northern lagoons of el Vizcaíno.
	Conflicting and collaborative relations 2 – researchers, NGOs, and tourism practices	A conflicting relation was noted between captains and researchers/authorities when trying to implement the zoning in Magdalena Bay. The whale watching activity takes place in any part of the lagoon in Magdalena Bay and is not limited to one specific zone. In contrast, there is a collaborative relation between researchers and tourism providers in the northern lagoons. The regulations for the activity were created in a collaboration between the government, researchers, and the local community. This communication between different actors allowed for the creation of cooperative relations within the network of whale watching in El Vizcaíno.

6.2.2 Differences with whale shark encounters

Differences were noted in the whale watching activity in the lagoons of BCS compared to the whale shark activity in the bay of La Paz. These included the importance of the grey whales being not only on a local scale but also on an international scale. This is due to the international conventions and accords between different countries. The way in which the interaction with the whale is described, and its behaviour during the interaction was an extremely prominent difference. With the whales having a lot more curiosity and interaction than the whale sharks. The classification of a lagoon made the regulations, tourism practices, and adherence to regulations differ according to the lagoon. Which in the case of the whale shark activity, was not a determinant as the activity all takes place in the same classified protected area. The boat is not only a vessel to bring the tourists to see the animal but also a delimiting factor in the encounter. The activity only takes place in the boat, so tourists can

take and use their cameras to document the experience. In comparison, for the whale shark activity you need a waterproof camera to document the in-water encounter. The relation between captains and whales was mostly observed as an economic one, a relation which was not mentioned as much in the whale shark activity. These listed differences are elaborated on further in the following section.

6.2.2 Shifting constructions of whales on a global scale

When commercial whaling was globally abolished in 1986 by the International Whaling Commission's (IWC) moratorium, it was an easy step for Mexico as they did not have any whalers. The conceptualisation of whales changed from a natural resource to consume, from whaling practices, into an important species that must be protected and safeguarded, through conservation practices. This led to the rise in scientific research on the whales, in order to be able to create an accurate management plan for the touristic whale watching activity which was on the rise. One of the ordering strategies used by conservation narratives is to create protected areas for the species of interest.

The Mexican government followed this new reality of whale conservation through creating the first whale sanctuary, a Marine Protected Area (MPA) specifically for cetaceans, in the Ojo de Liebre (Scammon's) lagoon of BCS in 1972. The San Ignacio lagoon was soon included in the MPA in 1979. In 1988 the whole complex, called El Vizcaíno, was classified as a Biosphere Reserve. It was further inscribed as a World Heritage site in 1993. Found in the northernmost part of BCS, the area is home to a multitude of different important species of Mexico and protected habitats. The importance of whale conservation on a global scale influenced the construction of realities for whale encounters in Mexico.

6.2.3 Role of science in changing realities and relations

Researchers from the University of Baja California (UABCS) were consulted by the government for recommendations on what should be included in the management of the whale watching activity: "Since the beginning… we were consulted by the authorities, how the whale watching should be developed. It was very interesting that our opinion was very… welcome to the development of the regulations." (Researcher 4, male, 64, personal communication). This contrasts to the whale shark encounter where it was the other way around; scientists contacted the government suggesting it should create a management plan for the tourism activity.

As the researchers were not experts on the matter of whale watching, they travelled to other regions of the world to see how the activity happened there and adapt the regulations to the

specific cases of the lagoons in BCS. The most important contribution they provided was as to *where* the activity should take place within the lagoon.

This zoning was determined by scientific research conducted in the lagoons of the Vizcaíno, through observing the whales' usage of the lagoons' space. The lagoons are breeding lagoons, as the mothers come there to give birth to their young. The deeper areas of the lagoon are typically where mothers and new-borns aggregate. This is determined as a special place where the regulations aim to protect the mother and baby. Thus, these areas should not contain tourism boats to leave the mother and calf in peace.

6.2.4 Role of the government in shaping realities of the grey whale in Mexico

The grey whales are of specific importance to Mexico since they come to give birth to their young in the lagoons of BCS. This leads to them receiving the title of Mexican Citizen, or "Mexican by birth" (*Mexicana por nacimiento)* as is promoted on the SEMARNAT blog, where individuals can learn more on the grey whales (SEMARNAT, 2018). In this we see the importance of the grey whale for Mexico and Mexicans. This significance of the species was also noted by a tour guide: "Grey whales are now in our bill of 500 pesos so that's very representative, because they are now in one of our bills so that means they are getting more and more representative for Mexicans." (Tour guide 4, female, 34, personal communication).

Indeed, the 500 pesos bill (Figure 7) features a grey whale mother and her calf with the caption: "Ecosystem of coasts, seas and islands, presented by the grey whale, its calf and sea grasses, in the El Vizcaino Biosphere Reserve in Baja California Sur, natural heritage of humanity"[5].

---

[5] Original text: *Ecosistema de costas, mares e islas, presentado por la ballena gris, su ballenato y pastos marinos, en la Reserva de la Biósfera El Vizcaíno en Baja California Sur, patrimonio natural de la humanidad*.

Figure 7: 500 pesos bill featuring a grey whale mother and her calf (source: personal photo)

The grey whales are thingified as a symbol of the Mexican coastal and marine ecosystems, thus a matter of national pride and concern. The Vizcaino is their natural habitat and iconic of the efforts Mexico is making towards conservation and sustainability. Thus, explaining their special protection in the standard created by SEMARNAT. The grey whales as an iconic species for Mexico and the importance of its marine ecosystem was noted by a boat captain:

> Mexico is privileged that these animals come and go with their young to their places of origin, where they feed, in the northern part of the world. For me it is very important this migration that they do towards Mexico, and that Mexico has been privileged by its nature, by its climate... which is why these whales come here to give birth a little while and to mate. (Boat captain 2, male, 47, personal communication)

6.2.5 Role of tourism in changing realities and relations

The San Ignacio lagoon was, and still is, the least accessible of all lagoons where grey whales came to rest during their migration. The most easily accessible lagoon for tourists is Magdalena Bay, as it is closest to the international airports of La Paz, Cabo, and Loreto. This results in the area having more pressure from tourism, thus leading to captains showing a more harassing practice of whale watching. The tourism pressure is especially strong in Magdalena Bay:

The theory is, or the pressure is, that the faster the boat driver moves, the more money they make in a day. If you are there long enough in Lopez Mateos, you'll see it. The faster they go the more money they get; they charge cheaper. (Boat captain 3, male, 48, personal communication)

Since the captains are all freelancers, there is a competition in trying to get the greatest number of clients on their boat. This was noted by a captain: "Well, always competing to be the best in favour of the tourism in the sea." (Boat captain 2, male, 47, personal communication). In comparison, captains in the whale shark activity did not mention this aspect of competition amongst one another. This is most likely due to the fact that almost all of them are contracted by tourism companies, and the season for the whale shark activity lasts much longer than that of the grey whales.

Due to the geography of the San Ignacio lagoon, not all areas are viable for the whale watching activity all the time, due to water levels with the incoming and outgoing tides. As a result, the deepest area is also the area where the activity can take place throughout the day no matter the tide:

So, it was not easy to decide… protection or whale watching activities. And there was some kind of, the half, because the area where the whale watching can develop in the lagoon is the area close to the mouth, it is the deepest area. And all the rest of the lagoon is not permitted. So, the mother and calf can move to the inside areas, avoiding the noise and the traffic, if they want. But the area they prefer is where the whale watching is happening. So, it's good for whale watching because they have the mother and calf close and easy to approach. That is why the… way to approach and to stay with the whale is very important. (Researcher 4, male, 64, personal communication)

The practices which occur during the encounters reinforce the creation of the whales as a docile animal and 'friendly', often compared to a domestic pet when describing its behaviour:

And then she moved aside a little bit then she started rolling, like in a barrel, in a circle. Like as if I was looking at my dog just rolling on the ground very happy looking at me. she stayed with her calf and we kind of pet them again, and they kind of said goodbye to us and then they left and we left. And it was like 'my god, I've just

had a human-dog interaction with a 15 meter animal'. (Researcher 1, female, 41, personal communication)

6.3 Nonhuman actors shaping realities of tourism encounters

6.3.1 Varying adherence to rules according to classification

A recurrent theme noted by interviewees was the difference of regulations, adherence to regulations, and practices for whale encounters depending on the lagoon. All interviewees referred to 'the northern lagoons' when mentioning exemplary interactions with whales that are non-intrusive and respectful.

The lagoons of Ojo de Liebre and San Ignacio are found within El Vizcaino, therefore they both fall under three classifications: World Heritage, Biosphere Reserve, and Whale Sanctuary. Their importance is noted on the UNESCO website where an explanation for the classification of the sanctuary as a World Heritage site is given:

> The Whale Sanctuary of El Vizcaino contains the most important breeding grounds of the Eastern subpopulation of the North Pacific Grey Whale. Its protection is intricately linked with saving the species from extinction and recovery after near-collapse due to excessive commercial whaling. (UNESCO, n.d., c)

Referring to how humans used to interact with the whales and how this almost led to the collapse of the species reinforces the urgency and importance of protection and conservation of the whales. These classifications entail that the management and ordering of whale watching occurs under a plethora of different regulations and best practices recommendations.

