Submarine Geographies: the body, the senses and the mediation of tourist experience

Submitted by

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Abstract

The thesis is concerned with ways in which tourists' experiences of learning to dive are mediated by technology, equipment and cultural constructions that are projected through visual media. The empirical chapters take a different theoretical body of literature to demonstrate the extent to which mediation alters human perception. The thesis is informed by research participants who took part in an experimental visual methodology that sought to open up new ways of studying the senses. The empirical chapters cover a consideration of the phasing in and out of attention of equipmental prosthetics for learner divers, a phenomenological study of the reorganisation of the senses underwater, a Bergsonian take on the intersubjective nature of recollection upon encountering material relics at a wreck site. The construction of docile diving bodies are considered, in relation to appropriate ways of moving and thinking about the ocean's inhabitants, before the final empirical chapter outlines the mediative role of videographic souvenirs, as they polish memories of previous experience and alter relations to place. The thesis concludes by drawing attention to the way in which understandings of underwater space are constructed before, during and after real-time perception of the ocean and its various inhabitants. Consequently, it is noted that underwater experience is both highly subjective and intertextual, being furnished by the associations and atmospheres that each learner diver brings to the encounter and being re-presented to others by means of what each diver takes away.

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Finally, I would like to thank a certain Dr. of Physical Geography for putting up with me on a daily basis. Whilst I still have no understanding of what C++ actually does, your knowledge of phenomenology and NRT is expanding admirably!

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Preface

The purpose of this preface is to give a brief background to the development of this research project, as it evolved from its original manifestation, quite significantly over the 3.2 years I worked on it. Explaining the reasons for, and ways in which, this occurred might help the reader understand why certain lines of thought were pursued over others, why the methodological approach was developed and how the field site resulted in certain 'case study' sites becoming the focus distinct empirical chapters.

This thesis was developed from my experience of writing a masters level dissertation, which sought to explore the extent to which windsurfing experiences of nature are mediated by board, sail, boom, mast, wetsuit etc. Though that dissertation focused on the windsurfing assemblage (body-kit-environment), it spawned an interest in theoretical literatures surrounding the body and technology, particularly from a post-phenomenological viewpoint. It was this same topic I wanted to explore, but in more depth throughout my PhD, but within the context of SCUBA diving. However, since the first conception of this project, in its rudimentary studentship research proposal, it has evolved and expanded significantly. Technological prosthetics, in the form of dive equipment certainly still play a central avenue of exploration within this thesis, however the ways in which the theme of *mediation* has been pursued has become much more encompassing, referring to technology/dive equipment, but also visual media (both popular and personal), research methods, materiality and history. Thus technology/equipment has moved from being the central tenet of inquiry, giving way to the notion of mediation, with

the primary research question becoming *how are tourist's experiences of underwater space mediated?*

This is the question on which the thesis rests, and indeed each chapter addresses this question from a different aspect of mediation. The transformation of the project from its initial guise was due to my own personal experience of learning to dive (an aspect I go into more detail in Chapter 3). I did not learn to dive until six months into my PhD studentship and as a consequence, the way I had approached researching existing literatures, whilst very focused, had not really encompassed the liveliness and breadth of type of dive encounter and the ways in which mediation is played out within these, beyond considering the tool/technological aspect. Upon learning to dive myself, a whole new set of questions and interesting avenues of possible research came to the fore, enriching the project's scope and offering new directions of thought. Whilst I had discovered there was more to mediation within a diving context, I also realised that learning to dive is such a jam packed, intense period of activity that each new skill, use of equipment and underwater encounter quickly phases from consciousness in order to devote attention to the next. This would make remembering and talking about aspects of dive experience with research participants, a complex task. As a consequence, thanks again to my initial experience of learning to dive, I began thinking about how I could experiment with visual methodologies, in order to capture as much of underwater experience as I could, saving an essence of the sensuous and embodied encounter, as cues to later discussion. A detailed narrative of this aspect of the research follows, but I will note that it was thanks to the presence of an underwater videographer, throughout my own initial diving experiences, that I considered delving into visual methods in the first place. It is becoming common for dive schools to work with professional

videographers, either employing their own or allowing external film production companies to make DVDs of excursions or learners. These films are typically made up of around fifteen minutes of footage featuring a combination of the divers, the underwater environment, wildlife, activities on board the boat in addition to a batch of 'bonus' stock footage of remarkable scenes shot at nearby dive sites. Having decided to embark upon a visual methodological approach to the thesis, it became apparent that I would need to complete a further 3 qualifications and log 50 dives before I could begin my fieldwork. A brief ethnographic summary of this journey is included in Chapter 3. Part of this training though incorporated the Advanced Open Water course, which I undertook in Sharm El Sheihk, Egypt, during a family holiday in December 2010. This phase of my training included a 'speciality' in wreck diving, and by complete chance I discovered that this training would take place at one of the world's most impressive wreck sites, *SS Thistlegorm*. Once I had established, that I was going to film research participants as part of my methodology I was keen to make visual methods the only data collection technique throughout the entire thesis. However, upon realising that I had gained the opportunity to dive arguably the world's most famous shipwreck-before I had the skills or connections to film and recruit research participants- I decided to incorporate (auto)ethnography into my methodological praxis. Thus Chapter 6 is informed by an autoethnography of my own experiences of repeatedly diving *SS Thistlegorm.*

In an attempt to lessen the jarringly different approach to this chapter, I then decided to incorporate ethnographic data generally throughout the thesis. Although this hadn't been part of the plan, in retrospect I believe it was probably a beneficial move as it opened up an opportunity to include not only my own accounts throughout the thesis, but also the voices of the Dive Masters and instructors who

helped teach the learners new skills and gave them guided tours of the local dive sites.

Thus diverging from my initial clear and precise plan of action (from the start), this PhD has become a very transient beast. Contrary to my expectations, and in line with Crang and Cook's (2007) approach to research, the study has ended up evolving and morphing as it has gone along.

Once I'd thought through my methodological approach and conceivable chapter outlines, a fieldwork location had to be chosen. Whilst logistically it would have been more convenient to carry the fieldwork out in the UK, the small scale of the dive industry, particularly with regards to tourism, in addition to the lack of service provision with regards to underwater videography training courses encouraged me to look elsewhere (not to mention the fact that the combined cost of training and cold water dive kit (dry suit) in the UK is comparable to return flights and budget accommodation in many warm water dive resorts). After considerable research into dive locations, the intention was to carry out my fieldwork with a dive school located on the island of Roatan, Honduras. Since I am fluent in Spanish I thought this move would put me in good stead for recruiting more than British participants. However, these plans were in vain as civil unrest in early 2010 led to both the university's insurance services and my family quite firmly prohibiting me going anywhere near such activity. The only other place in the world (at that time) that taught the underwater videography skills I needed in order to carry out my new experimental methodology, was on the island of Koh Tao, in the gulf of Thailand. By luck, the training facility on the island would allow me to work as an intern, using their equipment throughout the time of my fieldwork. I'd already booked and paid

for flights, accommodation and equipment by the time the Thais decided to revolt against government corruption with petrol bombs and barricades throughout March to April 2010. So, despite advice given by consulates, the British media and travel advisories I headed off to Thailand thinking I might as well have gone to Honduras after all. Of course, the island of Koh Tao is so remote, the closest I got to any political action was watching the BBC World News channel's coverage at a local cafe.

As it turned out, I had chanced on a good field site in Koh Tao. Within the Gulf region of Thailand (See map, Figure 1), Koh Tao offers the best diving and sights in terms of ecosystem richness, water clarity and dive facilities. It is a common stopping point for backpackers and gap year students due to its proximity to the island of Koh Phangan, the "full moon party destination of the world", as well as Koh Samui. By contrast though, Koh Tao is quieter and smaller than the former, and less developed than both. The island relies almost exclusively on the dive industry, offering some of the cheapest (yet still standardized) PADI certification courses in the world. Basic accommodation can be found at a fraction of the cost of other dive intensive locations such as the Red Sea, the Great Barrier Reef and the Maldives, reinforcing the age structure of the visitors, who are typically between the ages of 19-26. Nearly all visitors to Koh Tao are either from English speaking countries (including potential research participants), or from my personal experience, have a good grasp of the English langauge.
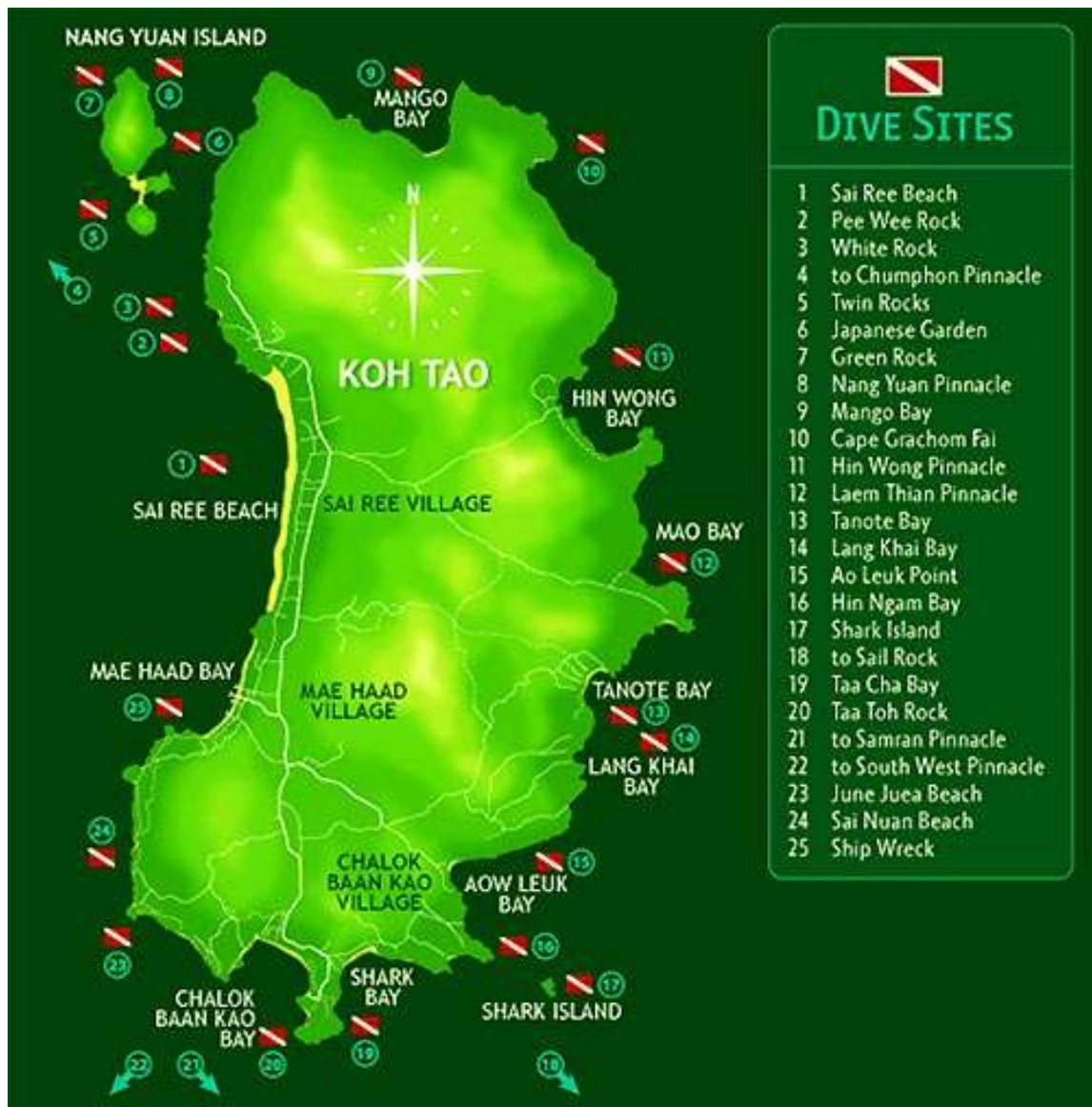
Figure 1: Map of Koh Tao

The underwater wildlife surrounding the island was teeming while I was there, with regular sightings of eagle rays and black tip sharks. The timing of my fieldwork coincided with the start of the peak dive season, conveniently between the monsoon months when underwater visibility diminishes. Whilst I was unfortunate enough to never be in the right place at the right time, many of the divers I worked with spotted turtles and occasionally whale sharks. Thus in conjunction with the variety and density of corals, the local dive sites offered an interesting and aesthetically pleasing environment in which to learn to dive.

In practice, once on the island everything seemed to fall into place. The presence throughout the dive community of the videography company with whom I was training, made recruiting research participants relatively unproblematic. The owners of the videography company set up the first, and as yet only, officially certified 'Professional Underwater Videography Course' in conjunction with the British Sub Aqua Club. Whilst the two owners spent their time training new interns, the rest of the staff went out each day with a local dive school filming learner divers. The internship encompassed two weeks training with one of the owners, followed by an indefinite period of time working as a videographer. Thus, I was able to incorporate my fieldwork into the second half of the internship.

The laid back atmosphere of the island, the fact that people were generally free from rigid time constraints that they may otherwise have in their everyday lives and my newly acquired status of 'underwater videographer' no doubt further influenced the divers' willingness to participate in quite a time consuming process of involvement (when compared to filling in a questionnaire or carrying out a single interview for example). In other words, I wasn't a random researcher approaching people, asking them to be involved in a study unrelated to their present activities. Rather, I already had a role and a purpose on the dive boat and could therefore get to know the participants and share their experiences.

I would argue that the informal nature of the dive industry and the time spent aboard dive boats, with little else to do reinforced the research participants' openness to contribute to the study. As Maccarthy et al (2006:551) note, satisfaction of dive experiences is not confined to the underwater experiences; rather camaraderie with others aboard the boat on the trip to and from a dive, including

'banter' with strangers, can "contribute a wealth to the overall appreciation of the service provision". As it was, whilst staff were 'in control' of the smooth running of the day, the relationship between them and the paying customers did not represent disproportionate power relations. It was common for the learner divers (who themselves, more often than not, had never met before the course), to go for celebratory drinks with the instructors at the end of a day's diving. As a videographer with a specific purpose on board the boat I fitted into this friendly dynamic. The learners could relate to me as a fellow diver, someone with whom they could share their experiences and chat with in an informal nature. I had an understanding of what they were going through (in terms of skill development), and I was also there with them when they were discovering new things and ways of being in the underwater world. This mutual understanding I believe was vital in fostering an encouraging and open environment in which to talk through the footage of them learning to dive at a later date. By that time, the research participants felt comfortable with each other and myself and as such were not worried about sounding 'silly' when talking about the senses or flagging up the difficulties they faced when learning to dive, the very aspects I sought to uncover throughout the research. My own experience of diving also meant that I could join in with the conversations that took place during these 'audiencings' in more than a purely abstract way. Furthermore, these provided me with the ability to distinguish between the level of skill acquired by the learners and the level of skill I had gained throughout my exposure to diving since the start of my PhD. Thus I could loosely trace the extent to which my sensorium had developed and adjusted, through a sustained period of diving regularly.

Finally I would like to flag up the thesis' organisation. As I go on to state in the introduction, the literature review which follows only contextualises this study in relation to existing research on sea space generally and underwater space specifically, leaving theoretical contextualisation to each chapter in turn. This is due to the fact that four of the thesis chapters have been written for publication, two of which answered to particular calls for chapters. Whilst the chapters that form this thesis have been modified from their published/in press manifestations (Merchant 2011a, 2011b, Merchant Forthcoming-a, Forthcoming-b), for example, to avoid repetition of methodological sections or the multiple use of the same empirical data, they retain a sense of self-containment. Thus, whilst I hope that as a collection they bring together debates concerning the body, mediation and underwater tourism, they should in turn contribute to distinct aspects of these.

1   Introduction

Since its first conception, this project has changed quite significantly. What was once to be a posthuman phenomenology of underwater space has now become much more generally, a human geography of the underwater world, centered on mediation. The thesis is informed by research participants who, at the time of carrying out the fieldwork, were learning to SCUBA dive. Thus, more specifically, the thesis is concerned with human perception of the underwater dive sites surrounding the island of Koh Tao, Thailand-my chosen field site. As a collective the chapters which make up this thesis at once illustrate the breadth and complexity of dive experiences whilst also demonstrating the plethora of ways in which perception of a 'natural' environment is mediated by equipment, memory, popular culture and the institutionalized set of practices taught by dive organisations.

With ever more sophisticated technology, and by extension improved accessibility, the seascape, particularly as viewed from underwater, seems to be an increasingly fashionable and explored space featuring regularly in popular culture representations, and growing in popularity as a holiday and general leisure pursuit. Appealing to the masses, the National Geographic has even partnered with the Professional Association of Dive Instructors (henceforth PADI), the world's leading dive certification company, to create a variant of the standard Open Water programme entitled the "National Geographic Diver Programme". The website states this course has the aim of "encouraging public interest in recreational scuba diving worldwide and exposing people to the aquatic environment to help them gain a better appreciation of our underwater cultural heritage" (PADI 2011a). Cater (2003:37) has stated that, 'if outer space is the "final frontier", it may be argued that

the marine environment is the penultimate, with advanced technology enabling an increasing number of marine tourists literally to reach new depths'. Considering geography's roots in exploration and unearthing what lies beyond the next frontier, it is perhaps surprising that there is currently a lack of interest in studying embodied explorations of *underwater* space (notable exceptions include Straughan (2010), and Cater (2008, 2007, 2006, 2003)). As I discuss in the following chapters, this is particularly strange as recent calls have been made by geographers to consider sea space as potential sites of inquiry (Lambert et al. 2006, Peters 2010, Steinberg 2001). As yet though, responses to these have concentrated on the goings on that take place above the water's surface. Therefore, this thesis seeks to attend to this gap in the literature by exploring a number of embodied aspects associated with learning to dive, including human-technology, human-technology-environment and human-animal relations underwater.

Dive related tourism is a one of the fastest growing tourism market sectors (Orams 1999) and its socioeconomic and environmental impacts are significant. Much research has detailed this from tourism management, marine biology and conservation standpoints (Cater 2008, Cater 2003, Davis and Tisdell 1995a, Davis and Tisdell 1996, Hawkins and Roberts 1992, Hawkins and Roberts 1993, Stolk *et al.* 2007, Tratalos and Austin 2001). However even within this broader set of literature, from an embodied perspective, research on the underwater environment is limited. To date academic research tends to focus on managing dive tourism and the impacts dive related tourism has on reef ecosystems and resort communities and economies, whilst failing to contextualize why people learn and continue to dive, nor do they explore the intricate details of diver experience beyond indices of satisfaction. In this thesis I explore what it is about underwater space that makes it

so popular: the sensual shifts in perception, the mastering of a new skill, the enchantment of learning about and relating to underwater creatures and the forgetting of the mundane aspects tourist experience. After all, in the wake of post-phenomenological and non-representational theories (henceforth NRT), the seascape is no longer considered an inert background or setting for human action, nor is it understood as solely a pictorial or discursive form of representation. Rather, landscape [or in this case the underwater seascape] is about 'practice' (Cresswell 2003), and comes into being by drawing variably on embodied, material and discursive domains' (Macpherson 2010:6).

Situated alongside phenomenological and non-representational research, this thesis then not only seeks to bring underwater space into the remit of human geography, but simultaneously its aim is to apply contemporary debates in human geography to a tourism context, thereby enriching the growing body of existing tourism literature concerning SCUBA diving.

As such I seek to highlight throughout this thesis that, diver-technology-seascape relations not only affect dive experience and understandings of underwater space but by extension they also affect the tourist experience and understandings of tourist sites, as SCUBA diving has become so entwined with holidaying. Not only do the majority of people learn to dive on holiday, if they continue to dive after their initial training, they are also extremely likely to become 'warm water' divers, continuing to dive either on specifically planned dive holidays, or fitting the activity into their general holiday plans (for a breakdown of the different 'types' of dive tourist see Garrod and Gosling (2008)).

Following Saville (2008:894), in this thesis I am concerned with exploring such 'new ways people are finding to make contact with their environment'. This aim is reflected in the wider tourism and geographical literature concerned with the body, phenomenology and NRT, as academics are becoming increasingly interested in the role of the body, the senses, perception, technology and memory in shaping our understandings of space.

The thesis is concerned with relations of *novice* divers to underwater space, in particular the dive sites around Koh Tao, a small island in the gulf of Thailand, for a particular reason. It has been argued that certain spaces or circumstances to which we are not habituated make the study of bodily experience less problematic, as the disruption of the expected/everyday leads to greater awareness and a heightened sense of perception that allows us to 'rediscover phenomena' (Merleau-Ponty 1962, Spinney 2006). To quote Tuan (2001:9), 'to experience in the active sense requires that one venture forth into the unfamiliar and experiment with the elusive and the uncertain'. As Leder (1990), drawing on Merleau-Ponty (1962), has noted, bodily sensations and processes show themselves, or are 'lit up', most commonly and most notably in times of dysfunction, whether it be because of illness, injury or because of an unfamiliarity with required bodily practices, or the environment in which one finds oneself. Thus, in order to 'get at' these elements of experience, this thesis mainly concentrates on the experiences of learner scuba divers, for whom many of the aspects of diving and the ocean depths are novel and unfamiliar enough to remain consciously notable (although not denying that many are not). However, at times, my own experiences and those of dive instructors and Dive Masters are also included, often serving to highlight the extent to which understandings and

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relations of/to equipment and the environment change over the course of a diver's 'career'.

Narrowing down which dive sites and aspects of experience to focus on was not an easy task. Consequently, in an attempt to engage thoroughly with contemporary debates in geography and theory I have chosen a selection of perhaps the most iconic "types" of dive encounter: the reef, the wreck, and being with a selection of the underwater 'big 5'. Furthermore, having stated that my project has shifted from specifically dealing with the body and technology to encompassing mediation more generally, I do not want to leave behind the original outline of the project entirely. Instead, an interest in embodiment and the post-human entanglements of flesh and the materiality of the diving equipment has become the foundation upon which the exploration of my chosen dive sites rests (rather than, as previously intended, being focal points in themselves). As a result, I hope that the inter-relational, technological and phenomenological literature, whilst explored in depth in Chapters 4 and 5, will weave through the write up of the whole thesis, perhaps subtly, yet binding the chapters into an experiential geography of the sea.

For these reasons, my project is quite broad in its grounding, employing a considerable number of theoretical approaches in order to demonstrate a liveliness and an enthusiasm for bringing to the fore the potential the sea has, as a topic or "area" of inquiry, for mobilizing and engaging with what are commonly land based geographical debates. With all this in mind, my aim is to think over a core set of research questions.

As noted in the preface, the main question that runs through the thesis is:

How are tourist's experiences of underwater space mediated?

In order to break this down into more manageable sub-inquiries, in the methodology I consider:

How do we 'get at' and represent sensations and affects, particularly bearing in mind the logistical limitations to underwater communication?

Following this I move on to analyze the body underwater by asking:

How do scuba-divers learn and continue to engage kinaesthetically with the underwater environment? What new sensations and somatic senses are involved?

In its most literal sense, considering 'technology' or 'equipment' is the task of Chapter 4, however when also encompassing, film technologies, the media and teaching technologies, in one way or another all of the thesis chapters contribute to answering:

What is the role of technology in providing access to, framing and/or restricting the divers' perceptions of the environment, literally or methodologically?

Binding these questions together is the analysis of the affective capacity of predominantly natural but also, in the case of shipwrecks, transgressive man-made beings and materialities.

In order to carry this research out, the main chapters of the thesis will be split by dive site 'type', with a different corresponding body of theory applying to each, but as already stated, with a post-phenomenological approach that pays attention to the mediatory acts taking place throughout each encounter, binding them together. Thus I make use of: visual media, sensory ethnography and methods; phenomenology and the diving body; haunting, materiality and a shipwreck; ethics, affect and animal encounters; and finally memories and representations of the reef.

The following chapter (Chapter 2) will provide a historical context for the emergence of SCUBA diving as an increasingly practiced pursuit. Initially outlining geographers' engagements with sea space, this will be followed up by an overview of existing academic literature which is concerned with diving. This chapter will not include more specific reviews of the main themes of the thesis; rather these will be included in their relevant chapters. This is not to say that there are no overlaps in theory and thought throughout the thesis, nor that SCUBA diving research participants (including myself) exclusively separated their modes of underwater apprehension dependent on which environmental context they found themselves in. However for the purpose of clarity I have played on certain themes in certain contexts, making each chapter self contained, yet contributing to a larger project.

Chapter 3 forms the experimental methodology. Arguably for most studies, the methodology is somewhat of a means to an end, a toolkit for obtaining data. For this thesis, that was not the case. Part learning curve, part experiment and part theoretical stance, researching and carrying out my approach to data collection grew a little out of control. Consequently the methods I eventually employed required ever more justification and detailed theorization. Thus the lengthy Chapter

3 initially introduces my two pronged approach to data collection. I then go on to detail the theory behind why I chose to experiment with visual methods, in addition to autoethnography. Following this I explain how my research data was collected in practice, including a brief autoethnography of my personal learning journey of gaining the skills to become an underwater videographer.

Chapter 4 looks specifically at the dive equipment to discuss how learning to dive encompasses getting to grips with a set of bodily prosthetics which at once enable yet mediate and restrict divers' abilities to explore the underwater world. This chapter highlights questions of identity, drawing on postphenomenological and cyborgian literatures to challenge essentialist ways of thinking about the body and its relation to the natural environment.

In conjunction with Chapter 4, Chapter 5 forms the basis upon which the other empirical chapters rest. The purpose of this chapter is to highlight the ways in which divers come to learn and negotiate their way around the underwater environment through the senses. Analyzing each sense in turn the aim here is to emphasize the novel ways in which sensuous understandings of the body and underwater space take place. The details of experience brought up by the research participants do not solely occur in the last two dives of the Open Water course (the ones which are drawn on for the chapter), rather there are also aspects I could relate to when diving *SS Thistlegorm* (the subject of Chapter 5) and they also appear in my own and others experiences of diving with marine animals (the subjects of Chapter 6). Furthermore the embodied experiences discussed in this chapter are the very same accounts which are depicted in the souvenir DVDs discussed in Chapter 7. Thus the situation of this chapter near the beginning of the thesis is reflective of dive experience itself,

initially at the forefront of consciousness the micro scale details discussed in this chapter still occur after continued exploration and are still relevant to different dive contexts, yet they move to the background of perception, only cropping up when things go wrong or when new ways of being are required.

Chapter 6 turns to autoethnography. Initially I had hoped to go wreck diving with research participants; however the logistics of doing so were not possible within the time frame and budget of my research. Consequently, the detail of this chapter is concerned with my own personal experiences of diving one of the largest wrecks in the world. In the chapter I consider how memory and materiality intertwine in the production of an "atmosphere" that consequently characterizes the dive site of *SS Thistlegorm* in the Red Sea as haunting and elusive. The chapter considers the "density of experience" (Adorno: 1981, in Gordon 1997:240), the multiple and overlapping politics of space being played out at wreck sites. The two main strands to this chapter deal with; on the one hand the mediation of experience through the affective materialities encountered at the site, and on the other, the confusion of the site's identity due to the natural takeover of the manmade ship.

Chapter 7 of this thesis then turns to human-animal encounters. The aim of the chapter is to argue that a combination of environmental 'education' taught by PADI professionals, along with diver 'interpretation' of wildlife and underwater habitats can lead to an enhanced ethic of care in the divers, leading them to not only act more responsibly during dives, but also encouraging them to take part in conservation activities. I do this, relying on a combination of the theoretical approaches advocated by Foucault (1977) and Levinas (1989). Thus, dive school activities and teaching practices are analysed to highlight the ways in which learner divers' bodies

become docile, and relations to different underwater beings are considered in order to think through what characteristics animals must possess in order to be granted a Levinasian 'face'.

Chapter 8 has a dual purpose. On the surface, the aim of this empirical chapter is to highlight the ways in which visual images have the ability to mediate our memories of place and performance. In this chapter this is illustrated through the example of souvenir DVDs that depict learner divers completing underwater exercises and exploring reef environments, whilst fulfilling the requirements of the PADI Open Water course. However, the chapter draws on a body of literature that sits uncomfortably with arguments put forward in the theory behind the methodology. Though not dealing with senses and the body specifically, the integration of time and memory into the theory of watching and re-watching filmic representations of past experiences, challenges the reliability of visual media in portraying accurate depictions of place and activity. Thus on the one hand this chapter is an empirical chapter in its own right, yet on the other it brings to the fore a series of limitations associated with the methodology put forward in Chapter 3.

Following this empirical section, in Chapter 9 I draw together the arguments put forward throughout the thesis in order to offer some conclusions. In addition relevant avenues of possible future research will be listed, as well as further limitations made apparent during this research.

2 (sub)Aquatic Geographies: sea space, popular culture and the origins of diving

The task of this chapter is to provide a background of previous research which has explored sea space and diving. As noted in the introduction, the themes discussed here relate specifically to studies of sea space and diving as each of the following chapters contains its own specific overview, comprising relevant empirical and theoretical literature, thus here I begin by outlining geographers engagements with ocean space generally. I then consider changing representations of the ocean before moving on to outline the development of diving in both lay and academic literatures.

2.1 Marine Geographies

"With the aid of scuba gear, the tropical traveller … (can) not only be on, in or near the sea, but beneath it as well' (Trist 1999, 383). There is certainly potential to consider the underwater in a myriad of ways (through imaginative accounts, shipwrecks or consumption practices) and these possibilities can only (literally) deepen our social and cultural understanding of the world."

(Peters 2010:1268)

As noted in the introduction, underwater seascapes have received little attention as a topic in their own right within human geography, yet the ocean's surface has begun to infiltrate postcolonial, economic, political and globalisation literatures. It is argued that geographies of the sea can be a lucrative source to re-orientate current perspectives, particularly by providing new remits of analysis outside of the more

common zones of the local and the national. Sea visions can provide novel understandings of the oceanic encounter that offer scope to reanimate prevalent approaches to "political economy, material geographies, the relations between knowledge and located practice and the intersections of social and spatial difference" (Steinberg 2001). In this light, maritime environments allow for a challenge to traditional land based studies and the production of knowledge which follows from these.

There have been three special journal editions since 1999 illustrating these themes, in *Social and Cultural Geographies* (2005, 6 (3)), *Journal of Historical Geography* (2006, 32) and *The Professional Geographer* (1999, 51 (3)), attempting to consider; "[w]hat if seas were shifted from the margins to the centre of academic vision?" (Wigen and Harland-Jacobs 1999). In these, art, maritime disasters, war and the quest for scientific knowledge, as focal points, are all situated in a marine environment in some guise or another. Thus, contributing authors offer a sense of the ways in which looking towards the ocean can change the geographies that come into view, whether this be by putting what we think we know in the context of an Atlantic survey; by understanding the intricate connectivities of trans-national networks; or by tracing movements, negotiations and memories across and around oceanic space.

Of noteworthy mention here, is the work of Steinberg (2001), perhaps the most prolific writer on marine geographies. Steinberg's attention to contemporary issues surrounding the sea, are dealt with in his book-long analysis of *The Social Construction of the Ocean* (2001), in which not only is he interested in forms of political economy played out over/across the ocean, but he also seeks to exemplify

how such processes have come to problematise the materiality of the sea itself. Steinberg (2001) refers to Castell's work on networking and society, to highlight the process of dematerialisation that has occurred with regards to the sea. It is argued that in a world that is intrinsically connected, the materiality of the sea and the distance which it spans is seen to be something which should be superseded, rather than explored. Steinberg argues that connectivity, which has evolved from its early forms consisting of trade routes and the Imperial project, "functions to dematerialise the connector, the space between" (Connery 2006:497). The sea then becomes a slippery space, as Deleuze and Guattari (2004) argue, it is both smooth and striated, and as Lambert *et al.* note (2006:480), it is a realm of 'differentiated conventions alongside interconnections'. Thus, it can be seen that geographical writings seem to take the ocean environment itself for granted, focusing instead on the acts and processes taking place on the surface. The aim of this thesis is quite different for two key reasons. Firstly, it is what is below the water's surface that is of interest. Secondly, the way in which tourists experience, understand and are affected by the underwater seascape itself, as well as the creatures that inhabit it, is what is of interest.

Kimberley Peters (2010) has recently sought to draw attention to the lack of socio-cultural work within geography concerning sea and ship space. She highlights a number of interesting research avenues that have yet to receive dedicated study, bringing particular attention to the ocean depths. She argues, as I do, that, "the magical, enchanting or spectral qualities of maritime space could be effectively investigated by geographers studying seas and ships in a contemporary light" (Peters 2010:1266). Reflecting such sentiments, Michael Pearson has argued that we need to 'get away from the prevalent focus on trade and commerce, and instead

try and bring a little culture into the discussion' (cited in Peters 2010:1260). Peters, draws on the work of Bear and Eden (2008), and Lambert et al (2006) to note the potential in researching underwater wildlife including the role of non-human actants in shaping underwater space, and our relation to these.

Thus, whilst the sea/ocean/Atlantic provides for a variety of starting points, theorisations and topics of inquiry, particularly with regards to notions of the sea as 'connector' of peoples and lands, with cultural approaches to the study of the ocean beginning to emerge, there remains a lack of embodied research on these. Furthermore, it is only recently that scholars (such as Peters (2010)) have begun to call for cultural approaches to studying underwater space specifically, despite their potential as sites of heritage, education and inter-relation.

Whilst it is this notion of a 'connector of peoples and lands' that has dominated conceptions of the oceans of late, this has evolved from previous narratives which have changed throughout history. The most comprehensive attempt to synthesize the changing cultural constructions of the sea(scape) is provided by Corbin in *The Lure of the Sea* (1994). Corbin traces the evolution of European discourses surrounding the sea and the shore from 1750 to 1840. Beginning with natural theology, Corbin explains how the sea was conceptualized as a site of fear and repulsion, due to its emergence from the "Great Flood", exemplified through the work of Burnet (1680 in Corbin, 1994), who noted how God ended the flood and created the shore as a dividing line between safety and chaos.   The ocean constructed as disorder and chaos, was a primary maritime trope established in Mesopotamian and Western Semitic texts (Connery 2006).

During such times, the ocean was seen as "that watery monsters' den", a damned site, in which creatures devoured one another (Corbin 1994:7). Sea storms were thought of as the work of the Devil, and swell or choppiness were considered to be caused by the damned souls who "haunted the atmosphere's intermediate zone" (Corbin 1994:7). Echoing this, Lambert et al (2006) reflect on how the oceanic instils a fear of the unknown leading to madness. To cross the sea was to risk being amongst the vengeful Gods, in a world of conflict and disorder. By its association with the dreaded waters, the shore was seen to be the site upon which the sea purged itself of unwanted monsters. Logically then, to enter the sea during a time of such prevailing narratives was considered a hugely immoral act, only ever entertained by the lower classes [sic].

Even as literary interest in nature began to grow, it was for the most part only concerned with the countryside and gardens, the site of "the synthesis of the tame and the wild" (Corbin 1994: 60). The ocean however, as matter always in a state of flux, could not be subdued or tamed by man [sic]. As Corbin (1994: 60) notes, "man could find no genuine shelter there, nor build himself a secondary residence. Because it was irremediably wild, the liquid element represented the primitive state of the world".

Consequently, the sea, to be appreciated in and of its self, needed discourses surrounding the sublime and the therapeutic to be fostered first. Thus, aided by medical fashions of the time, the self and the body were important factors in the re-imagination of the seascape. As Connery (2006) argues, it is only recently that the intellectual and physical satisfaction of diving and swimming has been re-explored by Westerners. Francis Bacon asserted in 1638, that "bathing the body in cold water

fosters long life", and equally European medics in the 18th century began advocating bathing for its healing and health-giving benefits. Such a change in ideology lead crowds to the Atlantic and North Sea shores for prescribed bathing. A sense of pleasure could be felt from the whipping waves, and the affect of sensing the powerful forces of nature. As part of the aesthetic of the sublime, bathing involved subjecting oneself to the violence of the sea, in a risk free environment (due to the supervision of employed bathing helpers), there was a pretence that bathers could be swept under by the force of the waves, but in reality people rarely lost their footing (Corbin 1994:73). Such attitudes altered the way people swam, so that one did not simply loll and play in the sea in order to feel in "dynamic communion with the liquid element" (Corbin 1994:76). Rather, swimming was an effort, a display of energy, a battle against being engulfed. Men, argues Corbin (1994:77), "hoped to emerge as heroes for having faced the staggering blows from the sea, felt the scourging salty water, and overcome it victoriously".

In this light, by the 1840s, the sea and the beach had been reinvented. Aided by improvements in transport and communication, particularly through the advancement of railroads, coastal towns; especially in England, France and Italy, became sites of escape from everyday life.

Furthermore the shore, as a notable geological site, fostered an appreciation of natural history, which reconceptualised the sea and its shores from sites of horror, to sites of wonder and contemplation from the 1780s onwards. Through voyages and appreciation of literary work, admiration arose in the process of interpreting the ocean, so that "sensation and the working of the mind" became the main focus. The emotions evoked by the seascape were no longer to be repressed, but rather

were encouraged and considered a worthy tool in the process of interrogating the self.

2.2   The underwater world and the popular imagination

At the turn of the 20th century underwater exploration as part of reef tourism was virtually impossible and largely undesirable. However, with the development of the rudimentary snorkel, followed by the aqualung, interest in seascapes began to shift, encompassing the underwater world. Pocock (2002:371) argues that for most people understandings of reef environments "enter people's lives through advertisements, documentary films, television, advertising, posters, books, magazines and postcards". She adds that for popular consciousness, the depths were not visually knowable until the 1930s when in addition to a burgeoning interest in snorkelling, glass bottomed boat tours began to operate in areas such as the Great Barrier Reef. Some of the first underwater photographs taken around this time failed to capture the magic of the reef though, as the full impact of the sea's spectacle was dampened until the advent of colour film/photography (Pocock 2002). Referring specifically to the Great Barrier Reef, Pocock (2002: 374) states "early colour reproductions in the form of hand-tinted photographs and postcards are pale and subtle in comparison with the photographic images of today. Even in the 1960s it was difficult to re-create the colours of the underwater world, and coral displays were a poor substitute". Ironically and contrary to most media representations of the time, due to the lack of colour spectacle, early reef photography was used to promote the shapes and tactile quality of the coral, yet real-time perception was largely only concerned with voyeurism. As she notes,

"Brilliant colour was therefore regarded more clearly as only one aspect of a broader visual aesthetic experience, and the textures and diversity of coral shapes were prominent."

(Pocock 2002:374)

In the fictional media, early representations set up a trend, with the ocean being screened as a dangerous otherworldly environment, home to aggressive, alien-like inhabitants (for example: It Came from Beneath the Sea (1955), Jaws (1975)). Unfortunately to date, some underwater inhabitants have failed to shake the narratives imposed upon them by such films, with public attitudes towards sharks still hampering the plight of conservation strategies. The mediative effects on 'real-time' encounters, of popular culture narratives and imagery, is considered in Chapter 7, where I argue for the importance of attending to the specificity of species variation rather than subsuming similar beings under overarching character traits, with the most notable example being 'sharks as killers'.

It was primarily the pioneering figures of underwater photography such as (among others) Hans Hass and Jacques Cousteau who began to widen the audience's general knowledge of the ocean depths. Whilst Cousteau was perfecting the aqualung in the early 1940s, Hans and his assistant and later wife Lotte Baierl, were already filming sharks and coral reefs in a quality good enough for German and Austrian cinema (Ecott 2002:142). Experimenting with home made diving equipment and camera housings the husband and wife team became the inspiration for a generation of recreational divers in the 50s and 60s. Hans was the first free diver to capture close up photos of manta rays and both of them had their work published in magazines and papers around the world. Even before Cousteau published *The Silent World*

(1953), Hass had already written prolifically on the underwater environment, with his third book *Diving to Adventure*(1951) becoming an English language best seller. Lotte gathered her own following, producing the book *Girl on the Ocean Floor*(1972) which countered the logic that swimming with sharks and battling the terrors of the deep was a heroic and masculine affair. However, even to date there remains a gender bias within the leisure pursuit.

By the 1960's the Hass adventures in the Red Sea became overshadowed by the more sophisticated filming techniques of Jacques Cousteau and his team of underwater "scientists", notably including Frederic Dumas and Yves Le Prieur. Audiences found his less than ethical activities (for example with scenes showing Cousteau's team repeatedly stabbing a whale, or discovering and then riding giant tortoises) more entertaining, and Hans left the public eye and turned to social science research. Cousteau died in 1997 with *The Silent World*, in its book and film manifestations, remaining his most popular productions. Between them, Cousteau and Hass were largely responsible for bringing visual images of the underwater world to the public, displaying creatures and environments ranging from the bed of the Danube to the red sea, including some of the earliest footage of sharks and giant squid. To date the Cousteau Society lives on, with Jacques's son and grandson continuing to be involved in the production of more than one hundred books and 115 films on a variety of underwater habitats.

Although often going against today's moral codes (particularly Cousteau) the duo were the first divers to represent the ocean in such a way that was still otherworldly and dangerous- yet also a site of awe and wonder, to be respected and preserved. Following suit, fictional accounts in film and literature began to de-demonise the

ocean's inhabitants, even anthropomorphically promoting their character traits as intelligent, trustworthy and morally sound beings, such that the invocation of spectator guilt over the human destruction of environments and species has become a common trope not solely reserved for the non-fictional genre (for example: *The Abyss* (1989), *The Deep Blue Sea* (1999), *Finding Nemo* (2003)).

Even this brief historical outline of oceanic representations displays the ways in which they were dependent on prevailing ideologies of the time. To date sea space tends to be homogenized, rarely being portrayed in a way that highlights its multiple, varied yet simultaneous characteristics. Historically, we have moved from seeing the oceanic as the dreaded, to the awe inspiring, to the colourful and now to the endangered; as is reflected by recent examples such as *The Great British Fish Fight* (2011), Martin Clunes' *Man to Manta* (2011), Monty Hall's *Great Barrier Reef* (2011) and David Attenborough's *Frozen Planet* (2011)*, as well as a change in the way some marine animals are represented in aquarium displays.

Thus, through the methods outlined in the next section, I want to consider that the ocean is not a placeless milieu, as the likes of Casey (2000), Deleuze and Guattari (2004), Lambert *et al.* (2006) have contended/noted. Such overarching constructions miss the liveliness and place specific intricacies which make underwater environments such lucrative tourist sites. By considering the affective atmospheres of distinct places, materialities and the beings which bring them to life, allows for enchanting discoveries, states of embodiment and relational understandings to emerge. Therefore, as is exemplified by the empirical chapters, I argue that each dive site is encountered differently and is distinct, with its own intricacies, characteristics and affective atmosphere.

2.3   Historical context of SCUBA diving

Since the 18th century people have been experimenting with ever more sophisticated ways to survive underwater, from learning to hold their breath for extended periods (Maynard 1999), to designing diving bells and other less successful, often deathly contraptions (Ecott 2001). The origins of modern day SCUBA diving were principally concerned with hunting and foraging underwater, rather than to observe the sea's spectacle. Tim Ecott (2001) details the ways in which a variety of communities developed specialised skills in order to collect sponges, pearls and abalone from the sea floor. Indeed even the pioneering divers of the 40s, such as Hans Hass, Jacques Cousteau and Emile Gagnan, originally pursued the activity under the guise of spear fishing, the most common pursuit for using SCUBA equipment at the time (Maccarthy et al. 2006). Developments in rudimentary goggles, fins and snorkels aided these tasks and early wetsuit technologies began to emerge, allowing for longer periods in the sea in relative comfort. Dive equipment innovations reached a breakthrough in the 1940s when Jacques Cousteau and Emile Gagnan invented a regulator which provided air on demand. This novel intervention, named the SCUBA (self contained underwater breathing apparatus), vastly extended the time one can stay underwater, as air wasn't constantly being emitted from its source, but only as one breathes in. This invention would be the foundation upon which modern SCUBA diving would rest. The ease of use of this new technology appears in the dive literature to be the turning point for diving, moving beyond the small scale pursuit of a few fanatical and innovatively minded young men, to becoming a burgeoning commercial enterprise. These new developments were further promoted by the visibility of a core group of divers within the popular culture media.

Since those pioneering few, the SCUBA diving population has expanded significantly to form the most rapidly growing adventure tourism sector in the world (Dignam 1990). In addition, professional divers are now relied upon for a variety of highly specialised tasks. Police and military divers are employed for search and forensic purposes, energy and telecommunications companies require divers to spend extended periods at depth laying cables and pipes on the sea floor, and marine biologists are increasingly taking to the waters (or employing others to), to carry out species and degradation surveys. It is with regret that these branches of the dive community could not be studied in more depth within this thesis as they would have formed interesting avenues of exploration and provided a contrast to the experiences of the learner divers I draw on throughout the study. However, due to issues of access and feasibility, I could only carry out my fieldwork within the tourism sector.

Initially Cousteau's design of equipment was only available in the United States. By the mid 1950s though, 30,000 SCUBA units had been sold globally. To begin with, there were no restrictions on who could dive, people bought their own equipment and learnt from friends or through experience. At that time the effects of pressure on the body were not widely published and so diving was not the 'safe', regulated and strict affair it has come to be today. With few printed guidelines, danger was a reality and accidents were common.

It was not long before not for profit training organisations such as the Confederation Mondiales de Activites Sub-Aquatiques (CMAS) or the British Sub Aqua Club (BSAC) appeared on the scene. These smaller organisations though have become somewhat

eclipsed over time by global dive associations. The biggest of these is PADI and since its birth in 1966 it has come to be the most recognised dive training organisation in the world (PADI 2011b). PADI's dive career ladder is extensive and standardised, offering taster sessions, entry level and professional qualifications. Once certified to Open Water level, newly qualified divers are legally able to buy and use dive equipment in groups of 2 or more, with or without the involvement of a recognised dive master or instructor, to a depth of 18m. Once general skills are gained, divers have the opportunity to develop more specific skills through further qualifications, in order to extend the variety of locations dive schools will allow them to visit. Such dive sites may be over 30m in depth, be visited at night, contain wrecks or require specialist equipment or air mixtures. By 1994 PADI had provided 5 million of such certifications and today more than 6000 schools/shops operate under the PADI brand, worldwide (PADI 2011a).

Alongside the emergence of the leisure SCUBA divers, another group of water descenders developed the sport of free diving. Reflective of Lewis's (2000) desire to escape technologically mediated understandings of the world, free divers find pleasure in mastering purer engagements with the ocean. By holding their breath and making their way down to increasingly challenging depths, these divers seek different ends yet share a common interest in being underwater.

2.4   SCUBA diving in the academic literature

Scuba diving has become a niche market that is embedded within the wider adventure tourism industry (Maccarthy et al. 2006). As dive tourism has expanded so has the academic literature referring to it, particularly in recent years. However

as Cater (2008) has noted, these studies come from an environmental impact perspective (Barker and Roberts 2004, Davis *et al.* 1997, Davis and Tisdell 1995a, Rouphael and Inglis 1997, Rouphael and Inglis 2001), an economic perspective (Davis and Tisdell 1996, Wilson and Tisdell 2003), management (Davis and Tisdell 1995a, Davis and Tisdell 1995b, Wilks and Davis 2000, Worachananant *et al.* 2008) or physiological/psychological perspectives (Adolfson and Berghage 1974, Pendergast *et al.* 1996, Terry *et al.* 1998, Whitcraft Iii and Karas 1976). Similarly Dimmock (2009a:9) argues that "adventure and leisure studies in marine environments […] indicate that apart from preliminary work by MacCarthy, O'Neill and Williams (2006) and Cater and Cater (2007), there is little research which uses SCUBA divers' voices to reflect their underwater experiences". Cater (2008) adds Garrod and Gossling's (2008) *"New Frontiers in Marine Tourism: Diving Experiences, Sustainability, Management",* to this burgeoning body of literature that is beginning to explore the experiential. Whilst Garrod and Gosling's (2008) edited collection begins to open out research concerning diving to include experiential and qualitative accounts of dive encounters, the contributions still lack an embodied perspective, and therefore do not go so far as to consider the potential affective, non-representation or phenomenological approaches to dive space could offer with regards to richer understandings of self and place. Since the publication of these however, a further couple of papers have emerged that do employ a phenomenological theorisation to studying the diving body (Allen-Collinson and Hockey 2010, Straughan 2010). However with so little to work with, the brief overview of the dive literature provided here has relied upon extricating some contextual information from studies which are for the most part concerned with tourism and environmental management.

Exploring marine environments is seen to be the main reason why people learn to dive, getting close(er) to fish and the reef in a way that would otherwise not be possible (Dimmock 2009b, Kenchington 1990). However education and adventure have also been demonstrated to be factors which encourage people to sign up to introductory courses (Tabata 1992). Cater and Cater (2007) argue that dive tourism has become a form of mass ecotourism. Similarly Tabata (1992) states that people are willing to spend significant amounts of money, travelling to witness underwater sights, particularly in tropical locations. The variety and density of this flora and fauna is argued to be of utmost importance in motivating divers to visit a location, as Williams and Polunin (2000) demonstrate with reference to Jamaica, as do Mundet and Ribera (2001) in Spain. Alongside this, Musa *et al.* (2004) add oceanic conditions, such as current, temperature and visibility to the list of underwater features which are considered to affect the appeal of diving/learning to dive. Academic literatures have incorporated a range of dive sites into their studies with wreck (Edney 2006), artificial reef (Stolk et al. 2007), shark (Cater 2006) and 'natural' reef (Dimmock 2009b, Garrod and Gossling 2008) environments being deemed to offer distinct tourist experiences (Maccarthy et al. 2006). As Dimmock (2009a) has stated, marine parks are particularly sought after destinations in which to dive, as one can more readily rely upon witnessing a more aesthetically pleasing encounter, due to the diversity and abundance of flora and fauna which reside there (Davis and Tisdell 1995a, Davis and Tisdell 1996, Green and Donnelly 2003). Whilst 'destinations near the Equator are especially popular' (Tabata 1992:154), more hardy divers also claim to enjoy the contrast provided by temperate seascapes (Dimmock 2009a). Kelp forests, wrecks and geological formations for example offer vistas with very different aesthetic characteristics, however the financial investment required to purchase a dry suit (which is needed in colder waters), and the fact that

these locations are not as popular (for diving) as tropical tourist destinations, means that the divers who frequent such sites are more likely to be local club divers rather than holidaymakers (although advanced, specialist, dive tourism does incorporate not only temperate dive sites but also lake tours (in Canada) and even Nordic ice diving).

Though Open Water divers are able to practice diving of their own accord, most do not. In fact research has demonstrated that those who learn to dive as part of a tourist activity, are not only likely to dive less often (typically only on holiday) but also that they are less likely to continue to dive at all (Maccarthy et al. 2006). For 'tourist divers' (Coxon 2006, Wilks 2000, Wilks and Davis 2000), it is likely that learning to dive is merely a means to an end, extending sight seeing activities from the land to the sea, rather than as part of any sustained interest in the practice of diving (Tschapka 2006).

In addition to witnessing a variety and density of smaller scale reef fauna, larger water beings such as dolphins (Curtin 2006), sharks and rays (Cater 2006, Dobson 2006, Dobson 2008), turtles and cetaceans (Cloke and Perkins 2005, Curtin 2003), in other words 'the big 5', have also been considered important instigators in why people learn to dive. The theme of anthropomorphism in this literature is particularly evident. Curtin's (2006) research on tourist recollections after swimming with dolphins highlights the extent to which people attribute human characteristics to the animals, using this as basis on which to affix a moving or positive emotional relation. Recent attempts to reconfigure the way in which sharks are perceived is illustrative of the extent to which our understandings of ocean wildlife are culturally mediated in different ways depending on the narrative being

employed (Whatmough et al. 2011). Sharks for example, offer a niche and lucrative diving experience, therefore it is not in the interest of a tour operator to advertise them as deadly and vicious, cold blooded killers, but instead as majestic, graceful beings in their natural environment (although the opposite is true in cage diving) (Dearden et al. 2008). Whilst it is difficult for new divers to feel at ease in the presence of predators, there is also the argument that a certain amount of tension in wildlife encounters actually contributes to the experience (Tremblay 2002). Feeling insignificant in the presence of such grand beings is a further trope, drawn upon in the wildlife literature which harks back to the Burkian (1999) or Kantian (2005) notion of the sublime. Such understandings draw on the sublime's inherent overlapping of fear and safety, horror and awe, exemplifying the emergence of what Lyotard calls that; "contradictory feeling- pleasure and pain, joy and anxiety, exaltation and depression" (1989:189). The structured and interrelational encounters which divers take part in with nature are argued to have the potential to 'push the imagination to its limits'. Echoing the romantic turn noted earlier in this literature review, megafauna and marine mammal encounters can be reflective of nature's re-interpretation from something to be dreaded and avoided, to a realm inspiring wonder in its discovery. As for example, whilst anxiety remains a key factor in unearthing and experiencing nature, this has since been channelled into to the feeling of awe.

One of the key tenets to the Romantic Sublime, as characterized by Burke (1999) and Kant (2005), is the sense in which the sublime emerges from an experience which is "on the edge", essentially, or in theory, safe, yet in the immanent act of interpretation, seemingly not so (as demonstrated in the sport science literature on extreme sports and fear/risk (Anderson 2007, Breivik 2007, Ilundain-Agurruza

2007, Krein 2007). Whilst diving with sharks, or other 'dangerous' beings (Cater 2006, Cushing and Markwell 2011, Dearden et al. 2008, Dobson 2006, Dobson 2008, Ecott 2002), this safety element is manifest through a sense of trust in the dive guide's knowledge of animal behaviour, or the notion that if the conditions were too adverse the dive wouldn't have had the go-ahead (as is exemplified in other toursim contexts e.g. Cloke and Perkins 1998, Cloke and Perkins 2005, Desmond 1999). However, in the performative act, a distrust in the understanding of animal behaviours, in the face of natures might, allows the diver to feel in danger, such that surviving an encounter with a whale shark, ray, or a particularly strong current may seem to push the boundaries of human possibility. As Ilundáin-Agurruza (2007:156) argues, "we experience the sublime when fear takes over as an 'intellectualized' response from our 'secure' vantage point as we feel the might and size of nature from the standpoint of our fragility". Maccarthy *et al.* (2006:549) reflect these sentiments but in relation to adverse or challenging environmental conditions when they state, "dive tourists accept or even invite less than perfect conditions as a way of adding value to the experience, a sense of overcoming the elements, or convincing themselves or others that their chosen lifestyle takes skill and effort and therefore is not for the faint-hearted". As can be seen then, the studies presented here approached the notion of 'sublime encounters' in addition to considering which creatures and environments have the potential to induce the fear/pleasure dichotomy. Underwater though, it is not just the sight of such creatures, but the reorganisation of the entire sensorium which can instigate such a response, a notion which has not received much academic attention to date. Furthermore, whilst attitudes towards certain underwater beings have been deconstructed, existing studies have not considered the reformulation of people's understandings of wildlife after/during 'real-time' perception, focusing instead on

their general attitudes. As an aside, this type of dive encounter was reacted to very differently by the participants who took part in this study, with some research participants echoing this fear versus pleasure narrative, whilst others were surprised by their complete, almost surreal lack of fear or apprehension.

Thus, it is not just being in the presence of large or potentially dangerous animals, or demanding environmental conditions that instil a sense of thrill. The novelty of underwater experience when contrasted to land based activities was similarly highlighted within the literature to appeal to tourists (Ditton et al. 2002). Cater (2008) demonstrates in a Fiskean (1989) way, that once beyond the liminal zone of the beach, everything is otherworldly. Cater (2008) states that nearly all of the participants who contributed to his study draw upon narratives relating to alien or extraterrestrial encounters. Consequently, one of the appeals of diving is that it provides opportunities to be somewhere we are not designed to be, to move and act in an inhuman manner. This also reflects the recent shift in tourism literatures toward attempting to understand sensuous and embodied aspects of experience (Cater 2008, Pocock 2002, Scarles 2009). As Pocock (2002: 379) argues; "there are a number of different aesthetic and sensory experiences associated with the Great Barrier Reef that hold significance". Thus she moves away from thinking about reef environments as first and foremost, tourist destinations that primarily appeal to the sense of sight (Scarles 2009). Furthermore she highlights the technological and mediatory aspect of these encounters, "people construct places through sensual experience that is mediated by technology and structured by society" (Pocock 2002:379). Pocock's work emanates from a heritage perspective and so she is particularly interested in the ways in which people understand place. She challenges those within her field by arguing that taking into account non-visual aesthetics is

what constitutes place, rather than solely considering that sensations are evocative of place. This set of literatures then, illustrates the importance of attending to the body and the senses in order to more fully explore human/diver relations to and understandings of underwater space generally and dive tourist space specifically. Thus this thesis is well positioned to respond to such a call. By considering the changes to the ways in which people sense the environment and reconfigure their modes of bodily being, it is possible to tease out the specific aspects of tourist encounter that people enjoy/dislike/seek to repeatedly experience etc. and so generating such micro knowledges of the body can feed into wider debates concerned with tourism management, interpretation and conservation.

A small number of academics have similarly been working in this vein. Also addressing the lack of attention given to the senses within sociology of sport literatures is the work of Allen-Collinson and Hockey (2010) and, from a human geography perspective, is the work of Straughan (2010). These studies both play on and roll out the role of touch in diving encounters, from a broadly phenomenological standpoint. Going beyond, simply using the hands to explore the textures of reefscapes, these studies consider the interrelatedness of the senses and thus expand their approaches to think about how water pressure feels on the body, how temperature gradients in the water alter perceptual focus and how moving is always at the core of tactile understandings of underwater space. Straughan (2010) takes the notion of touch even further by considering the metaphorical act of being emotionally touched by underwater happenings, sensations and sights. However, whilst these two studies are somewhat pioneering in their focus, by solely concerning themselves with touch, neither provide a particularly holistic approach to the sensuous body, nor do they point out the alterations to the sensorium as it

shifts from land to a sub aqua mode of apprehension, both of which are the task of Chapter 5 of this thesis.

So far, in this literature review, I have only highlighted what draws people to SCUBA diving, I have yet to note the aspects of being underwater which detract from the experience, or even prevent people from continuing to dive. This is one central aspect to Dimmock's (2009a, 2009b) work, which is specifically concerned with analysing 'comfort' within the SCUBA setting. Along with the work of Carl Cater (2008), Elisabeth Straughan (2010) and Hockey and Allen-Collinson (2010), Dimmock's research similarly considers the embodied nature of SCUBA diving. However, where the latter two studies concentrate specifically on touch and the notion of being touched literally and metaphorically by the water, Dimmock's research is more rounded in its scope. She writes in detail about what aspects of underwater experience people find essential to maintaining a state of comfort whilst diving, ranging from embodied aspects such as ability to cope with the demands of the seascape, the requirement for appropriately fitting equipment, to highlighting the importance of the interrelational aspects of diving. Dimmock (2009a) argues that being with people you trust, especially family members and friends etc. is one of the most important factors in not only being able to enjoy a dive, but also being able to fully get to grips with exploring the environment. Dimmock's (2009a, 2009b) comfort analysis flags up the points and thresholds of tension that exist within the leisure activity and she demonstrates that overlapping and simultaneous elements of experience operate in such a way that no two dives are ever the same; different aspects will always add and detract from experience. Indeed this is the argument I make towards the second half of Chapter 4. Furthermore, whilst I agree with Dimmock's (2009a, 2009b) findings, I seek to embed this similar set of arguments

within a more theoretically adventurous framework, in comparison to the largely empirical presentation of her findings.

2.5   Conclusion

Here I have outlined the different ways in which the ocean and diving have featured both in academic and lay discourses. This historical contextualization and literature review highlights that embodied perceptions of the ocean, not least underwater space, are somewhat lacking. This is evident both within geography and scholarly writing more generally and it is only recently that this has been flagged up (Allen-Collinson and Hockey 2010, Cater 2008, Peters 2010, Pocock 2002, Straughan 2010). The set of literature discussed above highlights a number of gaps in existing academic thought. Firstly, whilst geographers have recently begun to engage with geographies of the ocean, these have yet to make any concerted attempt to look below the water's surface for sites of inquiry. Consequently, it is the task of each chapter of the thesis to take a different contemporary debate within geography to the ocean's depths, and highlight the potential the deep sea has as a site of academic inquiry. Secondly, in contrast to many conceptualisations of the sea/ocean, in presenting the thesis in such a way, it is hoped that I will highlight the heterogeneous character of different water spaces and dive sites, therefore countering the tendency to attribute overarching, social constructed narratives to 'sea space' in general. Thirdly, whilst literatures do exist concerning sublime/enchanting encounters with ocean beings, these have tended to focus on contrived scenarios (for example Davis' work on Sea World (2005)), rather than chance encounters. Furthermore, those who have considered chance encounters (Cloke and Perkins 2005), have only done so above the water's surface. Thus, an

opportunity is presented in which to present novel findings concerning human relations to underwater fauna (in the wild). Finally, and most importantly for this thesis is the attention given to subjective, embodied and sensuous understandings of self and seascape. Doing so is not a new endeavour, however from a phenomenological perspective, to date authors have only considered the sense of touch in any detail, thereby enabling this thesis to provide the first attempt to holistically consider all the senses (although as will be noted, smell and taste fail to be commented on by the research participants), their interrelations and adaptations.

Thus, this PhD sits within a very apparent gap in existing research, which could contribute and bring to light to new ways of thinking about established literatures concerning, for example; dive tourism, cultural representations of the ocean, geographies of the body and technology, sensual anthropology or the sociology of sport, whilst also forming an interesting interdisciplinary topic of consideration in its own right.

3   Methodological Practices

3.1   Introduction to Methods

In order to embark upon research that sought to explore, in the first instance; people's interrelational engagements with underwater space, it seemed necessary from the start to think outside the 'pre-existing' box of commonly used methodological approaches, particularly if I wanted to study more than my own, personal accounts of underwater experience and interaction. How else would it be possible to get at the often overlooked, imminent and subconscious aspects of experience which commonly elude us either altogether or at least soon after the event?

For this reason 'being there' as a researcher and a participant, at the moment of direct encounter, seemed necessary to get at the fleeting, transient, unexpected, continuous bombardment to the senses, memory and emotion. Whilst 'being there' was possible, communicating at the precise moment of perception was not. Sound travels poorly under water and in any case, a diver's regulator prevents using the mouth for talking. Consequently, the task was to come up with an alternative; the second best option to communicating at the time of the encounter would be to somehow preserve the details of the experience in order to try and recreate an environment in which they could be brought back to consciousness for the research participants. In the second half of this chapter I outline the ways in which I attempted to do this, before arguing for the potential of coupling videography and audiencings for this very purpose.

The first section of this methodological chapter though defends and outlines my use of autoethnography throughout the thesis. Autoethnography weaves in and out of the thesis forming a minor role is some chapters (4,5,6), the sole contributor (6), to a dual informant (7,8). The remainder of the chapter begins with a brief autoethnographical note on my experience of learning to become an underwater videographer. It then delves into firstly the practical approach I undertook as part of the visual methodology, followed by the theoretical underpinning that supports this.

3.2   The auto-ethnographic approach

Emerging from the "crisis of representation" autoethnography as a method has been employed by anthropologists, in particular, as a reaction to decontextualized, objective, realist accounts of social and cultural phenomena and interactions (Denzin 1992). Hockey (2006:184) states that autoethnography "emphasizes the linkage between themes within the author's experience and broader cultural and subcultural processes". As such, the author's body is an instrumental part of the research process as the "the autoethnographic text emerges from the researcher's bodily standpoint as she is continually recognizing and interpreting the residue traces of culture inscribed upon her" (Spry 2001:711). Auto/ethnographic research on sporting/leisure bodies and spaces is not uncommon though (see for example Allen-Collinson and Hockey 2010, Downey 2005, Hockey 2006, Hockey and Allen-Collinson 2009, Hockey and Collinson 2007, 2009), and these studies emphasise the value of employing auto/ethnography in order to study those aspects of experience which are difficult to ask other research participants about without prompting them for specific answers. Thus, I have integrated autoethnography into

this research for two reasons. Firstly, I sought to compliment the divers' sensuous elucidations with my own experiences of the underwater environment. To come at the research questions outlined in the introduction quite literally from another point of view. Secondly, over the course of my dive training and fieldwork, there were times and places which I wanted to include in the thesis, but due to practicalities I was unable to study these with the research participants. For example I was unable to take a video camera to Sharm El Sheikh, when I explored *SS Thistlegorm*, and even if this had of been possible, some dive sites (including *SS Thistlegorm*) were too challenging for a learner diver to gain access. Similarly, uncovering the process of souvenir DVD production was possible only through being able to be on the production side of things myself. The techniques and skills involved in capturing footage and then making it appealing to tourists must be learnt from the professionals, and aside from analyzing a number of final products, it would have been impossible to gain such insight without completing the videographer training myself.

Arguably I could have written the entire thesis autoethnographically, in the style of some notable examples such as Greg Downey (2005) and Tomie Hahn's (2007) long term ethnographies of Capoeira and Japanese dance respectively, or even Sudnow's study of learning Jazz piano (1993), but, as all three acknowledge, their distinct leisure spaces and practices are not encountered and played out homogenously. Not surprising, since each body is lived through subjectively and brings to the encounter different embodied socio-cultural 'baggage'. The former two studies are reliant on personal interpretation of group activities. However, just because the researcher is engaged in the activities being studied does not mean he/she is experiencing them in the same way as the others in the group. As I go on to demonstrate throughout

the thesis, learner divers all understood, progressed and perceived the underwater environment very differently and since these differences were the very things I wished to explore, it seemed that autoethnography would be a valuable addition rather than substitute data collection method.

3.3   Visual Methods in Practice

3.3.1 Introduction

"In Switzerland, a man told me he preferred to dive in alpine lakes rather than in tropical seas. He said he found the marine life too distracting; there was too much colour, too many things to take in. For him, the joy of diving was the opportunity to see inside himself"

(Ecott, 2001: 1-2)

"Usually, just being underwater is enough for me, the ease of movement and the rhythmic sound of my air bubbles are soothing and the weightless hovering is its own reward [...] this liberation from gravity's tiresome pull frees not just the body, but also the mind [...] Underwater there is freedom from everything terrestrial. For me, inner space more accurately describes the place my mind goes when underwater. The mental release that neutral buoyancy brings is even more valuable than the interaction with creatures of the deep."

(Ecott, 2001: 102-104)

At the time of reading Ecott's (2001) book Neutral Buoyancy I had yet to learn to dive. What's more, having snorkelled, I found some of his writing not only trite, but I was also sceptical. Surely the point of modifying one's body, with prosthetic dive equipment, is to adapt to and explore an 'other' world, not one's self? Isn't the point to observe the sea's spectacle, to learn about creatures and seascapes that are far removed aesthetically and biologically from those of the land? For some, this is clearly not the case. Rather than diving to encounter and understand an alternative environment, for Ecott and his acquaintance, diving is a journey of self discovery, a becoming aware of embodied sensations.

But how can we 'get at' the kind of detail these two divers start to elucidate? How and what does it feel like to be liberated from 'gravity's tiresome pull'? What are the characteristics of hovering for the sake of hovering that make it enchanting? How does water's density become sensually manifest in the body? What thoughts and/or feelings fill this 'inner space'? Or is diving about emptying one's 'inner space'?

Getting at this kind of sensuous, sometimes 'pre-reflective' and 'pre-objective' detail (Csordas 1990:6), studying aspects of life that seem almost insignificant; the fleeting encounters, immanent sensations, practical skills and sensuous dispositions (Lorimer 2005), is a task that non (or what Lorimer prefers to call 'more-than') representational theorists have been grappling with particularly since the early 00s (Dewsbury et al. 2002), following Nigel Thrift's (1996) influential book *Spatial Formations*. Not to mention phenomenologists, and those dealing with performativity and affect (Blackman and Venn 2010).

By stepping beyond the 'established academic habit of striving to uncover meanings and values that apparently await our discovery' (Lorimer 2005:84), and instead being open to what will become; or witnessing the unforeseen it is possible to render visible many of the invisible aspects of embodied encounters with space that are often left outside the remit of academic interest. After all, these aspects of experience deserve attention since they contribute to the shaping of lives and worlds, whether routine or 'other', mundane or novel.

Despite the proliferation of work that takes seriously such elements of place, practice and performance, Lorimer (2005) highlights the lack of methodological experimentalism accompanying this turn towards studying doings and becomings, and Latham (2003) similarly calls for more ingenuity in the research process. Indeed, Gordon (2008:21) states that; 'our methods have thus far been less than satisfactory for addressing the very nature of the things and problems it is our responsibility to address'. Blackman and Venn's (2010:7) special issue on 'affect' in Body and Society explicitly aims to 'spark interest and ongoing engagements in questions of method and experimentation in light of the common ontologies emerging across the humanities and the natural, social and human sciences'. However, for the most part methodological conservatism persists largely due to an uneasiness with going against established codes of acceptable, or 'valid' modes of representation for publication (Lorimer 2005).

The 'traditional' qualitative methodologies of interviewing or surveying would have to involve some rather abstract and contrived questions, if they were going to 'get at' the kind of embodied, sensory and emotional knowledge, outlined above, in any detail. As I noted above ethnographic practices seem to be the most commonly

adopted by academics working in these areas, but even they come up against logistical barriers when attempting to study the senses in the act of sensing. Among other reasons this is due to the fact that much of embodied experience isn't even outwardly expressed, for example; we can't look at a person and know that they are having a visceral reaction to something they have seen or done.

At the end of a week on a dive boat, myself and the other learner divers in my group, on completion of the PADI Open Water course, were shown a souvenir DVD of our training. The film was narrationless, with only a subtle soundtrack playing sometimes instead of and sometimes with, the repetitive and emotive noise emitted by the cameraman's regulator, as air was sucked through and blown out of its diaphragm.

Seeing ourselves on screen and remembering the minor details of each dive, as a group we began to explain or talk through, how each of us found different training exercises more difficult or fun than others, what it felt like when neutral buoyancy was lost and/or achieved, the unfortunate case of claustrophobia experienced by one diver and vertigo by another, in addition to other general disruptions to preconceived habits and notions.

Thinking back to the kind of questions set out at the start of this section, I began to consider that maybe videography had the potential to pave the way for a multi-sensuous methodology. A methodology that 'captured' the traces of tourists 'becoming' divers as they learned to leave behind their land based and/or swimming techniques, in the process of generating a submarine habitus,

characterized by floatiness, minimized exertion and a consciously slow and steady respiration rate, not to mention its equipmental mediations.

It is evident that to study such difficult to describe forms of embodiment such as kinaesthesia, proprioception, viscerality etc. within such a logistically complicated 'field' site, required a novel and experimental methodological approach, for two reasons. Firstly, underwater aural communication is impossible and writing field notes is impractical. Secondly, sensuous 'data' is highly varied, continuous, fleeting and often not considered worthy of explanation by research participants. Consequently this study used underwater videography to 'record' the events and was followed up by post dive audiencings to give research participants a time and place in which to reflect on their experiences, re-witness things they may have forgotten and talk through the process of learning to dive.

3.3.2 Logistics

A more in depth theorization of the visual methodology I outline in this chapter, is the purpose of the following section. Therefore here I will just write of the details concerning the actual process of data collection, including the journey which led to me being able to carry out the 'logistics' of the experimental data collection.

Becoming videographer

Theory aside, my own personal journey throughout this PhD has been significant not only in terms of distances travelled but also skills learnt. Upon submitting my initial

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research proposal, towards the end of my masters degree, I had yet to learn to dive. I spent the first six months of the PhD formulating research question and getting to grips with the literature, all the while worried that I would not take well to the pursuit of diving. Fears of claustrophobia, failing medical checks on account of my asthma and a general lack of skill hung in the back of my mind until I finally took my first plunge in a rather deep swimming pool in Phuket, Thailand. Part holiday, part scoping exercise, my own experience of learning to dive significantly altered my way of thinking about this thesis, and with this came a significant shift in the PhD's focus. Cyborgs faded to the background, mediation became the order of the day and with it a whole host of new technological considerations, the primary being a new visual methodology in the form of underwater filming, followed by audiencing.

Thus the journey became more complicated. I needed even more skills and as it was I had only just learnt to dive. More than new skills, this new visual methodology would require the use of some expensive and sophisticated technological kit. Thus while overcoming theoretical barriers I opened up a can of worms in the form of logistical barriers.

As I explain in Chapter 5, a diver's 'career' follows a rather rigid set of qualifications, which normally fall under PADI's certification system. To get my hands on an underwater video camera I would need to pass another 3 qualifications and log 50 dives within a year (if I was to keep to my self imposed research timetable). Making the most of a family holiday to Sharm el Sheikh (the setting of Chapter 6), I notched up a further 15 dives and gained the Advanced Open Water certification. Most of these dives were to SS Thistlegorm, Chapter 6's wreck in question.

With only three months to go before flying to Koh Tao for my official fieldwork, I still had to pass the Emergency First Response, Rescue Diver course and log a further 26 dives. With more luck than judgement though, course dates were found. Several particularly burly Scotsmen were hauled onto boats, piers, and dragged up beaches, whilst they acted as the unconscious victims of dive accidents, their bodies were repeatedly located and their lives were more often than not saved by three barely muscled female divers, myself included. Before I knew it I was headed to Thailand with nothing but dive gear and a set of certification cards in my bag that alluded to a far more experience individual.

At first the thought of filming underwater was daunting, the video cameras and housings were worth around £2000 each and it would be my responsibility to make sure no water would make its way past the camera housings. The two cameras I would have access to looked complicated enough by themselves, let alone once they were inserted into their underwater housings, which covered all the button labels and mechanically re-configured the orientation of these into protruding levers and stiff knobs. My weapons of choice (or Hobson's choice) were a Sony PC 330 and Gates housing and the more advanced Sony XR 520 with Aquatica HD Wave housing (depicted in Figure 2). I was told that throughout my training I would be wielding the latter as it was easier to use and my footage would be of a higher quality. Once training was over, I would be moved on to the more basic/older camcorder as new trainees would take my place and would need the more advanced equipment to train on.

Figure 2: Camera and Housing equipment used for videography

On our first day diving I was a nervous wreck. I'd yet to go diving with my new 'team' (myself, another trainee Darren and our Professional Videography Instructor Ella), let alone with alien and expensive equipment. Although we had spent the previous day learning how to prep the camera and casing for a dive, I forced Ella to check that I had done so correctly, to prevent any potential future guilt that would arise form a breached housing. I had indeed done my prep correctly and I sat in nervous silence until we reached the first dive site. The new set of tasks associated with the camera had made all those related to my dive equipment fade into the background, until Ella declared that we would become self sufficient in our equipment checks- as we would have no dive buddy when filming potential clients/research participants.

I hastily checked my air and BCD worked before being instructed to jump off the dive boat. Ella remained on board and passed us each our cameras before jumping in herself. Instructed to descend, we deflated our BCDs and started to sink. At around 10m Ella made us hover to flick over our red filters and manually calibrate the camera's white balance using her white slate. I failed twice to keep the camera close enough to the slate and so Ella did the process for me one handed in an instant. A good start!

We carried on descending to the ocean floor and proceeded to follow our instructor over a homogenous reef bottom. If it all looks the same, what do you film? I was so dependent on her cues I only filmed when she pointed things out. The act of filming seemed easy enough, push record, position the camera, push record again to stop filming. So I blundered on for the rest of the day, gradually becoming more liberal with what I deemed worthy of capturing. Not that this was an issue as a pair of Eagle rays graced us with their presence for the last 15mins of our second dive. Completely lost in the task at hand I followed them to the best of my ability. On the boat on the way back to the island, I felt amazing. Elated at the luck of capturing eagle rays, and convinced my first day's footage was going to be top quality.

It wasn't! the task for day 2 was to edit our footage. I was so excited to re-witness the scenes from the day before, but to my disappointment my lack of skill had let the majestic creatures down. Shaky, strangely coloured scenes, shot from afar. The movement in the pictures was so extreme it made me feel physically sick to watch. The National Geographic Channel wouldn't be hiring me anytime soon!

Editing is a pretty depressing task when you have nothing but nausea inducing footage to work with, but it had to be done. More basic skills were learnt. The footage was cut, re-organised, colour corrected and put to music.

Over the next 7 days this pattern of action repeated itself without rest. Each dive would involve getting to grips with an additional filming technique, manual control or compositional style. This would then be followed up by editing with ever more impressive effects, clip precision and musical timing. Adding new elements to each task one by one made learning straightforward, always rehearsing what had been instructed before and always growing in competence without being overwhelmed with the task at hand.

After a week my footage was steady as a rock, I wasn't afraid to get up close to my subjects and I had learnt a variety of shot styles and motions. Editing the footage became a source of pride and an opportunity to make the most of what I had captured. I couldn't wait to start filming people. Initially I kept to a relatively strict set of shots when capturing learner divers (See Table 3 in Chapter 8). However, as I gained in confidence and became much more efficient at collecting the footage that would be used for souvenir DVDs, I was able to spend more time underwater filming more extensively for research purposes.

3.3.3   Data Collection

The quotes and descriptions that appear in this thesis, other than my elaborations, were derived over the course of six weeks, starting on the 22nd of March 2010. The filming took place in the waters surrounding Koh Tao, a small dive tourism based

island, in the gulf of Thailand. Having been trained to be a Professional Underwater Videographer I spent this period of time as an intern at the same local videography company which trained me, and which shall remain anonymous for the sake of confidentiality.

The videography company worked in tandem with many of the dive schools on the island, and as such would send its videographers to whichever school was carrying out the final day of the PADI Open Water course, so long as the learner divers concerned had consented to being filmed. The output from the footage gained on behalf of the videography company was for the purpose of producing a souvenir DVD, which would be shown and potentially sold to the learner divers that evening or the following day. However, as noted, my role in this process was twofold.

Upon meeting the divers I would explain what my role as a videographer would entail, and I would further ask each group if they would be willing to participate in my research. I would explain that their final open water dives would be no more affected than if they were being filmed purely for the production of their souvenir DVD. However, should they be willing to participate in my research, they would then be asked to attend a longer, more interactive screening session. At this time the participants were asked to watch themselves back on the screen to talk through their experiences of learning to dive. The screening would take place at a mutually beneficial location (most screenings occurred at the dive school whilst others were shown on a laptop in a variety of cafes in Sairee and Mae Haad).

If the divers chose not to take part in my research, I would film them solely for the purpose of the souvenir production and would show them the final cut of the film at

a mutually agreed location. What follows in this methodology only relates to the dives filmed for the purposes of research. The souvenir DVDs however, are considered in more depth in Chapter 8-*'Souvenir or Reconstruir'*- which when considered alongside this section -*'visual methods in practice'*-also serves to highlight the limitations to the methodology outlined in this chapter.

The filming process began once the learners boarded the dive boat and stopped once they had dismantled their equipment. The filmed dives, for the most part, consisted of a combination of skills training exercises such as mask removal and clearing, compass navigation, regulator retrieval and buoyancy control, with the remainder of the dives being free for underwater exploration. My aim was to film the learner divers individually and as groups. To the best of my ability I tried to film the divers moving, interacting and looking as well as the environment in which this took place. All skills exercises were filmed, from a variety of angles and focal distances. When I saw a diver looking at something in particular, I would try to film them looking before moving on to capture in more detail the animal/plant/person/thing being looked at. I acknowledge that my previous training in underwater videography (an element which is explored in more depth in Chapter 8) will have influenced the way in which I carried these framing practices out. Equally, a further complication here is that the footage shot to sell and the footage shot to research had to be captured simultaneously, resulting in a considerably high percentage of the footage being 'stylized' in a manner that I personally believe to be detrimental to maintaining as neutral and as unmediated a rendering of underwater experience as possible. However, the cost of the camera equipment, the associated technology and even diving on a daily basis was far beyond the scope of my research budget. Consequently compromises in my data

collection approach were necessary, and whilst these were arguably detrimental to some aspects of the research process, they did in fact provide further interesting avenues of exploration, from those initially outlined at the very beginning of the PhD journey.

In the editing process, for the purpose of time saving at the screening, I filtered through all the footage and cut all the scenes in which seemingly nothing happened or where my lack of skill/human error had resulted in out of focus or wayward shots. Clearly there are further limitations associated with such practice. I more than likely 'missed' moments which were meaningful to the participants and additionally prevented the divers from re-witnessing the 'boring'/uneventful moments which equally shaped the character of the event (Bissell and Fuller 2010). However, due to time constraints it would have been impossible to screen all the footage in real time. Consequently, the edited footage was screened to the participants. Originally (the first 3 audiencings) the participants received no questions or background themes of what to discuss, so as to avoid prompting, they were simply invited to watch the footage and talk about anything they noticed. However this mainly resulted in confusion and an awkward silence as the research participants were unsure as to what their role involved. For the remainder of the screenings, participants were given a brief summary of the aims of the research to keep in mind whilst they talked freely about what they saw, remembered and felt at the time of diving and at the time of the screening (shown in Table 1).

Table 1: Contextualisation given to research participants

> **Thanks for contributing to my research! I'm studying how people feel when they learn how to dive, how they get on with their scuba kit, how they find moving around and carrying out the PADI exercises, what strikes them about being underwater… When you are watching the film it would be great if you could share things you noticed about learning to dive. What was new? Did you enjoy it? Did you find things hard? Were there any sensations you particularly did/didn't like? Did it feel natural? What do you think about the wildlife? Were you ever scared/elated/awestruck? Anything you notice (or notice you didn't notice), when you are watching the film or that you can remember from the 2 dives is worthy of comment, so don't hold back!**
>
> **THANKS AGAIN!**

During the screenings I occasionally asked questions, particularly if the conversation did not gather momentum. However, these were unstructured questions and emerged from interaction between the participants and the film. Furthermore, as I had spent most of the day with the divers in an informal setting, they often included me in their post dive reflections, whilst watching the film.

The discussions were tape recorded with permission and later transcribed. Upon transcription, the conversations were coded. Having filmed, edited and re-watched and talked about the dive events with the with the participants I became very familiar with the research findings before 'officially' analysing the data, and so I felt able to determine the thesis structure and themes before analysing all the data. Thus coding simply involved underlining quotes in different colours depending on, firstly the chapter they fitted most appropriately with and then highlighting them with another colour depending on the subtheme of the chapter (For example 'The Body' and then 'vision'). In addition I re-watched all the footage and put place markers on the timeline in Adobe Premiere Pro where the scenes related to participants' quotes. The file name of the footage and time of the marked place was

then written next to the highlighted quote in my transcription notes so that these could be linked and observed quickly. For reference Table 2 provides personal information on the divers who I have specifically quoted in the thesis, including their pseudonyms.