The reasoning for making El Vizcaino a World Heritage site was that it met one of UNESCO's criteria for selection (x):

> To contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation. (UNESCO, n.d., a)

Further, it is also considered to be of outstanding universal value, according to this classification as a World Heritage site. The narrative of World Heritage mediates the practices for the conservation of important biodiversity, which takes place within a constructed space of 'significant' status.

According to an interviewee, this classification of the lagoons as World Heritage entails that the space is considered a pristine wilderness area. The classifications of San Ignacio specifically allow for the maintenance of this conception of the area as pristine. This is set in contrast to the other lagoons who do not have the classification, and therefore may not follow such strict encounter regulations:

> So, they have several designations that sets a lot of different regulations to follow. So, in San Ignacio and Scammon's we do follow a lot more regulations, or a lot more tightly in those two locations because of those designations. Magdalena bay, San Carlos, and Lopez Mateos they are not, as far as I know they are not a World Heritage site, they are not a reserve, they are not a whale sanctuary, and the general regulations might be a little more loose. (Boat captain 3, male, 48, personal communication)

This difference in classification and construction of the area where the wildlife encounter occurs influences the relations between actors involved in the whale watching activity and associated practices. In comparison, the whale shark activity only takes place in one specific location that is classified as a protected area. Resulting in all practices of wildlife encounters following the same regulations for this constructed area. Further, the other human activities which takes place in the whale shark area results in that it cannot be considered as a 'pristine wilderness area'.

6.3.2 The boat as delimiting factor

The boat for whale watching encounters mediates a lot of relations between actors and the competences that are necessary for the encounter. The boat is a delimiting factor for the encounter: the regulations are not as extensive as that of the whale shark encounters, which take place within the water and the boat is merely a vessel to bring tourists to the area where

the activity occurs. The use of small *panga* boats for the activity results in the regulations specific for the size of the boat. Since these small boats can approach a whale more easily without scaring it away, regulations order the distance and velocity of the boat, requiring the motor to be on neutral when the whale comes closer than the designated safe distance. This is to ensure that the whales' space is respected and to limit the potential of injuries on whales by the boat motors. Larger boats cannot enter into the lagoons due to the depth and geography, therefore the regulations ordering their practice of whale watching is different.

Since there is no in-water activity, a guide is not needed, and tourists are 'free' to move around within the space of the boat. Nonetheless, they are still required to wear a life jacket the whole time they are onboard. The role tourists need to play in this situation then is to respect the space of the boat and not jump into the water the moment they see a whale. Everyone has seen the encounters of humans touching the friendly whales, but they still know to respect the limits set out by the boat.

6.3.4 Social media shaping expectations

Tourists who arrive for the whale observations often have pre-conceived expectations due to the way in which the encounter is advertised all over the internet and on all tourism websites: "I always tell them that it is what the influencers and the government and everyone sells to you. Like "here is the whale", "touch the whale", but it is not always going to happen." (Tour guide 3, female, 27, personal communication). There is an expectation of a unique experience which is thrilling to tourists. This expectation is a stark comparison to that of the whale shark encounter, where tourists feel fear at the idea of interacting with the whale shark.

The guides, and some captains, aim to manage the expectations of the tourists which have been created by the network of tourism providers who use the charismatic interaction as a means to promote the activity. A tour guide observed how (in Magdalena bay) the captains try as much as possible to get this iconic encounter with the whales. The reflection on this is the better the experience, the better the tip: "The closer the better because there is some way thinking about the best experience, they will get the best tips, right?" (Tour guide 4, female, 34, personal communication). In contrast, a captain from Magdalena Bay commented on how he too aims to manage the expectations of the tourists on touching the whale:

There are tourists who tell us, "I want to touch a whale". Well, I tell them that you can't touch a whale, I tell them as it is: that they can't touch a whale. The whale comes on her own, the whale comes, that's the friendly whale. It arrives and that's when there's a chance you can touch a whale. (Boat captain 2, male, 47, personal communication)

The influence of this constructed expectation by social media is what is the most detrimental to the whales, due to the practices the captains perform as a result: "If you promote touch the whales, or feel the skin of the whales, or something like that. That is not good for the whales because of the harassment (*by the captains*)." (Researcher 4, male, 64, personal communication).

The expectation of touching a whale can influence tourists' perception of the success of an encounter: "And I've heard people in the past, I asked how was the activity, and they say: 'oh it was perfect! We spotted 20 or 30 or 50 grey whales, but I'm feeling really disappointed because I didn't touch a grey whale'." (Tour guide 5, male, 27, personal communication). This disappointment apparently affects the captains as they may not get as much of a tip from a disappointed tourist. The pressure from expectations of tourists influences the behaviour captains have towards the whales:

Of course every captain would try to get you that famous friendly encounter that everyone sees on all the pictures touching the grey whales so there are a lot of people as most of the captains will get out of the rule, or without knowing there was a rule or even when there weren't rules at all they will just try to approach as much as possible. So, they will get in their way, approach a lot with the boats and trying to just reach the whales. So that's what I think it was in the past. A lot of harassing the animals. (Tour guide 4, female, 34, personal communication)

6.3.5 Taking the perfect picture

The encounter takes place in a semi-dry environment, allowing to tourists take their phones and cameras with them to capture the unique moment and experience. The influence of technology is clearly notable in the relation between whales and tourists, where the necessity

to capture this special moment with a wild animal is extremely important for tourists (Figure 8).

Figure 8: Tourists interacting with a grey whale through their camera lens (source: personal photo)

Capturing the perfect wildlife picture involves removing humans from the shot, to only have the animal in its natural habitat. This was observed when a tourist commented that the person in front of her was making it difficult to take a good picture. As a result, the encounter occurs often half through the lens of a camera or phone:

> What do I need to experience it? A camera… sometimes that got in the way because I wanted to see it with my own eyes and really experience it, not just experiencing it through a lens, because that's just the same as watching it on TV at home, I sort of felt like. (Tourist 3, female, 36, personal communication)

This construction of the perfect wildlife picture is contradicted when there is a physical or intimate encounter with the whale, the purpose then transforms to that of obtaining a picture of oneself interacting with the whale. The picture serves as proof of the tourist fulfilling the encounter expectation that was shaped by pre-arrival information and media.

6.4 Varying relations between actors

The development of whale watching encounters in BCS has had a strong impact on the relations between actors, similarly to the whale shark encounters. Relations that differ from those noted in the whale shark encounters are explained below. These are magical relations between tourists and whales and economic relations between captains and whales.

6.4.1 Magical relations – tourists and whales

Every tourist that comes to do the activity has the knowledge of the history on interactions between humans and whales, this moral weight on them makes the encounter even more special:

> And then to see the mother and the calf swimming together and then coming to the boat… it was, it was sort of spiritual. That the mothers trusted and would bring their babies to us to watch. Especially considering our history not so many years ago with hunting them. (Tourist 4, female, early 60s, personal communication)

The most common word used to describe the encounter with the whales was "magical". The violent history between humans and whales is what makes possible the current conception of the encounter as magical: due to the stark contrast of the interaction. Tourists have a lot of respect for the large mammals that they have the chance to see in their natural habitat, without disrupting them or feeling like they are harming them, as humans used to in the past. Respect for the whales and concern for them makes tourists quite analytical of other boats' practices when interacting with whales. An example: when observing the whale watching boats from the beach, tourists commented (in a negative way) on how there were so many boats around one single whale.

Affective relations with the species were seen to be mainly influenced by media platforms and the closeness humans feel to this marine mammal due to their shared biological classification. This affective sentiment influences the relation and perception individuals have on whales. A researcher noted, when comparing people's perception on the whales versus whale sharks: "When you say "whales" they are pretty, and nice, and gentle, and majestic." (Researcher 3, female, 33, personal communication). The whales are given human

personality traits and characteristics by the tourists, often commenting how they seem curious, or happy, or are performing for the tourists. A recurrent theme was of mutual curiosity from the whale and tourist: "And the idea of curiosity, that we as tourists are curious about what's under the sea. Then these creatures, these baby whales are curious to see us and find out about us." (Tourist 4, female, early 60s, personal communication).

The intimate and sometimes physical interaction that happens between the tourist and the whale gives rise to interpretations of tourists that the whales now are 'trusting' of humans, since they 'bring their babies' to be seen. A tour guide noted that tourists are often amazed at this close interaction they have with the whale, as they half expected to only see them from far away and only the head or a small part of the body. This experience is markedly different to that of the encounter with whale sharks: the whale sharks are not interested in these human beings entering into the water with them. The tourists cannot relate as easily to a large fish, lacking an empathic connection based on behaviour. With the grey whale, the motherly care and sociable behaviour is more similar to human cultural practices.

6.4.2 Economic relations- Captains and whales

A prominent theme mentioned by interviewees was the economic importance of whale watching for the local fishermen. Once the whale watching practice gained momentum among the fishermen, it became a more important economic activity than fishing. The fishermen realised that they could make more profit from alternating between fishing and whale excursions, as this gave the fish stocks a resting period. This explains the reason why so many fishermen are now also captains during the time of the grey whales.

This is different from the whale shark activity as fishing occurs year-round no matter if it is whale shark season or not; therefore, not all fishermen are captains in the La Paz bay. That the economic relation between captain and wildlife is more prominent in the whale watching tourism activity is important as it adds a different reality from an actor who is present in two different kinds of wildlife encounters.

CHAPTER 7: DISCUSSION

This research aimed to deconstruct the realities of tourism wildlife encounters, by observing how different processes of ordering and materialities create a context of multiple realities, and how these have changed over time. The "taken for granted" (van der Duim et al., 2013) reality being researched was that of wildlife tourism encounters. ANT aims to understand *why* this reality comes to be meaningful and what it consists of. Inevitably in the process of writing a thesis, this process of meaning-making has been simplified. Messy objects are important to look at, as observing a messy object allows for the consideration of different understandings and interpretations of such an object or entity, resulting in the co-presence of multiple realities. The messy objects were specifically whale sharks and grey whales found in the La Paz bay and the lagoons of Baja California Sur. These were discursively constructed through narratives, socially produced through tourism practices, and made to matter through the usage of specific objects/nonhuman things during the encounters. The black box of grey whales and whale sharks, resulting from the black boxing of 'wildlife', was the main simplification and categorisation upon which the ordering of relations and the reality of wildlife tourism encounters were based.

Consequently, the research observed which actors and objects are involved in shaping, producing, and stabilizing these simplifications (or messy objects) and different realities. All of these together create the Actor-Network assemblage that is wildlife tourism encounters in Baja California Sur.

This chapter explores further how the findings of the research relate to the specific concepts of ANT which were provided in Chapters 2 and 3.

7.1 Realities of wildlife encounters

Four of the five controversies mentioned by Latour in *Reassembling the Social* (2005) were used to explain Actor-Network Theory in Chapter 2. These will now be used to guide the discussion on the findings of this research. The controversies mentioned by Latour are: the status of groups, the status of facts, agency, and how to study associations. The observed *collectifs* of wildlife encounters relate to the status of groups. The status of facts will be

exemplified through wildlife conceptualisations. Nonhuman agency and properties of nonhumans elaborate on the agency of different actants. Finally, the practice of wildlife encounters links to the controversy of how to study associations through practice theory, the tourism encounter, and topologies of wildlife tourism.

7.1.1 The *collectif* of wildlife encounters (status of groups)

In this first controversy, ANT focuses on deconstructing groups in order to better understand what makes or unmakes them. The *collectif* of wildlife encounters was the focus of research for this controversy. Therefore, placing attention on the actants *(*people, things), and the relation between these two in order to understand how they are strategically put together to create Actor-Networks or *collectifs*.

The two Actor-Networks which can be distinguished in the marine wildlife encounters are that of conservation and tourism. A network is formed when two or more actors are connected; as such, these two networks were formed when (1) the wildlife became constructed as a species in need of conservation and protection (conservation network) and (2) became of interest for tourism practices (tourism network). These two networks also came to be connected because tourism, especially water-based tourism in this case, plays an important role in the Mexican economy. The connection of the two is what creates the network of marine wildlife tourism encounters.

How different actors conceptualise and come to contribute to the creation of the entity that is the whale shark, or the grey whale, is important to understand as it allows for the observation of the network of wildlife encounters. The conservation network for whale shark encounters in La Paz arose from the collaboration between a PhD researcher and the government. International conservation relations between governments were established when the IWC moratorium was signed, and whales were no longer hunted for meat but became a symbol for conservation. Initiating the whale conservation network in Mexico. This network was then expanded further to include the scientific community in order to obtain advice and recommendations for how encounters with whales should occur.

The rise in whale shark and whale watching tourism created the tourism network. This is where *translation* occurred: the network of tourism became connected to the conservation network through their mutual usage of the wildlife species (Middelveld et al., 2016). For example, when the government published the first management plan for the tourism activity taking place in the whale shark protected area with the key phrase being the "sustainable non-extractive use" of the commoditized whale sharks. In the grey whale encounters, the government asked the support of the scientific community for their recommendations on what should be included in the regulations for the whale watching activity.

Tourism and conservation may sometimes have different objectives or constructions of realities, specifically with regards to the use of the commoditized grey whales or whale sharks: different modes of ordering in tourismscapes can be present. This is especially notable when looking at the relation that most captains have with researchers. The captains believe the researchers have an advantage over them in the whale shark activity due to the importance that is placed on scientific research for whale shark conservation and protection. Being aware of this reason for the controversy can now help to mediate and improve the relations between actors.

The relations between the two Actor-Networks were established and stabilised through ordering practices and use of materials. These moments of translation are never fixed, as can be seen in the shift that occurred from a mere management plan for the whale shark activity into an actual protected area. Relations between actors changed as a result of this shift. The most notable difference was the captains altering their network from collaborating with only those in their neighbourhood, to including and collaborating with everyone working in the whale shark activity. The collaboration between actors involved in the whale shark encounters network is maintained through the use of the radio, GPS, and bracelets: material actants that confirm the belonging to the network of whale shark encounters. The mandatory courses played an important role in reinforcing actors' perception of being 'partners on the water', working together to guarantee a respectful encounter.

Permits given to those who can enter into the protected create a *collectif*. Actants who are outside of this group, namely pirate boats, do the activity illegally. Those who have signed the new management plan and have a permit are moderated by the authorities and can legally be sanctioned for malpractice. On the other hand, pirate boats, who are not a part of the

collectif, cannot be fined or have their nautical permit removed. This makes the management of the activity more difficult and requires physical removal of the illegal boat from the area.

Similarly, in the whale watching of the Northern lagoons there is a *collectif* between researchers and tourism providers who work in unison to guarantee a respectful wildlife encounter. In Magdalena Bay, due to the lack of classification of the area where the activity occurs and limited presence of researchers, there is little collaboration between captains. The only collaboration is seen in the use of the radio where communication on the location of a friendly whale takes place.

The convergence that occurred, where actors aligned their activities in order to be more compatible (van der Duim et al., 2012), was when scientists and the government worked on mediating the tourism activity in order for it to suit and fit into their construction of wildlife encounters. Tourism actors were involved in the process of the newly constructed reality of wildlife encounters when the protected area for whale sharks and the management plan for whale watching were created. However, the whale watching management plan was only created in collaboration with tourism actors from the Northern lagoons, which were already part of the conservation narrative due to the area in which they are found to be classified as a biosphere reserve.

7.1.2 The conceptualisation of wildlife (Status of facts)

Ordering and representation allow for the understanding of knowledge production. Ordering contributes to the creation of matters of concern into facts, which shapes taken for granted realities (van der Duim et al., 2013). 'Black boxing', or simplification (Law, 1992), is a form of ordering. Processes of ordering involve three stages: narratives, strategies, and performances (Franklin, 2004). Certain conceptualisations have a stronger influence than others in being constructed, reproduced, and reinforced; changing matters of fact into matters of concern (Latour, 2005).

In this situation two topologies of wildlife (Huijbens, 2015; Whatmore, 2002) are prominent, each with their distinctive conceptions on why the species are a matter of concern: (1) conservation due to their global and national status and the importance of the specific

geographical space where they can be found within Mexico, and (2) tourism due to the economic profit that the encounters with the wildlife provide. Using the metaphor of topology allows for the approach of ANT where the subject of study is considered through network connections and processes of ordering which can transcend time and space, there is no distinction between inside or outside. Rather than imagining and investigating wildlife in a specific geographical space, this perspective allows for a consideration of the messy and interconnected networks that arise and are a part of this 'wildlife' reality. This allows for a consideration of not only the human actors but also the material and how it plays a role in the construction of realities. The relations between actors in these networks is also considered.

The topology of conservation and biodiversity causes wild animals to be classified according to a scientific organisation of the world: with categorisations, distribution numbers, behaviour, and habitat. The habitat in which the species can be found, and its classification, is important for the construction and conceptualisation of the wild animal. For example, the Northern lagoons of BCS are referred to as the last 'pristine wilderness areas' where grey whales can be found. In contrast, the whale shark protected area is not constructed as a pristine wilderness area due to all the human activities that take place in it, other than the regulated tourism activity of whale shark encounters. The relations between actors and practices are influenced by the classification of the areas of encounter.

The concept of tourismscapes (van der Duim et al., 2012) helps to understand processes of ordering and meaning-making, through the lens of tourism wildlife encounters. For the tourism topology, wild animals acquire an economic value by being constructed according to a touristic mode of ordering and perception of reality. This construction shows how the network of wild animals is not only 'local', but 'global'. The wild animal is materially real 'locally' but also symbolically significant 'globally'.

The wildlife species of whales and whale sharks *became* matter of concern through the narratives of conservation and tourism that simplified and black boxed them according to their conceptions. A network of actors is created within these two narratives of conservation and tourism, with specific practices and materials used in the human-nonhuman interaction that occurs in the encounter. The narrative of conservation and protection of the whale shark or grey whale, put forward by a leading PhD researcher, Deni Ramirez, through her thesis on whale shark injuries, and other scientific research on the effects of human-wildlife

encounters, leads to the creation of regulations that produce and order specific practices within a demarcated space. International movements towards sustainable and responsible tourism, global classifications of protected areas, and classifications of wildlife according to the risk level of extinction, all reinforced this push from researchers for the management of wildlife encounters in order to ensure a 'respectful encounter' (See 5.2.5). The international collaboration between researchers helped to obtain a framework for creating a management of the whale watching tourism activity. In this all, we see the connection between different networks that are in accordance with a certain reality of wildlife encounters, this connection strengthens the drive for said reality. This then led to include strategic arrangements of materials and people in order to fit the ordering network, such as the inclusion of the GPS in the whale shark encounters in order to maintain the demarcation of the protected area. Practices and performance that occur within this network arise from the specific ordering. The whale sharks and grey whales, through translation and ordering, are turned into facts.