Table 2: Research participants' by pseudonym, age and ability

Pseudonym	Age	Ability
James	25	Pre Open Water
Sasha	26	Pre Open Water
John	32	Instructor
Sarah	23	Pre Open Water
Claire	20	Pre Open Water
Dave	30	Open Water
Simon	24	Pre Open Water
Sam	28	Dive Master
Julian	36	Pre Open Water
Hannah	25	Pre Open Water
Lee	22	Pre Open Water
Mark	30	Pre Open Water
Jan	28	Pre Open Water
Tara	19	Pre Open Water
Amy	22	Pre Open Water
Andy	27	Dive Master
Seb	30	Pre Open Water
Katherine	25	Pre Open Water

Suzanne	31	Instructor
Tom	20	Pre Open Water
Felix	40	Pre Open Water
Andy	32	Pre Open Water
Sue	18	Pre Open Water
Declan	19	Pre Open Water
Jane	26	Pre Open Water
Gill	30	Pre Open Water
Dean	37	Pre Open Water
Andrea	24	Pre Open Water
Helen	28	Pre Open Water
Polina	26	Advanced Open Water
Chloe	29	Advanced Open Water
Jonathan	32	Instructor
Fran	29	Advanced Open Water
Jasmine	26	Instructor
Janet	34	Instructor
Steve	27	Advanced Open Water
Ivan	25	Pre Open Water
Johnny	26	Pre Open Water
Ben	22	Pre Open Water
Alex	30	Pre Open Water
Sian	26	Pre Open Water
Daniel	29	Advanced Open Water

At the time of filming the divers were in groups of between 2-6 people. The water temperature was consistently between 31°C and 32°C and the learner divers all wore short wetsuits. The dives were all to a depth of between 10 and 25m. None of the dive sites took more than 40 minutes to get to, with the most commonly dived sites (Japanese Gardens and Twins) taking only 20-30 minutes by boat. The boat played a key role in getting to know the divers and forming relationship with them, particularly between dives and on route back to the main land as at such times divers would often have nothing specific to do aside from reflecting on and sharing their underwater experiences. Thus, many divers whether they be research participants, staff or other divers who were not being filmed, or were solely being filmed for the souvenir DVD further contributed to this thesis through conversations aboard the dive boat. Those who have been quoted are likewise represented in the above table. In total 90 divers were filmed, with 60 participating in the research audiencings.

3.4   Visual Methods in Theory

In this chapter section I employ theoretical perspectives from sensuous anthropology and philosophy, as well as film studies to investigate the potential audio visual media has in research with multiple participants.

Before I go on to consider what the theory behind such a visual methodology might look like, I will argue for the importance of embarking on embodied sensuously engaged leisure scholarship in the first place. Following this, the second half of the chapter initially outlines the practicalities and benefits videography can bring to the research practice. Finally, before concluding, through an exploration into audience

studies as well as the concepts of synaesthesia and embodied memory (in order to examine the means by which audience studies can become sensuously engaged), I seek to show that 'joining up' the two bodies of existing literature which tend to exclusively deal with either; embodied spectatorship or visual methodologies may point to a useful and experimental methodology for research in this area.

3.4.1   The Senses

Increasing interest in 'the body' within the social sciences has resulted in a series of calls to engage more thoroughly with the senses. Reflective of this, has been the small but concerted effort made by those academics using visual media in their research, as part of the methodological process (Hahn 2007, Spinney 2006). Such work is largely concerned with demonstrating that visual media have the ability to convey non-visual aspects of perception, particularly within the remits of contemporary film theory (Crary 1992, Marks 2000, Sobchack 1991, Sobchack 2004), as well as visual anthropology (Howes 1991, Howes 2003, Pink 2006). As Howes (Howes 2006:122) argues; the aim of visual anthropology is to uncover how people 'distinguish, value, relate and combine the senses' when immersed in differing cultures and contexts and Stoller (1997) similarly emphasizes the need to explore smell, taste and texture, since it is not solely visual perception which organizes experience. Before attempting to outline a sensuous methodology (in theory), in this section I justify the importance of understanding the role of the senses in the practice of grasping and negotiating space, through an exploration of the 'sensorium'.

The sensorium is the sum of a person's perceptions, or 'the seat of sensation', of their interpretation of an environment. The different 'ratios of sense' that make up

the sensuous and perceptual means by which we come to understand and dwell in space are said to be dependent on shared cultural norms and consequently vary according to social context and geographical location (Howes 1991: 8).

Post-industrial western society is argued to have alienated itself from the more proximate senses of smell and touch, whilst heightening the role of vision (Marks 2000). As a reaction to such Marxists claims surrounding the detachment of the proximate senses since capitalism, recent work has demonstrated that people may contain in their individual sensoria, perceptual tendencies that are not generally characteristic of their social and/or spatial context (Classen et al. 1994). As Buck-Morss (Buck-Morss 1992) argues; even with modernity, development and culture is uneven and complex enough that habitual practices and performances result in different forms of sensory knowledge (Marks 2000). Illustrating this, Marks (2000: 206) explains that; 'cooks, musicians and blind people develop specialized configurations of their sensoria'.

These 'specialised configurations' are what I consider to be particularly important to the study of the body in relation to the environment, since these often require alternative 'ways of being' to the 'everyday' spaces of the home or the workplace. Such distinct leisure and tourist practices would similarly result in Marks' (2000) claims that some senses are heightened over others, not least when associated tools or equipment are added to the body-leisure-space assemblage. Thus, it is not solely environmental or cultural cues which call for a re-organisation of the senses, but technological and/or equipmental interactions may likewise/additionally contribute to further reorganizations or extensions. Examples would include anything from the expanded sense of touch felt by the tennis player 'through' the

racket, the violinist through the bow (Downey 2005), the grasping and harnessing of the wind's power by a kite or windsurfer (Dant 1998), the synchronisation of bodies in the human-tack-horse-landscape assemblage of the rider (Game 2001), and similarly the human-bike relation to the landscape (Spinney 2006), not to mention the mundane technologies of boots worn by the walker (Michael 2000) or trainers by the runner (Hockey 2006).

However, whilst studying people's sensuous configurations and the technological alteration of these is essential to understanding our connections with space -due to the fact that these are formed from the relations between practice and sensory meanings (Geurts 2002)- in reality, doing so with research participants is a complex and problematic task, for at least two principal reasons.

Firstly, many embodied practices, are performed at pace or place which is not conducive to the data collection techniques favoured by more traditional qualitative research methodologies. Attempting to study scuba-divers phenomenologically is particularly illustrative of these logistical issues. Indeed, underwater communication is limited at best, let alone when taking into account the depth of understanding required to convey embodied sensations such as kinaesthesia or proprioception. Even if such embodied experiences were amenable to discussion and observation they, would still come up against the impracticalities of being logged for later analysis, divers' slates are compact after all.

Secondly, practices and performances (whether habitual or extraordinary) encompass a vast quantity of sensations, movements, reactions, and affects which although integral to our interaction with the environment and the success of their

execution, remain unarticulated as they are often not consciously reflected upon. Equally, such fleeting, immanent feelings, sensations and connections could simply be forgotten or not deemed worthy of exploration by research participants.

By exemplifying the potential integrating videography into ethnographic practices can bring, the aim of the remainder of this chapter is to demonstrate that visual media provide a way of dealing with these two points and consequently may get closer to 'accessing' the study of the sensorium as well as the 'sensual shifts' which alternative environments and embodied relations with technology induce. Thus, by working together audience studies and film theory literatures, I will attempt uncover if we can 'get at' or represent the sensuous and often pre-reflective, subconscious aspects of embodied experience.

3.4.2 Why videography and audiencing?

Whilst audience studies was traditionally concerned with the analysis of the structures and form of visual images, and the ways in which these position the spectator, little attention was paid to ways the audience 'made sense' of the images being perceived, nor their embodied relation to film. In fact, it was not until recently that audience studies began to engage with the audience's reaction to visual images at the times and places in which they are screened (e.g. the cinema or living room). Thus, Rose's (2007) contemporary reformulation of 'audience studies' proves more useful than early psychoanalytic approaches, particularly when combined with the multisensual aspects of film or video perception discussed below.

By highlighting the move away from interviews and quantitative methodologies (e.g.Bourdieu et al. 1990), audience studies has embraced ethnographic approaches which are more conducive to accessing 'the complex detail of decoding as it is in the process of occurring' as a means to 'access and understand the texture of everyday life' (Rose 2007: 207). Equally, more recent forms of audience studies, concern themselves with what photo methodologies can achieve, rather than using photos or videos as valuable objects in their own right (although not denying that they are valuable). I am keen to take from these studies their acknowledgement of the potential that visual media has to 'carry and evoke...information, affect and reflection' in and to the participants/audience (Rose 2007:238). To employ a methodology which is open, reflexive and recursive, rather than one that aims to categorize, conclude and close down avenues of thought (Davies and Dwyer 2007).

Studies of this type (Blinn and Harrist 1991, Hahn 2007, Holliday 2004, Latham in Rose 2007) use photo or video elicitation as a means to bring to light, re-mind and encourage participants to engage and talk about embodied experience. As Rose (2007) notes, the fact that visual media are capable of capturing the 'texture' of places, as well as the fact that vastly more visual and audio information is accessible in an instant compared with written accounts, renders it more likely to prompt participants to talk about their recorded and real time experiences in 'different registers' (240). By displaying the elusive character of spaces and performances, videography then can 'flesh out' reflective descriptions of events, providing the researcher and the participants with an opportunity to talk through and point out significant and specific sensations, emotions and connections, interactively. As MacDougall (in Pink 2006: 49) argues; 'visual representation can offer pathways to the other senses and resolve the difficulties anthropologists face in research and

communication concerning emotions, time, the body, the senses, gender and individual identity'.

Thus, ironically videography gestures toward evoking the non-representational excesses of embodied and situated experience, the very aspect it has been critiqued for since the sensuous turn in the social sciences. The tendency to dismiss the visual by highlighting the occularcentrism and distancing aspects of sight, have often resulted in a stigmatization of visual methods being inherently disembodied (Jameson, 1998). Actively contesting this notion has been on the research agenda of late, notably by those working in film theory (Marks 2000; Sobchack 1992) or visual methods (MacDougall 2006, Pink 2006, Rose 2007). As Pink (Pink 2009:98) states; 'concerns that an audiovisual medium cannot represent other sensory modalities of experience are largely misguided'. Yet whilst Pink is adamant that video appeals to multiple senses, she still acknowledges that sight may not be the most efficient sense for relaying information to other modalities. A notable point here is Howes' (2003:57) argument that; whilst film can be an evocative medium for 'conveying sensory impressions', it does run the risk of giving sight and sound preferential treatment in comparison to text, which for the most part gives all the senses a level playing ground when one comes to interpreting the medium. However, whilst this was not an overly evident or constraining issue in the PhD research, does not mean that other limitations were not apparent.

Firstly, the research participants had no say in the framing of the shots which consequently guided their re-membering. Thus, as the researcher, I potentially missed things and events which the participants would have deemed important to their experience. Secondly, despite the many ways video and other multisensuous

methods can be used in the research process, at one point or another there is still the difficulty of relaying the complex, fleeting, immanent, feelings we have tried so hard to access, in words. Whether from the research participant(s) to the researcher, from the researcher to his/her audience or both (as in the case of this study), it seems methodological ingenuity is beginning to overtake the practices of information dissemination. However, along with others (Hahn 2007; Spinney 2009) working with the senses and visual methods I follow Pink's (2009) contention that experimenting with methods depends on making the most out of the technology we have at our disposal.

In sum, in this section I have tried to show that video provides 'data' in its material form, as well as giving 'research participants a means to reflect on aspects of their lives [or experience] that they may usually give little thought to' (Rose 2007: 238), such that the footage and the discussion of people watching themselves can be interpreted by the researcher.

Of course, on the surface, such an approach only really provides a way to re-mind the participants of their experience (even if they were originally unaware of it) and encourage them to talk about it in a more 'research friendly' environment. Although this is of value in itself, when we think about this kind of audiencing in terms of a phenomenology of film experience, as a methodological experiment, the process becomes much more lucrative in the investigation of the sensuous body in leisure space.

Consequently, by combining such a methodological approach, in the form of audience studies with additionally considering the overlap and integration of the

senses in perception of the environment (including the screening or 'audiencing' environment), the contention is that; if we can 'capture' and represent experience through one or two modalities, in this instance by recording the visual and aural, then, the others must be accessible (to some degree) through them. It is to these issues which I turn next.

3.4.3   Re-membered participants

Drawing on the work of philosophers such as Merleau-Ponty (1962) (1962), Bergson (2004), and Deleuze (2003, 2005), film theorists have argued that audiences are embodied and active perceivers, who do not simply watch a film, but instead, through memory, synaesthesia, and cross modal knowledge generally, are capable of reconstructing an understanding of what the objects and experiences of those on screen feel like. Or in MacDougall's (1997:18) words, 'as excess, the by-products of mechanical vision defy the containment of the work and are more capable of touching the exposed sensibilities of the viewer'. Through repeated exposure to situations, places, objects etc. we commit to memory the sensations, emotions and practices that these elicit in the body, whether we are conscious of this or not. Bergson (2004) argues that this memory is located in the body, and Merleau-Ponty (1962) goes on to state that 'memory is built out of the progressive and continuous passing of one instant to an another, and the interlocking of each one, with its whole horizon, into the thickness of its successor', such that perception continuously enfolds and separates us with/from the fabric of the world (Marks 2000:148). Because of this sustained form of embodied memory, which is reinforced through habit, we are capable of 'knowing' things even when our engagement with them is only partial. For the audience, engagement is partial as it is directly available

only to the senses of vision and touch. As spectators then, watching video footage, the participants can draw on previously acquired 'knowledges and competences...in the act of interpretation' (Rose 2007:200), and I would argue this is even more the case when those on the screen are in fact those watching the screen, as the very 'things' and actions being represented have literally been experienced at a previous time and place by the audience members. Paradoxically then, because of the limits of video technology, the audio-visual 'information' provided on the screen limits our understanding of the world at the same time as it extends it:

> We both perceive a world within the immediate experience of an 'other' and without it, as immediate experience mediated by an 'other'. Watching film we can see the seeing as well as the seen, hear the hearing and the heard, and feel the movement as well as the moved. But these same acts are given to us co-terminously as the film, as mediating acts of perception-cum-expression we take up and invisibly perform by appropriating and incorporating them into our existential performance; we watch them as a visible performance distinguishable from, yet included in, our own.
>
> (Sobchack 1992:10)

At once, the focus of our perception is framed and only directly available to two senses, (the learner divers who watch themselves on the screen are only presented with the familiar sounds and images of the visited dive site) yet at the expense of this we are provided with an extension of embodied existence (the divers' perception extends beyond/through the screen into a digitized version of ocean space), by means of a (albeit compromised) re-living and differently situated (what the screen shows is more analogous to the videographer's (my) gaze than the

participant's as spectators) view of a previous engagement with the world. The space 'beyond' the screen becomes prosthetically part of, and transformational to, the participants' bodies; a 'virtual space' where subjectivity and affect 'free flow' (Sobchack 1992:302). Deleuze summarizes this as follows; 'cinema cannot give us the presence of the body [...] what it produces [...] is the genesis of an unknown body, which we have in the back of our heads, like the unthought in thought' (Deleuze 1989:201). Therefore, the meaning of the images and sounds put across to the audience are not received as signs, but rather are 'experienced in the body' and so must be 'fundamentally mimetic' (Marks 2000:149).

Whilst the literature does point to the potential videography offers as a gateway to sensuous scholarship, by instilling a kind of mediated mimetic response in the spectator, there is still a question mark surrounding the extent to which it would truly yield a more holistic, or multi-sensuous, understanding of the body performing in a leisure/tourism environment, particularly seeing as only visual and aural 'data' are captured and represented.

Therefore, in the remainder of the chapter, following a long line of academics working with the senses more generally, I consider that studying the overlapping of the senses, in addition to synaesthesia, not only paves the way for such a task, but also provides a critique to many a recent attack of the visual in the social sciences.

3.4.4   A (multi)sensually engaged audience?

Baron-Cohen and Harrison define synaesthesia as 'occurring when stimulation of one sensory modality automatically triggers a perception in a second modality, in

the absence of any direct stimulation to this second modality' (1997:3). Similarly Howes explains that; the senses 'operate in relation to each other in a continuous interplay of impressions and values' (2003:47-8). Among others, Pink (2006), Seremetakis (1996) and Ingold (2000), go on to contend that this process of grasping one sense 'through' another is not a practice of translation, but rather is possible as the senses are a priori interconnected, or acting as a perceptual whole (Rose 2007).

Thus, when attempting to grasp sensuous engagements with place through a video or film, the task is to 'read' touch, smell and taste, as well as vestibular, proprioceptive and kinaesthetic senses, by means of the visual and audio material. As Crary notes, 'there is never pure access to a single object; vision is always multiple, adjacent to and overlapping with other objects, desires, and vectors' (1992:20). By, highlighting our cross-modal engagements with such media, and by acknowledging that sensory perception is always 'overlapping', it is possible to study 'visual' media in way that is not occularcentric or contingent with the trend of associating mastery and distancing with vision (Marks 2000: 131; Howes 1991; Rodaway 1994). Instead, vision and sound can be 'used' to understand how other levels of the body operate, employing what Marks (2000: 132) considers to be; 'a form of visuality that yields to the things seen, a vision that is not merely cognitive'.

Particularly well developed in studies that are sensually informed is the notion of 'haptic-visuality' or close-vision (Reigl in Paterson, 2007). The relationship between sight and touch (Taussig 1993), where 'the eyes themselves function like organs of touch' (Marks 2000:162). Within film theory, 'haptic-visuality' has been extended such that analogies are commonly drawn between the screen and the skin,

emphasizing the capacity of the film to touch the spectator with images. Illustrating this is Laura Marks' book 'The Skin of the film', in which she argues not for the video footage to be conceptualized 'as though through a frame, window, or mirror', but instead as something which is 'tactile and contagious...something we viewers brush up against like another body' (Marks, 2000:xi).

Therefore, it can be argued and indeed is demonstrated in the following chapters that on watching back the footage of their dives, the learners had physical responses to the sounds and images, which allowed them to 'feel for and in' themselves the sensations instigated by an experience that had taken place in a far removed location and at a previous time (McDougall 2006:18). In the setting of the screening room, the video provided a means of representing sensory experience in way that opened 'more directly onto the sensorium' (Pink 2006: 51), encouraging the divers to talk through their encounters as they were shown on the screen, rich in sensuous detail, yet also celebrating the repetitive and seemingly mundane aspects which shaped the overall experience. These sensations were seen to construct and circulate intersubjectively, within a relational setting formed from 'moods, senses, postures and topographies' (Wylie 2006:532). As the varied 'articulations of the viewer and viewed participate and fold', the collective of these sensuous affects are the means by which tourists 'see-with' the seascape and the equipment, in the act of sensibly becoming divers (Wylie 2006).

3.5   Conclusion

For the most part, existing studies which take seriously the potential for visual media to convey 'more than the visual' appear to come at the methodological

process from a different angle to that which I have explored here. On the one hand there is a considerable body of literature seeking to uncover how audiences experience films 'in the body' (Crary 1992, Marks 2000, Shaviro 1993, Sobchack 1991, Sobchack 2004) and on the other hand there are those who use (and ask their participants to use) video cameras as a data collection technique, in a bid to understand aspects of the participants' lives. In the latter, it is the researcher who analyzes and 'decodes' video footage of the participant's lived experience, sometimes to engage with the footage multi-sensually, but often simply for practical reasons (Pink 2006, 2009; Rose 2007).

In essence the method I have explored here combines both of the above approaches and is distinct in that, not only are participants' engagements with leisure space recorded for later analysis, but the audience's sensuous engagement with the film in which they feature can also be studied, in an attempt to gain a more holistic, or 'closer', understanding of the body and it's sensing of place. Therefore, it is not only the researcher who can attempt to mimetically and multisensually understand the participants' experience, but through an 'other's' (the videographer's) gaze, the participants are encouraged to re-view, re-sense and bring to cognition non-cognitive ways of knowing, through a sensuously engaged 'audience studies' approach.

Thus situated, the purpose of this chapter, has been to explore the potential videography provides for recording, replaying and by extension allowing for a re-embodying of sensuous experience and an engagement with space, since neither film nor video are ever solely visual (Shaviro 1993). Taking into account aspects of embodied experience such as synaesthesia, haptic visuality or the ability of sound

and vision to evoke visceral feelings in the spectator, as well as other aspects such as embodied memory (Bergson 2004; Merleau-Ponty 1962) and mimesis (Buck-Morss 1991), I have sought to think about vision not as masterful and distancing (Howes 2003, Rodaway 1994), but rather to explore the visual as intersubjective, and as that which 'yields to the things seen' (Marks 2000:131).Essentially then, the version of 'audiencing' this research argues for, is not that of a formally watching and silently and conservatively reacting group of people to a film, as this would be unlikely to yield any further 'data' to the ethnographic practices of observation and conversation carried out directly 'in the field'. Instead, communication and interaction between the participants, the researcher and the video, at the time and place of the screening is seen to be the point of the exercise.

I have sought to illustrate here the 'contagious characteristics' (Marks 2000) of film, and throughout the thesis it is demonstrated that underwater videography allowed for an 'embodied spectatorship' that provided groups of divers with the opportunity to talk through how they came to terms with bodily co-ordination, equipment use and the environmental characteristics of the ocean. Even the limited examples provided throughout the rest of the thesis, highlight how novice divers experience a more pronounced phasing in and out of attention to and from their body and their surroundings, than most everyday land based activities call for. Expressions of difficulty surrounding coordinating the body and the equipment encourage an investigation into the mediating and altering characteristics of the dive technology, as well as the heightening of proprioception and/or the reorganisation of the land based sensorium. Equally, the use of macro videography highlights the shifting of the sense of touch; from the fingers to the eyes, in their exploration of a mutli-textured seascape. As a collective, these elements are all integral to shaping and

characterising not only the learners' embodied experiences of scuba diving, but also their understanding of the underwater world.

Thus, it is hoped that a case has been made to take seriously the potential videography provides in capturing those often passed over elements which shape leisure performance generally, but particularly when logistical issues hamper the expressive abilities of research participants, whether due to the nature of the data sought, environmental constraints or when the pace/difficulty of the leisure practice hinders real-time communication.

4 Cyborg tourists: The Body, technology and the seascape

"without fins diving would be a right drag, for me they make the activity. At first you can feel your legs tightening with the added strain of the water's resistance, but once your muscles get used to it, it's so liberating. Keeping up with an eagle ray or propelling yourself through a cloud of fish, like you are one of them, it's just awesome." (Daniel)

4.1 Introduction

Within the social sciences the body and landscape have come together to form a significant topic of study (for example; Ingold (2000), Michael (2000), Nash (1996) (2000), Wylie (2005)), and from this there has begun to emerge a series of papers on the sporting and/or leisure body and it's relationship with the environment (Dant 1998; Game 2001; Lewis 2000; Spinney 2006). These tend to emanate from a broadly phenomenological standpoint, with equipment use being instrumental to the argument, whether conceptualised through Heideggarian (Elden 2001, Harman 2002), Merleau-Pontian (Wylie 2007), post-human (Haraway 1991) or material culture (Dant 1998, Dant and Wheaton 2007, Tilley and Bennett 2004) lines of thought. This chapter is of a similar vein, yet it takes these debates beyond their traditionally land based terrain- to the sea.

Situated within the surrounds of Koh Tao, this chapter will explore the way in which the performance of the diving assemblage, namely, body-kit-environment, is seen to trouble the extent to which the body can be conceptualised as separate and distinct from not only the seascape in which it finds itself, but also from the associated technology. By analysing the research participants' reactions to their underwater film, as well as to questions asked on board the dive boat and in the screening room, I hope to problematize the varying ways in which the SCUBA dive equipment enables people to become kinaesthetically active in the seascape, and how consequently, this enables them to make sense of the environment (as will be explored in the following chapter). It is hoped that such accounts will provide a basis upon which to consider how the fins, mask, BCD, wetsuit, gauges etc. enhance bodily perception of the elements, whilst at the same time acting as tools for the manipulation of the elements, in order to deliver intentional action. In doing so, I want to demonstrate that the act of diving provides an empirical example of embodied experience that cannot be solely considered human, as the harnessing and perception of (changeable) environmental conditions which offer and close down possibilities for human action, are themselves mediated and altered by the technology of the kit. As a result, I will draw attention to the identity of divers in relation to current post-phenomenological literatures, by emphasising a relational mode of thought that challenges the distinctions between subjects and objects. Therefore, the following sections contribute in their various ways to problematizing detached, occularcentric and static modes of inquiry, by highlighting instead the processual, embodied and interrelational approaches to space, place and bodily experience.

The chapter is structured as follows: firstly relevant theoretical and empirical studies are discussed to provide a context for this research. Then, the first empirical section deals with the relationship between the body and the equipment. Based on Heidegger's (Heidegger 1962) work on tools, this section outlines the ways in which the kit comes to lose its materiality and consequently becomes an integral extension of the body, through a consideration of the diver's ability. Following this, the chapter focuses on notions of landscape, or in this case 'seascape', predominantly drawing on a dwelling approach so as to theorise the divers' understandings and experiences of the waters surrounding Koh Tao. Employing Gibson's (1986) ecological theory of perception, it is highlighted that the divers' movements through the water are not shaped purely by their intentions, but rather are the result of a reading and reaction to the affordances provided by the seascape *in addition to* the divers' desired expressions of skill. Diver agency within the seascape, is incorporated into this section through an analysis of the sense of compromise evident between desired and possible lines of action, within the tourist practice. Such an interrelational engagement with the kit and the environment is argued to result in a variety of emotional reactions which variously shape the ways in which meaning is attributed to the seascape, at the time of diving and subsequently in everyday life, as is taken further in Chapter 7, which is concerned with diver-animal relations.

4.2   Contextualisation

As noted in the introduction to this chapter, considering body-technology-environment relations is a task which has been approached from a number of theoretical standpoints, all of which, in their various ways, advocate an anti-dialectic

mode of thinking through categories identity such as nature and culture. Here I will briefly highlight the main arguments within three such theoretical frameworks, before outlining more recent geographical research which has emerged from these.

Firstly, Deleuze and Guattari (2004) put forward a conception of corporeality which, by employing notions of assemblages, rhizomes, intensities, surfaces, flatness and multiplicities is able to upset and breakdown dichotomous modes of thought (Grosz 1994). It is argued that it is inapplicable to explain nature and machine through binary logics, understanding each in terms and in contrast to the other. As Currier (2003) notes, it is not that machines represent an absence or lack of nature, instead both are thought to be different in and of themselves such that they cannot be conceived hierarchically. Within the assemblage of diver-kit-environment for example, all the involved forces/things/beings affect and are affected by each other, all "elements are equally operational in a productive mode...it is impossible to figure one as the diminution of the other, as a privileged term" (Currier 2003:329). Therefore, identity cannot be seen as an ordering framework, but is instead the product of an ever evolving line of 'historical circumstance', where connectivity with all that is encountered has a transformative potential. Thus, social, mechanical and material formations, thought of as 'assemblages', indicate that we should not be thinking about how we statically *are* in the world, but instead how we are *becoming*. Deleuze and Guattari's (Buchanan and Lambert 2005, Deleuze 2003, Deleuze 2005) concepts of assemblages, the body without organs and machines, all highlight the way in which beings and things are formed and bound together by flows, intensities, linkages and lines of flight. Consequently their work troubles dichotomous modes of thought, and also the hierarchical terms associated with such forms of encounter, as they note; "an assemblage has neither base nor

superstructure, neither deep structure nor superficial structure; it flattens all of its dimensions onto a single plane of consistency upon which reciprocal presuppositions and mutual insertions play themselves out" (Deleuze and Guattari 2004:90). Although their understandings are possibly more micro-scale than more contemporary debates referring to identity and the body, their advocation for a "reversal of Platonism" and to overcome binary polarizations is equally echoed in post-human literatures, and the implication for taking such debates into account renders it necessary to think beyond the human actant as constructor of self and sole decision maker during activity. In other words, more weight is given to the agency of nature and technology in the construction of the lifeworld.

Secondly, from such post-human perspectives that take seriously the material and immaterial ways in which our body and agency are linked into the wider environment; bodies, technologies, reefs and sea would not be considered to be different 'types' of objects meeting one another within the context of Koh Tao, rather they link together, connect and exchange affect. Therefore, the equipment or technology is not something which is *between* the human and the landscape. Instead, it is an organ, or "an infolding of the flesh" (Merleau-Ponty in Haraway, 2008:249). Heterogeneous infoldings, the ongoing infolding of the vast array of other 'components' into the flesh, are what make beings, or things (Latour cited in Haraway 2008:250). As Haraway notes,

> Never purely themselves, things are compound; they are made up of combinations of other things coordinated to magnify power, to make something happen, to engage the world, to risk fleshy acts of interpretation. Technologies are always compound. They are composed

of diverse agents of interpretation, agents of recording, and agents for directing and multiplying relational action. These agents can be human beings or parts of human beings, other organisms in part or whole, machines of many kinds or other sorts of entrained things made to work in the technological compound of conjoined forces.

(Haraway 2008:250)

Components such as bodies and technologies then, "are multiplicities in themselves, rather than unified objects" (Currier 2003:329). As Michael argues, "technologies are shot through with social relations", social relations are shot through with technologies, and the same can be said of 'nature' (2000:18). All the components emerge out of their relations with each other. If the body is constantly linking, and being linked into equipment and the environment, then as Grosz (1994:165) notes, it can be considered "as neither locus for a consciousness nor an organically determined entity". Instead it should be thought of by means of the ways in which it performs, through the linkages it makes and the transformations it undergoes. Much work in this vein draws on Haraway's 'Manifesto for Cyborgs' (1987), which similarly attempts to challenge dualistic approaches, with reference to the study of identity. Haraway considers the figure of the cyborg to highlight the confusion of boundaries and so emphasises that, "it is not clear who makes and who is made in the relation between human and machine, it is also unclear what is mind and what is body in machines that resolve into coding practices" (Haraway 1991:177). Relating to the prostheticisation of the body, Haraway asks "why should our bodies end at the skin?" (1991:178), emphasising that technological (and organic) multiplicities are constantly contributing to our hybrid selves, and that these need not necessarily be in a tangible, material form. Equally, Braidotti (2006) notes; as hybrids we are

connection-making entities, figures of inter-relationality and receptivity. Consequently, as has been explored in the studies that follow, technology is not seen to be something that can be dominated or animated, rather technology is part of us, an expression of our embodiment (Haraway 1991). Thus, the elements which make up, in this case divers' bodies, are not fixed into an unchangeable state, rather they are constantly in flux, exchanging with the objects, contexts and energies with which they find temporary and situated articulations (Currier 2003). Furthermore, not only are diving bodies and the seascape different from their "previous" arrangements, but they are also different, in and of themselves, or in other words- in a state of 'becoming'. Grosz considers that such a 'becoming' is crucial to constructing an alternative "conceptual horizon" (Currier 2003:333) which offers a means of thinking of an open-ended epistemological horizon, where "knowledge proceeds along lines other than those of identity" (Grosz 1993:170). If there is no replication of singular, joined subjectivities, but rather only difference in and of itself, then it is not possible to see the seascape and its affordances as 'natural', the dive kit as 'cultural' with the body being seen as the meeting point of the two. Instead the body, the seascape, the equipment are all employed and shaped by each other, all are 'becoming' a combination of each other through the opportunities for action and performance each enable for the other. As Clarke (2002:33) notes, "mutation is central to the notion of the post-human, describing a human identity which is caught between the idea that the self is becoming 'other' than itself". Becomings are always specific movements, particular kinds of motion and rest, speed and intensities; things are multiplicities, transforming from one "thing" into another which is vastly different, "Captain Ahab becomes-whale, Williard becomes-rat, Hans becomes-horse. Their becomings are not based on mimesis of or resemblance to the animal, conversely, on the animal's ability to symbolically

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represent and act as a vehicle for the subject's fantasies and psychical investments" (Grosz 1994:173). In this case the human becomes-diver, videographer or even fish, manta ray, shark or even as Cousteau's quote in Chapter 3 illustrates, one can fly, or become-bird. The tourist diver is given the mechanical, environmental and educational multiplicities to discover the underwater world, to adapt and behave in enchanting and liberating ways

Thirdly, from a phenomenological perspective both Heidegger (1962) and Merleau-Ponty (1962, 1969), highlight the role of non-human objects in the binding of world and organism. For example, Harman (2002:1) has taken into account the importance attributed by Heidegger to tools, by outlining what is referred to as an "object-oriented philosophy". Heidegger (1962), in contrast to Descartes, considers that when we encounter equipment it is not an experience determined by geometry and measurable distances, but instead it is by a more banal understanding of "closeness or nearness, de-distancing and directionality" (Dreyfus 1991, Elden 2001:17). Furthermore, Merleau-Ponty considers the prostheticising powers of objects by noting that they have the potential to become an area of sensitivity for the body, and so extend a person's radius of sensory scope. This argument, that our bodies do not end at the skin, is echoed in Haraway's work and indeed post-human literatures more generally (Braidotti 2006, Harraway 2004, Kull 2002). However, it is this phenomenological approach to the study of bodies, technologies and land/seascape which I take further in this chapter. Thus a more in depth illustration of the theoretical advancements of Merleau-Ponty (1962), Heidegger (1962), Dreyfus (1991) and Harman (2002) follows, in relation to learner divers coming to terms with the their own set of bodily mounted equipment. I concentrate more on these rather than the contemporary posthuman literature, as I am not only

interested in the ways in which technology extends and enhances the body and connects divers to their environs, but I also want to consider how it ruptures experience, reminds us of our humanity and how inappropriately our bodies are suited to being underwater. Thus whilst I agree with and admire much of the cyborg/posthuman debate, here I want to celebrate but also trouble human-technology relations, to illustrate its noisy, mediative properties and transformative acts, a task more in line with research which draws on Heiddeger's theorization of relations to material objects.

Before moving on to consider such aspects of dive experience though, I will firstly draw attention to similar research which has emerged in the geographical literature specifically, as well as the social sciences more broadly.

4.2.1 Sporting bodies, nature and technology

The inherent use of equipment in 'natural' settings in the following topics of study, has made them particularly amenable for study under phenomenological, nature-culture and post-human debates, and they have extended the importance of the body in the mediation of relations between humans and the natural environment, by also considering the role of technology. Although other examples of this kind are evident, for example Arnold's (2003) phenomenological study of mobile phone use, or the theme issue of Environment and Planning A (Laurier 2003) concerning technology and mobility, the work that follows relates these debates specifically to leisure contexts. Potentially of most relevance to this study, is the work provided from an anthropological and material culture studies perspective (Tilley *et al* 2006), particularly studies by Dant (1998, 1999) and Dant and Wheaton (2007). Using the

example of windsurfing these studies consider how certain objects "offer extended motility to a human being" and so provide distinct leisure experiences; in their case by raising the person "onto the surface of the water and by harnessing the propulsion of the wind" (Dant 1998:78). Thus in their study, it is argued that the windsurfer gains the capacity to transcend the constraints of the human body, through its enhancement in a relationship with a thing. Furthermore, the example of windsurfing is used to highlight a 'blurring of boundaries' as is considered by the fact that whilst "locomotive force is external to the body, the pleasure is in the motor and decision making skill in relation to that force" and so "actions and objects entail each other" (Dant and Wheaton 2007:12).

In addition, Mike Michael (2000) considers that the role of walking boots, as resources for the body, are instrumental in affecting the way in which we experience nature. With this in mind, the function of the boots is seen to intervene in such a co-constitution, as depending on their fit and/or quality, boots allow for an expanded bodily capacity that mediates the affordances perceived by the body. In the same way, as possible inducers of pain, boots have the potential to highlight the interobjectivity of the natural environment and the human body. This chapter is reflective of Michael's analysis as it considers Gibson's 'ecological theory of affordances' (1986) and thus is illustrative of an approach which draws variously on a Heideggarian (1962)/Ingoldian (2000) conceptualisation of being-in-the-world (Barratt 2011, Spinney 2006).

As geographers have become increasingly interested in the concept of mobility, with it have emerged a number of studies concerning kinaesthesia. Justin Spinney's, (2006, 2009) work on cycling, like this chapter, used an innovative visual

methodology, in an attempt to 'get at' the role of kinaesthesia in shaping cyclists relations to Mount Ventoux and urban space. Spinney (2006:7) states that there is a need for "a phenomenology of mobility which foregrounds not only the body-subject at the centre of the lifeworld, but also the objects which form and shape its movements". In order to demonstrate this, Spinney uses the example of the rider-bike assemblage ascending the physically demanding and renowned Mount Ventoux in France. For Spinney, the cyclist experience is not seen to be something that is readymade or accessible instantly. By contrast, it is a process that is crafted through practice, the cyclist is argued to 'come into being' by means of the development of appropriate skills (Ingold 2000:379), an aspect I highlight in this chapter by considering the development of diver skill over the duration of the Open Water Course and thereafter. With this in mind he considers that cyclists do not merely *see* from a bike as though it is a machine moving them through space, rather it is an internalised element of the hybrid human-machine assemblage, from which the riders *feel.* Furthermore, the landscape is seen as the arena in which such a 'becoming' human-bike assemblage is possible. In this sense, meaning attributed to the landscape is seen to be constructed for the cyclist in each instant the landscape is embodiedly perceived. Feelings such as pain, exhaustion and liberation, which a rider experiences, when ascending or descending Mount Ventoux (for example), are aspects that the landscape offers the rider interoceptively as a result of an active embodied movement within it.

Borden (2001), like Saville (2008), is concerned with more 'enchanting' and creative ways of engaging with the urban landscape, and in his research he details the kinaesthetic flow of using the cityscape as a space of play and expression. With mobilities comes automobiles and the consequent reshaping of the sense of

kinaesthesia (Sheller 2004). Sheller (2007) explains how the act of driving is an inherently sensual experience and discusses our ability to incorporate the car into the body, such that driving becomes an almost pre-cognitive act (Merriman 2009). Consequently, in the act of driving a car, "the identity of person and car kinaesthetically intertwine" (Thrift 2004:47). Thus cars have "redefined movement and extended sensory experience" (Gilroy in Sheller 2007:179). Saville's (2008) emphasis on the notion of play, challenges how we understand both our bodies and the environment and as such is particularly relevant to both this chapter and the thesis as a whole. Indeed one of the main motivations for studying SCUBA diving was to orchestrate a scenario in which the surrounding and the body would feel novel and enchanting, beyond the confines and banalities of working life.

Game's (2001) study of horse riding, is yet another example of an 'alternative' embodied experience of nature, which not only considers technology in the mediation of experience, but also encompasses animals into the relational assemblage (human-horse-tack-environment). In her study, Game (2001:1) highlights the inseparability of rider and horse in "the process of coming to be". In this way, Game (2001), Spinney (2006), Michael (2000), Dant (1997), Sheller (2007), Merriman (2009) and to a lesser degree Lewis (2000) and Barratt (2011) all build on the notion that; tools are not mechanical add-ons that dispense bodily force, rather they extend the whole person, delivering intentional action (Ingold 2000). Consequently, the body's capabilities are seen to be altered by technology that in turn mediates the affordances which the body receives.

By combining the bodies of literature considered above, here I have tried to contribute to what Hockey and Collinson (Hockey and Collinson 2007:116)

consider to be a "small but growing literature" that provides a "particular kind of 'embodied' analysis of the body in sport". More specifically though, through combining mainly two bodies of literature (that of experiencing nature and that of post-human identity) the aim of this chapter fits with Arnold's (2003:232) contention that; "Heidegger's model of a lifeworld enframed by technology, together with an 'amodern' logic that looks to an ontology of hybrids, offers a potentially productive way forward" for the theoretical underpinning of diver-technology-seascape relations.

4.3 Body-kit relations

In this section, the main focus will be on bringing to light the various ways in which the diver comes to understand his or her changing relationship with the dive equipment. The mediatory powers of the kit will be highlighted through an analysis of the extent to which it comes to lose its materiality, dependent on the ability of the diver and functionality of the equipment. By highlighting the role of the equipment here, a basis is provided upon which to consider not only the ways in which meaning is constructed about the seascape of Koh Tao -through an active, and embodied experience of being in and working with the affordances of nature- but also the implications such experiences have on the construction of the identity of the diver with regards to notions of hybridity and interrelationality. Therefore here, I will firstly provide a basic outline of the practice of diving before taking into account the way in which the variable of ability has the potential to alter a diver's relation to his or her kit, in order to consider the extent to which it can be seen to be an extension of the body.

Figure 3 below displays the basic equipment used by learner divers. More experienced divers tend to accrue further appendages as they fulfil more advanced level courses. Additional items include a compass, dive slates, a torch, a knife, metal poking sticks, inflatable surface marker buoys and in my case a video camera and housing weighing 3kg. Nearly all divers who own their own equipment will also own a wrist mounted dive computer, which lessens the need to plan dive profiles and also eliminates the need to regularly check the depth gauge[1]. The computer will beep if a diver ascends or descends too quickly, goes too deep or if he/she stays underwater for too long, all of which could lead to decompression sickness/ nitrogen narcosis and/or lung overexpansion. The learner divers often noted the large number of items attached to their instructors or myself, through exclamations such as, *"you look like a Christmas tree!"* and *"how can you possibly need that lot!"*, Figures 4 and 5 illustrate the extremes some divers go to with regards to being technologically and equipmentally adorned.