The conservation narrative aims to maintain the binary distinction between nature and culture as 'fact'. Contemporary Western conceptions of a 'wild animal' stems from setting it in contrast to humans, entailing that the environment in which wild animals are found (the wild) is othered as distinct and separate from human presence (Cronon, 1996; Whatmore, 2002). This serves as justification for the narratives regarding the creation of protected areas (of wilderness) with regulations on human entrance and activity within the area. The regulations on distancing between human and wildlife *during* the encounter can be understood as a means to further maintain the construction of the animal as wild and maintaining the conception of human and nature as separate. However, through the tourism practice this 'fact' or reality of separation between human and wild animal is shattered. The tourism wildlife encounters create a heterotopic space (Foucault, as cited in Huijbens & Benediktsson, 2007), in which the outside, or what has been othered, is brought into the inner space of society and made to matter in a particular way. The heterotopic space that is created through the encounter in the protected area is where the ocean (wilderness/nature) and society (tourists and their practices/humans) come into contact.

The boat in the wildlife encounters can be considered the 'inner space' of society. Through the whale shark tourism encounter, tourists leave this inner space to enter into the othered space of nature in which whale sharks live. The mask, fins, and snorkel help adapt the human actors to this integration into another space. At the same time, they contribute to the

construction of the heterotopic space, as tourists' bodies also represent the inner space of society, which, through materials and practices, comes into contact with the outer space of nature. Tourists reflected on this entrance into a different space when mentioning that they are 'just visiting', or feel they are guests in the area in which the encounter is taking place. This differentiation of being a guest or not in a specific space stems from the dualism of society and nature.

Tourists commenting on the difficulty of the encounter, where their mask might fog up, or they cannot swim, further reinforces this differentiation between actors who are in the encounter, where the whale shark swims nonchalantly, and the tourist is seen struggling to be in this space. The perspective of tourists on their relationship with the whale sharks reinforces the thingifying of the whale shark as a wild animal and a species in need of protection.

This heterotopic space is also created during the rare moments when a whale chooses to approach the boat and allows the overwhelmed tourists to pet it, or even kiss it, as if it were a dog. All of a sudden, the outside is in direct physical contact with the inside. Both tourism practices move beyond the simple act of observation, to active interaction, which is what tourists seek and expect to have when joining tourism wildlife encounters.

Huijbens and Benediktsson (2007), through their research on wilderness trips in Iceland, illustrate how a material object (jeeps) bring the wilderness into communion with tourists using the jeeps. The jeep is also the means with which they get to this space of wilderness. The material plays a role in making the nowhere becomes a something. Similarly, the natural space in which the wildlife encounters of BCS occur are transformed by the usage of a boat to enter into this space, which changes from a 'nowhere' to an (protected) area and tourism destination with specific touristic activities. Consequently, the nature in which whale sharks and grey whales are found becomes a destination. Consequently, the practices that arise in this constructed destination are reinforced and mediated through the use of specific materials. The distancing of the boat from the whales and whale sharks, as well as the proximity limitations for humans when in the water with the whale sharks, ensures that the particular construction of wildlife is maintained. The closeness to the animal that is created through the encounter and practice of wildlife tourism leads to feelings of responsibility for the care and protection of not only the species that tourists are interacting with, but also the environment in which they are found.

Perspectives on wildlife can vary depending on an individuals' existing knowledge, purpose of the encounter, and meanings attributed to the wildlife. When different interpretations come into contact it can cause conflicts or points of tension between different actors. This was seen in the tension between captains and other actors such as tour guides during the activity of whale watching. All captains are fishermen and have, or had, a different conceptualisation of wildlife and how to interact with it based on their previous lived experience and interaction with the grey whales or whale sharks before regulations were (attempted to be) put in place. In contrast, tour guides' knowledge stems more from their academic background, making them represent the conservation and scientific reality of wildlife encounters.

ANT sees power as a consequence of different network orderings and their stability (Jóhannesson et al., 2016). In the case of marine wildlife encounters, tourism and conservation have the most connected and far-reaching networks. The conservation network obtains its importance and power from the associations between actors even outside of the national borders. The tourism network is powerful due to its inclusion into the local economy, and involving many different practices, such as transportation, hospitality, gastronomy. Tourism connects so many different practices: pockets of power and equilibrium, each with their multiple material objects. Wildlife tourism therefore is a network that surpasses the typical 'global/local' or other dichotomous categorisations, hence why the metaphor of a topology of tourism is used.

This power can be easily noted in the actors who take the role of representatives of wildlife. Certain actors are capable of representing other 'silent' actors. Scientific data has a lot of power in this network of wildlife encounters, giving them the role of representatives of wild animals. The role these actors have taken are of custodians and interpreters for nature (Whatmore & Thorne, 1998). This gives them the ability to shape the space of nature, and the encounter with it, to their advantage, according to their imaginings of nature. However, it must also be considered that since processes of ordering and relations are never fixed, the ability of science to order and manage everything in the activity of wildlife encounters is not possible. Further, as there is also the network of tourism involved, this entails that actors in the tourism network also aim to represent the silent actors. This was observed in the whale shark encounters where the tourism companies replaced the government and NGO for the surveillance of the protected area. In the grey whale activities, scientists only began conducting research in Magdalena Bay a few years after the activity had already been taking

place. Their relations with, and authority over captains are not as established as in the northern lagoons, resulting in the inability to implement a zoning system. Therefore, the narrative and 'fact' of needing a zoning for the geographical area where the activity takes place was not accepted by the tourism actors in Magdalena bay.

7.1.3 Nonhuman agency in shaping realities

The role of the nonhuman and materials in shaping realities was another controversy focussed on for the research. *Actants* are sources of action. Actants which were prominent in the wildlife encounters included scientific knowledge, the GPS and radio, the boat, weather, and cameras. The concept of vital materialism as used by Huijbens & Jóhannesson (2019) to explain destination formation can be used to join all of these nonhuman actants together, as it states that the material is involved in the construction of the social. Tourism realities arise from vital materialism.

Grey whales and whale sharks are thingified by different actors. This results in varying realities and meaning-making. The thingifying of whales is constructed through the creation of the marine environment (the lagoons especially) in which they can be found. The natural environment in which the wildlife encounter occurs contributes to the whole experience and creation of the grey whale or whale shark entity. The waves especially are given their own agency, which contributes to the thrill of the whole activity: "Someone watch the whale; I'll keep an eye on the waves" (Tourist 2, male, 47, personal communication). The waves have an impact on creating the space in which the adventurous activity of whale watching occurs, as they are just as unpredictable as the grey whales that tourists are searching for.

Humans feel a stronger connection to the grey whales due to their shared biology, and therefore similar behaviours: both are mammals who care for their young. This affective connection of motherly care provides the possibility for a bond to be created between human and animal, explaining why so many human actors who have the possibility to encounter the whales describe the experiences as 'magical'. The encounter is compared to an interaction with their domesticated animals, as they can read their behaviour and easily relate to them. However, this encounter is with a wild animal, making the experience more unique. Thus, the

whale encounters relations are a useful addition to the research, as the classification of the species is different than that of the whale shark.

This classification and thingifying influences the relations, interactions, and realities described by human actors. The nonchalant whale shark is set in contrast with the curious whale who actively comes to the boat. These two personality traits give the wildlife species agency in the encounter. Where the whale shark is not affected and does not care about the tourists and the grey whale is the opposite. The behaviour of the whale and how humans interpret it as friendly or even trusting, when they "bring their babies to be seen" reinforces the connection that humans have to the animal. This ability of the animals to act makes them a part of the wildlife encounter network, not only as the reason for the creation of the networks but also engaging in it, shaping, and altering it.

The realisation of wildlife agency was commonly noted by tour guides, this was most prominent when they explained to worried tourists that the animal always has a choice to leave and not allow for the encounter to occur. Since the space in which the encounter takes place is boundless, they can easily swim away or dive deeper to end the interaction.

This thingifying of the wild animals is noteworthy as we see how the anthropomorphising of a species, bringing forward its similarities to humans, increases the connection that humans have towards it, leading to deeper affective relations and closeness. Thus, tourism wildlife encounters inspire a sense of responsibility towards the protection and conservation of the species. This was reflected in the tourists' narratives on respecting the species, wanting to play their part in the bigger picture of environmental conservation, or captains understanding better *why* specific regulations have been set in place.

7.1.4 Properties of nonhumans

The properties of nonhumans (Sayes, 2013) as stabilisers, mediators, moral and political associations, and gatherings can be used to further explore the actants observed in the activity of wildlife tourism encounters. Activities take place in the water, which means that the demarcation of an area is not as easy as on land, where physical (visible) barriers and

delimitations can be implemented. Materials come into play as important actants in maintaining and constructing this invisible space.

The scientific data plays a role in mediating the relations between actors involved in the wildlife encounter. This is specifically notable in the relation and interaction between humans and the wildlife. The conservation narrative, with knowledge from scientific data, justifies the rules that need to be followed during the encounter and how to interact with the species. The specific distances which need to be maintained by the boat and tourists with the wild animal all stem from the mediator that is scientific data. Through the mandatory courses, captains' relation to and practices with the sharks and whales was altered.

The creation of a protected area within the bay of La Paz made the whale sharks change from an invisible animal into an important species for conservation and protection. The classification of the Northern lagoons as a UNESCO World Heritage site and a Biosphere Reserve made them fall into the categories and networks of conservation. Therefore, the classification of the area acts as: (1) a mediator for the encounter, regulating the activity occurring within; (2) a stabiliser, as the classification will ensure that the practices associated with it remain even after the actors have changed; and (3) as a gathering, for only specific forms of activities and actors are allowed in the area. The use of specific materials during the activities within these areas further reinforce the stabilization of the tourism practices.

The protected area is maintained through the use of the GPS and radio, in monitoring the entry and exit of boats as well as their movement within the area. The radio and the GPS are nonhuman actors with the property of stabilisers and mediators of the practice of whale shark encounters. The destination that emerges from this is the protected area, which is monitored and regimented through the GPS and radio.

The destination in the whale watching activity is not as visibly demarcated and created through material objects as compared to that of the whale shark encounter. Rather, classifications of the areas contribute to the creation of the destination and regulations that come with it. In the whale shark encounter, the radio removes the spatial aspect of surveillance by allowing authorities to monitor the activity of the tourism providers through listening from their office to the communications between captains doing the activity. Linking to Foucault's disciplinary power (1995) this could then be considered a kind of aquatic panopticon. Kien (2016), notes that the routinised performances and use of materials

provides a sense of stability and togetherness to a practice. This was observed in the routinised use of the radio for self-regulation between the captains and tour guides, where they team up together to do the activity well. The GPS stabilizes the practices of wildlife encounters through ensuring that the non-visible protected area is respected. Further, it serves as a mediator in how the interaction between boats and whale sharks can occur, ensuring that the boat drives at a certain speed and only remains within the area for a maximum of two hours in high season, and three in low season.

The *panga* boats act as a gathering, as it is where actors come together for the joint participation of the tourism practice of whale watching and whale shark encounters. In addition, it is a stabiliser for the tourism practice as it acts as a vessel for tourists to be transported into a wilderness area. Tourism provides a way for individuals to experience the extraordinary, the practice of wildlife tourism is inscribed into the transportation of tourists, via boat, from everyday life to the extraordinary wildlife space. In the whale shark encounters, tourists have the possibility to fully immerse themselves into the wilderness space to interact with the wildlife. The life jacket is as a moral actor as it limits the bodily movement of the tourists within the water. It guarantees that they cannot dive down when interacting with the whale shark, ensuring that the distance between human and shark is maintained.

In comparison, the whale watching encounters are mediated by the boats that are used as the boat plays a role in limiting the mobility of the tourists when interacting with the whales during the encounter. Regulations mediate the movement and interaction of the boat when encountering a grey whale. Again, the life jacket acts as a moral actor as humans are not allowed into the boat if they are not wearing it and must keep it on during the whole activity.

Social media and contemporary constructions of wildlife was noted to be a mediator for expectations of tourists; however, the expectations were different depending on the wildlife tourists would encounter. Tourists participating in a whale shark encounter were often fearful of the animal due to common mis-conceptualisations of the shark, combined with images online of the whale shark opening their mouth showing how they *could* potentially eat a human.

The whale encounters involve tourists coming with the idea that they will be able to kiss and touch the whale. The completion of the expectation determines if the encounter was

successful or not. The use of technology, specifically cameras, for the whale watching tour serve as stabilisers for the human collective of tourism encounters. Taking wildlife pictures is routinised during the encounter, where the manner in which the picture should be taken becomes in itself part of the culture of tourism practice.

7.1.5 Practices of wildlife encounters

Grey whales and whale sharks are constructed through their classification as a species in need of protection. This construction is generated from images of the species on social media, globally used scientific names, and national laws. The scientific name, classification, and images found online are the immutable mobiles (Law, 1992) of grey whales and whale sharks, where they are put into a form which can surpass time and space. The processes of translation, where the networks of conservation and tourism combined, provided the space for the transmission of these immutable mobiles. Through both networks, the species are represented, researched, and communicated across time and space. The 500 pesos bank note, in which the grey whale is printed, makes the grey whales travel across time and space as a symbol of coastal and marine ecosystems and national pride. Similarly, the billboard at the entrance of the airport, where tourists can already see the whale shark even before having entered into the water with it, shows the construction of the bay of La Paz as the home of the whale shark.

Classifications of a species makes a specific construction of it more prominent in the production of interactions. In this case, scientific classifications are used for the construction of the whale sharks and grey whales. This creates a species which is to be observed and documented through scientific research, each aspect of the species is calculable and must be noted down to share with the rest of the scientific community. Further, official governmental documents add a context-specific classification of the species. The whale sharks are nationally classified as vulnerable (as opposed to its global classification as endangered), and the grey whales are classified as in need of special protection. These national classifications make the species be connected to other laws and regulations already present in Mexico comprised of conservation, protection, and interaction with the natural environment.

When looking at the history of conceptualisations of grey whales as a devil fish (*pes diablo)* and whale shark as toad fish (*pes sapo*) by local fishermen, it can be noted that the nature in which the species are found were constructed by the fishermen. The whales were just as dangerous and unpredictable as the waters in which they can be found. Fishermen have been interacting with this nature long before the tourism and conservation practices and conceptualisations of nature arrived. Fishermen's conceptualisations are not part of the science and tourism network which developed later on. Rather, their conceptualisation had to be (and was) altered through their integration into the networks of conservation and tourism. This can be seen as part of the cause for the tense relation between tour guides, researchers, and captains. The captains had their own meanings and reality of nature, and the wildlife found within, with specific practices for when they were in this space of nature. This is contrasted to the new realities brought by the rise of tourism and conservation networks, where tour guides and researchers are the main actants interacting with the fishermen.

The politics of absences and presences must be considered in relation to tourismscapes. The blank figures in this situation are the previous conceptualisations of fishermen towards wildlife, which destabilise the tourism ordering in certain contexts. Not considering the previous conceptualisation of the fishermen towards whales especially can be the reason for why implementation of new regulations has not been as successful in the Southern lagoons, as the difficulty and effort of changing a practice is not taken into account by the authorities implementing this change.

Currently, fishermen (now turned captain) do not use the scientific conceptualisation to refer to the species, but they also no longer use their own conceptualisations. This shift is seen in the change of relation between fishermen and the species: from fear of the whales and nonchalance towards the whale sharks, to affection and commoditisation. The affection is created through the recurrent interaction with the species as well as the mandatory courses given, which increases their knowledge on the scientific facts known about the animal. The commoditisation arises as a result of the tourism network. It is clearly notable that tourism and conservation had an effect on changing topologies of wildlife in the area of Baja California Sur.

Observing practices allows for the understanding of how elements are bundled together. Practices are composed of materials, competences, and meanings. The meanings for the

wildlife tourism practices are shaped by the narratives and processes of ordering which dominate the reality of wildlife tourism encounters in La Paz and the lagoons of BCS. Embodied practices of wildlife encounters are ordered by regulations that mediate the movement of bodies and materials in a (protected) area.

The practice-arrangement bundle (Lamers et al., 2017) for wildlife tourism encounters involve the cultural norms tourists have learned and perform when being a tourist, the materials that are used during the activity, such as fins, mask, snorkel, life jacket, and the regulations which determine the kind of practice that is allowed within the space which has been created specifically for the tourism activity. The elements in this bundle hang together in an enduring way due to the repetitive performance and use of the same elements in other similar tourism contexts. The space where the activity takes place has simultaneously been constructed as a conservation area. Therefore, the practice-arrangement bundle also involves conservation practices, such as monitoring of the species, and materials such as the radio or GPS that ensure the adherence to the regulations created for the wellbeing of the species. In the whale shark activity, the self-regulation of captains can be noted, and is influenced by material actants.

The assemblage of the body, materials, conservation space, and tourism practices produce a specific tourism destination in which wildlife encounters take place. Tourism is in itself a mode of ordering. In the case of wildlife encounters it has an effect on how the activity is organised. This was specifically seen in the material organisation through the use of bracelets provided. Where tourists pay a small extra fee in order to ensure they are going with a tour operator that follows specific guidelines, without the bracelet, one cannot enter into the protected area. When the NGO Paralelo 28 was in charge of vigilance, the bracelet mentioned how the tourist was a hero for choosing a company that is committed to the conservation of the whale shark (See 5.2.3). The text on the new bracelet, provided by PRESETUR, still entails that the tourist is supporting conservation of the whale shark by wearing it (See 5.2.6).

The wildlife grey whales and whale sharks are discursively constructed through scientific narratives, socially produced through tourism practices, and materially real through the usage of specific nonhuman things during the encounters (van der Duim et al., 2012). This then leads to the next controversy, that of agency and objects having agency.

CHAPTER 8: CONCLUSION

8.1 Answering the main research and sub-research questions

The objective of this research was to investigate the multiple realities and relations of tourism wildlife encounters in Baja California Sur. This was done through aiming to answer the question of "what actors (objects, wildlife, and people) are engaged in meaning-making of marine wildlife encounters in Baja California Sur".