Figure 3: Standard dive equipment diagram

[1]However, PADI warns that an over reliance on such technologies is perilous (in case of equipment failure) and thus advocates that divers should still manually check depth gages and plan dives. In reality though this becomes rarely practiced.

Figure 4: Example of Equipment used

Figure 5: Extreme example of equipment used

Sport and leisure equipment generally has been described as being able to provide opportunities to transcend the limitations of the body. Diving, in order to be successful, requires a continuous co-ordination of diver and kit within the material context of the ocean (Dant 1998). Diving is a practice that requires the body to learn from experience what information the equipment (fins, tank, gauges, BCD, mask, regulator and wetsuit) is providing about the environment, this information must be responded to by constantly adjusting the body's surface area and motor action. These adjustments are not solely a matter of moving the body to change the position(s) of the adjacent parts of kit; rather they entail a continual attunement and awareness of the body's density in relation to the ocean's, and propulsion in relation to currents.

In order to rise, fall, move back and forth, and even stay still, the diver must combine expansion/contraction of the lungs and BCD, with kicking or resting the feet. The decision of which combination of movements and density adjustments to be applied at the time is made by evaluating the constant bombardment of information provided by the ocean's affordances which are not only felt directly by the body but, as noted above, are also converted into digital data through a dive computer and depth gauge. The diver, by receiving these stimuli, is able to interact with the kit by kicking, altering breathing patterns, removing/adding weights or inflating/deflating their BCD.

Despite the relative simplicity of the theory behind the practice of diving (lessening the body's surface area/increasing the body's density results in descent, increasing surface area/decreasing density results in ascent), it is unsurprising that the research participants revealed considerable differences in the ways in which they

perfected such a relation with their kit and consequently their ability to 'read' the conditions, with particular reference to their experience and/or ability. Based on Heidegger's (1962) concept of readiness-to-hand and Harman's (2002) analysis of tool-being, in what follows I will outline the progressive ways in which divers began and continued to connect to their equipment and the environment.

4.4　Skill

As is illustrated in Table 2 in the methodological chapter (Chapter 3), the majority of the research participants were completely new to the sport of SCUBA diving, thus their learning curve at the time of filming was very steep; with significant improvements in buoyancy control, navigation and equipment use noted over the course of single dives as well as over the duration of their training. As most of these divers took part in the research in the final day of their Open Water course, they were well placed to notice at once their progress but also the jarring moments in which they lacked control, or in which they became alerted to the materiality of their equipment. Providing further empirical examples, and demonstrating an alteration to perceptual modes of being underwater over longer time periods are the instructors' and dive masters' quotes which were gained during ethnographic periods of research on the dive boat, as well as my own experiences of diving with and without the camera. With a variety of experience and skill training, the divers who took part in the research then were able to offer a fuller picture of diver-kit-ocean relations.

Heidegger argues that, tools operate in such a way that we do not consider their materiality, their "thingness", unless the tool fails to perform in a manner that is

expected of it. He argues that readiness-to-hand suggests that the orientation of material things in the world to *Dasein* is embodied and engaged; through touching, manipulating, by bringing things into contact with the body, as into the hand, they break free from the environment and have relevance as distinct entities. Consequently, when considering readiness-to-hand, "things are identified through what Heidegger calls 'circumspection'- a form of sight that includes both 'looking around' and 'in order to'" (Dant 2005: 87-88). The research participants echoed such a relationship to the material appendages of their equipment. Firstly, with reference to ability, it was noted that the novice divers at first saw the dive equipment as a set of objects that required manipulating and moving into place, for example;

"I seem to lack any control over my fins during the buoyancy skills, I can't

get them in the right place to reach the ends with my legs crossed" (Jan)

Heidegger's theory of the "broken-tool" here does not necessarily refer to the equipment being *broken* or inappropriate for the task, rather; it is the case that those learners, such as Jan, attempting to use the equipment, have yet to craft the skills and experience necessary to gain an expectance of what *should* happen when they react in a certain way to the movement of their bodies, in relation to the sea. By contrast, those who were more qualified claimed to rarely, if ever, think of the kit *per se.* As a result, when such a relationship is yet to be crafted, the kit becomes "freed from its contexture, released from the dimension of reference" so that it is encountered *as* a tool, instead of "only quietly functioning as one" (Harman 2002: 49), a point reflected by the following respondents;

"I don't think about using my inflator hose without instruction now. At first I'd wait until I was sinking or flying up out of control before panically getting Lindsay's [dive instructor's] *attention for help. I can feel if it is starting to happen now and do something about it before losing control"* (Dave)

"On my first Open water dive I felt really conscious of my regulator, it really freaked me that it was the only thing keeping me alive down there. I was biting onto it so hard to make sure it stayed in that it made my jaw ache. I don't know when I stopped that but by the end I never even thought about it, and when I was trying to control my buoyancy through breathing I was only thinking about expanding my lungs, the regulator didn't register at all". (Tara)

The sense of habit evident in respondents' descriptions, highlights the way in which learning to acquire the skill to dive well, involves retaining knowledge gained from past experiences, which is not only of the body but also of working with the equipment. Once, this knowledge has become 'habit', there is no need for the pressures put on the diver's body by the equipment to be interpreted consciously, rather they are perceived *through* the equipment as though it were "a bodily auxiliary, an extension of the bodily synthesis" (Merleau-Ponty 1962:152). As Heidegger (1962:107) notes of a person wearing spectacles, with experience, the diver's kit although distantially close, becomes environmentally more remote from them than the other objects, people and coral which are required to be manoeuvred around or over. In such situations the "equipment in action operates in an inconspicuous usefulness, doing its work without our noticing it" (Harman

2002:45). In other words, the equipment is *ready-to-hand*, capable of working its "magic upon reality without entering our awareness" (Harman 2002:18). As Amy and Andy noted;

"When everything was going to plan, you could forget about all the appendages and just peacefully make your way round the reef" (Amy)

"For me diving is such a relaxing activity, I just go with the flow, zone out and just appreciate whatever the ocean displays. On the boat you are so heavy with equipment, and in a hurry to get all the customers ready. As soon as you're under you can forget about everything" (Andy, Dive Master)

My own experiences of learning to use the underwater video camera further illustrate this point. As a more experienced diver with a new bundle of equipment to familiarise myself with, I rarely noticed the interactions I had with my dive kit. Operating silently, as expected, my kit had become an extension of my body, allowing me to turn my attention to perfecting a new set of skills associated with the camera. As my experience of this grew further, my attention turned from the camera's buttons and functions as these too, slowly became habit. Instead, perfecting filming technique and style came to the forefront of my attention with the camera only really becoming an issue for contemplation if its battery ran out or if buttons became jammed. It can be argued then that when the desired embodied performance is being realised and the dive kit loses its materiality, the seascape comes into vision and therefore provides an extended radius of scope for the body to be capable of realising evermore complex and alternative "enchanting" possibilities for action. As the following learners noted when watching themselves

perform summersaults and blowing rings with their air intake during their audiencings session;

"Messing around, doing things you can't on land, it is so liberating" (Sam)

"Once you get used to it all, it's just fun to relax and play!"

(Sam, Dive Master)

In this sense, the equipment can be seen to have "dissolved" into a "global tool-empire" (Harman 2002:29). Once withdrawn the kit disappears and instead brings into view the seascape, or "the tangible reality that it allows to enter the spotlight" (Harman 2002:29). Thus, perception or conscious thought is not of the kit but of the seascape, and that which is afforded by the seascape. Through a habitual use of fins, mask, BCD, regulator, tank and weights the diver's understanding of how to use these and what the likely results will be, have been "taken into the body and, in use, the object[s] become[s] effectively part of [...their] user" (Dant 2005: 98-9). Just as Merleau-Ponty (1962:145) notes how the person who has learned to type; "incorporates the key-bank space into his bodily space", so does the diver incorporate the surface area of the fins and BCD into his/her bodily space. Thus, when everything is going to plan, such a perception of the environmental conditions is argued to be felt directly *in* the body, as mediation becomes a task for the subconscious. Instead of thinking through the process of manipulating equipment to gain a desired outcome, these actions become instinctive, and so the diver knows for example how much air needs to be added/dumped from the BCD, they can 'feel' the extent to which it is already inflated. The BCD, as an example, becomes an additional body space that is at once informing and forming of movement, a "conduit that

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extends the agency of the body and the person into the world while also providing a channel from the world back into the person" (Dant 2005:64).

Understanding how to make the most of the dive kit though does not just involve learning how to use it, it also requires an awareness of how to fix or adapt to peculiarities when equipment does not operate as it should/normally would. In such instances the tool really can be *broken*, in a literal rather than Heideggarian sense. Unfortunately though, malfunctioning equipment is sometimes an unavoidable issue, which along with lack of experience can highlight its materiality;

> *"In the pool my mask was constantly fogging up and it seemed like a right hassle filling it with water and blowing it out through my nose all the time, it's really annoying when you are trying to learn from the instructor and all you can see is the inside of you mask!"* (Seb)

> *"I could never find my octopus cos it kept floating above my head, in the skills training I'd just be there aimlessly grabbing around for it"* (Sarah)

> *"My tank was too high up on my body and I kept bashing my head on it if I looked up, it really ruined the experience for me cos every time I was relaxed and enjoying myself I'd forget about it, and then *whack*!"* (Katherine)

> *"I don't really think about my kit, I just use it without thinking, but there is one exception…when I'm deeper, like 30m, it starts to get difficult to breathe. You really have to draw on your regulator to fill your lungs. I don't*

like that much, it really makes you think about the tank and the regulator,

and even the air gage cos sometimes I feel like it must be faulty- it's telling

me I have half a tank but it feels like I'm running out…that's just something

I haven't got used to yet and I'm not sure I ever will." (Suzanne, Instructor)

These quotes highlight that the kit, when in action, is only really noticed when it fails to react to the environment and the body in the way expected of it, in such situations the "contexture of reference and thus the referential totality undergoes a distinctive disturbance", which forces the diver to pause (Heidegger in Harman 2002:45). When the diver doesn't have the appropriate kit or when it is not assembled correctly, it becomes conspicuous and stands in the way of the activity being realised in its most enjoyable manner, or possibly at all. Thus the equipment is "lit up" and "the world announces itself" (Heidegger 1962:105). When the kit fails, the seascape becomes present-at-hand, rather than ready-to-hand, and the parts of the dive assemblage "take on qualities as things in themselves" (Dant 2005:88).

Consequently, it could be argued that; it is only when the diver has acquired the appropriate skills, to not only control their movement but also to set the equipment up correctly and resolve small issues easily, that the BCD, regulator, mask and all other elements of the assemblage become enfolded or incorporated into the flesh of the body as a set of prosthetics. As Heidegger considers, "the peculiarity of what is proximally ready-to-hand is that, in its readiness-to-hand, it must, withdraw [*zuruckienhen*] in order to be ready-to-hand quite authentically" (Heidegger cited in Harman 2002:21). Therefore the diver's engagement with the seascape of Koh Tao, just as the cyclist's engagement with the landscape of Mont Ventoux (Spinney 2006), is not something that is accessible instantly; rather it is a process which is

crafted through practice. As Merleau-Ponty (1962:166) considers; to get used to a tool is to be transplanted into it, "or conversely, to incorporate [it] into the bulk of our own body. *Habit* expresses our power of dilating our being-in-the-world, or changing our existence by appropriating fresh instruments" [emphasis added].

Having begun to consider the way in which the body forges a relationship with the kit, in the following section I will build on the ideas put forward in this section, to consider the array of 'natural' affordances such a relationship provides for the body within the seascape as well as highlighting the resultant emotional affects, which the reception and manipulation of these affordances provide. Whilst the majority of quotes used so far have generally emphasized the ease and enjoyment of learning to dive, the rest of this chapter and the following one do further highlight such a forging of the human-technology-seascape relation, by noting the many difficulties the learner dives also faced. Additionally, the next section takes into account the ways in which such affordances alter divers' experiences of the seascape, thus providing a case to support an anti-Cartesian conceptualisation of the sea/landscape which not only draws attention to the hybridity of human identity, with regards to its enlacement and enfolding with material objects and natural forces, but also conceptualising the landscape in a multisensual and embodied manner rather than purely as an occularcentric ideology.

4.5   Landscape, affordances and interaction

"Nature is not to be understood as that which is present – at-hand, nor as the power of nature. The wood is a timber forest, the mountain a rock

quarry, the river water-power, the wind is wind 'in the sails', as the 'environment' is discovered, the 'nature' thus discovered is encountered too."

<div align="right">(Heidegger cited in Elden 2001:21)</div>

As is reflected by Heidegger above, there is a sense in which, through a dwelling approach, the seascape can be 'used' rather than merely being observed, in contrast to conceptualising the landscape as a 'text' from which socio-cultural meanings could be read (Barnes and Duncan 1992), the gaze from a static (elevated) position, by a (traditionally) white, able bodied, male (Rose 1993), or a 'veil' covering over issues of social and economic reality (Cosgrove 1985, Cosgrove and Daniels 1989). The divers who contributed to the research reflected an understanding of the seascape that had far more in common with a dwelling approach to the study of landscape than any such conceptualisations, reflecting Ingold's (2000:191) contention that the landscape should not be conceptualised as though it were a "picture in the mind's eye...nor an alien and formless substrate awaiting the imposition of human order." The most popular connotations associated with the waters of Koh Tao were those suggesting that for divers, the seascape is perceived as a playground, full of obstacles to be negotiated around or used/ harnessed in a performance of skill. As is exemplified by the following respondents and as is illustrated in the photos of *Buoyancy World*, a sunken set of obstacles a diver can negotiate for fun or as part of their buoyancy training (Figures 7 and 8);

*"It is so much fun just being able to hover, twist and turn" (*Tom)

Figure 6: Illustration of freedom of movement

"I love the feeling of propelling myself round and over coral like I'm flying"

(Felix)

"Buoyancy World was fun, trying to get through the hoops without touching them is pretty hard!" (Andy)

Figure 7 :Buoyancy World 1

Figure 8 Buoyancy world 2

The implication was that Koh Tao's waters offer a freedom of movement, a sense of 'learning to fly', explore and play. Furthermore, it is not a seascape that is purely visually affective, but one in which the whole body is immersed, both theoretically and literally. As Wylie considers (2003:155), the landscape (or in this case the seascape) acts as the "medium *through which* [...] performances are enabled and enacted", and so experience is not reduced to occularcentric ideologies of "subject-relevant images or representations" (Macnaghten and Urry 1998:121). Therefore, acting as a prosthetic potentiality from which the diver can experience the surrounding environment, the equipment, and the diver's relation to it, is given meaning through a series of immanent and fleeting connections with the elements. Such meanings associated with the seascape are not stable, but fluidly dependent on the water conditions (clarity, current, availability of light) or on the person engaging with it. As the following quotes highlight;

"We go a lot to Chumphorn and the currents can get quite strong. It's a completely different experience. You can either spend ages looking for sea life or just spend ages battling the current to get back to the boat". (Sue)

"Night diving is crazy! You can go to the same place and it feels completely different. Japanese Gardens is such a relaxed dive in the day but at night you see different creatures, there is an eerie feeling too because you don't know what is surrounding you and you can get disorientated pretty easily." (Declan)

Consequently, the identity of the seascape of Koh Tao is seen to be variable and is in part constituted by the activities and experiences being realised there. As Ingold has

noted of the landscape more generally, it "owes its character to the experiences it affords... to the sights, the sounds and indeed smells that constitute the specific ambience" (Ingold 1993:155). The ever changing and evolving character of the seascape serves to highlight that the 'generative field' of everyday life is constructed by means of the sum of all organism-environment relations, so that by theorising the landscape in such a way that highlights a continual and inter-relational 'becoming', the world itself can be seen as an evolving organism (Ingold 1993). Diving then, is not a process of acting *on* or *to*, rather it is an enfolding, shaping and becoming *with* the seascape, as skill grows and perception widens and alters focus.

Equipment delivers information, acting on the diver's behalf, delivering the affordances of the environment which are instinctively reacted to so as to maintain a state of equilibrium. At every moment the body is adjusting its "movements in response to [an] ongoing perceptual monitoring" (Ingold 1993:456). And so, in these moments of expression, the equipment becomes a set of prosthetics which enable a sustained interaction with the underwater world. However, they also simultaneously become integrated into the body allowing the diver an *enhanced* capacity to feel and a *reduced* capacity to feel. In both cases though, whether enhancing or diminishing sensory perception, the equipment is designed to ease the practice of navigating underwater. For example the numbing of sensitivity to the water's temperature through a wetsuit allows for longer periods in comfort whilst the weights and BCD optimise the potential for kinaesthetic freedom through an ability to 'alter' the effect of gravity on the body-equipment assemblage. This is further illustrated through a consideration of the divers' sense of agency as they learned to negotiate their way around the underwater environment. The conversations on board the dive boat and in the screening rooms made it evident

that it was only towards the end of their open water training (for learners) and beyond (for the more experienced participants), that they felt agency and intentional action was shaped and controlled mostly by themselves rather than the equipment, or more accurately the effect of the sea and equipment on the body. For the learner divers, it was evident that agency and intentional action was shaped and controlled by a combination of the equipment, the ocean's currents and their own intentional action. As, for example Tara and Jane noted;

"I found it hard to combat the current that day, I was pretty relieved when we made it to the rock because at least it offered some shelter, we weren't really up for seeing the other side because it was too much effort and I was using up all my air really quickly" (Tara)

"I'm not sure how I passed really, my buoyancy is still pretty naff, one minute I'm too inflated and I'm zooming off toward the boat and the next minute I'm disappearing into the depths, I was a slave to my BCD!" (Jane)

Thus, it could be argued, that it is only when the sea is calm and the diver's overcome their equipmental difficulties that as an assemblage, the participants 'come into being' as prostheticised divers, within the seascape. When this state of control and equilibrium is maintained, the kit loses its materiality, and is not an awkward and bulky collection of things which are being willed into performing in a certain way. Rather, they are forgotten to be there in themselves, they are a part of the diver as an expression of his or her embodiment.

Gibson's ecological approach argues that perception is not based on the interpretation made by the mind which is situated within a person's body, as the Cartesian mode of apprehension would have it, but rather is the result of a total bodily immersion, from the start, in an environment. Therefore, as Ingold notes, in order to study the practice of a skill (such as diving), there is a need to begin from the perspective that locates the practitioner, from the beginning, "in a context of an active engagement with the constituents of his or her surroundings", or in other words; to employ a Dwelling perspective (Ingold 2000:5).

For Gibson this sense of unity stems from the notion of "affordance". He states in his (1979) Ecological theory of Perception that; the surfaces of the environment allow for a certain array of possible actions which reflect the limits and capabilities of the perceiving animal's body. Furthermore, one of the main points of Gibson's theory that has been taken up by scholars such as Ingold (1993, 2000), Dant (1999) and Michael (2000), is that the environment's "suggestions" are not oriented towards a passive sedentary perceiver, but toward an active organism that explores its environment, actively seeking (picking up) information. Thus, depending on the equipment's reliability, ability of the diver and water conditions of the time, the underwater seascape of Koh Tao provides a certain array of lines of action and not others. As noted above, the dive kit mediates this experience, but also is the means by which access (in this instance) to the seascape is gained. Therefore, when considering Gibson's theory of affordances, it is less that, the environment's surfaces offer possible lines of action that reflect the capabilities of the *human* body, but instead the hybrid or *prostheticised* body. In this sense, the dive kit, by enhancing/adapting sensory and bodily capabilities and by gathering a wider than purely humanly possible array of affordances (in such an otherwise inhospitable

environment), highlights the "rich intimate togethernesses of beings and things, which make up landscapes and places and which bind together nature and culture" (Cloke and Jones, 2001:651). In other words, the kit renders normally imperceptible/inaccessible aspects of nature perceptible (vision underwater, viscosity of water, the effects of pressure on the body) making "immersions between humans and environment possible" and enabling "the cascade of affordances that comprise taskscapes" (Michael 2000:67). As the following quotes illustrate,

> *"I hate it when there is a strong current as I use all my air really quickly and then have to surface before the hour is up, I don't really feel like I'm getting my money's worth!"* (Sarah)

> *"Difficulty breathing occurs because you are deep! It is the weight of the ocean compressing your air and your lungs!"* (Polina)

> *"Pain is a message, if your mask is too tight, you have gone deeper"* (Chloe)

> *"It takes loads more air to inflate your BCD when you are below 20m say"* (Jonathan)

These quotes highlight that it is through alterations in the performance of their dive equipment that the participants understood their depth. Whilst the depth gauge requires an active effort to be looked at, the feelings of pain that emanate from a mask 'squeeze', or the difficulty of drawing air from the tank are alterations which occur because of the environmental effects to the equipment's performance and therefore are felt passively by the body. The resultant effect of the acquisition of

such affordances allows the diver to optimise the limits of his or her possibilities for desired action. Overall improvements in technique and efficiency, through the smooth delivery and receipt of affordances then, enable the diver to execute a range of ever more controlled bodily movements, which in turn provide increasing levels of enjoyment and exhilaration. As the following quotes illustrate;

"Now I'm not scared of bashing into people and losing control, I like messing around doing summersaults and hovering or pretending to fly" (Tara)

"It's fun moving round the reef just using my breath, it makes you feel really in control" (Fran)

"it's such a cool job, I loved learning to how to dive, it is such a memorable event and you think that it's just going to be about learning how to move and look at stuff. But the longer you do it, the better it gets, apprehension eases off and you can experiment, feel more in control, see tiny things, film, take photos, get more technical, the more you learn the more rewarding it becomes!" (Jasmine, Instructor)

Consequently, it could be argued that the kit and its use within the seascape has the ability to "make emotions intelligibly present" (Michael 2000: 79). As Tisseron (1999 cited in Dant 2005:64) notes, "objects are not only extensions of our motor or sensory organs, they are, more fundamentally, extensions of our mind". Here, contrary to Lewis's (2000) assertion that technology encourages the process of disembodiment by lifting functions out of the body and investing them into a

technology, it could be argued that the technology of the kit allows for people to realise a state of enhanced embodiment, with a set of expanded capabilities which are not only perceptive (e.g. in the case of mask, wetsuit and fins) but also kinaesthetic (e.g. in the case of BCD, fins and weights). Furthermore, such an enhanced state of bodily interaction with nature, through the mastery of a set of "things" is seen to bring with it a series of emotional responses that are expressed in the dive performance. As Tisseron (1999 in Dant 2005) has noted, the psychic life of a person can be transferred into the objects being used, through which emotions can be expressed and made apparent. As such, the material relation between the diver and the kit enables "feelings and emotions to be pushed from inside to out, from the psyche to the surface of the body and then beyond" through the fins, regulator and BCD (Dant 2005:65). Consequently, the agency of the diver "spills out" from the body into the kit being used (Dant 2005:65), visibly evident through the performance of the assemblage. When coupled with the sense of freedom of being able to move on a vertical axis, this sense of mastery, which a person feels when using and learning to use the kit with skill such as Jasmine above, could be considered to realise a state of enchantment (or similar) in the diver, or what Michael has termed 'bagging'; the objectification of nature to enable the possibility of enchantment (Michael 2000:52; Bennett, 2001). This is reflected in the above quotes that note the element of freedom and joy felt by the research participants, as well as the following;

> *"I just can't help but mess around and do flips, or hang around upside*
>
> *down, what's the point of learning and paying all that money, if you don't*
>
> *just let go and embrace the qualities of the environment!"* (Janet,
>
> Instructor)

"Being underwater makes me feel like a child again- it is acceptable to play and experiment with movement underwater. Imagine just doing a head stand in the street, just because, you would look like a right special case, or do cartwheels. Adults don't really get the opportunities for stuff like that anymore, underwater though not only is no one gonna judge you, but it won't hurt if you get it wrong!" (Steve)

Tisseron considers that the prosthetic characteristic of material things is balanced by "their 'introjection' or 'inclusion' within the psychic states of those whose bodies they extend" (Tisseron cited in Dant 2005:62). He argues that a person's contact with objects is not purely functional or symbolic; rather it is equally linked to people's individual identity and sense of self. Thus underwater embodied tourist experience is argued to not only enhance our appreciation of the natural environment at the time and place in which diving as an activity is engaged with, but the construction of this hybrid identity is seen to encompass a whole series of relations and understandings of the natural world which are held onto in later experiences. Throughout this thesis such a notion is reinforced in two major ways. Firstly through the way in which divers mimetically related to the audiencing films shown as part of the methodological experimentation (in Chapter 3) and souvenir DVDs (explored in Chapter 8) and secondly through a sense of enhanced environmental awareness and an ethic of care discussed in Chapter 7. Consequently, with regards to the former it could be argued that the construction of a diver's identity, forged through practice and the acquisition of skill retains a "phantom" relation with the kit. As Grosz (1994) notes of Merleau-Ponty's "phantom limb" concept, the actions which the body-kit assemblage could or would have performed,

are still retained as possible actions in certain contexts. Thus relations to the 'phantom' fins and BCD are "not a memory or an image (of something absent)… [they are] "quasi-present"…the refusal of an experience to enter into the past; it illustrates a tenacity of a present that remains immutable" (1994: 89). As Jonathan notes,

"it's just frustrating watching documentaries and stuff, because you want so much more- you don't just want to see cool things, you want to explore, float…" (Jonathan, Instructor)

Whilst Merleau-Ponty is referring specifically to phantom *limbs*- the extension of the physical materiality of the body- for the divers, I believe this became more of an all encompassing refusal of the present to enter into the past, including subjective attitudes and outlooks. However that is not to say that Merleau-Pontian 'phantom limbs' including forms of embodiment, relations to equipment and even relations to environments did not manifest themselves with some divers,

"All week I've felt like I'm on a boat, even when I'm back at the hotel. I can't stop swaying!" (Polina)

"When I get out of the water and take my mask off, it still feels like I'm wearing it, I guess you just get used to the pressure on your face" (Ivan)

In this sense it can be seen that the combination of affordances provided by the seascape, a knowledge and understanding of the kit and an embodied practice and experience of diving collectively contribute to not only the diver's understanding of

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the seascape of Koh Tao, but also to relevant representations and sense of environmental ethics. As a result, at least for the majority of those participants who contributed to this research, diving as a practice, is seen to alter in addition to their outlook on the underwater environment and representations of these, but as I go on to discuss later, also their habits and practices of future life (through a development of an ethic of care towards the underwater world, which in turn can lead to environmental action or changes in consumption practices, for example becoming a vegetarian). Therefore it can be seen that an active and potentially 'enchanting' folding into the seascape, by means of technological prosthetics, can lead to an enhanced attachment and perceptual sensitivity to environmental conditions, which contributes to the construction of the divers' identities, as well as general appreciations of underwater environments.

4.6   Conclusion

The first aim of this chapter was to discover how divers relate to their kit and also how this changed over the course of their (and my own) initial and later training. The participants' responses suggested that whilst initially divers understood the kit as a set of material objects to be used and controlled by the body, those with greater experience and a history of more time in the water began to reduce their focus on their kit in itself. Consequently it was noted that, the greater the knowledge of the capabilities of the kit and the body, and an awareness of their potential actions, resulted in the equipment's loss of materiality and the bringing into focus of the underwater seascape. However, the state of 'invisibility' attributed to the kit was seen to phase in and out, for example when divers became distracted by wildlife, or when the kit failed to operate as expected. In such situations the respondents

considered that the equipment would once more come into view and be perceived as a set of 'things' rather than as an extension of the body.

The second half of the chapter considered that equipment expands the sensory capacities of the body. Mask, BCD, fins, gauges, regulators were seen to 'gather' a wider than humanly possible array of affordances from the seascape. These, affordances were argued to be felt directly *in* the body, rather than how the equipment felt *against* the body. Such a smooth 'flow' of information from the environment into the body was considered to optimise the divers' possibilities for desired action, enabling the respondents to perform ever more polished and controlled manoeuvres and allowing them to travel as smoothly as possible through the water. As an assemblage, the body-kit's ever growing possibilities for action and the mastery of their execution was argued to induce feelings of exhilaration and enjoyment which in turn were expressed through the diving performance (for example through summersaults, resting upside down, swimming through hoops and rock formations and generally illustrating freedom of movement). Therefore, not only does the equipment act as a means of gaining vital information about environmental conditions, but it is also an extension of the body in its performance of skill. Furthermore, such a co-constructed activity encouraged divers to understand the seascape as something to be *in* and move *through*, rather than as something to be looked *at*.

Not only is the practice of diving said to induce feelings of exhilaration, but the respondents highlighted that, through their appreciation of the affordances of the seascape, awe and enchantment were experienced as part of being made aware of the forces of nature and their connection to the wider environment. Consequently,

understandings of the seascape that were facilitated and provided by the equipment, at the time of diving, then shaped and affected their habits and awareness generally. Whether of the seascape specifically or the world generally, dive experience highlights that neither are considered in a purely detached occularcentric Cartesian mode of inquiry. By contrast the seascape is imaginatively and embodiedly encountered as an area offering a series of possibilities and limitations, an array of tools waiting to be put to use, and an arena that is not solely acted upon, but whose forces and intensities impinge and shape the lived experience of the diver. Therefore, the seascape is apprehended in an extremely active way, by an embodied subject whose multisensory modalities have been expanded beyond their natural limits, immersed within that which is being perceived. Choices of course of action, use of equipment etcetera, are all aspects of diving that are based on an element of compromise, with the diver and environment both contributing to the resulting embodied performance.

Whilst on the whole I conclude that the combination of Heidegger's theories on equipment and being-in-the-world are reflected in the diving performance, I also feel the alien underwater environment may highlight a tension in their compatibility. Whilst on the one hand the ocean's currents and changing environmental conditions that are made perceptible by means of a set of technological tools do highlight that divers are with and of their surroundings, as their bodies are moved against their will and become more sensitive to the affect of natures forces. By contrast however, the trials and tribulations that these same divers face as a consequence of this, serve to reinforce the fact that as humans, we do not belong underwater (and must work considerably hard to forge the conditions to allow us to be there), once more separating connections to equipment and

rupturing flow of embodied movement. Thus it could be argued that whilst diving is illustrative of a co-constructed form of activity, the imbalance between skill and agency takes so long to level off that, perhaps it is only more experienced divers who can truly *dwell* underwater. I go on to explore this further in relation to the senses in the following chapter, employing Drew Leder's theories of bodily dis- and dys-appearance.

5 Negotiating underwater space: the sensorium, the body and the practice of SCUBA diving

5.1 Introduction

The dense under water world, where a person's resistance to gravitational pull results in differing feelings of weightlessness, where sound travels around five times faster yet more unevenly than in air and where verbal communication is impractical such that visual cues are necessary, calls for a different 'way of being' to the everyday spaces of the home or the workplace (Marks 2000). It is these different ways of being and feeling which I explore in this chapter. To do this I present a sensual phenomenology that pays particular attention to the reorganisation of the sensoria of the novice divers as they start to gain an awareness of the different perceptual means by which they move through and sense underwater space.

In this chapter I explore what it is about underwater space that makes it so popular. Clearly witnessing and interacting with creatures of the deep is a significant element that shapes dive experience. However, here I seek to understand what exactly the novel characteristics are of underwater space itself, its texture, viscosity, atmosphere, temperature and physical properties that people experience and enjoy. Consequently I argue that studying the senses underwater, including the reconfiguration of the sensorium, is an instrumental element of diver satisfaction and a contributor to its popularity as a holiday activity (Dimmock 2009b).

As noted in Chapter 3, the methodology, the sensorium is defined as the sum of a person's perceptions, or 'the seat of sensation', of their interpretation of an environment. The different 'ratios of sense' that make up the sensuous and perceptual means by which we come to understand and dwell in space are said to be dependent on shared cultural norms and consequently vary according to social context and geographical location (Howes 1991: 8). To adapt and succeed in negotiating an environment such as the underwater world involves a reorganization of the land based or travelling sensorium. Following Saville (2008: 894), in this chapter I am concerned with exploring the 'new ways people are finding to make contact with their environment'. This aim is reflected in the wider tourism and geographical literature concerned with the body, phenomenology and NRT, as academics are becoming increasingly interested in the role of the body (Veijola and Jokinen 1994), the senses and perception in shaping our understandings of space (Rodaway 1994).

The chapter is structured into three main sections. Firstly, I present a review of the literature on body-landscape relations and sensuous engagements with space, including tourist space. Following this, I outline the sensations that came to the fore for the learner divers who participated in the research. This will provide a background from which to consider the reorganization of the tourist sensorium as a diver learns to negotiate underwater space.

5.2 Sensuous studies, technology and leisure space

A diving 'career' is measured against a level of attainment gained (most commonly although other country specific training organizations exist) from PADI's extensive hierarchy of qualifications, as is reflected by their catchphrase 'The way the world learns to dive' (PADI 2011a). Across the world the same set of practices, movements, actions have been demonstrated and passed on to millions of novices by their 133,500 professionals (PADI 2011a). In fact, for the last 10 years, PADI has consistently certified in excess of 800,000 divers per year (PADI 2011b).

The diving body is developed through training and a combination of mimicking others (the PADI instructors, other recreational divers), mimicking what learners expect diving to look or feel like, as well as a continual attunement to the affordances offered by the underwater environment, in conjunction with the equipment; a never ending practice of self-reflexive becoming. A diver's subjective personal history, their normalized, preconceived goals, their conscious and subconscious relations to equipment and underwater space all combine in their performative exploration and understanding of the seascape. Thus, in order to study the diving body and the means by which it is sensuously engaged within the underwater seascape, I draw attention to the body of literature within which this chapter is situated, namely that of body-landscape studies within human geography. However, this is not to deny the existence of similar research within tourism studies as the work of Veijola and Jokinen (Jokinen and Veijola 2003, Veijola and Jokinen 1994) has been pioneering in bringing subjective, embodied accounts of space to tourism studies, in conjunction with the writings of Edensor (2001, 2007a), Swain (2004) and Pritchard et al (2007).

Macpherson (2010) provides a succinct overview of body-landscape studies with reference to NRT specifically, and (post)phenomenology in passing. Drawing particular attention to the work of Thrift (1996), Wylie (2007a) and Rose (2002) she summarizes the reconceptualization of landscapes and bodies from 'free floating or objective givens' to being emergent through mutual engagements with each other (Macpherson 2010:3). This results in the body and sensual perceptions of the world being understood as constantly emergent and in process, rather than insular products of signification. Thus, the context within which we are situated, and the modes of activity in which we engage, together alter our sense of embodiment and landscape. In this vein Wylie (2005), describes feelings of pain as he narrates his journey along the South West Coast Path and Saville (2008) explores alternative kinaesthetic engagements with city space, as he joins and observes parkour practitioners and deals with the emotion of fear. Whether it is the blistering of the feet, the overcoming of acrophobia or soreness in the muscles, they illustrate the difficult to communicate aspects of experience which shape relations to natural or built surroundings. A key element of NRT is the importance it places on the pre-cognitive and intuitive aspects of experience which shape human-landscape negotiations. Indeed this is an aspect which the visual methodology I employ throughout this thesis attempts to address, even if only experimentally. Drawing on Damasio (1999), Macpherson describes how we avoid reaching a state of 'cognitive overload' by preventing certain stimuli from reaching consciousness and therefore enabling increasingly refined and habitual negotiations of the landscape (Macpherson 2010:5). Indeed she states, 'non-representational work emphasizes how the regular performance of particular embodied roles results in them becoming a habitual and neurologically sedimented phenomenon' (Macpherson 2010:6). This is a concept I explore more thoroughly throughout this chapter, by drawing on the

phenomenological arguments put forward by Drew Leder (1990). Leder outlines the two modes of bodily being that occur simultaneously and fluctuatingly in different parts of the body at any one time. These two modes, *dys-* and *dis-*appearance, refer simply to the way in which we are consciously aware of bodily functions and perceptions, or to the way in which bodily processes are in action silently beyond our notice, respectively. Thus, *dys-*appearance is associated with awareness, an attention to movement, visceral functions and bodily co-ordination. It is the mode of being which is apparent when we are away from our usual surroundings and/or we are required to act and negotiate our way around space in novel or previously unrefined manners[2]. *Dis-*appearance, by contrast then, is akin to (parts or all of) the body vanishing, or a forgetting of the body as it operates seamlessly; functioning appropriately for the surroundings and the task at hand. Thus, extending the previous chapter this one considers the specific ways in which divers experience the underwater world through the senses, an aspect of embodiment which is largely ignored in Heidegger's writings on the body (1962), and hence the turn from one phenomenologist to another.

For the purpose of studying the usually 'unrepresentable' senses - those that are commonly beyond conscious reflection, or even to highlight the aspects of experience which ordinarily would not seem remarkable or worthy of comment - putting the body in an environment or state in which *dys-*appearance can occur, seems a fruitful way forward as 'breaks, fissures and interruptions' in sensual perception can enrich our understandings of world relations (Saville 2008:909). As

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[2] Leder argues this mode of being is also prominent during times of illness or injury- when pain lights up and draws attention to parts of the body that normally act silently without question.

Leder argues, 'a disruption in world-relations leads one to reflect back upon one's bodily performance', and to overcome such disruption requires that 'the body itself becomes the focus of ongoing hermeneutic and pragmatic projects' (1990:86). For novice scuba divers, adapting to the equipment and environment associated with exploring the ocean's depths provides just such an opportunity, the opportunity to "let go' of regularly repeated relations/representations of space and to attend to the spark of newness that marks a life as enchanted and lived' (Saville 2008:900). That is not to say that normative expectations and standardized, PADIfied modes of modes of being do not mediate and structure the experience (as I explore more fully in Chapter 7), but as Lea (2009) has similarly explored within the context of learning a skill, there are ample possibilities for rupture, unexpected emergence and dys-function within the diver-seascape encounter.

It was Rodaway in 1997 who explicitly called for studies of space to become sensually engaged, and from renewed interest in phenomenological theory and the development of NRT, a significant number of studies concerned with sensuous perception of space have emerged. It is argued that different places call for different ways of being (Classen et al. 1994) and that as we develop the necessary skills to negotiate heretofore unexplored environments, our sensory envelope becomes reconfigured to perceive more effectively the sights, sounds, feelings etc. that shape our experience and understanding of our surroundings (Marks 2000).

Touch appears to be the most commonly studied sense by those outside of anthropology. Following Paterson (2006a, 2006b, 2006c, 2007), and of particular relevance to this study, is Straughan's (2010) work on the hapticality of scuba diving. Engaging with touch metaphorically and literally, she outlines the various

means by which experienced divers touch (or actively avoid touching) and are touched by the watery world. Straughan (2010), as I discuss later, highlights that touch pertains to more than just the skin, and drawing on the work of Paterson (2007), she links in visceral, kinesthetic and visual elements of bodily perception to demonstrate the complexity and interrelatedness of sensuous perception underwater. Allen-Collinson and Hockey (2011) likewise concentrate upon touch in their study of running and scuba diving, yet their approach focuses even more specifically on heat and pressure. Working within a phenomenological framework they illustrate that divers build up an 'embodied memory' of how to perform underwater such that 'practitioners develop specific senses of touch, constantly 'alert' and responsive to tiny differentials in pressure and temperature change' (Allen-Collinson and Hockey 2011:341). Bridging the gap between land and sea based studies of touch, is Obrador-Pons's (2007:123) paper concerning hapticality in the liminal space of the beach. Integrating vision into his research Obrador-Pons considers that the sensual experience of nudity offers opportunities to 'develop insights into the elusive experience of the beach'. I highlighted the importance of these writers' work in Chapter 2, however the specific relevance their research holds to this chapter, warrants their repeated mention.

Separating vision from touch is often a problematic task and this is even more pronounced when considering how visually impaired research participants use the hands as organs of sight (Reigl in Macpherson 2009a, Macpherson 2009b, Paterson 2006b, Paterson 2007), a topic which Hetherington's (2003) research explores within the context of museum space, and which has also been studied in relation to SCUBA diving (Carin-Levy and Jones 2007) and tourism more broadly (Richards et al. 2010). Vision and the visual are once again legitimate topics of inquiry since

falling victim to the labels; 'disembodied', 'privileged', 'distancing' and 'objectifying' (Nash 1996, Rose 2007). Since the 'sensual turn' vision has been somewhat overlooked in favour of the previously understudied senses. Hawkins (2010) has noted that 'the argument of the eye' needs to be re-established and reconsidered within geographical thought, not avoided altogether. In same the way, Wylie (2006) has argued for a reconceptualization of the relationship between vision and the landscape, which does not fit with a Cartesian or Kantian perspective. Wylie argues that we should consider 'looking as a perceptual actualisation of landscapes and self, of materialities and sensibilities' (519), such that the landscape is the means by which we see, not that which is seen nor a way of seeing. The re-embracing of the visual is particularly evident when it comes to the current trend of using more experimental, visual methodologies (Crang 2003, Hahn 2007, MacDougall 2006, Pink 2006, Rose 2007). As Rose (2007) argues, academics are becoming aware of the fact that visual media are able to capture the 'texture' of places. This is reflected in the work of Scarles (2009:466) who has researched the role of visual imagery within a tourism context and proposes that 'visuals and visual practice exist through the fusion of all senses'. Relating more specifically to a specialized (underwater) 'habitus' though, Gislen et al (2003) explain how the children of South East Asian sea gypsies have developed the ability to see clearly underwater without the use of goggles, by learning how to constrict their pupils.