Guiding sub-research questions were created to sharpen the analysis. Observing how materialities and the nonhuman contribute to constructing realities, discovering the actors involved in the production of meaning-making, and understanding the heterogenous networks of relations, all contribute to unravelling the complexities involved in wildlife encounters. The sub-research questions were the following:

- Who or what is acting when an action is observed in wildlife encounters?
  - What are the 'invisible' actants?
- How do different actors imagine/describe marine wildlife encounters?
- What objects help to influence relationships in wildlife encounters in Baja California Sur?
- What are the power relationships that exist between human/human actors, human/nonhuman, and nonhuman/nonhuman actors?

The diagram representing the research questions and methods is illustrated once more below (Figure 9) to briefly portray the findings for the conclusion. The sub-research questions will each be answered in turn to conclude with answering the main research question.
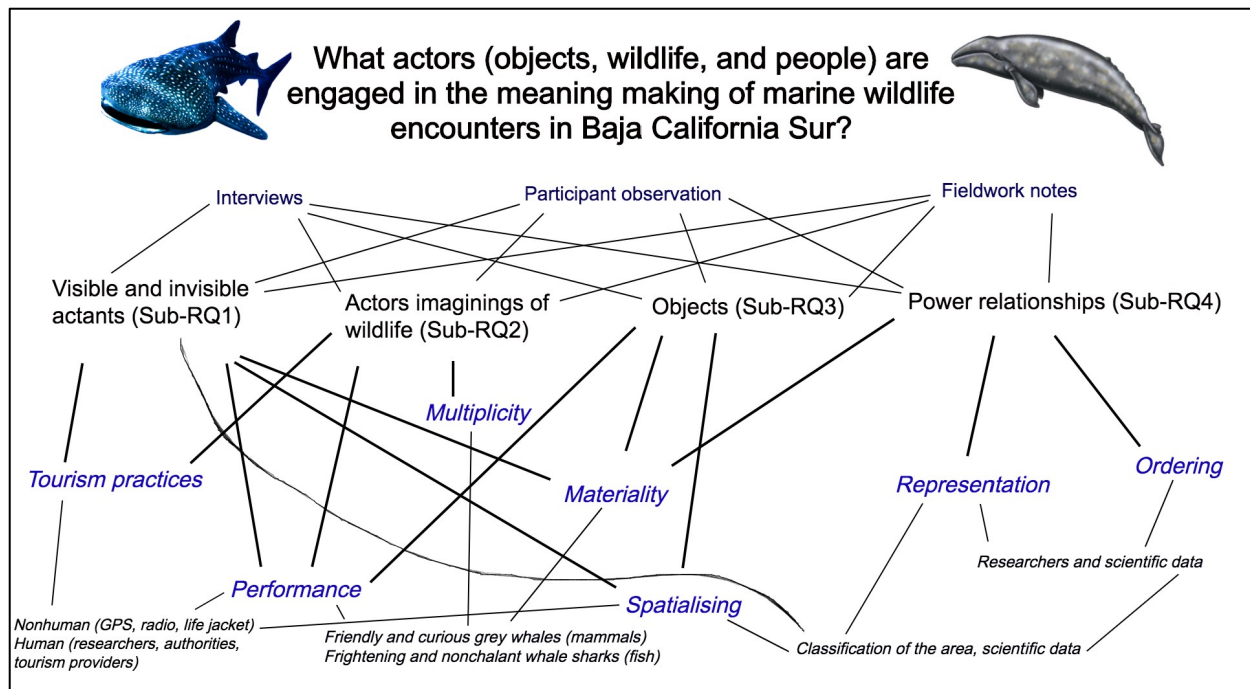
Figure 9: Visually connecting research methods, research questions, and main findings

8.1.1 Who or what is acting when an action is observed in wildlife encounters? What are the 'invisible' actants?

The main actants in the wildlife encounters were similar for the grey whales and whale sharks. The visible human actants observed when an action took place were the tourists, tour guides, and captains. The visible nonhuman actants were the radio, the boat, the life jacket, cameras, wind, and waves. The invisible actors who play a role in actions of wildlife encounters were governmental authorities (SEMARNAT, PROFEPA, CONANP), the classification of the wildlife according to the NOM-059, scientific data, the classification of the area in which the activity takes place, and expectations of the encounter constructed through social media. Another important invisible actant that was noted is the scientific classification of the wildlife with which the humans are interacting. The whale shark, being a fish, was not as easily relatable to or was not attributed as many human personality traits, this 'distance' in biology could influence the awe that tourists feel when being in the presence of something so 'ancient'. In comparison, the whales, who are mammals, are more easily relatable to and tourists project human attributes and behaviour on them.

Certain actants were different for the two wildlife encounters. Visible actors in the whale shark encounter included the GPS, the snorkelling equipment (mask, snorkel, fins, wetsuit), and the bracelet must wear at all times during the activity. Invisible actors included the NGOs Whale Shark Mexico and Paralelo 28, PRESETUR, the mandatory courses given to the captains and tour guides, the permit provided to the tourism providers allowing them to do the activity, and the classification of La Paz as home of the whale shark.

In the grey whale encounters the invisible actants included the history of human-whale interactions, which links to the invisible actant of the IWC moratorium, the tourism pressure in Magdalena Bay, researchers from the University of Baja California Sur, the consideration of grey whales as Mexican citizens, and the World Heritage site classification of the Northern lagoons. The nonhuman actors who strongly influenced the relations in the grey whale encounters are scientific data, the classification of the lagoon, the boat, and the behaviour of the whales themselves. The classification determines how actors adhered to the regulations aimed at the management of the activity.

Not all actors presented have the same type or *intensity* of agency; the level of power that such actors have in influencing the network will vary. This power can be determined by the amount of connections and relations the actor has in the network.

8.1.2 How do different actors imagine/describe marine wildlife encounters?

The way in which (human) actors imagine or describe the wildlife encounter was also noted to vary depending on the wildlife encounter, the materials used during the encounter, and the frequency with which the actor partakes in the encounter. A common description for both encounters was on the unpredictable behaviour of the wildlife, and how this makes the encounter even more special and unique.

The change in regulations for the whale shark activity from a mere management plan to a protected area influenced the way in which actors imagined the activity. Tourism providers had previously done the activity as they wanted, the workshops instigated a change of their perception on the encounter. Fishermen in this time referred to the whale sharks as *pes sapo* and did not care for the encounters with the wildlife. The protected area maintains imaginings

of how WSMX and the government saw the activity taking place, with the inclusion of the tourism providers imaginings. The main imagining according to the protected area is that the activity be sustainable and non-extractive.

Captains and tour guides both described the encounter according to their responsibility as a tourism provider. The role they must play during the tourism activity influences how they perceive the encounter, where they represent the rules and must ensure that tourists adhere to them, while also guaranteeing that the tourists enjoy the experience and remain safe. Both captains and tour guides mention an attachment to the shark and care for its protection. All actors describe the whale shark encounter as an important economic activity for the people living in La Paz. Tourists described the encounter as slightly frightening, due to the novelty of the experience and contemporary perceptions of sharks. All three actors (tourists, captains, tour guides) mentioned the relaxed and un-phased behaviour of the whale sharks vis-à-vis humans entering the water to observe them. They also mention how amazing and awe-inspiring it is to be able to come so close and interact with such a large wild animal.

In the whale activity the description of the encounter depends on the lagoon (north or south) in which the actor is doing the activity. All actors describe the encounter with the grey whale as something magical. Captains describe the encounter mainly as an income generator; however, some level of consciousness and care is starting to develop, through seeing the species not only as a source of income but being attached to it.

8.1.3 What objects help to influence relationships in wildlife encounters in BCS?

The objects which most prominently influence relationships in the whale shark encounters are the radio and GPS, providing communication between actors and aiding with adherence to regulations. The GPS further constructs the protected area in which the activity takes place and is material proof that the boat has a permit to enter into the area. The checkpoint where the tourism boats must go ask for permission plays a role in observing that the boat is in order to enter into the area. The bracelet tourists have to wear is another important object which provides proof that tourists are permitted to be in the protected area. The snorkelling gear provided to tourists allows for them to have a closer encounter with the whale sharks,

adapting them to the aqueous environment and helping them in trying to keep up with the sharks swimming.

A radio is used for communication between captains in the whale watching activity on the location of a friendly whale or if a boat is in need of technical assistance. The boat and life jacket were the most prominent objects playing a role in the grey whale encounters. The boat as a delimiting factor to the mobility of tourists and the life jacket as a permission for tourists to get onto the boat. Cameras were also important in the whale encounters as tourists needed to capture the unique moment in order to truly make it real.

8.1.4 What are the power relationships that exist between human/human actors, human/nonhuman, and nonhuman/nonhuman actors?

The power relations between different actors involved in wildlife encounters of BCS were noted to be complex and intermeshed. To begin, the main authority were the government and scientific data: they influence how the activity unfolds and how relations between actors take place. Scientists have taken on the role of representatives for the wildlife species. This is then passed down to the tour guides and captains, who in turn are representatives of the regulations, and ensure that tourists conform to said regulations. The regulations then can be seen to mediate the relations between human and nonhuman (e.g. tourists and wildlife) as well as nonhuman-nonhuman relations, such as the boat and the wildlife.

Captains and guides alternate between who determines the unfolding of the activity, but both are under the surveillance and authority of the governmental official. The guides and captains depend on the whale shark or grey whale to be present and allow for the encounter to occur.