The special issue of Social and Cultural Geography (6:5) on the practices of music and sound provides a thorough overview of the ways in which researchers are engaging with the sense of hearing in multiple and complex ways. Anderson *et al.* (2005) highlight a shift towards studying the practices and performances associated with hearing, and making sounds and music, rather than considering these as a

'text'. It is argued that 'sensory and sonic registers are frequently neglected and this is to the detriment of embodied and lived registers' (Anderson et al. 2005:641). As a collection the papers argue that sonic experience should be considered a 'central problematic' as this would allow a politics 'sensitive to geographical complexity' (Anderson et al. 2005:643). Aside from this collection, research has similarly considered the role of sound in affecting experience, particularly of the cityscape, and by studying artistic mediation (For example Cameron and Rogalsky 2006, Crang and Travlou 2001).

When taking into account proprioception, I have found the physiological literature on (outer) space travel particularly interesting, for as Massion *et al.* (1993) argue, it offers some parallels for studying the body underwater. A concept which has been embraced by NASA, who have recreated space stations in giant pools to simulate a reduced gravity environment, in which astronauts may train (as seen in episode 1 of Dr. Kevin Fong's *To Boldly Go*). Such studies tend to be carried out almost exclusively through controlled, quantitative experiments in space shuttles (for example Gurfinkel *et al.*'s (1993) study on spatial orientation). Clement's (2005) *Fundamentals of Space Medicine* contains detailed descriptions of the alterations to sensuous perception experienced by cosmonauts who were present on a selection of space missions since the 1980s. With the diving body remaining an understudied topic of research, the findings in these papers shed light on the experiential nature of a key aspect of diving: floating and the commonly stated notion that scuba diving can feel like flying (Dimmock 2009b).

As the topic of mobility is explored further within academic literatures, a number of studies concerning kinesthesia have emerged. As noted in the previous chapter

Spinney (2006, 2009), Borden (2001), Saville (2008), Sheller (2004, 2007) and Merriman (2009) have all considered the reconfiguration of our sense of kinaesthesia. These studies point out the importance of considering the interconnections that exist between bodies and technologies, and in particular they reinforce how equipment/bodily prosthetics and technological tools have the power to manipulate our understandings of space. Whilst the mechanics and technologies of the car provide opportunities to alter, enhance and extend sensory experience, so do the material appendages and technological tools of the diving body. By enabling access to sub aqua space and facilitating movement once there, I turn to the ways in which these sensory alterations become apparent in the empirical section of this chapter.

The above studies present distinct moments in which the role of one or more senses is/are heightened so that the surroundings are perceived consciously in novel, enchanting, scary or vivid ways, or by contrast, when sense perception becomes numbed, routine, banal or unreflexive. Whilst previous research which focused on the senses, particularly vision, tended to treat each sense as distinct, the literature reviewed here argues instead for the importance of studying the interrelations which exist between the senses. Indeed the combination of sensual perception, or 'ratios of sense' alter how tourist land/seascapes are experienced and the malleability of such ratios is what results in novelty, an essential aspect of the tourist experience.

This chapter addresses the gap in embodied, sensually focused research on diving specifically but also within tourism and underwater geographies literature more broadly. Within a dive tourism context this chapter also attempts to link debates

prevalent in geography and sensual anthropology, notably phenomenology and landscape studies, with tourism studies.

5.3   Sensing Underwater Space

Because of the properties of water, the role of vision changes significantly, and divers' quotes make it evident that it is impossible to consider vision without also considering touch. Whilst on the one hand, vision is distorted underwater to become less accurate as a perceptual tool, on the other it simultaneously makes up for the body's inability to transport habitual land based practices to the ocean depths.

Underwater, nearby objects appear 33% bigger and a 25% closer than on land. Furthermore, the scattering and absorption of light rays from the sun not only reduce visual acuity so that the fine details of many cues are lost, but make distant objects seem further away (Adolfson and Berghage 1974). The deeper one goes, the more the long and shortwave sections of the colour spectrum are filtered out, so that light soon adopts a greenish-blue colour, known as the Tyndall effect - which is worsened in turbid waters. Watching back footage of themselves, novice divers commonly noted how vibrant and colourful the reef looked on the screen in comparison to their real time embodied encounters. For example Hannah noted, *'I remember being disappointed with the colours of our last reef* [which was 8 meters deeper than those previous] *but looking now I can't see why, it's gorgeous!'*

With few divers showing interest in the technology of my camera, it was not surprising this was a topic commonly remarked upon. A diver's mask, with clear plastic glass, does not counteract the Tyndall Effect. The camera though, with its

integrated red filter captured scenes similar to those seen on television and in photographs: the reef as novice divers often expect it to be, the reef as it has been constructed on the screen and reproduced in the mind. Hannah highlights the ease with which technologies have the power to alter perception of previous experience; rather than questioning the film, she instantly questions her visual memory. The lesser mediated real time experience did not conform to Hannah's preconceptions of what dive space would be like. Similarly, on the theme of mediation, is the role of the mask in itself. Whilst Hannah's quote highlights that the colours of the ocean environment will be different in real time experience to those seen on the screen, or at least until advancements in mask technology are aligned with vivid media representations, there are also issues of fogging or leaking, and as I will discuss in relation to touch, '*pinching*'. Leder (1990) argues that there is a direct relation between the proximity of body regions to the organ of sense perception which infers the extent to which it will disappear from consciousness. Extending this to the diving prostheses, the same can be said about the proximity between the sensory organ and the piece of equipment. For the most part the mask is barely, if at all perceived, a plastic plate that becomes part of the diver. Rather than something which is looked at or from it is a material which is looked through. At such times the act of seeing is taken for granted (even when what is seen may be remarkable). Reversed though, the mask can throw the body off guard and disrupt the seamless flow of action for the novice divers who are not well practiced in the act of mask 'clearing'[3]. The research participants noted how commonly they had 'issues' seeing clearly. James states;

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[3] To clear a fogged or leaking mask underwater, divers must tilt their heads back, push on the brow of the mask (which breaks the seal around the bottom of the mask causing it to flood) before blowing through the nose to refill the mask with air.

'It's like when you're wearing glasses and you eat soup or whatever and they steam up…but ALL THE TIME! In the end I got so tired of trying to clear my mask I'd leave it longer and longer before clearing cos I don't like the feeling of all the water rushing in when you clear it. It's all weird enough down there anyway, let alone when you're straining to even make out which diver is the instructor half the time!'

Given that the learners were experiencing such issues with just the mask, it is not surprising that other aspects of the equipment would also cause further trouble and confusion for them. Perhaps unaware that the instructor and dive master leading her dive were far less encumbered by the equipment than herself and the other learners, Sasha was surprised at how rarely she and they would notice the interesting marine life before having it pointed out to them;

'I don't know why but I didn't seem to find anything exciting myself, just generic fish and coral. Unless John pointed stuff out I'd have been pretty disappointed. Like, the sting ray under the rock and the eel were the best bits but unless they'd have swum past my face I don't think I would have seen. Between blankly looking around and fiddling with my BCD[4] and stuff I didn't have much time for anything else.'

Feeling at odds with her equipment, Sasha found herself sacrificing distant visual perceptions of the environment so that she could concentrate on controlling her

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[4] Buoyancy Control Device

body. Her disappointment at not seeing wildlife seems to stem from an expectation that wildlife is easily spotted. However, unlike on land (and in edited film footage), events and objects don't mostly happen and reside on one axis and furthermore humans aren't the principal acting agents. Underwater, things that may require attention could be below or above, and the ocean's inhabitants have their own practices and agendas to carry out, which the diver must become familiar with to get the most out of the experience. Thus, like Hannah, on encountering the seascape Sasha's preconceptions gleaned from edited representations, resulted in the 'natural' environment being considered firstly, more difficult to negotiate and secondly, less 'rich' in wildlife than she had expected. The narrative promoted through tourist agencies, tour operators and dive schools, that the underwater world is there awaiting discovery, contributed to her experience of the seascape as the reality failed to match her expectations.

Furthermore, whilst distances are harder to perceive, colours are less vivid than expected and technologies flag up the act of seeing, vision is given the task of roaming haptically across the seascape in a bid to make up for the disuse of the hands for touching. As noted in Chapter 3, 'haptic-visuality' or close-vision (Reigl in Paterson 2007) is a common topic of study for those interested in the cross-modal relationship between the senses (Taussig 1993). For the learner divers this was a particularly evident shift in sensory perception. Where on land the eyes might have a reduced role in the act of touching (as the hands are less likely to be stung or damage coral), the learner divers were by contrast reliant on them to perceive the varied surfaces of rock and coral. Sarah states, *'to look at, the corals have an amazing variety of textures, and they are so detailed: hard, soft, spiky, tree like, they are so alien!'*

As Straughan (2010) discusses in detail, for SCUBA divers, the act of touching is complex. At once one is drawn in to an otherworldly and extensive selection of textures, yet touching these fragile structures is not only deeply frowned upon but, they are often poisonous too. With practice divers learn to control their flailing tendencies and swim with their hands clasped together in front of them, a way of being that not only demonstrates experience but also 'good form'. Within the institutionalized set of bodily practices promoted by PADI, a diver with clasped hands signifies control and a conscious act to minimize the touching of coral. At first this feels awkward and the learners were often shown to unclasp their hands before using a finger to push off or hold on to a rock, or similarly to use their hands to propel them through the water in a bid to regain control of their buoyancy. Yet as the divers acquired more skill they were able to control their buoyancy without using their arms and so allow them to hover at a close enough distance from corals and sea life to allow 'the eyes themselves to function like organs of touch' (Marks 2000:162). Leder has explained that, the bodily distribution of modes of disappearance is specific 'to the vagaries of current action' (1990:105). Thus the fingers can disappear from thought to allow the enhanced use of the eyes when the venoms and fragilities of the ocean floor make it safer to do so. Finally, pertaining to vision and touch, the creatures of the deep are equally perceived to be so alien that their textures often provoked exaggerated responses in the divers, as the following example shows.

'Eeeeeeew, that was so gross! I had no idea it [a large sea slug] *was*

there. I just lost my balance, and put my hand right on it. As I pushed

off it felt squishy… though not as squishy as it looks… Bleuuuurrrr'

(Sarah)

In time with her outbursts of disgust Sarah flapped her hands in front of her, and screwed up her face before shuddering. As Cushing and Markwell (2011) note, 'objects of disgust are viewed as contagious…affecting people through sights or smells and, less often sounds' or in this instance texture. However, in not just an aversion to the physical touch of the slug, 'but to its essence' as well (Cushing and Markwell 2011:168), Sarah elaborates her sensuous engagement as she explains how she had previously *looked* at sea slugs in enough detail to conclude that they would *feel* 'squishy'. Sarah's surprising sensual realization caused her to shudder and shake her hands, a reaction of disgust, a transient ripple of sensation which travelled down her spine, through her torso and her hands bringing them to consciousness and illustrating a cross modal instigation of sensory perception.

Considering divers do their best to refrain from actively touching the marine environment, aside from employing their hands to use their equipment, for the most part the sense of touch is largely felt passively underwater. Temperature and pressure changes, or even the pinch of a mask on the face are aspects more commonly noted than the cutaneously felt texture of corals for example (as I have argued above these kinds of observations tend to be made by the eyes). Furthermore many of the associated sensations of touch are relatively constant underwater and are often forgotten about, for example the feel of the wetsuit against the skin. The constant contact between the materiality of the suit and the body works efficiently yet silently, beyond conscious though. Thus, to be touched is often to instil shock or fear as the dive participants describe;

'I hate it when you don't realize you've drifted into those stick like corals and they touch your leg, it makes me jump!' (Claire)

'I keep forgetting that people can be above me, so I get worried when I swim into a fin or something that I've touched something alieny!' (James)

Underwater, divers continually touch and are touched by water; they may get cold, feel pain on the eardrum and in the sinuses, they may be cut by coral or barnacles, get bitten by sea creatures or even simply get salt in their eyes (Cater 2008). These interactions are what make up the divers' relationships with the underwater environment, acting as moments of dysfunction, alerting the divers to parts of their bodies.

Increased pressure is perhaps one of the most 'otherworldly' aspects of diving, and its effects on the body are the compromise required to enjoy the feeling of weightlessness. The deeper the diver goes the more pressure is put upon the body, an environmental stimulus which tends to manifest itself in the ears, the mask and the sinuses, and when at depths deeper than those descended to by the research participants, the pulmonary and circulatory systems. To avoid building up pressure and consequently pain in these areas of the body, learner divers are taught to *equalize*, the process of pushing air into the affected area to refill the space (in the eustachian tube in the ear or within the mask) left by the original, but now condensed, air.

Figure 9 Research participant equalizing

At first equalizing is a conscious task, when divers feel a build up of pressure or pain, they have been taught to hold their nose before blowing through it in order to force air from the lungs into the inner ear. At such times, like when fogged, the mask once more is 'lit up', described by one participant as *'a plunger that sucks your eyes out'* (Simon). However, over time as Allen-Collinson and Hockey (2011:340) have noted, 'divers become skilled at making these small, improvised, continual adjustments to their air pressure so as to avoid bodily pain and discomfort, becoming attuned to their pressured aquatic environment' intuitively, without waiting for the cue of pain to instruct action.

Feeling the current of the ocean on the skin allowed the divers to become attuned with the water's movements and consequently allowed for a deep(er) connection to

'nature', a caressing of the body by the environment. The divers who contributed to this research wore short wetsuits but they argued that it was 'nice' to feel water directly on the skin of their arms and legs. This permitted them an unmediated awareness of the 'real' temperature or the tickle of plankton as it brushed past in a current. By contrast though, some divers felt the wetsuits gave them a sense of safety and distance from venomous tentacles and abrasive corals. This is particularly true when only short wetsuists are needed as is highlighted by Dave;

'I surf a lot in a full wetsuit in the UK and for one it makes you less flexible, but also with my wetsuit I don't really feel as 'at one' with the sea because all I can really feel is the inside of it [his wetsuit]*, particularly cos I wear a hood, gloves and boots so my sense of touch is really numbed. This though* [diving in a short wetsuit]*, it's much more intense, not only can you feel the current, but like, other people's bubbles tickle when they hit u from below and then a cleaner wrasse will make u jump by nibbling at a scab...'*

Similarly, with no wetsuit, the feel of the ocean's temperature changes occur initially on the surface of the skin. Geurts (2002) has argued that heat can be considered as a form of touch, not only being felt on the body's surface but also within. While bare skin allows for direct perception of temperature, it is at the risk of becoming too cold too quickly.

The role of hearing, like vision, is similarly hindered in its land based function yet is augmented in terms of a new function. Whilst above water sounds fail to penetrate to the ocean depths, the density of water dramatically reduces the working power of the vocal cords, and contrary to Cousteau's (1953) depiction of the ocean being a

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Silent World, being underwater is far from quiet. Underwater sound travels around five times faster than it does in air (Adolfson and Berghage 1974). As such, divers not only have less time to react to sound stimuli, but the viscosity of water also affects the way in which sound waves are converted into nerve impulses (Straughan 2010). These aspects cause considerable trouble for the human ability to locate the origin of a noise; 'sounds appear to come as if from nowhere. The location of a friend, or foe becomes a matter of dangerous conjecture, and reverberant sounds mix with direct sounds into unintelligible jumble' (Bauer & Torick, 1996 in Adolfson and Berghage 1974:126). As the regulator drones on repetitively and the coral ticks, boats whiz by above and dive masters try to get the attention of their respective groups by tapping metal pokers against their tanks, sound can induce a feeling of disorientation. Thus hearing is less the tool for communication but retreats from an active role to perceiving ambient noise.

> *'whenever I zoned out looking at some fish or something I'd hear tapping on a tank and assume it was Sam trying to get our attention…it often wasn't him though and most of the time I couldn't even tell where it was coming from, the person tapping must have been so far away'* (Simon).

Yet whilst hindered and confused in this sense, previously imperceptible internal bodily movements, reactions and processes become audible. For novice divers this is at first, often an alarming shift in perception that is beyond normalized expectations of what being underwater will feel like. Such aural intrusions can rupture performance and are the result of the diver's primary auditory receptive mechanism shifting from air to bone conduction (Adolfson and Berghage 1974). Julian was recovering from a cold when he learnt to dive and despite being advised

to delay his open water dives until he had fully recovered he proceeded nonetheless. I recorded him on his first dive at 10 meters below sea level pointing manically at his forehead. Watching himself on the screen he noted;

'Oh God, I thought I was going to die, as we descended I could hear this high pitch squeak coming from my forehead and it felt like someone was stabbing a knife through my brain. This 'eeeeeeeeee' noise kicked up an octave, sounded like the noise a radio makes when you tune it, and then suddenly it stopped as I felt a blob of liquid come out of the corner of my eye, then it was gone'.

Similarly but less alarmingly Hannah and James, went on to talk about their own perception of noise, *'I tick…the whole time I am underwater my temple ticks like a clock, it doesn't hurt but sometimes it moves around a bit, sometimes it speeds up and then slows down'* and *'I tend to focus on the noise of my regulator, that seems to drown everything else out'.* These sensations highlight that contrary to land based experience, underwater sound tells the divers less of the environment and those others residing within it than it does of themselves and their own bodily processes. The difference in pressure causes usually imperceptible bodily processes to become perceptible through another sense, in this case hearing, in addition to pain. Sometimes sound is the only way in which the body communicates a state of being, and at other times sound merely draws attention to other bodily processes (for example James' awareness of his breathing).

The most remarked upon change in human perception when underwater though is commonly quoted to be the most appealing aspect of diving: the feeling that a

drastically increased environmental viscosity has on the body, allowing for an experience similar to that of slow motion flying. Cousteau (in Cater 2008) for example, describes;

'To swim fishlike, horizontally, was the logical method in a medium eight hundred times denser than air. To halt and hang attached to nothing, no lines or air pipe to the surface was a dream. At night I had often had visions of flying by extending my arms as wings. Now I flew without wings.'

(Cousteau 1953:16).

Thus the ocean, with its vast tracts of emptiness in conjunction with its currents and swim throughs[5] provides a distinct environment for the learner divers to discover new means of travelling through and inhabiting space. At such times, Saville argues, it is possible for a 're-enchanting of the body in place' (2008:893), where we are offered unrivalled potential to engage with the freedom space has to offer. Yet to be able to negotiate underwater space calls on a complex set of sensory interactions, which take time to refine and understand. Underwater we require vestibular, somatosensory and visual modalities to keep our balance (Simetacek 2002) and to maintain a horizontal rather than vertical bodily orientation. Whilst the cilia in the inner ear can carry on in their land based *modus operandi*, sometimes a lack of visual cues and/or the grounding touch of land upon the feet (or in this case stomach) can trouble the seemingly effortless act of travelling and hovering underwater. Studies on microgravity environments have illustrated that it is those who have spent extended periods of time in such an environment who are able to

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[5] A series of, or a singular rock which can be swum around by entering and exiting through different passageways.

move around gracefully, without performing unnecessary actions (Clement 2005). Experienced divers can hover statically for minutes on end to look closely at small creatures or to avoid drawing the attention of shy/dangerous underwater beings. By contrast, for the learner divers this was not the case. Controlling body positioning underwater is related to the change in volume/density of the body over the course of a dive, which can be controlled on a small scale by the lungs. Thus even though the majority of the research participants were able to make themselves neutrally buoyant with their BCDs they had yet to integrate their lungs into the sensorimotor system. Lee provides an example;

'I found maintaining buoyancy ok so long as I was concentrating on breathing slowly and deeply, as soon as I started looking at fish or whatever, or trying to understand instructions I'd end up all over the place and then start using my BCD'

Over the duration of the PADI course some divers became so accustomed to breathing in such a way that not only could they stay level but they could even deliberately manipulate their air intake and exhalation to travel smoothly over coral and rocks. Consequently, through practice they had been able to attune their lung function to their proprioceptive and kinaesthetic sensibilities, freeing them from the need to perform inefficient adjustments to their equipment. In addition, when travelling in the desired direction a current can be used for transportation, allowing the diver's body to literally 'go with the flow'[6]. Thus, incorporating the muscles of the diaphragm and the chest, as well as an awareness of environmental affordances,

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[6] Dives are often planned so that drifts can be taken advantage of, and boats will pick the divers up down current of their drop off point.

into the kinaesthetic sensibility, highlights that the diver's sensorium is altered by putting to use muscles and embodied practices that are considerably different to those used to achieve the same ends on land.

When considering proprioception in relation to the diving body, it is evident that it not only comes into play to determine the body's position in relation to the ocean surroundings, but must extend to the diving equipment too. Hannah notes,

> *'I found it hard enough remembering where my spare regulator and the gauges were on my body, let alone the inflator hose- that kept floating around above or behind me, or getting hooked under my armpit, I could never find it!'*

Just like the cosmonauts in Clement's (2005) studies, not accustomed to weightlessness, looking down would seem the most likely place to find bodily appendages. However, linking back to the quotes on touch, Hannah's lack of awareness of where her dive equipment is located in relation to the rest of her body highlights the need to be perceptive to what is above as well as bellow, in front and behind of the body.

Above I talked of the internal bodily noises and pains the participants spoke of, for example the 'ticking' Hannah could hear and the high pitched 'eeee' noise Julian mentioned. A final note on the interoceptive sense of viscerality brings further attention to the fact that the senses are in relation to, and feed off, each other. As Leder (1990) states, the viscera have a significantly smaller number of sensory receptors compared to the proximate senses. Consequently, for the

most part they go about doing their jobs without our notice. Furthermore, he argues that 'the viscera seem most able and most articulate in relation to dysfunction' (Leder 1990:40). Thus it is not only when we are sick, but also when the body is yet to learn how to negotiate an environment that we are provided with an opportunity to think about the 'foreignness' of the inner body, or those 'alien' internal organs which normally elude us. Beyond the diver's control such internal bodily noises seem uncanny (Leder 1990). Not consciously made, yet produced nonetheless, they trouble the unity of the body, 'in experiential terms, one becomes aware of the recalcitrant body as separate from and opposed to the 'I'' (Leder 1990:88), a surprise that the body could make new and previously unheard of sounds beyond the divers' control. Yet, it was not solely through sound that the divers became aware of their inner bodies. The stabbing pain of the sinuses that Julian mentioned made him aware of his brain. The consciously slow and steady breathing described by Lee made him aware of the inflation and deflation of his lungs. Integrated into his understanding of volume, he pictured the surface area of his lungs as they expanded, intentionally forcing them to their limits, before exhaling and repeating the process rhythmically. Another research participant illustrates the bodily depth, at which fear and apprehension can be manifest,

> *'We followed the eagle ray for about 5 minutes, it swam so fast that all my attention was focused on it, I was completely engrossed and it didn't occur to me to look around. When I ran out of energy I looked down and freaked out. My stomach turned as I looked round and saw nothing, not in any direction'* (Mark)

Like vertigo or acrophobia, being disorientated can call forth internal bodily reactions to a situation, with the feeling of apprehension for example here seeming to originate from the stomach - a gut reaction like that felt as the body begins to fall, when a lift starts to move or we look over the edge of a precipice.

5.4   Conclusion

In this chapter I have attempted to contribute to the increasing attention being given to the body, subjectivity and the experiential aspects of tourist activity. By exploring the role of the senses in dive tourism this Chapter seeks to illustrate the complex, changing and inter-relational connections tourists make with the underwater seascape. By situating the chapter within a phenomenological context, I have sought to challenge dominant approaches to tourism studies which often take for granted the practices and performances of the tourists themselves. Furthermore, in conjunction with the previous chapter I have similarly attempted to bring the rarely studied seascape into the remit of contemporary landscape studies within geography. Here I have illustrated how underwater sensual shifts occur and new bodily skills are required in order to negotiate a distinct tourist space successfully. Being away from the habitual security of land, the divers' bodies showed themselves intensely and noisily, as 'the disruption of world relations, the telic demand for interpretation and problem resolution, all combine[d] to compel awareness' (Leder 1990:92).

Touching and hearing are both described as somewhat redundant in their land based modes, but are given new roles for perceiving. Vision inherits the role of feeling the seascape and must be used in acts of communication. Touch may be all

that signifies the presence of others, when they are yet to be seen and difficult to hear. The ears pick up internal bodily sounds, draw attention to visceral squeaks and clicks just as fear or apprehension can draw attention to the stomach, the spine or the brain. Less able to *touch* and less aware of the surroundings, divers are more conscious of being *touched*; by currents, bubbles, corals, fish, the equipment, other divers. Furthermore, obvious absences in this chapter are smell and taste. Not once did the learner divers comment on the smell or taste of the seascape, probably due to the fact that when diving, the nose is blocked by the plastic seal of the mask and is not even used to intake air and the mouth draws in homogenously neutral dry air. These aspects call for new ways of performing in space in conjunction with an integral set of equipment.

Masks must be cleared now and again to minimize mediation, the hands are required to learn a form of sign language to communicate, the body must be flipped and the lungs must be managed to control movement. Already lacking the grounding nature of a solid underfoot, proprioception needs also to deal with a set of prosthetics, which must be internalized so that the diver can remember their location on the body and in space, in order to put them to use. The practice of 'equalizing' must be learnt in order to fill the body-equipment spaces of the ears and the mask.

Whilst attending to the equipment was the prerogative of the previous chapter, divers often included technology in their sensuous descriptions of experiencing the underwater world. Thus equipment was further expanded on in this chapter, but with a closer focus on body-equipment rather than equipment-landscape, as was the task of the previous chapter. Thus it was reinforced that on the one hand the

equipment comes into being within the seascape, for the most part barely mentioned; the equipment is forgotten. Underwater weights are no longer heavy, no longer angular blocks of lead that dig into your spine. The wetsuit that causes a diver to overheat on the boat becomes the second skin that allows for endurance underwater. Fins don't trouble balance and induce tripping tendencies, but are the means by which divers propel themselves effortlessly over significant distances. However, whilst adapting the body with fins, a mask, a tank, buoyancy systems and a weight belt enables this escape to an alternative sensory environment, it is at the same time that which re-minds and separates the divers from the environment. Until fully understood and integrated into body techniques, lack of skill and the equipment become the source of *dys*-appearance, a foggy or leaking mask troubles vision, an over/under inflated BCD hinders kinaesthesia and a full wetsuit numbs touch. This heightening of bodily focus and the acquisition of novel skills at times of disruption, illustrates that being open to experiencing new environments can enrich and redefine our knowledge of the body. Thus, it can reinforce that the 'body is always a field of immediately lived sensation [...] Its presence is fleshed out by a ceaseless stream of kinesthesias, cutaneous and visceral sensations', it is just that with practice and perfection of skills, (as well as environmental understandings) these aspects of experience *dis*-appear so as to open the body up to yet further processes of fine tuning (Leder 1990:23).

I have tried to demonstrate that the re-arrangement of the sensorium for divers allows for a perceptual experience that is vastly different to the way we feel in/on land. Getting away from land based sensory cues literally allows for a different way of being to land based encounters. These are sometimes unpleasant, enchanting, playful, alarming, frustrating and liberating. Nevertheless, presenting the body with

such opportunities not only enriches understandings of bodily capabilities and functions, but also of the underwater environment itself. Whether divers find this novelty enchanting or terrifying, or something in between, as yet this is a relatively unexplored *subject* within tourism and *context* within the broader social sciences. Novelty is often sought by tourist and tourist divers, yet as descriptions of sea slugs, fogged masks and disorientating seascapes exemplify, novel experiences are variously produced and not all elements of the processual encounter contribute positively to the activity. Therefore teasing out the intricacies of novel and enchanting ways of being in and perceiving the seascape, offers opportunities to link literatures on landscape and the senses, with the politics and economics of tourism, a quest that to date has been rarely performed.

The following chapter bears traces of the arguments put forward in the previous two and combines a further two themes, hybrid materialities and intertextual memories. Whilst turning to an autoethnographic tone, hints of sensuous engagements with my own equipment and the environment are still evident, yet, as noted in Chapter 4, with increased skill comes increased possibility for movement and perception and more time for underwater contemplation. Thus, for the most part the micro scale descriptions of encounter which have been analyzed here, for me as a more experienced diver required less attention, allowing for deeper and more thought provoking engagements with the seascape to emerge (although, I do not wish to suggest that all divers of a similar ability will encounter *SS Thistlegorm* as I do).

6   Deep Ethnography: Witnessing the ghosts of *SS Thistlegorm*

6.1   Introduction

If ships have stayed largely beyond the remit of geographical interest, then it follows that embodied research on shipwrecks fails to even register as a conceivable topic of inquiry. Not surprising given the logistical complexities of accessing such sites, let alone communicating and recording 'data' once there. In this chapter I briefly re-tell the story of *SS Thistlegorm*, a four hundred and twenty foot casualty of the Second World War. Today the ship rests at the bottom of the Red Sea forming arguably the most structurally and content rich wreck dive site in the world. As noted in the preface and methodology, unfortunately due to the timing of my visit to *SS Thistlegorm*, I had yet to acquire the skills or resources to recruit research participants, nor film and host audiencings with them, a practice I believe would have enriched this chapter and broadened it beyond my own personal experiences. However, this was not possible, and so through an auto-ethnography of the site I experimentally attempt to demonstrate that the over and done with materialities of shipwrecks are worthy of discussion and pertinent to contemporary geographical debates. Thinking through notions of haunting and materiality, I will argue that the objects and beings found at wrecks are so situationally transgressive that their competing material signification (in the form of decay, biological take-over and their potential to evoke intertextual memories), has a noteworthy influence on the practices and performances being played by those who visit the site.

The notion of hybridity has been seen as a major development in academic thought, particularly with reference to dispelling fixity and singularity of meaning (Harraway 2004, Whatmore 2002).Working under the influence of hybridity geographers have begun to write of the differing embodied affects, that are felt and produced by those who experience sites of obvious tension in terms of the meanings attributed to the things and atmospheres which furnish them. Whether it be the tension between past and present, the real and the imagined or the natural and the cultural, ghostly and haunting environments have emerged as popular topics of academic research. Humans connecting, feeling or being affected by intangible others/things/bodies throughout their daily and otherwise routines have been studied notably by academics such as Edensor (2005a, 2005b, 2005c, 2005d, 2007b), Gordon (1997) and Bell (1997). In this chapter I seek to open up these geographies to the underwater spaces of shipwrecks in order to consider the ways in which history comes alive, is (re)performed and is distorted during encounters with sunken artefacts, colonised passageways and alienating environments. To do this I explore the textures and life forms of *SS Thistlegorm*.

Simon (in Crang 2010:1084) has noted, "we all know how ships are born, how majestic vessels are nudged into the ocean with a bottle of champagne. But few of us know how they die. And hundreds of ships meet their death every year. From five star ocean liners, to grubby freighters". *SS Thistlegorm*'s demise and rediscovery is interesting and well documented. Therefore to contextualise the chapter, in the next section, I outline *SS Thistlegorm*'s late history. Following this I explore the concept of hybridity, to consider the ship's re-birth as a natural cultural ecosystem and also in terms of temporality, to consider how 'ghosts of the past' infiltrate experience of the present. Before concluding I present an autoethnography which details my journey

of exploration from dive boat to sunken ship and back, twice over. Throughout the chapter I want to highlight that it is possible to take the contemporary, land based geographical debates of materiality, haunting, memory and place meaning to the ocean depths, and to consider the shipwreck as the knot which is the means by, and the point at which, these themes come together. Consequently, *SS Thistlegorm* is seen to be an 'other space' where nature-culture, past-present boundaries are visibly in flux, where history is brought back into the present and relived through interactions with encrusted artefacts. The chapter is presented as a two dive tour of the ship in terms of these two binaries. Thus the description deals with notions of evocative materialities as well as considering the simultaneous decay and biological takeover of the ship. However, although these two themes are presented as distinct moments of obvious connection (with the first dive largely concentrating on nature-culture and the second past-present), they cannot be thought of in isolation. Rather both weaved through and emerged throughout the diving encounters and have only been drawn out separately for the purpose of clarity in writing up.

6.2   A History of *SS Thistlegorm*

SS Thistlegorm is a sunken World War two cargo ship that lies beneath the Red Sea, between the reef of Sha'ab Ali and the Sinai Coastline. For divers visiting Hurghada or Sharm el Sheikh, *Thistelgorm's* structural remains are one of the most popular attractions. Resting at thirty meters below sea level on a sandy bed, *SS Thistlegorm* is accessible to most divers and the destruction of a large section of its superstructure makes for novel routes of exploration. At peak times the wreck can have up to 30 dive boats moored to it on a daily basis and overcrowding below water is common, particularly when weather conditions are favourable.

With a length of one hundred and twenty six meters, a seventeen and a half meter beam and a capacity of 4898 tons, Ecott (2007) argues that *SS Thistlegorm* provides one of the most exciting wreck dives in the world. Constructed in 1940, the freighter was destined for Alexandria to supply British troops with equipment. The equipment ranged from small scale items such as Wellington boots, medical supplies and ammunition, to large scale vehicles including two locomotives, complete with accompanying cars, as well as tanks, trucks and motorbikes.

Having set out from Glasgow, *SS Thistlegorm* had made the long journey south, round the Cape of Good Hope and back north up the West African coast, to the Straights of Gubal. The shorter more direct route through the Mediterranean was deemed too unsafe. As the ship lay at anchor on the 6th of October 1941, in the so called 'safe zone', it was targeted by a long range German bomber that had travelled from Crete. Struck twice towards the rear of the ship, the two bombs set off a subsequent explosion of the on board ammunitions located in hold number four. The stern was blown apart and nine seamen perished in the incident, with the remainder of the crew escaping to the nearby *SS Carlisle*. John Kean's (2009) book devoted to the history of *SS Thistlegorm* tells the story of the ship and its crew members from its construction in Sunderland to the night of its demise the following year.

Fifteen years after the event, with the tragedies of the Second World War over, but not forgotten, Jacques Cousteau and his team of 'underwater scientists' set out from Marseille on a wreck seeking expedition. Travelling south through the Golf of Suez, he and Frederic Dumas had flagged up *SS Thistlegorm* on a nautical chart, believing

it to be a promising find. Accounting for positional error the duo sailed the Calypso in 'zig zag sweeps' until they noticed a significant shape on the ship's echogram (1963:82). The Calypsonians were allegedly the first to re-discover *SS Thistlegorm*, although other sources claim that it had never truly been 'lost'. Collings (2008) states that local fishermen had known of its location the entire time, yet even so it is unlikely that anyone would have dived the site. Following a preliminary dive by Dumas and Falco, Cousteau decided to return to *SS Thistlegorm* for further exploration, on their return to Marseille. They moored the Calypso up at the wreck for two days to film its structure and contents. Featuring in the Palm d'Or winning documentary *The Silent World* (1956), and forming a chapter of his 1963 book *The Living Sea*, Cousteau's videography and literary descriptions provided information on the ship's whereabouts and structural quality for all to explore.

Despite being witnessed by many, Cousteau's depictions of *SS Thistlegorm* failed to attract divers, in part because recreational diving was still in its infancy. It was not until the early 1990s that *SS Thistlegorm* began to attract significant numbers of tourists, when the towns of Sharm El Sheikh and Hurghada, on opposing coasts of the red sea, began to develop into Egypt's most popular diving resorts. Since then the wreck site has received over half a million visitors. Having outlined the history of *SS Thistlegorm*, the chapter now turns to relevant recent academic literature on haunting and materiality, so as to contextualise my motivations for highlighting the ship as a potentially interesting research site.

6.3 Geographies of haunting

Peters (2010:1267) recently stated that the liminal spaces of ships and the sea "may well be sites that are specially suited to investigations concerning spectrality and magic". Further, she argues that studying ships in this light would offer possibilities to consider the "folding and blending of past and present in material manifestations". In this section I span the literature of geography's dealings with spectrality, hauntings and ghosts, or what has been called 'spectro-geographies' by Maddern and Adey (2008).

Bell's (1997) article 'The Ghosts of Place' was one of the first to deal exclusively with the connections between ghostly beings and their residence in certain places. Whether they be friendly or threatening, his varied examples illustrate that ghosts of place are at once highly subjective yet situationally specific 'beings', whose presence tells us a lot about the ways we feel and relate to certain spaces. Ultimately Bell describes ghosts as the haunting manifestations of social experience of place, and rather than 'being given to us' (Bell 1997:830), ghosts are projections that *we* populate our surroundings with.

Since Bell's publication, ghosts, have figured in a variety of guises within geography, with some being more loyal to their popular culture configurations than others. Most however, have been, to varying degrees, conceptualised as mysterious affects (Holloway 2006, Wylie 2005, Wylie 2007b), sensations (Edensor 2007b, Pinder 2001), distorted acts of memory (Bell 1997, Crang and Travlou 2001), or the spectral traces of an author (Derrida 1994, Wylie 2007b). Furthermore, whilst some consider ghosts within the everyday spaces of the city or the home (Bell 1997,

Pile 2005), others have concentrated on more extra-ordinary spaces. For example, for Gordon (1997:64), ghosts are "haunting reminders of lingering trouble" (xix). Consequently, Gordon believes haunting to be of particular relevance to sites where acts of extreme wrongdoing such as slavery or torture have occurred (as the ghosts of such locations are politically important in highlighting the ways in which the past still has a hold over the present). Other, less routinely experienced hauntings include those of tourist sites (Bell 1997, DeLyser 1999), derelict ruins (Edensor 2005a), or the sites of religious/spiritual encounter (Holloway 2006, Holloway and Kneale 2008).

Alongside this breadth of ghostly manifestations and locations there has been an increasingly emergent body of literature that puts materiality into the 'spectro-geography' mix. Tim Edensor's work in this sub genre is particularly prolific (2005a, 2005b, 2005c, 2005d, 2007b). Edensor argues that interacting with the over and done with architecture of industrial ruins and their varied scattered and defunct content, encourages a human comportment that is free from the standardized and regulatory framework of city space. This 'alternative sensual realm' allows the body to perceive in a more holistic and richly experiential manner. Such experience he argues, can "conjure up the forgotten ghosts of those who were consigned to the past" (Edensor 2005d:311). DeSilvey is similarly concerned with the potential decayed and rotting materialities have as intertextual memory aids (2003, 2006, 2007). Though not dealing explicitly with the concept of haunting, DeSilvey does argue that historical artefacts complicate our experience of the present by bringing forth memories and sensations associated with the past (2006).

It is these latter two authors whose work I believe is of most relevance to this chapter, largely because the figure of the ghost in these is no more than an unexpected recollection of an old memory or a musing of relations instigated by the touch of a semi-decayed and forgotten object. As Holloway and Kneale have noted, "what we are dealing with when a space becomes haunted, is the disruption or dislocation of normalized configurations and affordances of materiality, embodiment and space" (2008:302). Thus, in this chapter I see hauntings as the uncanny moments of wonder and confusion, the random and complex mental and sensual associations that emerge as a result of interaction with the structure and contents of *SS Thistlegorm.* The "tangle of temporal linearity" is what the chapter aims to explore (Maddern and Adey 2008:292), the intermingling past and present, real and imagined, absent and present *in the present*. It is for this reason I feel that Bergson is owed a mention here.

In *Matter and Memory,* Bergson (2004:24) states;

> There is no perception which is not full of memories. With the immediate present data of our senses we mingle a thousand details out of our past experience. In most cases these memories supplant our actual perceptions, of which we then retain only a few hints, thus using them merely as signs that recall to us former images. The convenience and rapidity of perception are bought at this price; but hence also springs every kind of illusion.

Although Bergson's 'details' seem more micro-scale than some of the recollections and affects I explore, with regard to *SS Thistlegorm*, his theorisation of memory

remains relevant. During the time I was diving, my perception of *SS Thistlegorm* was impregnated with often barely relevant recollections, reinforcing the subjective nature of my engagements with the ship space.

> In short, memory ... covering as it does with a cloak of recollections a core of immediate perception, and also contracting a number of external moments into a single internal moment, constitutes the principle share of individual consciousness in perception, the subjective side of the knowledge of things.
>
> (Bergson 2004:25)

Thus temporalities 'collide and merge' in a seascape of juxtaposed 'asynchronous moments' (Edensor 2005d:324). Furthermore, it is not just *SS Thistlegorm*'s temporal associations that call forth these obscure traces of memory and association, but also its transgression from the human world, its semi natural, semi man made structure and its partial destruction and disarray, that elicit a confusion and enhanced mode of sensory perception.