Varying power relations were also noted for the two wildlife encounters. In the whale shark encounter, the checkpoint, radio, and GPS are material actants used to sustain the power relationship that the government and scientific data has over the tourism providers, as they are what allow the boat and human actors it is transporting to enter into the protected area. The radio is the medium through which permission to enter the protected area is given. When they are within the area, the GPS constantly observes the movement of the boat, and the radio relays the communication taking place between human actors. In the whale watching activity

the power relations vary more depending on the lagoon's location and its classification. The classification of the area in which the tourism activity takes place mediates the relations between actors that occur within this context and the movement of human actors.

8.1.5 Main research question: What actors (objects, wildlife, and people) are engaged in meaning-making of marine wildlife encounters in Baja California Sur?

The meaning-making (or realities) that were observed in the wildlife encounters of La Paz bay and the lagoons of BCS were seen to have developed from two shifts in conceptualisation of the wildlife. The two networks involved in this are that of conservation and tourism.

Government officials and scientific data were the main actors involved in instigating the first shift. Through the use of specific narratives and materials, such as the radio, GPS, and classification the wildlife and area within which they are found, a certain reality became more prominent. The abolition of whaling, and the number of injuries on whale sharks causing alarm reinforced the conservation narrative, and the necessity to protect the wildlife. This was then coupled with the rise in tourism, which caused a second shift in the interactions between actors and meaning-making of the encounters, where new materials and actors were added. The most prominent change in meaning-making, with regards to the wildlife encounters, is the fishermen's changing perception of whale shark from an invisible to an important species, and the grey whale from a demon to a friend.

Expectations of tourists, which also mediated their description of the encounter, were shaped by social media and contemporary conceptualisations of the wildlife species. Entailing that tourists had a sense of fear in entering into the water with a 'shark' and had an objective to obtain the popular whale encounter where they can touch or even kiss the whale. A lack of fulfilment of the expectation for whale encounters did lead to the encounter not being seen as successful, despite still having seen the whale.

In summary, the meaning-making of wildlife encounters in La Paz and the lagoons of BCS involve both human and nonhuman actors. Specific practices and networks arise from the interactions between these actors. Narratives, especially those of tourism and conservation, have a stronger network connection thus, the capacity to mediate the practices that occur. The

materials and objects these narratives used for the process of ordering were mainly scientific data, GPS, radio, and the boat.

8.2 Challenges in the research

A few challenges have been noted by previous authors in using ANT as a framework for research. The main challenges being where to start and stop with the research. This should be left to the decision of the researcher to determine when the network has been followed 'far' enough. Reaching theoretical saturation is a good guide for determining the end point. The second biggest challenge is trying to communicate the research in a reductionist manner, while still reflecting the complex reality that was studied. Using mixed methods for the representation of the realities helps in displaying their complexity as it allows for an investigation of the topic of research from multiple angles and through multiple medias.

A major challenge to this research was the current covid-19 global pandemic which affected the influx of tourists and possibility to conduct fieldwork observations. After only around three weeks of being in La Paz, the tourism was already deeply affected, with most tour operators choosing to close down. I was lucky enough to be able to partake in two wildlife encounter trips, one with grey whales and the other with whale sharks. The grey whale encounter was part of a camping expedition with RED travel Mexico, where tourists go and camp in an island in Magdalena Bay for three nights. They go out three times for whale observation in the bay and along the coast. The whale shark excursion was also with RED travel and involved a full-day excursion within the bay of La Paz. Beginning with a sealion encounter, lunch, then a whale shark encounter. The fact that all fieldwork was done with the same tourism organisation does create a certain bias in terms of the experience and observations that were used for analysis.

After both of these encounters, interviews were conducted with tour guides, tourists, and a captain. These then served as the preliminary interviews that would help in determining the networks and other actors of interest. Contacts to other actors were obtained through interviews. As the situation did not allow for face-to-face interviews, Skype or Whatsapp interviews were conducted with actors who were willing and available to. This does change the nature of the interview in that there is now a nonhuman actor mediating the interaction.

The internet sometimes did not work very well, resulting in some of the words or even full sentences being lost in the recording. My ability to actually go to the place of work of the individual was then limited, which made it harder to get certain actors to respond. A lot of interviews were postponed multiple times. Using Skype and Whatsapp for interviews also meant that the scope of potential actors to interview became limited to those who had access to such technology and internet, and whether or not I could obtain this contact information.

Language was another challenge to the research. Spanish is not my native language, so interviews in Spanish were not as fluid and some information may have been lost, or words may have been misused due to their similarity to English. The most prominent of this similarity is the word 'compromised', which means settling or mutual agreement. However, in this context the way interviewees use the word, a more appropriate replacement would have been 'committed'. The word in Spanish for committed is *comprometido* (similar sounding to compromised), which explains the misuse of the word. For example: "With the whale sharks I feel very… *compromised* with them because in La Paz we have specifically a juvenile population that visits this area. We don't have the big grown adult, so I feel very responsible of them like a mom." (Tour guide 4, female, 34, personal communication).

For the analysis, the interviews were translated into English, which may lead to a loss of some information through the translation. Certain words and phrases were kept in Spanish with the English translation in parenthesis, allowing for the reader to decide if they accept the translation or not. Contextualisation or completion of sentences was also added to the interview transcripts in order for the quotation to make sense when standing on its own. For example: "You stop your people (*from doing the activity*), you make them get out, they get in (*the researchers*), they start taking pictures, identify it: "ok thank you very much, the shark is so and so". (Boat captain 1, male, late 30s, personal communication). The italicised words in parenthesis are my addition. Most interviewees were not native English speakers, meaning their ease and ability to communicate may have been limited due to the interview being in English. Certain sentences and use of words may thus seem grammatically incorrect.

8.3 Suggestions for further research

This research explored the different realities and relations between actors involved in wildlife encounters in Baja California Sur.

The scientific classification of an animal seems to have an effect on the proximity tourists and other human actors feel towards the wildlife they are interacting with. Further research could investigate this with another species of marine wildlife. Sea lions and turtles are other main attractions in the bay of La Paz and lagoons of BCS. The island where the sea lions are most commonly found is a protected area and UNESCO World Heritage site, turtles are part of a global network of conservation. It would be interesting to conduct a similar investigation through an ANT framework, focussing on materiality, multiplicity, and ordering, to understand the wildlife encounters with other marine wildlife, and compare them to those of whale sharks and grey whales. This could help to better understand if the classification of a species has an influence on the level of affection and responsibility for protection tourists feel towards the species.

The shift in fishermen's perception of whales after the moratorium, and the rise in whale watching tourism, is another interesting point of focus for future research. A comparison could be made with different locations around the world where human-whale encounters take place to see if there was a similar, or different, change in perception and interaction between fishermen and whales.

REFERENCES

Balmford, A., Beresford, J., Green, J., Naidoo, R., Walpole, M., & Manica, A. (2009). A global perspective on trends in nature-based tourism. *PLoS Biol*, *7*(6), e1000144.

Barua, M. (2016). Lively commodities and encounter value. *Environment and Planning D: Society and Space*, *34*(4), 725-744.

Boeije, H. (2010). Doing qualitative analysis. *Analysis in qualitative research*, 93-121.

Bosco, F. J. (2006). Actor-network theory, networks, and relational approaches in human geography. *Approaches to human geography*, 136-146.

Braverman, I. (2015). Introduction to 'Wild Life: The Institution of Nature'. Stanford University Press: Forthcoming.

Callon, M. (1984). Some elements of a sociology of translation: domestication of the scallops and the fishermen of St Brieuc Bay. *The sociological review*, *32*(1), 196-233.

Cloke, P., & Perkins, H. C. (2005). Cetacean performance and tourism in Kaikoura, New Zealand. *Environment and planning D: Society and space*, *23*(6), 903-924.

Cronon, W. (1996). The trouble with wilderness: or, getting back to the wrong nature. *Environmental history*, *1*(1), 7-28.

Curtin, S. (2009). Wildlife tourism: The intangible, psychological benefits of human–wildlife encounters. *Current Issues in Tourism*, *12*(5-6), 451-474.

Czarniawska, B. (2005) Book Review: Bruno Latour: Reassembling the Social: An Introduction to Actor-Network Theory. *Organization Studies*, *27*(10), 1553-1557.

Dutton, A. G. (2014). *The tides of the tourism complex at La Paz, Mexico*. North Dakota State University.

Edensor, T. (2001). Performing tourism, staging tourism: (Re) producing tourist space and practice. *Tourist studies*, *1*(1), 59-81.

Farías, I. (2012). Destinations as virtual objects of tourist communication. In Van der Duim, R., Ren, C., & Jóhannesson, G. T. (Eds.). *Actor-network theory and tourism: Ordering, materiality and multiplicity*. (pp. 128-145). Routledge.

Flores, S. D. H. (2010). *NORMA Oficial Mexicana NOM-059-SEMARNAT-2010, Protección ambiental-Especies nativas de México de flora y fauna silvestres-Categorías de riesgo y especificaciones para su inclusión, exclusión o cambio-Lista de especies en riesgo*. (Report no. 1). Gobierno de México. Retrieved from https://www.profepa.gob.mx/innovaportal/file/435/1/NOM_059_SEMARNAT_2010.pdf

Foucault, M. (1995). *Discipline and punish: The birth of the prison*. Vintage.