Due to controversy surrounding whether or not 'accidentally' sunken ships can be classified as artificial reefs (as opposed to the strategic and deliberate sinking of ships), *SS Thistlegorm* would probably not 'technically' fall under this category, however the characteristics of deliberate and accidentally sunk wreck sites are often similar (Stolk et al. 2007). Shipwrecks occupy the benthic zone of the marine environment (Stolk et al. 2007), are capable of supporting wildlife populations and they are often characterised as being 'artificial habitats'. Along with others (Pitcher and Seaman 2000), I have an issue with the term 'artificial', implying that the fish,

chorals, turtles, cetaceans etc. which reside in or near man made structures are by definition less 'natural' or 'real' in comparison to those which reside in self instigated sites. Irrespective of the 'naturalness' of the site, academic research carried out on the great lakes of America, has highlighted that divers and tourists are more keen to visit shipwrecks that *weren't* deliberately sunk (such as *SS Thistlegorm*), because of the added historical interest (Vrana and Halsey 1992), thus fitting with Lawton and Weaver's (2001) argument that: ships are a form of 'modified space' where 'a recreational user can experience a combination of social and natural history', 'a novel setting for humans to interact with natural environments, and […] cultural heritage' (Stolk et al. 2007:336). For me, by the time I came to diving in Egypt, the underwater world was not so alien but *SS Thistlegorm* as my first wreck dive brought back the sense of unease I felt when first descending to the ocean depths.

Framed thus, we can begin to see the mixing in of two bodies of literature that have at their core a shared interest in dispelling fixity and singularity of meaning. Yet whilst these are the focus of the chapter, they are not the only aspects of the assemblage which are in operation. The site specificity of *SS Thistlegorm* makes these already contradictory and overlapping interactions further complicated by the wider environmental characteristics of the ocean, before we even begin to consider the technological and equipmental tools and prosthetics which are needed to navigate and survive underwater. Thus, not only is the essence of the temporal and the natural/cultural central to experiencing *SS Thistlegorm*, but as I discussed in Chapter 4 and further highlighted here, what it means to be human/cyborg is also at the critical juncture of shaping the event. Whilst I briefly extend this notion of the more than human (SCUBA-photographer) habitus from Chapter 4 to introduce the

next section -the descriptive autoethnography- and occasionally throughout the chapter, it remains the focus of Chapter 4, only really picked up to highlight my own experience of technology to give further contrast to sill development with regards to the previously studied research participants'. Before turning to the descriptive section of the chapter, I first want to make transparent the means by which *SS Thistlegorm* was approached as a site of inquiry.

6.4   Autoethnographic practices

For the purpose of this chapter, I use autoethnography to make apparent the fleeting relations, hauntings, interactions and perceptions of *SS Thistlegorm* which I perceived, to highlight its affective and transformative nature. Thus, *SS Thistlegorm* has the potential to open up contemporary geographical debates associated with materiality and haunting, to the ocean depths.

Following Hockey (2006:184), I must "make visible some "accountable" knowledge in terms of" a diving biography. In December 2009, before the main bulk of my fieldwork and before I learned to become a videographer, I travelled to Sharm el Sheikh to visit the wreck of *SS Thistlegorm*. The aim of my trip, as Wylie (2005:234) puts it, was to consider, 'a space and time within which I might engage with and explore issues of [sea] landscape, subjectivity and corporeality' within the context of a particular 'type' of underwater site- the wreck, whilst also incorporating essential training needed to undertake the rest of my fieldwork. As part of this and before I could dive the site, I had to pass the PADI Advanced Open Water course. As an element of this course and subsequently to it, I learnt some rudimentary skills in underwater photography and 'wreck' diving. Although I did not initially consider

photography to be of significance to this chapter, my trials and tribulations of learning to use the camera actually enriched my experience and understanding of the environment. Consequently, some of the images I took whilst diving *SS Thistlegorm* have been included in the text.

The weather conditions, at that time, were not particularly favourable, with gusty winds whipping the sea up into a messy chop and a strong current running from the ship's bow to the stern. Despite seasickness aboard the dive boat, between and after dives I wrote a detailed dive log of my experiences. It is upon these logs which this chapter is based, in conjunction with the literature on haunting and nature/culture hybridity: the two themes which characterised my experience of *SS Thistlegorm*.

To present the 'data' evocatively and to aid the flow of the chapter, the events that I write of in the next section have been edited and reconfigured temporally. It is true that in writing up the chapter in such a way, just like the souvenir DVDs in Chapter 8, the 'encounters' essentially became over(t)ly 'affectual' version of events. However, this not only facilitated the 'journey' of the narrative but also allowed me to present the ecological 'take over' of the ship in the first dive and to concentrate on haunting/memory and materiality in the second. The 'tours' of *SS Thistlegorm* were experienced repeatedly in the orders presented, however the descriptions of the sections of ship and my dealings with people and technologies have been picked from different entries from my dive journal. Initially a newcomer to deep (sub 30m) and wreck sites, to start with, I had no idea what to expect. The atmosphere, the scale, the structure and the physical demands were all new to me, my only anticipation was that this new experience would be 'different' to any other diving experience I had known. Consequently, although the site was dived repeatedly over

the course of a week, the first few dives made for much 'richer' journal entries (echoing my justification for researching learner divers in an novel environment from the start), and therefore form the majority of the next section.

6.5   The Journey

After equipment assembly and a three hour windy journey on the 'fast' boat, we arrived at the site and began transforming into human-fish. First I turned the airflow on my tank and began to don a rented, tired and dated five millimetre wetsuit. The sun was blasting down on the boat and the struggle to squeeze my body into the neoprene worked up a sweat. Then the weight belt; I tend to be floaty towards the ends of dives and the high salinity of the Red Rea made this even worse. The four kilos of lead strapped round my waist to counter this dug deep into my hips and as I simultaneously swung my spare arm into my buoyancy jacket and stood up, the weight of my tank pushed the lead further into my spine. Drastically top heavy my thighs burnt as I bent over to pick up my fins and mask from equipment box number 8- my designated box for the week. Once all strapped in and buckled up, I checked my 'buddy's' equipment - all was fine, as was mine. I took a drag from each of my regulators, just to make sure, and on cue the captain blew the ship's horn- the boat was securely anchored and it was safe to jump in. Laden with equipment, we were the first pair to hobble to the back of the boat and as we took it in turns to slip on our fins and spit in our masks the sea rose and fell, slamming against the dive platform and testing our balance. Leading the way, one by one we took giant strides off the platform and gave the 'ok' sign to the deck staff. Seconds later the Red Sea drew each prostheticised body under (Merleau-Ponty 1962).

6.5.1 Dive 1

Leaving behind my land based habitus, following an anchor line into the depths; the remnants of a ship became visible. Eerie, dark and monochrome, it was not an inviting sight. The entirety of its scale was not taken in at first, for it took a good minute or two to adjust to the environment. The rising mid morning sun above largely failed to penetrate the turbid waters, increasing the scattering and refraction of its rays, denying any assurance as to what may lie ahead.

Figure 10: *SS Thistlegorm* **pictured from rear**

Sinking, further and further, to compose on the sandy bottom (30m meters below sea level) insignificance in the face of such magnitude was realised. Against a backdrop of nothingness, *Thistelgorm's* form trailed endlessly off into a murky horizon, where visual acuity was no longer and where structures merged into little

more than dark blocks of grey set against a deep blue. Breathing was an effort and the turbulent stream of bubbles I exhaled rattled the regulator against my gums and noisily massaged the side of my face. Save my 'buddy' the others had dispersed now, searching for isolation and escape from the traces of routine mass touristic exploration this dive site has come to be subjected to (Kean 2009). Kneeling on the sea bed amongst the metal debris, the wreck appeared void of any life. No longer within its intended realm, *SS Thistlegorm* felt deserted, a melancholy reminder of the loss and destruction of the Second World War.

Orientated and inquisitive, we made our way to the rear of the ship, passing over the hull. Rubble like in appearance, the matter that fans from the scar of the ship is ambiguous. Hold number four, the impact zone of two Luftwaffe bombs which subsequently caused the explosion of ammunition stored on board, 'is almost unrecognisable as a ship' (Cousteau 1963:87). Here the inside spills out and the outside has been washed in, mangled and deformed, 'the mutilated plates were twisted and rippled like kelp' (Cousteau 1963:87), the point at which the ship twisted on its spine, almost broken in two.

We swam closer to the vessel, and I noted the strain of breathing. Since descending our lungs and the air in the tanks had condensed; unlike above water, inhaling was no longer a passive act but a conscious effort, reflecting what Leder (1990) has called a "disruption in world-relations". Yet to be at one with the environment, I had begun surveying my bodily performance.

Spilling from the scar, beneath the chassis of a jeep, a box of four inch shells could be seen. One had previously been scrubbed clean by a diver and through a thin veil of

dark green slime, the engravings were easily visible. I didn't bother to translate the Roman numerals, but was surprised by the date inscription of '1929'. The shell box is but one of many relics of *SS Thistlegorm's* dense and disorganized `temporal collage' (Lynch 1972), encompassing materials from the 1920's to the occasional contemporary discarded fin or torch.

Figure 11: Shells (ammunition)

My attention turned to focusing my camera on the shells and to maintaining buoyancy. As the captured image (Figure 11) presented itself on the camera's digital screen, I was reminded that the ship was not as dull as it seemed. The absent colours became momentarily present through the red filter on the lens (Gates 2010); allowing rust, algae and coral to emerge as distinct colonisers of the steel remains, no longer subsumed together by their similar crusty texture, but more akin to DeSilvey's 'technicolour moulds' (2006:319).

I felt the cold flush out the arms of my ill-fitting wetsuit. Although the water was a temperate nineteen degrees, a shudder took over my back and shoulders. Underwater the body loses heat faster than in air (Adolfson and Berghage 1974), and it was not long before I felt the chill deep in my bones. Unlike reef dives, *SS Thistlegorm* has a different aura. Darker, deeper, and despite being man made it is an alienating place.

Swimming anti-clockwise around the outside of the wreck the dominant structure of the anti-aircraft cannon came into view. Here the ship leans so precariously it appears to be held upright by a single rope from above. In line with the ship the cannon has swung round to lean portside, aiming ominously at the sandy bottom bellow.

Figure 12: Cannon

Looking up the barrel, I had been told, makes for a well composed photo. But as a newcomer to the art of underwater photography, my task ran far from smoothly. Like most of the ship's exterior, my subject was covered in coral, and fish life was more abundant. Their silhouettes scattered back and forth in the background, shying away as I moved and returning as I became still. Despite its intended use, this tool for combat, death and destruction has become 'converted to peace' (Cousteau 1963:87), the foundation upon which an ecosystem has formed, the residence of bat fish, turtles and crustaceans profiting from the 'procreative power of decay' (Bataille in DeSilvey 2006:320). After three hovering and flashless attempts to capture the scene, I remained steady enough to succeed (Figure 12).

Figure 13: Propeller

Rounding the stern of the ship the propeller juts out from the sand (Figure 13). The two emergent blades were taller than me and both were covered with a patchwork of algae and coral, themselves at war over space, they camouflaged its surface

merging with the sandy bottom, making it difficult to see where the metal ended and the sea bed began. A lone star fish (Figure 14) lay protected from the current beneath the fin roof and as I turned to point 'him' out to my buddy a school of bat fish hurried past and disappeared off to the shelter of the ship's hull (Figure 15).

Figure 14: Star Fish

As Edensor argues, beyond the remit of 'social circulation', the ocean's processual and ecological rhythms highlight that human made objects don't solely have social lives, but chemical and biological lives too (2005a:100). Whilst fish swirled around the propeller's blades as though they were 'waves of the sea', the sharp streamlined edges of steel have been softened by filaments and fronds (Cousteau 1963:87) and corroded by salty water. Thus, the marine life seems to offer, a 'future possibility, a hope' that along with tourist interest gives *SS Thistlegorm* purpose again (Gordon 1997:64).

Figure 15: Bat Fish

As I finally became accustomed to the awesome surroundings, I felt another trickle of cold run up my arm and travel round my wetsuit, lighting up its failure (Heidegger 1962). Breathing was still a strain and the visibility began to diminish seemingly by the second. All these aspects acted as a reminder that *SS Thistlegorm* has transgressed from the human world, seeming ironic that above land these characteristics would be likely to have a negative impact on the experience. Underwater though, these are what make exploration unique, interesting and undoubtedly popular; the cold, the physical effort, the required bodily technological mediations and prosthetics, the absorption of colour and light, the distortion of sound, the erosion, demise and colonisation of its form. Had the ship not sunk, had it not transgressed it wouldn't be nearly as interesting, enchanting, chilling (literally and metaphorically), structurally and atmospherically. These elements are what make for adventure, but they simultaneously and paradoxically are what detract from it.

I checked my air gage for the first time; only sixty bar remaining[7], but only thirty five minutes down. Normally an efficient breather, the depth and overbearing surroundings must have made me gasp. We fought the current, paddling with force. With the visibility worsening our immediate surroundings seemed not to change -a homogenous superstructure to the left and featureless blue to the right- it was difficult to tell if we are even moving forward. No longer inquisitive toward the relics, my attention had turned to seek out our anchor line, tied somewhere to the middle of the ship. Finally and with less than the recommended air left to ascend we latched onto the target for the final few minutes of the dive. I looked down upon 'the petrified ship' at only five meters below sea level (Cousteau 1963:85). Despite my previous scepticism of such oft quoted remarks, for the first time as a diver, I felt as though I was flying. It's one thing to look down upon a reef, another to see a ship's contours from above. That said *SS Thistlegorm*'s scale is so vast that it doesn't invite a static contemplative gaze, the bow and stern were beyond perception and from that distance neither my torch nor the camera's filters could recover the colours lost to the sea.

6.5.2 Dive 2

Much shallower this time at around 18 meters, we sank to *SS Thistlegorm's* deck. There's a large opening in the floor where the hatch cover has been blown away. Sheltered beneath the remaining sections of deck, rests a selection of 1940s vehicles. An upright motorbike, stands as if on display, just like the one Steve

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[7]roughly 1/8th of the tank, divers normally begin ascent when they reach 50bar

McQueen rode to flee the prisoner of war camp in The Great Escape- probably worth a fortune had it not suffered such a fate. Somewhere on land there is an identical one surfaced by Jacques Cousteau, along with the captain's safe and the ship's bell that chimes eerily in *The Silent World*, accompanied by a female voice that whispers its inscription of '*Thistlegoooorm*' (Cousteau and Malle 1956). These recollections, some of real events and some of fiction, bring forth an 'imaginary past', making *SS Thistlegorm* seem uncanny, the site at which "temporality and spatiality collapse" (Vidler, 1999 in Edensor 2005b:836) .

Circling below deck not far from the bike is a jeep, windscreen in tact. A female diver, sat at the wheel. I recognised the luminous pink fins- it must have been the excitable American woman from 'my' dive boat. I wasn't sure if I approved of her mimicking practices. It seemed simultaneously disrespectful yet a good photo opportunity. Here it can be seen that the ruination of *SS Thistlegorm* presents a confusion over, and absence of boundaries. The plethora of possible lines of action afforded by the wreck seems to encourage a human comportment counter to that traditionally expected in a land based heritage site. As Edensor notes, 'in ruins [one] becomes strangely reminiscent of childhood sensory immersion and of the pleasurable negotiation of space largely denied to adults' (2005a:837). The look but don't touch ethic is replaced by a playful urge to act out or mimic ship performances, 'conveying a sense of corporeal empathy' towards those passed (Edensor 2005a:840), bringing the rusty and encrusted materialities of the ship temporarily back to their original use, no longer banal but remarkable in their contemporary transformed state and site.

I decided not to copy the female diver and instead returned to the motorcycle- the others had moved on and there was enough time to take a photo (Figure 16). I had not perfected fiddling with tools and maintaining my buoyancy and my fingers had started to get stiff with the cold. Between dives the flash had accidentally jammed on. As I aggressively handled the camera casing, my head collided with the edge of the remaining section of deck. It didn't hurt, but I counted myself lucky, angular intrusions and rusty edges were plentiful. On the plus side I no longer needed the colour filter but now the light from the flash bounced off of the plankton and the floating matter, previously barely perceptible in itself, it considerably reduced my subject's visibility.

Figure 16: Motorcycle

A testament to my state of jumpy unease, I felt my knee 'land' on something. I looked down and inhaled from shock, then instantly became calm as the moray eel I thought I'd made contact with became a rubber tire emerging from 'years of sea

dust' (Cousteau 1963:80). Prehistoric looking, with their dominant jaws, beady eyes and pointy teeth- *SS Thistlegorm* seemed right for them. Cavernous, dark, and far from the human world, the perfect place for the forgotten and unsightly, or as Cousteau describes; 'the rats of this forsaken garage' (Cousteau 1963:85).

Figure 17: Tank

As I let the remaining air out of my BCD and inhaled, my buddy and I both rose 'through' the deck to the captain's bridge. On my way up I spotted a tank (Figure 17) resting on its side, so 'thickly dressed' with *Ectopotra* it had almost lost all contours and was recognisable solely by its distinctive wheel and track design. The bridge itself no longer conformed to the conventions of tidiness. It represents of a kind of loss, of life and unfulfilled wartime duty. It was here that I thought of people, of sailors, of work-men and the captain. The rest of the ship didn't feel lived in the same way, more for storage and transport than being, walking, working. My buddy

and I kept rising further up over the deck's ladder (Figure 18) and ventured right-off the side of the ship.

Figure 18: Ladder

We swam through an opening to the captain's quarters, moving amongst 'the presence of those who are not physically there' (Bell 1997:813). We entered the empty chamber, gutted of all remains, far less exciting than Cousteau's (1963) descriptions in *The Living Sea*.

Over the years the litter of corked bottles and porcelain crockery has been filched by trophy seekers, wanting material evidence to prove their exploratory prowess. Such objects, handled by the sailors, are imbued with an 'aura' (Benjamin 1999), irreplaceable, along with the ship itself; they are the means by which we interact with the past. To the left a doorway led us to the bathroom which contains only a bath. Although minimal in its furnishings it was not difficult to imagine what went

on there. I recalled movie footage of my father's World at War DVDs and passages from Kean's (2009) historical accounts. Somewhere near the bridge a heroic sailor saved another by running barefoot across the burning metal deck, receiving the George Cross for his efforts. Furthermore, the captain wasn't one of the nine who died the night the ship fell victim to enemy attack, he returned to England and grew old, but his presence is still there, it was his bath. As DeLyser says of Bodie-California's surviving ghost town- discovering *SS Thistlegorm* is an 'intertextual experience' (1999). For me, the ghosts of *SS Thistlegorm* are not just the traces of those who lived and worked on her, who travelled the long journey from Glasgow, round the Cape of Good Hope up to the Straights of Gubal, but also those who dwelt in my memory, and who were brought back to being through my interaction and exploration with/of the ship. As Gordon explains; ghosts are social Figures, 'of inarticulate experiences, of symptoms and screen memories, of spiralling affects, of more than one story at a time' (1997:25). The captain's bridge (Figure 19) then, 'evokes the process of remembering itself, its impossibilities and its multiplicities' (Edensor 2005a:834).

Figure 19: Captain's Bridge

My air gauge told me it was half time so we moved out and on to the nose of the ship. I spotted 'Pink Fins' posing again, this time acting out a flying Kate Winslet, from that well known scene in *Titanic*. I wondered if she was singing along to Celine Dion's accompaniment of *My Heart Will Go On* in her head. She overtly exemplified Edensor's (2005a:834) argument that 'the qualities or affordances of particular kinds of space, those full of random juxtapositions, clutter, obstacles, and numerous pathways, [also] demand a fuller performative, corporeal engagement with space and hence with memory.' The ghostly animation of material things by means of the elusive and overlapping perceptual information they bring to attention in the diver exemplify our multiple and tenuous relations to 'clutter' rather than the clutter itself, they are what produce 'an excess of meaning, a plenitude of fragmented stories, elisions, fantasies, inexplicable objects, and possible events' (Edensor 2005a:834).

Figure 20: Clown Fish

Back over to the starboard side, there's a semi-covered passageway. We travelled part the way along and emerging from a bundle of unidentifiable matter we spotted a clown fish family nested deep within a blanket of *Heteractis Magnifica*, more commonly known by its grandiose title 'The Magnificent Sea Anemone'. Both flora and fauna were brightly coloured under my torch's gaze and stood in stark contrast to their dim surrounds, almost iridescent their hideaway formed 'an impressive display of animal [and plant] adaptation to available resources' (DeSilvey 2006:322). Since learning to dive I must have seen hundreds of clown fish and at the risk of dangerous anthropomorphisms they seem to represent the sedentary nuclear family of the fish world. The fascinating texture of the anemone, invites touch- fuzzy yet of a distinct form and radiant yet seemingly translucent. This symbiotic relationship between flora and fauna is species specific. The clown fish have bought immunity from the anemone's poison at the price of life long cleaning services and fecal fertilisation. Concerned (but not too concerned) that they probably didn't appreciate flashing lights; I only took a couple of photos (Figure 20). The miniature fish hid deep in the anemone's tentacles, and the 'parents' swam close by to protect 'him'- retreating when I thrust the strobing plastic box in their faces. Neither 'artefact nor ecofact, but somewhere in between', *SS Thistlegorm*, as a home to such creatures, has begun to take on an 'ecological function' (DeSilvey 2006:323), a 'blurred terrain where nature and culture are not so easily (as if they ever were) distinguished and dichotomised' (Harrison et al. 2004:9).

Figure 21: Moorish Idol

Harassing over, we propelled our way back into the ship's interior, through an opening in its side. It could have been a window or a door, I didn't notice and it seemed irrelevant, after all, 'processes of decay and the obscure agencies of intrusive humans and non-humans transform the familiar material world' (Edensor 2005d:318). This section of the ship was empty too, just a maze of rooms which have acquired additional entrances/exits and the disorder brought on by a major explosion. 'Wires [hung] in garlands from overhead' forming a maze like selection of passageways for the equipment laden diver who is clumsy and bestowed with an oversized turning circle (Cousteau 1963:86). Whilst *SS Thistlegorm* does chime with Edensor's notion of ruins allowing for reminiscence into childhood sensory immersion, there is still a hint of adult/rational caution to be had, in my mind at least. Cables and metal edges drop down from the ceilings, accompanied by snake like chorals and sponges. I checked my gauges once more and became wary of

entangling my second stage[8]. As a slight claustrophobic above sea, the thought of becoming ensnared or blocked in with a limited air supply made me apprehensive. To make sure this didn't happen I became much more aware of my positioning in relation to the surroundings, and whilst compensating for an impoverished sense of proprioception I looked up to check my clearance. In doing so I noticed that the water was glimmering on the ceiling of the chamber- 'a quicksilver mirror that distorted our reflections' (Cousteau 1963:86). I raised my hand and it passed through the mirror into air, the exhalations of those who had been there before me. Holes have been drilled all over the ship's body to prevent such build ups, and from the exterior, bubble trails could be seen mushrooming and morphing almost endlessly from wreck to surface, set against a background of dancing rays of light. Into the next chamber and out through the roof, *clang*, my tank chimed and vibrated as I collided three times with the edge before judging my width correctly. A deep breath, I could relax- the route to the surface was clear should anything happen.

Before ascending back to the dive boat we looked back to the deck. Amazingly a complete train engine has held its position on the starboard side and beside it amongst the crumpled metal, the engine's cars lie deformed and imploded under the weight of the ocean. Lashed to the deck, it seemed odd that most of the vehicles on board are upright. Not only have they survived years of corrosive processes, but most impressively they didn't even topple when the ship was bombed, nor when it

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[8] Regulator hose

collided with the sea bed, whilst the other locomotives and similarly errant items were blown many meters from the wreck.

6.6   Conclusion

In this chapter I have sought to descriptively explore a particular underwater environment, the once human realm of *SS Thistlegorm*, in its current resting place 30m below sea level. Through witnessing, capturing, touching and interacting with the ship, its materialities and its avenues of exploration I have begun to demonstrate that places beyond normal remits of exploration can prove interesting and useful as geographic field sites. *SS Thistlegorm* presents a vast array of research possibilities, and here I have chosen to touch upon two key themes. As a displaced remnant of the Second World War, *SS Thistlegorm* illustrates that objects/vessels/buildings have natural as well as social lives. *SS Thistlegorm* is currently becoming re-humanised by dive tourism, but it is simultaneously becoming wilder by the minute- as corals grow and as fish reside at the same time as the ship's cultural information is scattered, filched and colonised by the sea's currents, materialistic divers and homeless species. The ships' architecture and its previous uses interact with its transgressive occupation of the sea bed and its inhabitation by various forms of flora and fauna, such that stairs, baths and cupboards become doubly coded as sites of decay and colonisation. Thus, a sense of loss or nostalgia for times gone bye is fostered, yet equally as the dwelling places of crustaceans, corals, eels and their residues; the barnacles and worm engravings, become 'traced out on the material textures of ruination' (Edensor 2005a:842) highlighting a 'matrix of memory' (Casey 2000:311).

The character of this environment is constructed as chilling and eerie by a combination of its broken and elderly materiality, its signification as a reminder of war, as well as the characteristics of the water itself; not just dark and colourless, but physically cold and full of scattered particles as well as a strong current. Thus I have tried to employ *SS Thistlegorm* to consider the 'density of experience' (Adorno in Gordon 1997:240), the multiple and overlapping politics of space being played out there. Through interacting with the site's materiality, visually and performatively I have explored the potential the dive site has for re-animating the past and considered the ways in which real-time perception is impregnated with our past (Bergson 2004:24). Such that perception of the ship is seen to involve 'an effort of memory', that highlights the mingling of previous images, for example my (non) site specific recollections of Cousteau's filmed dives of *SS Thistlegorm*, general wartime documentary footage, literary articulations of shipwrecks, with perception of the present, bringing 'together all sensible qualities', in an enriching experience yet one that is vastly subjective in its knowledge creation of material things and environments (Bergson 2004:48). As Bergson claims, since perception is inseparable from memory, the past is imported into the present, such that we are constantly driving toward the future, and thus de facto forcing us to 'perceive matter in ourselves' (2004:80).

7   Underwater animal encounters:

The PADIfied body and the creation of the ethically sound diver

Figure 22: Finding Nemo Poster

Historical accounts of tourist activities have long highlighted the role of animals in circuses, zoos, fairs, ecotourism and wildlife tourism, using animals as the prime focus of their experience. The aquatic environment though is relatively inaccessible to the majority of the population, in comparison to land based 'natural' areas. Consequently the general public's awareness and understanding of underwater creatures is typically a mediated affair, gleaned through documentaries, films, cartoons, books etc (Tyler and Rossini 2009). As dive tourism increases in popularity, mediated understandings gleaned from such representations can

become more readily incorporated into, reinforced and troubled by real-time, lesser mediated face to face encounters. Indeed, Hearne "describes the special kind of respect, awe, and delight that results from prolonged engagement with the character and capacities of a particular animal" (in Patton 2003:84). However that is not to say that such encounters are beyond the realm of discursive conceptualisations and institutionalised structures of behaviour, and it also highlights the need for dive practices to be controlled so as to minimize the damage to underwater ecosystems and habitats. After all sustainability and responsibility have become significant subjects of study within tourism literatures, which have consequently opened up deeper and sustained debates concerning equity, equality, rights, justice, and values in regards to what constitutes acceptable tourism practice (Fennel 2011).

Thus the task of this chapter is to deconstruct the underwater tourist-animal encounter, to highlight the ways in which the encounter is made possible, as well as considering how such encounters affect the diver and reconceptualise their understanding of the underwater world and the beings who reside there. To do so I initially outline the discursive means by which the disciplines of PADI protocols construct docile, environmentally sensitive, diving bodies. As Markula and Pringle (2006:44), drawing on Foucault have argued, "the workings of power have proliferated and infiltrated into all reaches of social life – schools, scientific research, the media, gymnasiums, sports fields and the like – so that disciplinary techniques exert an omnipresent influence: power relations are everywhere", including then in the classrooms, pools and dive sites used by PADI's dive schools. Garrod and Gosling (2008) highlight that, dive schools have a central role to play in the control and supervision of diver behaviour. Dive schools and the curricula of their certifying

body (in this case PADI) are often a diver's first point of contact for information on detrimental activities to the ocean wildlife, and they are further well situated to promote good diver practice through education and intervention (Barker and Roberts 2004, Medio et al. 1997). Thus the dive school, as well as the staff and curriculum employed by it, is/are instrumental in the construction of the considerate and skilled diver, who is less likely and better able to minimize damaging dive site ecosystems.

Secondly I go on to consider why some diver-fauna relations are valued more than others, by taking into account the popularly held beliefs and oft represented narratives that permeate popular culture representations. In this section of the chapter I note that whilst many divers' become more knowledgeable and open minded upon encountering underwater beings in the flesh, they may still hold on to previously acquired understandings and misconceptions regarding certain species, which affect their relation to such animals and their embodied actions once in their presence. Thus, employing the Levinasian concept of the 'face' I consider that some underwater beings are variously produced and subjectively responded to, to be more likely to invoke a sense of moral obligation in divers than others.

Finally I consider that personal encounters with underwater environments generally, and in particular the ocean's wildlife, tend to result in an a sense of increased environmental awareness, and a desire to protect (Orams 1997, Wilson and Tisdell 2003). Studying the notion that close contact encounters with wild animals fosters an increased sensitivity toward environmental protection is not a novel task, even within the marine sector (Andersen and Miller 2006, Curtin 2003, Finkler and Higham 2004, Forestell 1993, Orams 2000). Higham and Carr (2003)

noted in their study of sustainable wildlife tourism, that 54% of participants considered their environmental values and actions to be effected by encounters with wildlife and Zeppel (2008:13) argues that "tourism experiences that increase both environmental awareness and positive feelings are likely to generate environmental actions resulting in conservation benefits for marine wildlife and the natural environment". The role of learning within such studies has also been noted and Luck (2003) argues that the terms 'education' and 'interpretation' whilst often used interchangeably within tourism studies, actually have a distinct difference in meaning. Environmental 'education' is argued to be more formal, for instance involving designated teachers to students, in comparison to 'interpretation' which typically involves visitors. In this chapter then I argue that within the confines of the dive school classroom and during training exercises, the fostering of a newly acquired sense of care toward ocean life, is the result of 'education' which is then combined with the personal 'interpretive' learning practices that take place during guided underwater 'tours'.

7.1   Disciplined diving Bodies

The PADI Open Water course represents most people's first opportunity to explore the underwater world (at a depth) and consequently the experience is heavily mediated by this educational context. In addition to learning how to negotiate the underwater environment to achieve personal ends (as detailed in Chapter 5, on the underwater sensorium), there are also a series of taught acts and behaviours which are conveyed in order to minimise harm to the environment and the wildlife. A previous study by Lindgren *et al* (2008) has been carried out with a similar aim. In their findings it was argued that dive organisations such as PADI, whilst being

arguably *potentially* the most valuable disseminators of good practice techniques and knowledge of environmental issues, *in reality* they fail to make good enough use of their position with regard to this. However, what I seek to show here is that, within the context of, on the one hand the fast paced nature of active holiday itineraries and, on the other a model of maximised profit and speedy qualification turnover, PADI actually are actually successful in their aim of rendering learner bodies docile and othering non-conformers, to successfully produce and qualify subjects who can control their bodily being underwater and respect the flora and fauna they encounter once there (or at least this was the case with the 2 dive schools that I worked with for the purpose of this research). Furthermore, PADI instructors seem able to instil this respect for the underwater world, without spending the extended periods of time teaching in depth knowledge of environmental issues, which Lindgren et al (2008) deem necessary for sustainable dive operations to succeed. Thus in order to explore the means by which this at times subconscious performance structuring occurs, I explore the Foucauldian concepts of discipline, docility, the gaze and normalisation, in order to highlight the ways in which the disciplinary power of PADI, has a hold over the learner divers' bodies, in turn producing ways of being (which at times are even beyond consciousness), that are self policing and attentive to the fragility of the ocean's ecosystems. Such an approach to the production of the sporting/leisure body reflects the aims of similar studies (e.g. Chapman 1997, Hargreaves 1986, Heikkala 1993, Kirk 2001, Markula and Pringle 2006, Pringle and Markula 2005), which highlight that culture and power are materially manifest in the bodies of individuals, played out through social relations which are subject to the economies and technologies of control.

Foucault (1977) argues that since classical times the body has been a targeted site for the manifestation of power relations, yet it was the disciplinary practices introduced in the eighteenth century that altered the degree to which control over an individual's bodily practices became augmented, such that the efficiency of movement and internal organisation of the body could also be influenced. Constant control became achievable through the disciplining of bodies, an aspect of embodiment which has become increasingly widespread in today's society where bodies can be rendered docile through manipulation to become efficient with regard to the desired outcomes of an institution or culture. 'A body is docile that may be subjected, used, transformed and improved' (Foucault 1991: 136), or in other words, technologies of domination can mould the docile body so that it becomes useful to these (Markula and Pringle 2006).

The dive classroom, pool and the open water locations used by the instructors and learners throughout the PADI OW course, and beyond then, become sites where discipline is instilled onto the bodies of the learner divers. Through repeated practice of a set of environmentally less damaging ways of moving and witnessing the underwater world, the preferred modes of diving become prescribed and imposed on individual bodies. After all, diver impacts on the ocean environment can be significant. The impacts divers can have on marine environments can include breakage of corals caused by kicking with fins, touching with the hands, holding onto the substrate with the hands or resting against it with the knees. In addition contact made by the diver's equipment can brake corals and stir up sand, as can trampling. Similarly divers can lift sediment from the ocean floor with their fins, and the resultant impact of such activities can lead to changes in animal behaviour and the alteration of feeding habits; particularly in shark based tourism, as well as

causing skin abrasions to rays. Consequently it is imperative that divers are taught to behave appropriately underwater, to minimize their impacts to the environment, for the good of species diversity and richness, but also ultimately for dive activities to be able to prevail and grow, thus expanding and reinforcing PADI's economic and political place within the marine tourism sector.

The most basic and structuring lesson taught instructs divers not to touch anything whilst underwater. Should learners feel the need to steady themselves they are taught to wave at a rock, to check its absence of camouflaged wildlife, before using a solitary finger to push off or rest. Any impulsive tendencies to put the hands to use are minimized by the taught practice of moving around always with the hands clasped together to avoid the temptation of flailing, grabbing or startling wildlife (as was highlighted in the methodological Chapter 3).

Figure 23: Correct hand positioning

Furthermore divers are taught to swim a suitable distance from the ocean floor to avoid damaging the ecosystem with their fins and are similarly encouraged to tuck their alternate air source and gauges into their BCD so as to prevent them from dangling down and crashing into things. Chapter three of the PADI Open Water

Manual is dedicated to introducing new divers to the underwater environment and whilst it is presented in such a way as to be beneficial to the diver, the underlying message is clearly in the interest of environmental protection, in turn benefiting the reputation and growth of PADI. The phraseology encourages pride in good practice, with informative paragraphs reinforced with sentences such as "you're setting a positive example as the underwater world's advocate and ambassador, and on a broader scale you're contributing to a healthier planet- something we can live *with*" (emphasis added) or, "leave nothing but bubbles" (Shreeves 2007:132, 133). Subtle adverts for PADI's "Project Aware" are incorporated into the main body of the text, informing learners of where and how to gain a more in depth knowledge of marine issues. Active interaction with wildlife is almost exclusively considered an inappropriate activity aside from "freeing fish from an abandoned trap or surveying species populations to support protective regulations" (Shreeves 2007:132).

In addition to promoting and teaching good practice techniques, the PADI Open Water course also seeks to reconfigure popularly held assumptions about certain underwater species, laying the blame for occasional confrontational 'instances', such as shark or ray attacks, with humans rather than the sea's inhabitants. For example shark attacks are argued to generally be linked to spear fishing (as wounded fish stimulate shark feeding behaviour), and it is noted that Orcas have never been known to attack a diver, despite the nickname "killer whale". Smaller animals that sometimes are considered aggressive such as rays and eels are deemed to be so only on rare occasions when they have been threatened by inappropriate human behaviour, resulting in defensive retaliation. These educational snippets are presented in a light-hearted way, which further ridicules human behaviour in the face of the ocean's inhabitants, "If a giant arm came in your front door and started

groping around your living room, you'd bite it too" (Shreeves 2007:133). This body of PADI discourse attempts to tackle the 'bad press' some underwater inhabitants have been charged with and further works to reinforce the need to behave in a respectful manner when underwater. After all, as I will argue later, if people do not empathise with an animal then they are less likely to engage in environmental activities to improve its environment, and I would argue similarly that they would also be more likely to act irresponsibly during general dive situations. This reflects Foucault's argument "that the complex workings of discourse were influential in the construction of 'subjects' or, more specifically, disunited or fragmented subjects" (Markula and Pringle 2006: 30). For example, if a person has only ever witnessed sharks through popular culture representations such as Jaws, or in news stories where they have killed surfers or fisherman, then it follows that real-time encounters with them would also involve a narrative of 'survival'. Consequently, little thought is given to practices such as feeding which alter the shark-human relationship, but are ironically the cause of such 'bad press' in the first place.

Furthermore, all of the information provided in the PADI open Water diver manual is then reinforced through a slapstick DVD which re-iterates the book's sentiments almost word for word, accompanied by footage of a brightly dressed class fool (Figure 24), who succeeds in getting everything wrong, throughout the entire length of the film.

Figure 24: The PADI class clown

The aim of this aspect of the training is to provide the learner divers with an opportunity to gaze upon someone not acting in the way they will/have be(en) instructed to. Foucault argues that being able to survey, whilst also being subjected to the gaze of others leads to the construction of a normalising judgement, with failure to act in line with this resulting in punishment; "from light physical punishments to minor deprivations and petty humiliations … for the slightest departures from correct behaviour" (Foucault 1991: 178). Thus the aim of each individual is to at least desire to be normal in relation to the other divers and instructors who make up the social setting, to behave in the safe and standardized ways advocated throughout the course. The message behind the discourse is clear, *"don't act like this humiliated fool* [the class clown on the DVD]*…be respectful and gain respect as a skilled diver"*. The research participants highlighted the actor's jarring antics in the post dive audiencings as they noted their fear of seeming as incompetent as him;

> *"Ah, look at me careering towards the reef. It looks so clumsy. I just kept getting flash backs of that idiot in the film. I found him so cringe worthy and now I'm cringing at my own lack of skill!"* (Sarah)

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Followed by,

"Yeah when you are in the classroom they want you to judge that guy as a ridiculous caricature who would never really be allowed to dive and then you see people kicking the reef and holding on to it, or whatever, and it makes you really judge them in the same way […] if you can't act properly then you shouldn't be there." (Tom)

Here there is a strong message that PADI imbue the divers with, if you lack the necessary skills, you should judge yourself and will be judged by others in the same way as the man in the film was perceived. On the flip side the language used throughout the film and the exercise book fosters a sense of pride in diving well, '*you too can become an ambassador!'*. Foucault's concept of the disciplinary gaze seems particularly relevant here. Having been taught how to behave and move in an appropriate, normalized manner underwater, the divers are provided with the opportunity to witness a disobedient 'other'. The omniscient gaze of the instructor and the other learners disciplines the divers to survey their individual abilities in a way that renders their bodies' docile. The divers police their own actions as the panoptic mechanisms of surveillance are no longer purely associated with the classroom or pool but 'function in a diffused, multiple, polyvalent way throughout the whole social body' (Foucault 1991: 208–209). In the two quotes noted above, it becomes clear that the learner divers are measuring their skills and internalizing the disciplinary gaze upon themselves. Awareness of how 'not to do it', and the structure of dive skill training activities encourages this internalization of the gaze, and was similarly illustrated in Markula's (2003) study of fitness oriented bodies in gyms. Just like the gym goers in her study, who are constantly alert to the possibility

that others within the open space of the main exercise room can see and pass judgment on their abilities, the divers also found themselves comparing their skills and practices to those of the man on the film, in addition to their class companions and the instructor. In her study, Markula highlighted the role of the 'field of visibility', or the arrangement of the setting in which bodily practices are laid out. In groups divers learn skills in front of each other, often awaiting their turn to demonstrate their understanding and ability in a circular formation. Each diver is able to see all of the others in their group. Thus the divers are constantly exposed to the gaze of their classmates and the instructor. As Markula (2003) argues, "Being subjected to the field of such visibility while engaged in physical activity, the exercisers have cast the ever-seeing, controlling eye upon themselves: they take on both the role of the invisible supervisor and the visible inmate" (in Markula and Pringle 2006: 80). Townsend, similarly outlines the practices of learning about the underwater world and the efforts to direct this knowledge production in positive forms by various agencies. He argues that it is important to acknowledge such micro scale practices as they result in divers becoming stewards of the underwater environment which forms their playground (in Garrod and Gosling 2008).

The quotes provided by the research participants and the PADI practices, outlined above, illustrate that education disciplines and normalises dive tourists to render their conforming but biomechanically or physiologically efficient bodies 'docile'. Thus dive instructors, like "fitness instructors, physical education teachers, sport scientists and coaches [act] as 'agents of normalization' (Halas and Hanson 2001:123). They produce in new divers a standardized way of thinking and dealing with underwater encounters, which may be at odds to those previously conceived of through mass media and popular culture representations. The intention of this is to

minimize environmental damage caused by SCUBA divers, yet as I will discuss in the final section of this chapter, the practices of discourse production and normalization also in turn benefit the PADI organization itself.

Having outlined how PADI attempts to imbue divers with such an environmentally sensitive way of being in and thinking about underwater wildlife, in the next section I explore how the learner divers reacted and felt upon witnessing such beings in their natural habitat.

7.2 Encounters

Working on the premise that face to face encounters with wildlife, when accompanied by a discourse that depicts the ocean as a fragile and endangered site, foster an enhanced sensitivity towards environmental issues and species protection, here I seek to uncover the specificities of distinct diver-fauna encounters. Thus, in this section I want to think through what it is about marine encounters which further encourage these pro-environmental conservation attitudes, and in particular I want to consider whether certain animals foster this ethic of care more than others. I do this largely employing Levinas' theory of the 'face'. However, in addition to considering that affinity and respect for animals is the result of perceiving their individual attributes and appearance, I argue that media representations, whether factual or fictitious at least initially contribute to divers' relations with underwater beings.