Franklin, A. (2004). Tourism as an ordering: Towards a new ontology of tourism. *Tourist studies*, *4*(3), 277-301.

Heckel, G., Espejel, I., & Fischer, D. W. (2003). Issue definition and planning for whale watching management strategies in Ensenada, Mexico. *Coastal Management*, *31*(3), 277-296.

Huijbens, E. (2015) Topological Encounters: Marketing Landscapes for Tourists. In Jóhannesson, G. T., et al., (Eds.), *Tourism encounters and controversies: Ontological politics of tourism development* (pp. 201-220). Ashgate Publishing, Ltd.

Huijbens, E. & Benediktsson, K. (2007) Practising Highland Heterotopias: Automobility in the Interior of Iceland. *Mobilities*, *2* (1), 143-165.

Huijbens, E. H., & Einarsson, N. (2018). Feasting on friends: Whales, puffins, and tourism in Iceland. In Kline, C. (Ed.), *Tourism Experiences and Animal Consumption: Contested values, morality and ethics* (pp. 10-27). New York: Routledge.

Huijbens, E. H., & Jóhannesson, G. T. (2019). Tending to destinations: Conceptualising tourism's transformative capacities. *Tourist Studies*, *19*(3), 279-294.

Jóhannesson, G. T., van der Duim, R., & Ren, M. C. (Eds.) (2016). *Tourism encounters and controversies: Ontological politics of tourism development*. Routledge.

Kien, G. [Serious Science]. (2016, June 2) *Actor-Network Theory – Grant Kien*. YouTube. https://www.youtube.com/watch?v=5Uh2UIPvIhs&t=93s

Lamers, M., van der Duim, R., & Spaargaren, G. (2017). The relevance of practice theories for tourism research. *Annals of Tourism Research*, *62*, 54-63.

Latour, B. (2005). Reassembling the Social: An Introduction in Actor-Network Theory. Oxford: Oxford University Press.

Law, J. (1992). Notes on the theory of the actor-network: Ordering, strategy, and heterogeneity. *Systems practice*, *5*(4), 379-393.

Manzur, V. M. T., Irizarry M., Sanchez, J. A. D. (2019). *Plan de Manejo de Rhincodon typus (Tiburon Ballena) para realizar la actividad de aprovechamiento no extrativo a través de la observacion y nado en Bahia de La Paz, B.C.S., Temporada 2019*. Gobierno de México. Retrieved from https://www.gob.mx/semarnat/documentos/plan-de-manejo-de-tiburon-ballena-rhincodon-typus-en-bahia-de-la-paz-bcs

Middelveld, S., van der Duim, R., & Lie, R. (2016). Reef Controversies: The Case of Wakatobi National Park, Indonesia. In Jóhannesson, G. T., van der Duim, R., & Ren, M. C. (Eds.), *Tourism encounters and controversies: Ontological politics of tourism development* (pp. 51-64). New York: Routledge.

Mol, A. (1999). Ontological politics: A word and some questions. In J. Law and J. Hassard, (Eds), *Actor Network Theory and after* (pp.74–89). Oxford: Blackwell.

Mol, A. (2002). The body multiple: Ontology in medical practice. Durham, NC: Duke University Press.

Nicolini, D. (2012). Practice theory. Work & Organization. An Introduction. Oxford: Oxford University Press.

Nimmo, R. (2011). Actor-network theory and methodology: Social research in a more-than-human world. *Methodological Innovations Online*, *6*(3), 108-119.

Niparajá (2018, March). *Promueven uso de brazaletes en usuarios para la vigilancia del tiburón ballena*. El Grampin: Información para los que viven del mar. Retrieved from http://elgrampin.pescadorapescador.net/promueven-uso-de-brazaletes-en-usuarios-para-la-vigilancia-del-tiburon-ballena/

Rantala, O. (2010). Tourist practices in the forest. *Annals of Tourism Research*, *37*(1), 249-264.

Ren, C. (2011). Non-human agency, radical ontology and tourism realities. *Annals of Tourism Research*, *38*(3), 858–881.

Reynolds, P. C., & Braithwaite, D. (2001). Towards a conceptual framework for wildlife tourism. *Tourism management*, *22*(1), 31-42.

Rodger, K., Moore, S. A., & Newsome, D. (2009). Wildlife tourism, science and actor network theory. *Annals of Tourism Research*, *36*(4), 645-666.

Ruming, K. (2009). Following the actors: mobilising an actor-network theory methodology in geography. *Australian Geographer*, *40*(4), 451-469.

Sayes, E. (2014). Actor–Network Theory and methodology: Just what does it mean to say that nonhumans have agency?. *Social studies of science*, *44*(1), 134-149.

SEMARNAT. (2018). *La ballena gris, mexicana por nacimiento*. Gobierno de México. Retrieved from https://www.gob.mx/semarnat/articulos/la-ballena-gris-mexicana-por-nacimiento

Tiburón Ballena. (n.d). ¡Explora la Bahía de La Paz, casa del tiburón ballena!. *Tiburón Ballena: Bahia de la Paz, B.C.S.* Retrieved from http://www.tiburonballenalapaz.com.mx/bahiadelapaz/

UNESCO. (n.d. a). *Criteria for Selection*. Retrieved from https://whc.unesco.org/en/criteria/

UNESCO. (n.d. b). *Islands and Protected Areas of the Gulf of California*. Retrieved from https://whc.unesco.org/en/list/1182/

UNESCO. (n.d. c). *Whale Sanctuary of El Vizcaino*. Retrieved from https://whc.unesco.org/en/list/554/

Van der Duim, R. (2005). Tourismscapes: An actor network perspective on sustainable tourism development.

Van der Duim, R., Ren, C., & Jóhannesson, G. T. (Eds.). (2012). Actor-network theory and tourism: Ordering, materiality and multiplicity. Routledge.

Van der Duim, R., Ren, C., & Jóhannesson, G. T. (2013). Ordering, materiality, and multiplicity: Enacting actor–network theory in tourism. *Tourist Studies*, *13*(1), 3-20.

Whatmore, S. (2002). Hybrid Geographies: Natures Cultures Spaces. London: SAGE.

Whatmore, S., & Thorne, L. (1998). Wild (er) ness: Reconfiguring the geographies of wildlife. *Transactions of the Institute of British Geographers*, *23*(4), 435-454.

Whatmore, S., & Thorne, L. (2000). Elephants on the move: spatial formations of wildlife exchange. *Environment and Planning D: Society and Space*, *18*(2), 185-203.

APPENDIX

I. List of interviewees

Tourists
(15 March)
- Tourist 1 – Early 30s
- Tourist 2 – 47
- Tourist 3 – 36
- Tourist 4 – 60s
- Tourist 5 – 60s
- Tourist 6 – 30s

(21 March)
- Tourist 7 – 20s

Tour guides
- Tour guide 1 – 28 (13 March 2020)
- Tour guide 2 – 32 (31 March 2020)
- Tour guide 3 – 27 (2 April)
- Tour guide 4 – 34 (2 April)
- Tour guide 5 – 27 (30 April)

Researchers
- Researcher 1 – 41 (16 April)
- Researcher 2 –27 (14 May)
- Researcher 3 – 33 (30 April)
- Researcher 4 – 64 (18 June)

Boat captains
- Boat captain 1 – Late 30s (23 March 2020)
- Boat captain 2 – 47 (12 May 2020)
- Boat captain 3 – 48 (15 May 2020)

II. List of websites used

- Mexican government website (www.gob.mx)
- RED travel Mexico (https://redtravelmexico.com/)
- UNESCO (whc.unesco.org)
- Whale Shark Mexico
  - http://www.tiburonballenalapaz.com.mx/
  - https://www.whalesharkmexico.com/

III. Coding tree for interviews

- **Encounter**
  - Expectation (pre-informed anticipation)
  - Experience
    - Scary
    - Thrilling/exciting
    - Stressful
    - Magical
    - Life-changing
  - Chance encounter
  - Encounter value
  - Space (spatializing)
- **Ordering (multi-spatial translations)**
  - Narratives (knowledge sharing)
  - Performance
  - Strategies
  - Space
  - Tourism ordering
- **Activity management / governance**
  - Perspective on rules
  - Lacking/problems
  - Difference in location
  - Change (before/after)
  - Role of science
  - Vigilance
  - Unofficial rules
- **Network**
  - Relation between actors (*who is in charge, higher/lower, how they work together*)
    - Collaboration/ teamwork / communication
    - Protection/care / responsibility (commitment)/ Respect
    - Superiority
    - Tension
    - Economic
  - Interactions (*noting actual actions happening*)
    - Human – nonhuman interaction
    - Human – human interaction
    - Nonhuman – nonhuman interaction
- **Practices**
  - Materials
  - Competences
  - Meanings (symbolic)
  - Embodied performance
  - Cultural norms/ tradition (*interactions, local regulations, code of conduct, etc…*)
- **Nonhuman**
  - Agency

- o Properties of nonhuman (*stabilizer*, *mediator*, *moral & political*, *gatherings*)
- o **Wildlife**
  - Nature vs. Society
  - General definition
  - Description of whale shark
  - Description of whale
  - Anthropomorphise
  - Domestic vs. wild
  - Icon/symbol
- **Knowledge**
  - o Sharing
  - o Lacking
  - o On behaviour