According to Levinas, the other is not the other due to different sets of attributes, or because he/she was born in a different place, at a different time. Rather he argues

that (Levinas and Robbins 2001:106); "the other is the other because of me: unique and in some manner different than the individual belonging to a genus. It is not difference which makes alterity: alterity makes difference". If our subjectivity is no more than a "pre-ontological relation to alterity" (Popke 2003:303), a dependence on others to make meaning about the self, then for Levinas, ethics must be formed from a fundamental responsibility for the other or 'the face' –not of a singular subject or a group of subjects- but of the 'essence' of the 'other human' prior to any cultural coding (Popke 2003:303).

Levinas' theory of 'the face' highlights a sense of moral obligation to others which is pre-ontological, unconditional and a fundamental feature of our being-human (Popke 2004). However, throughout most of his writings he is dogmatically persistent that it is only ever the face of another *human* which can instil this ethic of care (Calarco 2008, Glendinning 1998). In his book *Zoographies: the question of the animal from Heidegger to Derrida* (2008), Calarco goes to great lengths to explain why Levinas' theory can be extended to animals, I won't repeat his explanation here. Suffice it to say that a particularly poignant moment in Calarco's writing appears when he brings to the attention of the reader a slip in Levinas' insistence on the 'face' only pertaining to human beings. In an interview entitled "The Paradox of Morality" (Calarco 2008:67), Levinas admits that he believes at least one animal being to have a 'face', Bobby, the stray dog that came to visit him every day when he was resident in a prisoner of war camp. In Bobby, Levinas found "a vital force and vulnerability evoking pity". Whilst the learner divers were clearly never in such a sinister situation, the vulnerability of specific species in the face of fishing and mass tourism, and associated with these pollution, overcrowding and general disruption to marine ecosystems, did seem to register in the divers, who were at once (in part)

the cause of such problems, yet equally those most likely to feel for the animals and act in a beneficial way toward them. However, whilst Levinas after much prompting admits that an animal, in this case a dog, has the potential to have a 'face', he goes on to say that he knows not at what point one gains a 'face' (Calarco 2008:68). "I cannot say at what moment you have the right to be called 'face'. I don't know if a snake has a 'face'. I can't answer that question" (Calarco 2008: 68).

Thinking through which underwater beings were more or less likely to foster newly acquired pro-environmental behaviours and attitudes (discussed below), there seems to be some affinity with Levinas' confusion over what characteristics (or following Lorimer (2007), what 'types' of nonhuman charisma)are deemed necessary to qualify a being to have a 'face'. The respondents who contributed to this research spoke of emotional connections with some underwater beings whilst noting their repulsion towards others. As Dobson (2011:89) notes "humans utilise animal representations as 'icons of otherness' (Bishop 2004:107) and they can be used to both attract and repulse humans". For some the affect of certain creatures held true with their pre-conceptions gleaned from the media, whilst for others these were deemed inaccurate. Some divers even failed to correctly identify distinct species, and as such they would transfer their preconceptions onto 'similar' looking species, which often had vastly different character traits and digestive palettes. The combination of such factors seemed to result in conflicting and temporally contingent sentiments felt toward an array of underwater beings. However some generalisations emerged, which I will now discuss in turn.

Big, endangered, graceful and, at one time cartoonised beings, seem to gain the most respect from divers. For example the sublime character of witnessing whale sharks

seems to instil awe, the anthropocentric characteristics of clown fish induce affinity (encouraged by *Finding Nemo*), the grace and serenity of turtles appeal to a particular aesthetic and sea horses represent the epitome of fragility in a changing and dangerous environment. All these seem particularly capable of instilling an ethic of care in the diver. As the following respondents describe;

"It's a shame you weren't with us yesterday. It would have been amazing to get the whale shark on camera. It's unsettling seeing something that big, but so cool, I could have stayed forever. His little eyes seem to take me in and cos their mouths are so wide it looks like they are smiling" (Jonny)

"He he, look at the Nemo fish! They are so cute! Look at the little baby one. His dad is being all protective coming out to scare us off" (Sarah)

"I love that they [Clown Fish] *stay by one anemone, like a home. They are definitely my favourites"* (Hannah)

"On our first dive we saw a turtle, he was so chilled. He didn't care that we were there. We were swimming all around him and feeding him dead coral. He was all covered in algae, made him seem really old and wise, it's such a shame they have mostly gone from here" (Ben)

"Finding those sea horses was just magical. We didn't see much before that and it seemed like Steve was losing hope of finding them. They are just so funny, how they wobble in the water and turn their backs to you but don't swim off, I love them!" (Alex)

Figure 25: Whale Shark

These were just a selection of the quotes relating to these particular animals, and even though I was absent on the days that turtles and whale sharks were seen (I only filmed the last 2 dives of each group's PADI Open Water course), they still came up in conversation regularly as the highlights of learning to dive. Despite their large size, their remarkable camouflaging, combined with the fact that they do not need to broach the surface to breathe like whales, means that sighting a whale shark is far from easy. Off the coast of Ningaloo, on the west coast of Australia such encounters are so valuable in terms of tourist revenue that spotter planes are used to assist with the location procedure. On sighting an animal, tourist boats are directed to intercept it. Typically these boats will hold up to 20 tourists with snorkel gear, who will be split into waves and enter the water with a guide from the company in the path of the shark (Garrod and Gossling 2008). Thus, Jonny's enthusiasm at encountering such a rarely spotted beast completely by chance rather than design, in waters where sightings are much less frequent than off the coast of Western Australia, is hardly surprising.

Furthermore, the link to Disney's character *Nemo*, was a common association made amongst learner divers. More often than not clown fish would be referred to as *Nemo*, and their apparent nuclear family structure, was similarly drawn out. Being able to relate to the animals through these anthropomorphic guises renders their characters closer to our own, and may indeed contribute to a deeper emotional connection to them. As Cater has argued, "in terms of our understandings of animals, the bodies of pets and charismatic megafauna become constructed as 'near' to us, while those we know little about as the 'others'" (Cater 2010:5). From a feminist perspective this has likewise been explored in Besio *et al*'s (2003) analysis of the discourses that permeate dolphin based tourism activities in New Zealand, in which they highlight the parallel maternal relationship between the female dolphins and their calves, with those of human mothers. In addition, linking back to the example of clown fish, Tyler and Rossini (2009) draw attention to the fact that for most of the time human encounters with animals, especially underwater animals, are mediated rather than immediate. They state (2009:45) "animals are rarely present to individuals but are instead represented, for instance in television programs and movies, in digital games and entertainment, in novels, newspapers and magazines, in art and design, in radio broadcasts and on websites, and in countless other media". These cultural referents are not understood in vacuum but can eclipse actual animals, "making it very difficult for people to dissociate representations from reality when they actually encounter wildlife" (Adams 2009:47). This seems to function in a manner akin to experiencing a simulacrum, with reality failing match up to engineered reproductions of it. Whilst the referent is not lost, elements of what was never there either feel as though they are missing or are fabricated by the diver so as not to complicate the continuity of knowledge production.   This is further highlighted in the examples that follow with regards to

lesser appreciated underwater beings, but in the case of clown fish this seems particularly evident. Understandings of clown fish themselves, as well as the wider habitat gleaned from *Finding Nemo;* seem to have erased the individuality of distinct clown fish. Unless they were seen within a 'nuclear family' setting clown fish were exclusively considered to be male and their distressed attempts to ward of human intruders were repeatedly mistaken for 'friendliness' or 'curiosity'.

Species such as rays, Scorpion fish and Moray eels seem to elicit a mixed reaction. Rays for example are often homogenised under the category 'Sting Ray' by those unfamiliar with distinct species, with several participants commenting on the supposed danger of their tails. Research participants noted for example; *"after Steve Irwin, I wasn't getting too close to that guy* [a blue spotted ray (Figure 27)]" (Sian), and "*you were pretty brave swimming in after him* [a sting ray (Figure 26) in cave], *I didn't feel the need to linger round there to be hones*t" (Tom). Yet by contrast other participants, myself included, noted instead their grace and charisma. Indeed, throughout my entire time in the waters of Koh Tao, it was Eagle Rays (Figure 28) which I enjoyed being with the most, as the following research diary extract, detailing my final dive, communicates.

Figure 26: Sting Ray
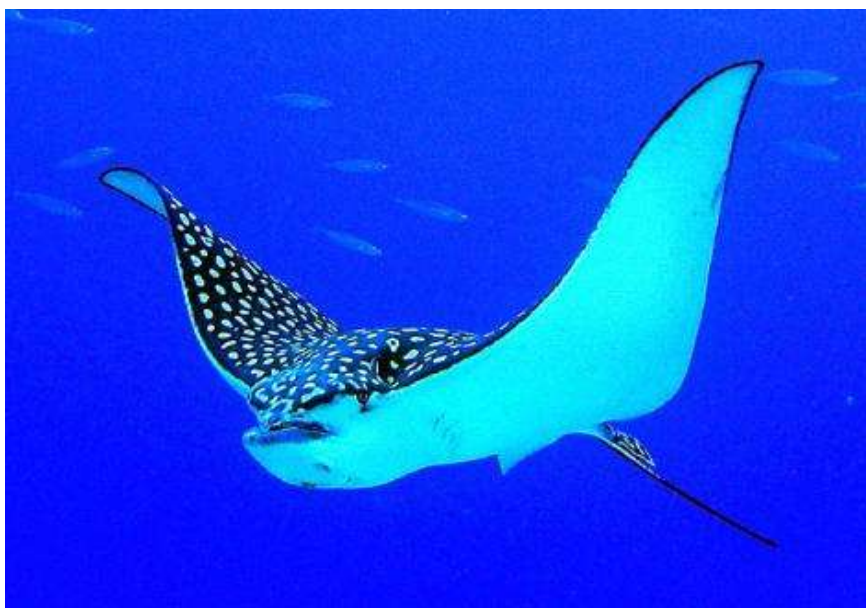

Figure 27: Blue Spotted Ray

Figure 28: Eagle Ray

Drifting, not sinking, it felt more controlled. Down, down deeper. Breathe. Inflate, just a touch. Perfect. Japanese Gardens, my favourite place. I knelt on the sand and waited, looking, looking, searching above. I was so excited! In my stomach I could feel it, I could feel that they'd come. But nothing, I could only see blue and the dancing rays of the sun. We made our way over to the coral; good enough, but only second best. Still, there was time. It's as good as any other reef, teeming with life, Clown Fish, Anemone, Giant Clams, Parrot fish, ornate coral structures, frilly, brain like, delicate little trees. An eel poked out from a cavern, purple with yellow spots. He was ok, but he wasn't the same. More coral, more little fish, a curious giant hermit all taken for granted. With only a quarter of a tank left I tried to barely breathe, to make it last, in case they came. That dive site was their home and they'd been there for months.

I finally spotted them, the majestic duo. I could see two shadows amongst the rays of light, it was them, in the distance. 'Fin, fin, fin harder!' I mentally urged my buddy, we could get to them, if we hurried. The stakes were too high to stay with him. My last chance to see them, my last day, my last dive.

For the 10th and final time we met. I knew now not to chase, or they would go, and I would have to follow. If we stayed vertical they would stay too. Circling round and round, performing just for us. The others didn't know, the others couldn't catch up.

We stayed for what felt like hours, but ended too soon. My favourite place. We watched each ray soar. So elegant, so smooth. They laughed at our appendages and they laughed at our slow pace. We are no match for them and they knew it. We can tell them apart; one has a scar, the elder, larger ray. To the ocean floor, 'he' head butted the sand and rose back level with us, swimming round and round. Such little bodily

action propels them so far. In previous dives I had used all my air trying to keep up with them, succeeding only for short bursts. Once I had been so determined to film them I had completely forgotten about my dive buddy. Unaware of which direction and how far I had followed one of the rays, I found myself without a compass alone, lost, underwater. I pondered my options. End the dive, rise to the surface and hope I could see the dive boat or keep filming and hope I happened upon more divers. Contrary to protocol I chose the later and before long was following the lone ray again absorbed in the activity of filming. 'He' took me right back, to where we had departed from, and there with his companion was my buddy, filming, engrossed, like me.

There is a connection there, at least it feels like it to me. They trust us, they stay close, they show off for the camera and when they did not show up I worried. Fishing lines, propellers, and spear guns are not unheard of. One already has a scar.

Attention back to myself, I breathed in with difficulty, my air was spent. 2m down, it was safe to go straight up and say 'goodbye' for the final time.

This extract, like Jonny's comments regarding the Whale shark he witnessed and the quote concerning the turtle, involve more of a sense of being with than looking at. The feeling that the animal is also engaged in the encounter could reflect a further dimension as to whether divers acquire an enhanced sense of responsibility toward such animals. The dolphin encounters explored by Curtin (2006) similarly highlight this notion. Touching, swimming with, interacting in a multisensual embodied manner seemingly result in a deeper connection to and understanding of the animal, which she in turn argues will more likely result in the participant engaging in pro-environmental activities. Here there are echoes of Bennet's writings concerning

notions of an ethical responsibility to others which is triggered by an 'enchanting' encounter (2002). This is a notion which is reinforced in this chapter and also throughout her follow-up book *Vibrant Matter* (2009), in which importance is attributed to the collective of beings and things which contribute to the encounter, rather than considering the engagement purely from the perspective of the human observer. Throughout both of these books, Bennet (2002, 2009) attempts to expand this notion further, so that we become not only reminded of our mutual being in place and time during such encounters, but also our wider relation to the world and beyond. Whilst am I am respectful of Bennet's aim to give agency and consequently, ethical and political responsibility to all human and non-human actants within the assemblage of the encounter, I find the 'level playing field' attributed to such an endeavour rather romantic. I would argue that the animals involved in the dive encounter clearly have agency and influence on the character, success, and enjoyment of the dive and they can also be involved in constraining/enabling human movement and/or potential for interaction. However, these ocean dwellers are part of a wider 'disenchanting' tale of human development over which they have no (or very little) control. Thus, as I go on to argue later, and more in line with the work of Jamie Lorimer (2007), I consider that it is more the case that the affective (and consequently ethical) element of the encounter is the product of human perception of certain aesthetic codes in addition to a sense of affinity with the animals. Lorimer terms these notions 'aesthetic charisma' and 'embodied charisma' (2007). He argues, "with aesthetic charisma I am interested in the visual impact and affections triggered by an organisms' appearance in an instantaneous encounter. With corporeal interactions I am concerned with the visceral becomings involved in tuning in to an organism over a longer period of time" (Lorimer 2007:918). Therefore, in particular for the learner divers at least, it is easier, and by extension

more readily rewarding, to interact with creatures we see ourselves in, with whom we can share a sense of embodiment, relational interaction, or who have characteristics we would like to see in ourselves (evident in the animals considered here for example by means of grace, speed, co-habitation, wisdom and joy).

Like eagle rays, Moray eels were also variously conceived of, but not only dependent on the observer but also due to size and/or particular species. When substantial in size, moray eels were often thought of as *'creepy'*, *'scary'* or *'snakelike with beady eyes and big teeth'*. Yet when these were scaled down to 15 cm or so they were thought of as *'cute'* and *'fun to play with'*. For example Helen argues,

> *"Ah, he was so cute [miniature moray in a rock crack], look if you held your little finger in front of him and slowly drew it away he'd come out further and further. I don't like the big ones though they are well freaky".*

Sharks by contrast appear to elicit a combination of one or all of fear, awe and respect. As I noted above and in this chapter and also in Chapter 2, the shark encounter tends to be promoted through a sublime narrative of survival against the odds. Dive operators have attempted to commercialise the activity by tempting sharks with bait, in order to increase the likelihood of sightings and also to add drama to the spectacle. It is possible to dive with sharks within the relative safety of a cage or chain mail suit or to enhance the sense of risk by wearing nothing but a wetsuit, whilst watching a guide throw lumps of dead fish out for devouring. Such practices though have caused considerable debate of late as they have been linked with alterations to the sharks' feeding habits, they encourage sharks to certain areas which are often multi-use sites and further have been argued to be the cause of a

change of relationship between sharks and humans, as sharks learn to associate food with people. Thus the negative publicity that results from shark attacks could arguably be the fault of dive tour operators. The high incidents of attacks in the Bahamas led the Cayman Islands, Florida and Hawaii to make shark baiting activities illegal (Carwardine and Watterson 2002), yet the Bahamas and Fiji continue to allow such operations to take place.

The divers who participated in this research were not able to take part in such an organized or staged form of encounter. However, Koh Tao is home to a resident group of infant Black Tip sharks (Figure 29) that can be found easily on the eastern side of the island. This species is not known for its aggressive behaviour, unless food is in the vicinity, yet some divers would refuse to go near them out of fear, with respondents making reference to the news and films to validate their apprehension. As Dobson (Dobson 2011:86) has argued, elasmobranchs, in particular sharks, have a poor public image (which needs to be addressed in order to maximise the potential of conservation strategies). Dave and Gill note for example,

> *"I wasn't going any nearer, you saw what happened to that guy in Australia, and that was while he was fishing! He wasn't even in the water!"* (Dave)

> *"oh, no! have you seen 12 Days of Terror?! Not me, nooo way!"* (Gill)

Figure 29: Black Tip Reef Shark

Such opinions though were not homogenously held amongst all the divers who took part in the study. It was also highlighted that the underwater environment and the dive equipment seemed to provide a distancing role, allowing divers who had previously imagined themselves to be scared of sharks, to be able to enjoy the spectacle of the sharks circling around them, as the following quotes illustrate;

"It's so strange. I was dreading seeing sharks and when I did I was totally fine, almost serene…It's like it's not really you there. You are seeing these deathly creatures just in front of you and it's just happening. I felt almost numb when we were there. And now I'm like: 'wow, I swam with sharks!'" (Hannah)

"It might be a bit extreme but it honestly went through my head, 'I could die here', and I was eerily ok with that. I just thought, well I'd better just appreciate what I'm seeing cos I'd probably get the bends or something if I

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tried to escape. And then when we were away from them I felt amazing, like

I never would have voluntarily gone there but I'm so glad we did." (Dean)

Personally I related to such comments, having always been apprehensive about meeting sharks underwater, my fear had vanished and all I could think of was capturing the divers with the sharks on film, so they could show their friends and families. As Dean argued, it occurred to me that to flee would be dangerous in itself and so I might as well do the best I could to film and witness the sharks. However, both my own and the respondents reactions here highlight a notion of distance, between sharks and diver and diver and fear. Thus whilst for some, these encounters were exciting and memorable they do not convey a sense of relating to an underwater being, in the same way as I discussed above, such as when I related to the rays and Jonny and Alex related to the whale shark and turtle respectfully. Unlike Lingis' (2003:168) notion that "the movements and intensities of our bodies compose with the movements and intensities of […] jelly fish and whales", the encounter with sharks seems to be more representative of a witnessing *of*, rather than a being *with* which differs from the quotes noted above, as a sense of interaction between diver and animal was present. With regards to the shark encounters though, despite the sense of pride that is evident in the divers' quotes, there remains a note of caution or fear in their comments. The sense of enjoyment appears to be attributed to the encounter as an afterthought, a sense of joy at having survived rather than joy at the idea of the encounter itself. After all, both the quotes and my own experience highlight that 'escaping' the situation became a conscious thought. Thus, had it of been possible to avoid the situation altogether, the divers may not have come around to this 'enlightened' (or lesser mediated/biased) understanding and witnessing of the sharks in their natural environment.

In reality, the majority of underwater life failed to even be mentioned by the learner divers in conversation. Some species instilled repulsion in the participants, for example as noted by Sarah in Chapter 5. Sea slugs did often instil a strong sense of disgust in the divers, particularly female divers. The lack of appreciation of smaller, or more common species has been described by Cater to be an issue linked to diver experience. Whilst new divers look forward to seeing the big and 'famous' ocean inhabitants, more experienced divers are seen to gain pleasure from smaller beings such as nudibranchs (Figure 31) (Cater in Garrod and Gosling 2008). Gosling et al (2008:61) similarly argue,

"an initial desire to sight charismatic megafauna is gradually supplanted by a fascination with smaller underwater inhabitants. The most experienced dive instructors are more often than not excited by the most colourful nudibranch (a small underwater slug) than by sharks or turtles. For example the most popular attraction at the Walindi Plantation Resort, Kimbe Bay and Papua New Guinea is an endemic Pygmy Seahorse [Figure 30] that divers from all over the world come to view."

Figure 30: Pygmy Seahorse

Figure 31: Nudibranch (Flabellina Cynara)

Figure 32: Miniature Gobi in beer bottle

This was an aspect of diving made clear to me throughout my videography training. My own instructors, who taught and dived at least 5 days a week, all year round, would find immense joy in capturing crisp, macro images of tiny crabs, shrimp, nudibranchs, gobi fish and sea horses. So much so that during training they would lead us for twenty or so minutes across a homogenous sand bottom to their secret hotspots, whilst the rest of the divers on board the boat would swim off in the opposite direction to witness larger reef dwellers. When dives are typically under an hour in duration an underwater travel time of 40 minutes reinforces such desires to witness specific small-scale beings. Thus the emphasis in this chapter on larger scale wildlife may be the result of only conducting research with learner divers.

In this section I have sought to highlight two aspects of dive experience. Firstly it seems that despite the often homogenising effects of popular culture representations, different people react to different underwater beings in varied ways. For example not all shark species are considered scary and similarly not all divers react in the same manner to a single species. Secondly it is argued that conceptualisations of underwater beings appear to be variously produced by a combination of often conflicting, information gleaned from televisual and educational discourses. Thus learner divers encounter commonly depicted underwater fauna often with a set of anthropomorphic associations layered over with a sense of awe and respect. The task of the final section of this chapter is to build upon these first two stages of the diver-fauna encounter, i.e. the pre-encounter environmentally sensitive education and the actual encounter, by exploring post-encounter reactions and events.

7.3 Environmental Action

The structure of this chapter is presented in three distinct experiential phases related to diving with underwater animals. The first stage is the educational preparation in which one learns how to behave appropriately for the second stage, the underwater encounter itself, with the third stage becoming that of contemplation and reflection, where a new diver begins to think through what has been witnessed and make sense of this within their own socio-cultural context. Thus, the time period that immediately follows the few Open Water dives that make up part of the Open Water course, is considered to be particularly important in reinforcing a newly acquired sense of an environmental ethic of care and awareness. As a consequence the dive boat becomes the target location in which to capitalise on this. Luck (2003) highlights that the time immediately following the event is when tourists seek personal validation. Dive time events are reflected upon and compared, fish identification books are browsed for further information, log books are written up and stamped, a sense of achievement at completing another stage of the course is felt. PADI appears to be aware that learner divers are particularly receptive to environmental issues immediately after their first dives. Luck (2003:947) states, "in this stage, they [divers] often reconsider global environmental threats and habitat degradation. Since they just encountered marine wildlife, these threats are not abstract issues far away of their home, but very tangible issues that are affecting…what they have just encountered".

Knowing that a diver is more receptive to environmental issues, as soon as a (s)he has completed their Open Water course, PADI instructors straight away ask learners to upgrade their standard (free) PADI certification card to one which costs more but depicts an image of one of the 'big 5' ocean fauna, accompanied by an explanation that the proceeds will go to marine conservation projects carried out by the organisation. On a smaller scale these post qualification enrolling schemes occurred independently of PADI as well, with Koh Tao's dive instructors actively promoting

Figure 26: Standard Open Water Card   **Figure 27: Charity Open Water Card**

the monthly underwater 'clean ups', organised by *Save Koh Tao*, and encouraging new divers to sign up for these when they were essentially a trapped audience on the dive boat. Furthermore, once in 'the system' PADI continue to email qualified divers, asking for further funds to carry out such activities or to invest in research and conservation schemes. When I asked the research participants if they had chosen to get involved in these activities and/or donate money to PADI through buying a 'prettier' membership card, 35% said yes to the former and 65% to the latter. In conversation with the divers on the boat and during audiencings, it emerged that many felt they had an obligation to do something to better the marine environment for the sake of the fauna. However, whilst these actions were for the general benefit of the underwater environment, the participants highlighted that witnessing and interacting with certain creatures was a key driving force for these.

Dive respondents made comments that combined a sense of awe and responsibility, for example Dave stated upon recollecting his encounter with a whale shark,

"I feel like seeing the whale shark was such an awesome experience for me, I have to do something in return for him, and the fact that there is an opportunity to do go out on a clean up, well you'd have to have a good excuse not to go, wouldn't you!?"

And similarly Jane noted,

"I hear that they have turned this place [Koh Tao] *around, that it suffered some environmental damage and the 'Save Koh Tao' people helped get it back into shape. So many divers come here it's bound to have an effect on the water quality and the fish behaviours, the least we can do as divers is take place in these organised clean ups".*

And finally Jenny,

"It was the sea horses that did it for me, they are so cute, delicate and small, what can they do in the face of pollution or a diving fin kicking around their patch. I want to keep diving to see them but I don't want diving to disrupt them. Hopefully if we are careful and have conservation areas, clean up the rubbish and invest in research, we'll cancel out the damage."

There is almost a sense here that many of the research participants, perhaps unknowingly, bought themselves into an ethic of care through learning to dive, that

in some way causes them to do something for the benefit of the marine environment. Even if they couldn't contribute time or money, participants still communicated this enhanced sensitivity for underwater beings.

"I'm on a tight budget and a packed schedule cos I'm on my gap year, but seeing the Clown fish in their little homes and the grace of the eagle rays, it makes you think you know…I won't be eating fish in a hurry, and if you don't eat fish you can't really defend eating meat. I'm gonna try and go veggie for sure" (Sam)

Indeed, of those who declined to participate in 'reef clean ups' in Koh Tao, the majority did so because they already had holiday activities planned for the remainder of their stay, not because they did not *want* to participate. Tara states here for example,

"I really feel like I should help out in some way because it probably won't occur to people who haven't had the luxury of seeing it [the underwater environment]. *It's so beautiful and the wildlife is stunning, it's so sad to think that in some places reefs like these are being polluted and the animals are hunted. I wish I could give something back but we're off to Cambodia, I'd love to do something in the future though."*

Thus in encountering a vulnerable animal the divers echo Levinas' sentiments,

"My ambitions are placed in check […] were I so inclined, I could enslave, abuse, or even slaughter this vulnerable human [sic] other,

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but paradoxically, it is the very vulnerability of the Other that *dis*inclines me to do so and gives me pause. The Other calls to me as if "from on high", from a location that reserves my mastery over the Other into a freely chosen ethical servitude. In the encounter with the Other, my objective intentionality and egoistic ipseity are unlinked, or rather relinked along ethical lines and called toward justice and hospitality" (in Calarco 2008: 66).

Tara's quote above highlights not only her desire to contribute in some way to benefit the marine environment, she also highlights the fact that the ocean is out of reach for much of the population. This has similarly been noted by Dobson (2011), who draws on the work of Evans, to argue that the majority of people remain unfamiliar with the marine environment. She states (in Dobson 2011:86), "exposure can be limited to information provided by the media (e.g. television documentaries) and direct experiences are often confined to immediate coastal environments, such as beaches and the inter-tidal zone (Evans 1997). In western culture, this lack of contact between the general public and marine environments is a 'major causal factor in the relatively low status of marine conservation" (Evans 1997:239). Thus, Tara's quote flags up that there is often a taken-for-granted supposition that distance acts as a form of barrier to notions of responsibility, and therefore a sense of indifference towards those beings in distant or 'different' contexts (Massey 2005). Therefore, for her, and indeed as was echoed by several other participants, there is a sense in which divers are inherently morally progressive, as it is argued that there is a need to gain knowledge about distant/inaccessible others, before ethical action can take place, a task which is unavoidable if one is

to pass the Open Water course. It follows then that the more one dives and learns, the stronger such ethical stances become, a sentiment reflected by Lindgren et al (2008 133), who argue that "divers with a perceived good knowledge of the marine environment and a higher degree of specialization in diving are more likely to engage in pro-environmental, responsible behaviour". Diving, thought of in this way then, at least for some, almost becomes a performance of ethics in itself. The combination of education and interpretation work together to frame the activity, such that it is (or should be if undertaken correctly) always one of respect and care toward others.

7.4   Conclusion

The purpose of this chapter has been to deconstruct the ways in which divers relate to underwater beings and consequently become caught up with a sense of obligation toward, if not bettering underwater habitats, then at least not causing any detriment to their current state. To do this I have concentrated on three key themes. The role of the first section of this chapter was to highlight the institutionalised discourses and practices which are utilised by PADI to render divers' bodies docile. By considering the precise teaching techniques used by PADI, including the construction of a normalised, proper, way of moving underwater it was argued that divers learn to monitor their own behaviour so that it conforms to a sustainable and undamaging ideal, which is situated in direct opposition to the figure of the 'class clown' depicted throughout the PADI Open Water Course DVD. Noting the way in which the divers became worried about being seen to act like this figure, the divers illustrated that they had internalised the disciplinary gaze of the PADI instructors

and other divers, within themselves. Therefore judging and self policing their own actions when under water not only for fear of damaging habitats, but also to avoid being 'othered' as the man in the instructional DVD had been.

The second theme of the chapter involved considering how divers related to specific underwater beings. The quotes provided above and my own experiences highlighted that, as Levinas argues, some animal beings encourage an ethical response in the divers, whereas others do not. It is difficult to pin point which characteristics enable a being to gain a 'face', but it seems that a variety of elements may contribute to this. It has been argued that "that the ability to anthropomorphosise the animal's actions is an important factor in creating an icon, as people are more likely to find an animal appealing if it demonstrates human-like characteristics (such as positive social habits, playfulness and curiosity)" (Dobson 2011:90). It could be argued that by including in their descriptions values or attributes such as 'wisdom', 'smile', 'family', 'home', 'baby' for example, that the divers did indeed relate more strongly to beings which they could see human traits in. It is also clear that the media does influence perceptions and understandings of wildlife, as was noted above, particularly with regards to misconceptions concerning the character of rays as well as contributing to a fear of sharks. Thus depending on personal history and exposure to certain narratives and representations, it could be argued that to perceive an animal as having a 'face' is a vastly subjective process of decision making. Therefore, it is not a question of determining; at what point a non-human may acquire a face, as though on a spectrum between the poles of human and non-human, but more a question of which traits and characteristics contribute to an individual's perception of a 'face'. This conception is more in line with the works of Haraway (2008) and Derrida (in Calarco 2008). As Derrida argues, like humans, animals do not "share a common

'animality' but a heterogeous series of being and relationships" (in Calarco 2008:141), and so it is these which combine at certain times, with certain beings to result in a stirring within the individual which prompts ethical action. According to Derrida we must consider the disruptive, face-to-face encounter between two distinct beings in order to understand the proto-ethical relationship they share (Calarco 2008). If we made the mistake of likening the attributes of any two beings (regardless of species similarity) then, not only would we risk betraying the specificity of the ethical relation between the two, but we would also misunderstand the relation between the beings themselves.

The final section of this chapter was to argue that the combination of environmental and embodied education taught throughout the PADI Open Water course, as discussed in the first section, alongside the interpretation of the underwater environment and those residing within it made possible during the actual Open Water encounter (as detailed in the second section) together result in an increased tendency for divers to take part in environmentally beneficial activities. These activities may be in the form of monetary donations, alterations to a diver's lifestyle or through an organised 'clean-up' type activity. However it was noted that whilst this pro-environmental stirring may occur in the independent diver, the opportunity to capitalise on this is well known by PADI and other organisations, whose strategies work to maximise the recruitment of donors/activists.

In sum then, it is argued that the combination of education and interpretation can result in a reduction of damage caused to marine ecosystems by divers, including the mitigation of touching or kicking coral, disturbing sand and sea bed habitats, feeding and altering animal feeding habits (such as sharks). Furthermore, by

learning more about the character traits of certain species and their reactions to humans, divers can become more comfortable around such beings in real time encounters, thereby increasing their satisfaction and enjoyment of their time underwater. Finally it can be seen that following up education with the opportunity to spend time amongst the ocean's inhabitants resulted in divers seeming to be relatively committed to improving in some way their involvement in marine conservation activities.

8 Souvenir or Reconstruir? Editing experience and mediating memories of learning to dive

8.1 Introduction

At a time when audio visual technologies significantly infiltrate tourist practices and experiences, the structure and content of personal and collective memory is becoming evermore mediated and transmogrified (Bolter and Grusin 1999, Jansson 2007, Tussyadiah and Fesenmaier 2009). As such, tourist's future understandings of self and place are entering a slippery realm where reality and imagination combine in the construction of virtual histories, ever in process yet never fully loyal to the original instance of experience. This digitization of the tourist gaze has resulted in increased attention being given to technological mediators such as digital cameras and camcorders by tourism scholars (Tussyadiah and Fesenmaier 2009).

In this chapter I explore how video technologies can alter tourists' understandings of underwater space and the memories they develop of embodied actions and experiences, acquired whilst SCUBA diving on holiday. It is becoming common practice for learner divers to be filmed in the most popular diving resorts, such as Koh Tao and Phuket, Thailand, particularly during the final stages of the PADI's, Open Water course. These tourists are subsequently offered a souvenir DVD of their time learning to dive, which they can then take home to show their families and friends or to upload on to social networking sites such as Facebook. It is argued that people have a vested interest such objects as "they come to serve as material triggers of personal memories" (van Dijck 2007:xii). The mediated memories

triggered by souvenir DVDs though are not mere extensions of the brain, rather they are the products of a "complex interaction between brain, material objects and the cultural matrix from which they arise" (van Dijck 2007:xii).

Whilst learning to become an underwater videographer, I was educated in the intricate ways in which acts and processes of mediation permeate the production method of the souvenir DVDs. Consequently, I was left to consider what the implications of 'interfering' with personal memory might entail for tourists' conceptualisations of identity and space.

In this chapter I initially provide an overview of existing research which has taken the role of photography and videography seriously in relation to tourist activities. I then go on to outline the history of where philosophers from Descartes to Bergson (2004) and Deleuze (2003), believe memory to be located, moving chronologically from a 'static, files in the mind' theorisation to an approach that emphasises the ongoing process of becoming *in conjunction with* stimuli from cultural artefacts, such as DVDs (Marks 2000), and the present. In other words, "the here and now" is considered to play as much a part in recollecting as the "there and then" (Hoskins 2001:335). By acknowledging that matter 'informs' recollection, the chapter will be set up to consider what enlacing these elements means for memory, when their materiality (screen, DVD etc.) is not only an instigator for remembering but also transformative in itself (Damasio 1999).

The third part of the chapter will be concerned with the precise ways the tourists' original experiences were altered in the production process. Thus, I will consider editing from three angles. Firstly by looking at the way certain filmic styles were

encouraged by the videography company that I worked for. The camera's perspective will be analysed to consider what aspects of the encounter are lost/gained for the tourists when the shots are framed by an 'outsider' who cannot capture their point of view, but whose artistic subjectivity and recording skill is framed by their (my) own personal experience. Fourthly, I will outline the technological means by which images are 'improved' to become visually more stunning and vivid than the often dark and almost monochrome blue scenes that are seen in situ by the tourists (Oceans_Below 2010). Then, the chapter will come at the mediation process from the perspective of the tourists themselves. Following Barthes (1981), I will consider the various means by which the tourists perform and present themselves whilst being filmed, in order to show that the learner divers want to see themselves, and be seen by others, at a later date, in a certain light (for example as adventurous, skilled, happy, etc.).

Having covered these themes the chapter will conclude by asking what these mediatory acts and processes mean for individual and shared constructions of tourist space and identity. I will argue that the souvenir DVDs encourage the creation of a 'virtual consciousness', where memories are informed by technologies that picture a place that never looked so polished and of a person (whether it be of the self or others featured in the films) who (at times at least) was/were acting for the camera.

8.2   Image capturing and tourist practices

For the most part it is photography which has received considerable attention within touristic studies of identity and place, rather than videography. This is likely due to the relatively new status of filmic equipment and production facilities as accessible to the general population. However, the increase in purchases of video cameras led Tagg (1982) and Stallabrass (1996) to declare that videography has followed photography "on the one hand democratizing aesthetic production and, on the other, colonizing an ever-expanding range of spaces and experiences" (Crang 1997:363). The additional advantage of videography though, is that it also allows what Crang (1997) describes as 'levity and enjoyment' to be captured, and I would add here sound, motion and a sense of chronology, whilst also adhering to Sontag's utilitarian notion of the images existing of proof that 'the trip was made, the project was carried out, the fun was had' (Sontag 1977:8).

Dating further back, the picturing practices of photography have been argued to be inextricably linked with tourist activities since the first Grand Tour (Albers and James 1988, Cohen *et al.* 1992, Crang 1997, Feighey 2003, Garlick 2002, Griffin 1988, Markwell   1997). Indeed, Belk and Hsiu-yen Yeh (2010) argue that photography and tourism owe the success of each to the other. Heidegger goes so far as to say that the enframing powers of technology were the key characteristic in the turn to modernity, "the conquest of the world as picture" (1977:134), a way of "revealing the world in which everything within it comes to be seen as, 'standing-reserve', that is, as something that 'stands by', as a resource, rationally ordered and ready to be exploited" (Garlick 2002: 293). Thus, resources can become knowable and systematised, as Sontag states "through being photographed, something

becomes part of a system of information, fitted into schemes of classification and storage" (1977:156). This way of thinking about visual imagery, perpetuated the myth that photography is a realist medium, a representative of truth and science (Slater 1995). By extension then, photographic practices positioned tourists as disconnected and disengaged from the people and landscapes which they came across, with the camera epitomizing the occularcentric and objective nature of their travel experience (Adler 1989, Craik 1997, Urry 1992).

Whilst the study of photography and tourism has been prolific and sustained, actual studies that analyse tourist produced imagery are in fact rare. As Garrod (2009) has explained, studies of images tend to concentrate on those produced by professional photographers which appear in brochures, posters, postcards etc (For example Dann 1988, Edelheim 2007, Hunter 2008, Pike 2002, Scarles 2004). Nevertheless, the paucity of studies concerning the specificities of tourist produced imagery, has not impeded theorizations of how and why tourists engage with the practice of photography and/or videography. This chapter sits somewhere in between both such approaches, as on the one hand, analysis is of professionally produced imagery, but on the other, this footage is of the tourists themselves. Consequently, the chapter cross cuts the aims of previous research, attempting to deconstruct the image making processes which contribute to the production of the underwater souvenir DVD (processes which are common within broader tourism film productions such as adverts, documentaries and interactive entertainment stations), whilst also taking into account the potential for memory manipulation such media may have on tourist divers, which I would argue could be synonymous with people's personal (holiday or everyday) filmic productions.

Considering why people choose to capture their experiences and extending the argument above, that visual practices allow for an ordering of understandings of place and people, Garlick (2002) has noted that whilst picturing practices dislocate visual stimuli from the sites in which they were first conceived, they become re-ordered into sites of self representation, contributing to the construction of memory and self identity. Thus Garlick (2002) links photography to the Foucauldian concept of one's 'life as a work of art'. Pictures, and more recently footage of holiday activities can be captured and brought back for a number of reasons, but existing research has pinpointed two in particular, which I later argue are not mutually exclusive, yet result in a tension over meaning construction in the production process. On the one hand then, images are taken and brought home for public viewing, either to pass around hard copies or to show footage to friends, or more recently by uploading these on to social networking sites such as Facebook, Flickr and YouTube. This fits with Garrod's (2008:347) contention that photos (and by extension film) become part of a hermeneutic cycle of "tourism (re)production, in which tourists seek to acquire photographic images of the place they are visiting so that they can prove to others that they have been there".

The images themselves not only serve as visual evidence that activities were carried out and sights were seen, but the ways in which images are framed, performed and staged, can become symbolic of class, taste and skill. As Crang (1997) has highlighted, 'higher-status' groups may picture place through certain aesthetic codes, others may take photos to communicate irony. These generally highlight interactions between 'nature' or the environment (Urry 1990), often involving the capturing of iconic scenes, directed by 'semiotic' markers (Garlick 2002). Such markers not only frame the picture but can structure a holiday, the process of

travelling to and stopping at a sight, framing the shot, possibly encouraging family or friends to pose in a suitable place, repeatedly contribute to the construction of the holiday narrative, and indeed that of the self as well travelled. Urry (1990) argues that for men, this idea holds further weight, as it empowers the male photographer (father/group leader) who then feels 'productive'. Sontag similarly states that the possession of a camera whilst on holiday suggests an element of participation within the landscape, transforming the tourist from a passive being to an active voyeur (Sontag 1977:10).

The notion of 'narrative construction' feeds back into Foucault's idea of the self as a work of art, and forms the second main reason why people film and photograph their holiday activities. In other words, not only is an idealized self-image constructed and manipulated to present to others, but also for the self. Keep-sakes or souvenirs become the instigators of memory work concerning past activities, and on holiday these may allow for a certain 're-configuring' of the self, due to increased freedom and an escape from lifestyle constraints of the home (and of relevance to this thesis, I would add the gravitational constraints of land) (Urry 1995). The prefigured scene can be transformed into a souvenir in times to come (Crang 1997). This is not just a retrospective use of the imagery then, but informs its very construction. Memories and their 'tone' are not merely *captured* in the process of taking a photo or video but are often *created* in the very act. Crang (1997:366) eloquently elaborates thus;

> The strong sense of self-surveillance and performance means that each act is in effect mortgaged to the future. Each event is not so much experienced in itself but for its future memory; as Langman (1992) puts

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it, if Goffman announced the death of the stable subject, all that is left in

so many family albums is a photographic smile, like the Cheshire cat.

Garlick (2002) goes on to state that this is why, in reality there is relatively quite a narrow breadth of image content in touristic imagery; happy memories and ones that depict only certain elements of other cultures and people. Memories then are produced just as much from what is forgotten and not captured as by what the images depict. The forgetting of the staging, the forgetting of un-photographed scenes which were deemed ugly, disturbing, depressing, the forgetting of the day the camera was left in the bag because the holidaying group had argued (Markwell 1997). These moments are rarely recorded, and if they are, they rarely make the cut (into the 'home' movie, the Facebook album or the hard copy album). Such holiday narrative constructions reflect both Heidegger (1977) and Bergson's (2004) notion that memory, and in particular idyllic holiday memories, is/are necessarily the product(s) of forgetting. The aim of this chapter is to reinforce such a notion by highlighting the ways in which negative elements of 'professional' tourist DVD production involve a considerable element of 'cutting', and furthermore draws attention to the fact that, tourists seem keen to go along with such story telling techniques, even immediately after the event. Therefore, despite the fact that photo and videographic images may have the power to instigate memory work, they are incapable of representing the entirety of experience (a major shortfall to the methods I advocated at the start of this thesis and a consideration I delve into more deeply in the main conclusion (Chapter 9)). Whilst this may seem an obvious point, in reality, despite knowing that the images are but selected and staged fragments of experience, they are still capable of distorting out recollections, polishing them into

enhanced, even fictitious, understandings of the past itself (Belk and Hsiu-yen Yeh 2011).

Before turning to the precise ways in which these alterations and mediations are made, I first move on to provide a background to theoretical understandings of memory.

8.3 Situated Memory?

In John Sutton's (1998) book *Philosophy and memory: Descartes to Connectionism*, the author outlines a timeline of conflicting theorisations of memory's location. It is argued that throughout the 19th century, the locus of memory was for the most part believed to rest solely within the mind, stored in a manner similar to the files in a filing cabinet, ready to be retrieved upon being stimulated by an object or image, or more simply, upon the request of the thinker. These stored memories were considered to be hermetically sealed from the changing world in which the perceiver was living, stable in the face of time and unchanging with context. However, in the twentieth century conceptualisations began to shift and in so doing highlighted the interconnectedness that exists between time, context and memory. Bergson's work in this domain was particularly important in changing previous ways of thinking about memory. In *Matter and Memory* (2004) Bergson explains that in perceiving matter we do not simply perceive an object in it's present state. By contrast, we mix in with our perception the myriad recollections which we have gained previously, making our understandings complicated deeply by the temporal, 'enriching' perception of the present yet making it vastly subjective. Thus, memory is seen to be an ever evolving, inter-subjective thread which confirms and

simultaneously troubles our understanding of the past, at once alluding to encounters which took place but conflating the details of this particular past with those of subsequent pasts, as well as the present. Drawing on Bergson and linking to the theory put forward in Chapter 6, Van Dijck (2007:30) explains this more clearly, stating that "the present dictates memories of the past […] the brain does not store memories but recreates the past each time it is invoked [so that] "the memory of the past serves as a base"". Incorporating and building upon Bergson's work, Deleuze (2003) tells a similar story of the intersubjective nature of perception and memory although he relates this specifically to the receipt and visualisation of cinematic images. Deleuze argues that,

> Instead of a continued memory, as function of the past which reports a story, we witness the birth of memory, as function of the future which retains what happens in order to make it the object to come of the other memory… [M]emory could never evoke and report the past if it had not already been constituted at the moment when past was still present, hence in an aim to come. It is in fact for this reason that it is behaviour: it is in the present that we make memory, in order to make use of it in the future when the present will be past.
>
> (2005:334)

Thus we have moved from thinking about the past as being firm and steady, to instead think about it as being fractured; "from a history sought in the continuity of memory to a memory cast in the discontinuity of history" (Hoskins 2001:334). This

troubles our conceptualisations of "what has been, can, and should be remembered" (Hoskins 2001:334).

In this chapter (like in Chapter 6) I want to think of memories in this way. Not as a collection of static, files in the mind, but rather I want to think about a re-collection as something which is "rewritten each time" it is intentionally sought, or brought to the fore subconsciously (van Dijck 2007:32). However, whilst this 'rewriting' may enrichen our understanding of the way we perceive the *present*, at the same time it troubles the extent to which we can rely on personal memory to gain realistic accounts of the past. If we intersect here a further mediating player, that of visual media (in this case souvenir DVDs of learning to dive), the blurring of memory, reality and digitally altered imagery would make for a recollection which is even further removed from the original experience, as the merging of "external" and "internal" images converge into experience (van Dijck 2007:125)

The fluid and fluctuating nature of memory is something which psychologists have devoted considerable time and effort to comprehend (Johnson et al. 1988). Of more relevance to this chapter is the work emanating from this field which explicitly troubles the role visual media plays in contributing to significant memory alterations over time. Such work builds on earlier studies which used narratives of plausible events instead of visual images in their research design (Hyman and Billings 1998, Hyman and Loftus 1998, Neisser *et al.* 2000, Weiser 1990, Williams and Banyard 1998). Irrespective of the method though, psychologists have gone so far as to demonstrate that not only are research participants capable of recollecting 'aspects' of previous experience that are incorrect or fabricated, but with the aid of visual images, the participants can even fabricate complete events or believe

themselves to have attended events fabricated by the researchers (Loftus and Pickrell 1995, Wade et al. 2002). In fact, it has been argued that memory performance, upon receipt of misleading information can cause between a thirty and forty percent deficit in accuracy (Loftus and Pickrell 1995). This type of memory alteration has been labelled 'retroactive interference', the act of altering memory formation after the event (as opposed to 'proactive interference' in which memory is disrupted by events that occurred previous to experience) (Loftus and Pickrell 1995).

It is argued that people "tend to think of photographs as frozen moments in time, place faith in them and see them as reliable representations of the past" (Wade et al. 2002:597). Over the last 20 years in particular, witnessing and producing visual images has become particularly commonplace, at times even overwhelming, within our daily encounters. Since the 'digital turn' this has been intensified further still (Laurier et al. 2008). Outside of the touristic literature reviewed above, Hoskins similarly (2001) explains that; the desire to capture and store memories electronically in order to compliment our own memory capabilities is a process that has increased in demand, particularly over the last ten years. In conjunction with this is the increased availability of relatively cheap and accessible image manipulation and film editing software, that further disrupts our understandings of the real and the altered.

It is argued that photographs require less "constructive processing than do narratives to cultivate a false memory" (Wade et al. 2002:602). If this is true, and research findings seem to corroborate with this theory, then surely, by extension, watching a film of a holiday experience in which you feature would prove an even

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more trustworthy medium of representing past experiences of space and self. As Loftus and Pickrell (1995:725) state;

> After receipt of new information that is misleading in some way, people make errors when they report what they [originally] saw [...] the new, post-event information often becomes incorporated into recollection, supplementing or altering it sometimes in dramatic ways. New information invades us, like a Trojan horse, precisely because we do not detect its influence.

Whilst the souvenir DVDs I produced of tourists, to take home to their friends and family to 'relive' their time on holiday at a later date were not of a fabricated event, they were filmed to certain aesthetic trends of the time (2010 to be precise). Films were heavily edited and visually modified to produce a product that would emphasise the 'positive' aspects of learning to dive and to downplay the 'negative' aspects of learning to dive (including the scenery, bodily movements and personal interactions). Before moving on to consider what the consequences of such editing practices might be, I will firstly outline the various ways in which these were carried out, in addition to troubling the performative actions and behaviours of the learner divers themselves.

4.4 Filming styles

Whilst learning to become a professional underwater Videographer I was instructed to shoot, edit and represent the tourists and the underwater world in a very contrived manner. Each aspect of the process is repeatedly rehearsed. The structure

of each film is virtually identical yet for the tourists their 'individual' DVD seems personally tailored as they are unaware of the videographer's training experiences or the production process. Producing films in this manner is essential if one is to meet the course requirements set by the British Sub Aqua Club (the Professional Underwater Videographer course awarding body), who have developed over time and decided upon what they believe to be the optimal aesthetically pleasing approach to film production. These aesthetic codes are the culturally constructed ideals of the time (2010), as James Moran notes, "movie technologies can hardly be separated from social contexts [...] in conjunction with the technical tools we use to capture. The movie camera, the video camera, and more recently the digital camcorder" are thus inseparable from tourist life (in van Dijck 2007:123). However, they are essentially a compromise between the Videographer's capability, creativity, time constraints, the sophistication of the camera equipment and editing suite, the 'performance' of the wildlife, weather conditions and the tourists themselves, as well as the structure of the PADI Open Water course. Furthermore, once trained in the techniques advocated by BSAC, the Videographer must also align him/herself with the production styles of the videography company for whom they work. I was lucky enough to train with the video production company who developed the BSAC course and thus avoided having to conform to this second level of stylistic mediation. However, upon passing from the 'trainee' stage to the 'employee' stage of a videographer's 'career', further demands are put on the quality of the visual output and there is even less freedom to experiment as time constraints are further intensified (typically one film of around 20 minutes is to be shot, edited, produced and screened within a twenty four hour period).

The broad structure of each filmed group was dictated by the videography company I worked for and this aimed to have each film, including the following sequences in order:

Table 3: Order of footage to be captured

- On shore shots of the dive school and the beach

- A sequence displaying each of the learner divers arm in arm looking happy and waving to the camera

- The group being briefed on the day's events by their instructor

- The group and the equipment boarding the dive boat

- The boat leaving the mooring

- A selection of 'arty' shots showing the boat, equipment and views from the boat.

- The group receiving their pre dive orientation

- The group assembling and donning their equipment

- Each member of the group jumping off the boat

- The descent with the dive boat or sun disappearing in the background

- The PADI training exercises (not including the compass skills)

- A string of sequences of the group interacting with the underwater environment

- The ascent with the dive boat or sun coming into focus

- Another descent, series of interactions with the reef and fish, and ascent

- Shots of the ladder being pulled up, a trail of eddies from the propeller merging with the horizon, the emergence of the mooring etc

- A final shot of the group waving goodbye, with one of them selected to put the lens cover on the camera.

Within this broader film framework, further stylistic approaches are encouraged. 'Footage' refers to the raw unedited material which is recorded by the camera. This footage is divided into 'shots', normally of between 2-10 seconds (longer shots are frowned upon as a viewer's attention will typically diminish after 12 seconds) which are combined to create a sequence. Underwater videographers are encouraged to mix up the range of these shots to tell a story in a visually interesting way. For example, a sequence could start with a very wide shot of two divers swimming over a reef. It could then cut to a long shot of the divers, with one of them pointing at something on the reef. This could then cut to an over the shoulder shot of the diver, with the camera focused on a small crab (the subject being pointed at). Before returning to a long shot of the divers swimming away again, there could be an extreme close up of the crab. Thus contrary to filming in a fluid and continuous way that is more akin to human perception, the film is made to look more interesting, by leaving out the in-between (so called "boring") moments of perception. The film still alludes to the sequence of events which led up to the climax of the encounter (discovering the crab), but the time invested in the search for something to look at is portrayed proportionally condensed compared to the time spent gazing at the crab. Similarly, now this sequence is over, no more filming will be necessary until the next exciting or interesting event/discovery occurs, whereby once more the Videographer will set the scene with a long shot, move in to frame the key subject, perhaps cut away to something being looked at or adding to the event, returning to the subject before filming a further long shot of the subject leaving the scene. The ethos behind this approach is summarised nicely by the BSAC *Professional Guide to Underwater Production* (2010:43) , "only select the elements that enhance the story you are telling and exclude everything that distracts from the subjects or setting [...] before hitting the record button make sure your subject is framed the way you want

it. Position yourself so you can quickly change positions and shoot the same subject from a different angle. Avoid having parts of fish, such as heads or tails too close to the edges of the frame".

An element of these shots which is decided upon by the Videographer is the movement of the camera throughout. Too many static shots are considered dull, but integrating them in to the sequence an 'appropriate' number of times will make the film easier to watch. Furthermore, panning is deemed unattractive underwater yet tracking is argued to make for an engaging visual encounter. Certain camera angles are equally important in constructing the overall 'style' of the film. Eye level and low-level angles are deemed more aesthetically pleasing underwater (for example Figures 33 and 34), as they set coral and divers against the blue of the sea and can silhouette divers with a background of sun.

Figure 33: Eagle Ray

Figure 34: Butterfly Fish

These angles alter our perception of the true density of coral, but make for more interesting scenes in comparison to a bird's eye view which flattens the topography of the ocean floor, yet highlights the sheer, sprawling volume of coral (for example Figure 35).

Figure 35: Banded Sea Snake

Here then there are further trade offs to be weighed up, with the outcome not being representative of 'real-time' perception. It is considered better practice to picture coral set against the deep blue background of the ocean than to represent it as the majority of learner divers (the prospective DVD buyers) would see it: from above, mostly looking straight down. Whilst this may not be the case for more experienced divers who have fine tuned their buoyancy control and are therefore more capable of meandering through the contour changes of the reef, it is the case for the majority of learner divers who swim over the coral for fear of getting too close.

Adding the occasional Dutch tilt can give a film a more contemporary feel and when combined into a tracking or flyover shot can brake up the monotony of continually shooting movement horizontally. These techniques allude to the freedom of movement offered by the viscosity of the water, as to pull them off successfully and smoothly the Videographer must roll, stretch and tilt their body significantly. Similarly though, picturing the ocean from such 'artistic' angles, is not reflective of the views witnessed by the learners.

Despite the fact that these aesthetic interventions do not accord with the unmediated visual experience of real-time perception, within the broader sequence structure of the film set out above, the videography company I worked for encouraged a certain number of these stylistic approaches to be used for specific shots. For example, the opening shot would normally be a close up shot of the dive school sign which then zoomed out to capture the whole school. Whilst filming the divers walk down the jetty and onto the dive boat, the company would ask that the Videographer follow the group, framing them in the centre of the shot whilst adding a continuous Dutch tilt from one side to the other. The final shot was similarly

beyond the freedom of expression of the videographer as he/she/me would be required to pan across the group, who would be sat next to each other, arm in arm at the videographer's request (as seen in Figure 36). As the camera panned to each individual they were encouraged to wave/smile/pull a face as the camera lingered on them at a jaunty angle. Such techniques were deliberately staged to leave the viewers convinced of the friendly atmosphere and light hearted nature of their time of learning to dive. This tactic indeed worked for the most part, with divers seeming nostalgic upon watching the last scenes of the film. Sarah, a 23 year old learner from the UK noted for example, "Aaaaahhh, I'll miss you guys!" and Andrea exclaimed "oh, that's it! I don't want to go home now".

Figure 36: DVD ending Scene

8.4   The editing room

Once the morning or afternoon of filming was complete, the following stage in the production process was to digitally edit the footage. If the above rules had been stuck to this process would be much easier, as there would be less of a need to sift through irrelevant footage or to salvage quality footage from erratic shots. Editing is an artistic and technical process that requires manipulating shots into an order that enhances the quality of the visual output. Shots may be deleted, added, rearranged. For example, if a number of scenery shots have been filmed on the boat in a row, they might be used to separate the sequences of each diver 'gearing up'. Similarly, if footage of an eel or ray hiding under a rock is too dark to be digitally adjusted, older footage of the same species might be used so as not to disappoint the divers who often express excitement at the prospect of being able to re-witness certain creatures. For example Alex commented upon re-surfacing after his second dive; "*did you get the ray? You got so close, I'd like to see it close up, I was too scared of its tail though*".

Figure 37: Corrected Footage

Figure 38: Unused Footage

In the top sequence (Figure 37) here we can see Alex's dive buddy and instructor looking at a moray eel. The eel they actually saw was the one in the second strip (Figure 38), however, as can be seen, this footage was of a poor quality and too dark

to be 'fixed'. In its place old footage was integrated seamlessly. The replacement eel wasn't even the same colour, yet the divers failed to notice the swap. Personally, 'tricking' the divers in this way made me feel uncomfortable as editing blurs into the realm of fictitious creation. The ease with which the divers bought into such alterations either demonstrates their desire to believe in the supposed 'quality' of their experience and/or the trick of 'blind' trust they hold in the videographer.

Here then not only is the temporal aspect of the footage re-arranged, but the images are also colour corrected. As I explained in Chapter 5 with regards to visual perception underwater, the camera has a red filter that covers the lens in an attempt to maintain the variety of colours that people are used to seeing in underwater documentaries and films. However, as the depth of the filmed dives varies this can lead to variations in colour intensity throughout the captured footage. To a certain extent, colours can be put back in to the images or taken away to maintain a 'realistic' looking white balance, and so the levels of the footage are played with to achieve this, for example the before and after shots of a Gobi fish reveal the difference in colour variety before and after editing (Figure 39).
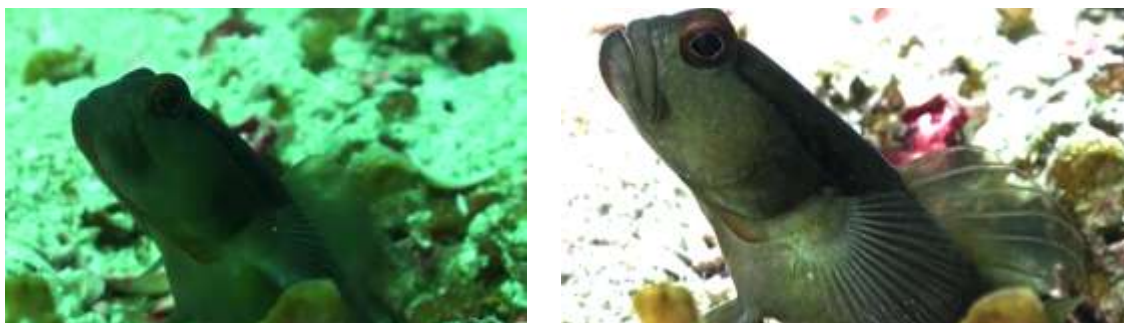

Figure 39: Gobi Fish captured without and with red filter

The human eye though, is neither equipped with a red filter, nor capable of these sophisticated alterations. Thus the images that are witnessed post this stage of editing were rarely originally perceived to be so colourful in real time experience. By contrast, the deeper one dives, the more blue the scenery becomes, as the other colours of the spectrum are gradually filtered out. Divers would rarely comment on this (apparently not so) striking alteration to visual perception. This could be a consequence of the proactive interference that watching underwater films and documentaries has on the divers as well as the retroactive interference caused to their memory by watching their souvenir DVD.

In addition to these alterations further inputs supplement the visual images. Transitions, which seamlessly blur one underwater encounter into the next, allow sudden changes of scenery and activity to wash over the viewer, disguising the extent to which real-time experience has been cropped. Textual headings of dive site locations, fish names, dates etc. are added to remind the learners, when in some distant time in the future they will no longer able to pin point the specific details of the course. And a further yet significant contextualising element is the sound track to the film. A selection of upbeat, strongly affective tunes such as Temper Trap's *Sweet Disposition*, The Red Hot Chilli Pepper's *Can't Stop*, Coldplay's *Clocks* and Jose Gonzalez's *Heartbeats* to name but a few favourites. Faster paced songs are used for the land/boat sequences to gee up the audience and end on a high, with relaxed and calming songs being used for the underwater scenes. Like the footage the soundtrack is also edited, 4-5 songs cut and arranged to make the film seem longer (and hence better value for money) but equally they change up the pace to maintain the attention of the viewer/listener and the energy of the film.

8.5 Performing Tourists

As I detailed in part 2 of this chapter in relation to Foucault's notion of the 'self as a work of art' (1991) . It is not just the prerogative of the videographer to try and polish the film to the highest possible aesthetic standards. The learner divers themselves, aware of the gazing eye of the camera, often equally contribute to this process quite openly. In *Camera Lucida*, Barthes (1981) analyses the difficulty people have in confounding a variety of self images into a single 'image' or representation. The moment a person feels the camera focusing upon them there is a conflicting desire to acquire a representation that at once captures an essence of reality, but this should also capture the subject in a favourable light so as to ensure that the resultant memory objects will invoke positive recollections and be seen by friends and family favourably. Thus, the aim is to merge one's "idealized self-image" with one's "public self image". In order to carry this out divers would act for the camera when they realised they were being filmed. Divers would wave, blow bubbles or make comic bodily movements (as displayed in Figures 40 and 41 below). On the boat they would smooth down their hair when they saw me reaching for the camera or for example would 'hide', look away or wave me off when they were having dive related issues they didn't want captured. Common acts of would include 'thumbs up' gestures, performing summersaults, blowing bubble rings, or in one instance comically looking terrified and pointing behind the camera as if a shark were approaching. Barthes (1981:10) explains his own experiences of being pictured in a similar fashion "once I feel myself observed by the lens, everything changes: I constitute myself in the process of "posing", I instantaneously make another body for myself, I transform myself in advance into an image". Barthes (1981:11) continues "I lend myself to the social game, I pose, I know I am posing, I

want you to know that I am posing, but (to square the circle) this additional message must in no way alter the precious essence of my individuality".

Figure 40: Posing Diver 1

Figure 41: Posing Diver 2

Van Djick, (2007: 101) referring to process of photography comments, "when a picture is taken, we want those photographs to match our idealized self-image-flattering, without pimples, happy, attractive- so we attempt to influence the process by posing, smiling or giving instructions to the photographer". Thus the camera's presence not only alters future memories through its mediatory technological apparatus, but it also encourages the learner divers to alter their real-time behaviour, *in order to* make the future memories more pleasurable and exciting. This is further intensified by the commonplace usage of visual productions as media of communication. Indeed sometimes, this is the primary role of the DVDs, as opposed digital re-memory/embodying aids, their use is solely to portray the 'pleasurable' and 'exotic' experience of learning to dive to friends and family. Thus, "hyper-mediation creates a new vulnerability [...] a haunting anxiety for missing the 'right' opportunity for communication, and simultaneously the touristic experience itself" (Jansson 2007:16). The very act of having a camera present shapes the

tourists performance into acts of self-presentation; the camera constructs the arena for acting and observing, "sacrificing the immediacy of experience and orienting activities to (future, distant) viewers" (Crang 1997:365). Consequently, future memory can be determined as much by the divers' imaginative capacities for action as the videographer's "tools for reconstruction" (van Dijck 2007:123).

8.6   Discussion

In response to Jansson's (2007) call for further research on the nexus between tourism, media, communication and geography, here I have tried to render visible the often unconsidered aspects of visual media production that result in, not only visual images themselves, but also by extension, a misunderstanding of place, performance and identity. The connectionist approach to the study of memory advocated throughout this chapter refutes the notion that "memories are images of lived experiences stored in the brain that can be recalled without affecting their content" (van Dijck 2007:41). Furthermore, it highlights that mediatory technologies, whilst acting as stimulants for recollection actually inform and construct memories rather than transmitting realistic snippets of past experience. That is not to say that all recollection instigated by film is false or of fictitious events, nor that film is incapable of allowing for an embodying of the sights, sounds and actions presented on the screen. Rather it is to say that the slippery nature of memory is formed in conjunction with the retroactive influence of the film, which when shot for a particular purpose (to be sold) is accompanied with a set of experience and place enhancing techniques. From brighter, more colourful images, to seamlessly integrated never before seen creatures, footage is cropped, sped up and made to shine. As Loftus and Pickerell (1995:725) have argued, "nearly two

decades of research on memory distortion leaves no doubt that memory can be altered via suggestion. People can be led to remember their past in different ways".

Thus there is a tension here surrounding the discontinuity between the DVD as *souvenir* and the DVD as an economically driven, artistic production. The term '*souvenir*' is French and literally refers to the act of remembering. The Oxford English Dictionary (2011) refers to a souvenir "as something (usually a small article of some value bestowed as a gift) which reminds one of some person, place, or event". In other words, the purpose of a souvenir is to bring back to consciousness the details relating to a particular experience. Those purchasing a dive encounter souvenir DVD, do so to be reminded of the scenery, the people, the animals, the culture and the forms of embodiment which they were exposed to throughout their PADI Open Water course and their time on the island of Koh Tao. Thus it would follow that they would desire visual imagery that is 'as close' to their real-time encounter as possible. Or do they?

 Whilst this is not at odds with the intentions of those producing the DVDs, it is equally not in sync either. As Laurier (2008:9) argues, "the concerns film editors are orienting to as they assess footage, set edit points and so on are of a filmic order rather than an epistemic one". The film makers know that tourists don't want to be reminded of negative experiences, and they will only buy DVDs that show the above elements of experience in a favourable manner. Thus it is in the interest of the film maker to rely on artistic style, the digital techniques of footage alteration and the manipulability of memory to their advantage. This is further complicated by the fact that, for the divers the DVDs have two roles; the first as memory aids and the second being communication aids; to share their experience with others not present at the

time. This aspect of communication can involve 'sharing' the footage with a much wider audience than was possible 15 years ago, as digital memory objects can now become networked in minutes. In this case the aim of the videographer fits well with the desires of the diver, who is less concerned with accuracy than with perpetuating an idealised representation of place, atmosphere and bodily skill. After all, people rarely wish to return home and broadcast how terrible their trip was.

As already noted, the 'idealised self image' comes in to play at this point as divers consciously manipulate their behaviour and attitude when in front of the camera. As van Dijck (2007:127) argues "the act of memory [...] is already anticipated at the moment of shooting" and consequently filmed dives always involve "remembrance, fabrication and projection" (123). However, the argument here is that; even if the divers recognise the mediatory influence the videographer has had on the production process of film, and similarly recalls the way in which they acted up for the camera, for the first, 1,2,3...6 times they watch their souvenir DVD, the active practice of forgetting the additional (personal) information, eventually serves to confound the mediated re-presentation with personal recollection. Thus self-editing out 'reality' whilst becoming increasingly vested in the 'produced'. As Hoskins (2001:335) argues "the saying 'we only remember the good things' about a particular person, relationship or event in our lives is often true. The visual provides us with our stock figures" until everything else fades into uncertainty.

In addition, whilst for the divers themselves there is the problem of the relatively fast deterioration of personal memory (in contrast to the mediated memories), for those who witness Koh Tao's dive sites in the 1st instance on the screen (family, friends, social network users and You Tube browsers), awareness of the extent to

which the images are altered from reality is even more uncertain *from the first observation*. Thus, as Hoskins (2001) argues, the medium actually becomes the memory. The viewers lose the "intrinsic dynamic that exists...at the instantaneity of" the live encounter (Hoskins 2001:342). Neither featured nor unfeatured spectators will be capable of retrieving the 'fullness' of the moment. As such, "even electronified memories, although reframed, re-interpreted and enhanced over time, are always incomplete" (Hoskins 2001:342). Jansson (2007) argues that visual media such as these DVDs then, digitally altered and rearranged, become 'scripting devices' which are based on an "idealized framework for a touristic memoryscape" which are subsequently consumed by the public.

Thus, souvenir DVDs trouble the relationship that the individual diver has with the underwater seascape, but they equally construct Koh Tao into a magical tourist destination for those yet to visit. For the divers previous experience becomes highly selectively remembered so that the seascape itself is recalled imaginatively as a tropical wonderland, saturated with colour, packed with activity and wildlife. Everyone is happy, everything goes to plan and everyone gets along in an overtly enthusiastic and outgoing manner. Discoveries are made one after another, new skills are always successfully demonstrated, qualifications are always achieved and at the end of the day the sun always sets majestically into the ocean's horizon. Thus, as Dijck (2007) argues, moving images, edited, re-arranged, clipped, saturated and framed in a certain style can become contradictory and inconsistent signifiers of a relation *to* and a version *of* tourist space, that was never realised yet is processually remembered and shared with others.

9   Conclusions

9.1   Summary of Conclusions

Before returning to the research questions set out at the start of this thesis and outlining how these make a contribution to existing research, I will first provide a brief summary of each chapter in turn. Whilst Chapter 1 outlined the aims of this thesis, Chapter 2 then situated these amongst scholarly and popular culture work concerning ocean space generally. This chapter drew attention to the fact that within geography, despite the current popularity of researching embodied understandings of landscape and also the emergent attention being given to sea space and ships, these two bodies of literature have yet to overlap. Thus from a geographical perspective existing research concerning the water worlds has come from historical, political, economic and globalization standpoints, failing to address the existential means by which we encounter, interact, sense and are affected by the ocean, whether above or below water (with Straughan's (2011) recent work remaining the sole exception). From a tourism perspective the story is quite similar, ocean space and in particular dive sites are receiving considerable attention at present but this is from management, economic and ecological perspectives with the body remaining rarely studied (a few notable exceptions here are Cater (2008, 2006), Garrod and Gosling (2008) and Dimmock (2009a, 2009b)). Having made this case the rest of the chapter drew on these dis-embodied studies in conjunction with popular culture representations to outline how the ocean has been reconceptualised over time and also how diving as a pursuit has evolved into one of the most significant forms of adventure tourism within the wider tourist economy.

In Chapter 3 the focus turned to methodological praxis. Having argued that studying the senses, equipment use and fleeting encounters with underwater beings are difficult to remember and talk about after the event, I went on to theorise an experimental methodological approach to data collection. I argued that visual media, in particular film- through mimesis, embodied memory and synesthesia- is capable of invoking sensory responses in research participants. The contention then was that videography and audiencing as a combined methodological tool may provide research participants with the opportunity to become re-embodied with the sights sounds and feelings that they had previously experienced, in an environment more suitable for communication with the researcher, and furthermore where the researcher was able to make detailed notes and recordings of these. This chapter also saw the integration of ethnographic approaches to the study. These were argued to allow for my own voice and the voices of instructors to be included in the thesis, and further enabled the study of *SS Thistlegorm* to be included in the thesis.

Chapter 4 was the first empirical chapter and sought to outline and problematize the role of SCUBA equipment in enabling/altering divers' relations to the underwater world. It was noted that diver's understanding and coordination of their diving prostheses and their bodies as a whole were dependent on the level of skill they had acquired over the course of learning to dive, and also the environmental conditions of the time. As skill improved it was shown that the mediatory powers of the equipment were lessened, allowing for the seascape to come into view, and also allowing for ever more sophisticated and enjoyable manoeuvres to be carried out. The second half of Chapter 4 detailed that the equipment paradoxically highlights human entwinement with the world whilst also rupturing this state of embodiment. On the one hand the equipment was seen to enable such an enfolding of world and

organism, as it allowed for a wider than humanly possible array of intensities to be felt by the body (such as atmospheric pressure), but on the other, the agency of the ocean and the equipment seemed to overpower the human diver, then reinforcing at once that he/she is at the whims of the environment yet inappropriately constructed to negotiate it (for example by being unable to overcome the force of a current or lacking the skill to control the BCD and hence buoyancy). Either way, the new opportunities for action opened up to the divers, such as freedom of movement, were seen to result in at least an emotional if not physical connection with the underwater world. Their embodied encounters troubled outdated modes of conceptualising the land (sea)scape in a detached and occularcentric mode of apprehension, as compromises inevitably resulted in oceanic encounters being co-constructed and multisensory.

Chapter 5 sought to build on the previous one, by adding sensuous understandings of ocean space to the already considered prostheticised body. Studying the various ways in which the sensorium becomes re-organised was the primary task of this chapter and so the work of Drew Leder (1997) was employed to make sense of the process by which the body experiences novel and unfamiliar sensual relations, in an environment to which the divers were not yet habituated. Underwater the respondents explained that actively touching, hearing and smelling become somewhat redundant, yet vision becomes augment and takes on the role of touch. Hearing turns inwards, alerting divers to their own bodily processes and being touched by other things and beings involves the whole surface of the skin (rather than mainly the hands as would be the case on land). The main re-organisation to the sensorium though was the attention the participants gave to the somatic senses. Proprioception must cope with the loss of a grounding touch underfoot, must

embrace a new bodily positioning as predominantly horizontal rather than vertical and must also integrate knowledge of where various dive appendages are located in relation to the body. Kinaesthesia has to adjust to a new propulsive action, deal with changing buoyancy levels, and negotiate an environment that is denser and always in flux. Finally the viscera alert divers to the build up of pressure and so bring ears, sinuses, lungs and eyes to attention on a regular basis, inducing pain and discomfort. Furthermore, the strain of inhaling air underwater, and the importance attributed to the correct practices of breathing (slow, steady and continuous) by instructors bring the lungs and oesophagus to the attention of the diver further highlighting internal bodily spaces and bodily processes.

The structure of the thesis attempted to mirror that of human perception underwater, as awareness of proximal tools became distant and as alarming sensuous relations began to fade from consciousness, the focus turned to the wider surroundings. Thus as the learner divers and I, myself, began to appreciate and explore the environment with fewer jarring interruptions, caused by lack of skill or knowledge, a wider array of relations and perceptions were able to come to the fore. The next 2 chapters consequently turned to focus on the materialities and beings residing beneath the water's surface.

Chapter 6 outlined my own personal recollections of diving one of the world's most impressive shipwrecks, *SS Thistlegorm.* As a cross between heritage site, decaying relic and artificial reef, the ship presented me with two particularly apparent experiential themes. The aim of this chapter then was to highlight that man made objects can transgress the human world and host natural as well as social activities. As the ship slowly collapses and deforms under the weight of the water and at the

will of the ocean's currents, it is simultaneously becoming colonised by a vast array of flora and fauna. These are reinforced through the history laden atmosphere which engulfs *SS Thistlegorm*. The materialities of the Second World War in the form of vehicles, ammunition, interior furnishings act as memory objects, filling and inhabiting the ship with random, juxtaposed associations, fictional characters and the ghosts of the sailors who worked upon her deck. Chapter 6 concluded by noting that the deformed and transgressive state of the ship is argued to result in altered state of perception and spatial negotiation in the diver, who is offered enchanting and playful opportunities for action. Furthermore, the intersubjective nature of memory displayed at such a historic site is seen to bring a further element to the aspects of perception discussed in the previous two chapters. In other words, it is not just sensual and equipmental relations that construct present experience of ocean space, as memory further contributes to and interrupts the flow of being-in-the-underwater-world.

Having considered an example of engagement with underwater materialities, Chapter 7 turned to conceptualizing divers' engagements with underwater beings. This chapter followed more of a linear argument in comparison to the previous ones, with the aim being firstly to deconstruct how divers related to aquatic fauna, secondly to think through what characteristics rendered some beings to be more appreciated than others, and finally to find out if these encounters resulted in a more ethically aware attitude towards the ocean's inhabitants and the wider environment. The ways in which PADI teach the divers to behave underwater in a manner that minimizes their contact and subsequent damage to reef ecosystems was detailed. In addition the narrative of the PADI Open water Course DVD and book were analysed in order to demonstrate that divers are encouraged to change

their beliefs concerning 'dangerous' animals, instead being encouraged to believe (and I would argue rightly so) that aggressive behaviour from fauna underwater is normally a self defence reaction, instigated by human ignorance. The second part of the chapter noted that a combination of factors (popular culture representations, the PADI narrative, fauna size and rarity, environmental context) resulted in different animals being responded to in different ways, by different research participants. Whilst not wanting to apply any overarching theory to this, some themes did emerge. Firstly animals that have traits similar to humans, or who have been depicted in anthropomorphised animated films (favourably), were particularly deemed to be emotionally engaging (for example Clown Fish and Turtles). Species that appear to be especially fragile (such as infant eels or sea horses) were seen to be 'cute' and in need of protection. By contrast megafauna seemed to invoke a sense of sublimity- awe in the face of magnitude. In the case of Whale Sharks this was reinforced by their 'smiling face' and the fact that they are uncommonly sighted. Whilst sharks and rays instigated a mixed reaction in the divers (fear, resignation, awe), it was argued that the underwater environment itself affected the way in which divers behaved and consequently related to them, providing divers with a feeling of distance and disconnection from what they were observing. Furthermore, elasmobranchs often became sublimated under the category 'dangerous' irrespective of their distinct species feeding and behaviour habits. For example eagle rays (not just sting rays) were related to the death of Steve Irwin and encounters with black tip sharks (who are not known for aggression to humans), invoked post dive conversations of Jaws and news stories detailing gruesome attacks to surfers and fishermen. 'Squishy' and worm like creatures (sea cucumbers, slugs, eels) were the most universally disgust invoking creatures, due to their alien, otherworldly shape and texture. Finally, it was argued that smaller beings (such as

nudibranchs, shrimp, sea horses) were deemed to be of more attraction to more experienced divers, who supplanted their desire to see megafauna with the challenge of locating hard to find and intricate creatures. The last section of the chapter considered that the combination of environmental and embodied education taught throughout the PADI Open Water course and the interpretive encounters with specific charismatic underwater beings, resulted in divers seeming to be more open to taking part in environmental volunteer and fundraising activities.

Further contributing to a more holistic account of tourist diver experiences, the final empirical chapter moved on to think through perception of Koh Tao's dive sites, after the event, thus adding retrospective memory formation to the study of the dive encounter.

Chapter 8 firstly outlined that memory is formed not by pristine and accurate details of past experience that are stored in the mind, waiting to be called upon. Rather I argued that as time passes, memories become evermore the mediated products of edited, manipulated and at times fictitious versions of reality. Furthermore, the desire to acquire media (such as photographs and souvenir DVDs) which (re)present the tourist diver favourably and behaving in the 'correct' holiday manner, not only result in a time deepened belief in the accuracy of the DVDs, but also alter behaviours and performances at the time of the original, real-time, encounter. I further went on to argue that for those friends and relatives who are exposed to such DVDs, who had not witnessed the sites and performances depicted, understandings of place are further removed from reality. Thus to varying degrees, the act of capturing tourists' performances underwater, serves to reconstruct Koh

Tao's dive operations and sites as brighter, more colourful, always interesting, fun and friendly, and always containing a successful and happy ending.

9.2 Back to the Research Questions

I will come back to the main research question, *how are tourists experiences of underwater space mediated?* toward the end of this section. First though I will attempt to answer each of the smaller questions in turn. The concrete answers to these questions are quite evident in the chapter summaries outlined above, therefore I won't repeat the intricacies of each argument. Instead I will flag up the main points made throughout the thesis, with regards to each question and will also attempt to relate each of these back to the existing bodies of literature from which they emerged, and hopefully provide some links to their use beyond. This is hoped to illustrate the relevance of the thesis as a whole in relation to wider academic debates.

9.2.1 How do we 'get at' and represent sensations and affects, particularly bearing in mind the logistical limitations to underwater communication?

It was mostly the task of the methodology, Chapter 3, to tackle this question and it is difficult to answer without overlapping with the latter part of "what is the role of technology in providing access to, framing and/or restricting the divers' perceptions of the environment, literally or methodologically?", therefore I will merge the two answers here.

I personally believed it would be impossible to write about more than my own sensuous and embodied experiences without talking to research participants. Such an act was clearly impossible underwater, and even if talking underwater were

possible, the last thing learner divers needed was regular interruptions to an already complicated and very active field of involvement.

What I did manage to succeed in orchestrating, was getting the participants to relate to, and talk about, an onscreen version of past events, which I hope held onto traces of their real-time experience. The methodological process did allow for a certain amount of re-embodying and recollection. Furthermore, the learner divers did seem to relate to the film in quite an enthusiastic and outgoing manner. The film instigated conversation, and specifically reminded the divers of their sensuous engagements with underwater space, beings and tools. Hopefully the fact that the footage was shown to the divers the day after their real time encounters, *enhanced* embodied memories of sensing and interacting, rather than *altered* this process.

However theorising diver's relations to their souvenir DVDs began to trouble my belief in the success of the methodology. Clearly the purpose of Chapter 8 was to consider memory on a longer term scale: weeks, months and years after the event. However, as I noted in Chapter 5 and Chapter 8, divers did seem to 'believe' in the accuracy of the visual representations almost immediately following the actual encounter. Thus I have to question whether I truly succeeded in 'getting at' divers' sensuous and affective understandings of sea space, or whether in fact all I really managed to do was gain access to their sensuously and affectively embodied relations and understandings of an edited film. As I noted in the methodology, the footage shown to research participants was longer, less edited and contained fewer stylistically shot scenes than those shown to the divers who bought the souvenir DVDs, which were the topic of Chapter 8. Therefore if a spectrum existed, with reality (the actual encounter) at one pole and fiction (the souvenir DVDs in their

most enhanced and polished state) at the other, it is hoped that the responses from the research participants came from understandings that were acquired closer to the reality pole than that of fiction.

If this is the case, which I believe in the context of this research it is, then do the occasional errors in perceptual recollection matter to the extent that the method remains unusable? Personally, I believe that had I not included visual imagery of previous experience, in what would otherwise have resembled a more traditional post dive focus group scenario, it would have been very difficult to encourage the research participants to talk as freely and as in depth about their encounters. I also believe that without this form of memory aid, such fleeting and transient elements of experience would have merged into more generalized descriptions than the quite richly detailed examples I have integrated into the theoretical chapters of this thesis.

Therefore, I would argue that whilst embodying some quite significant limitations, this attempt to 'get at' the complicated to communicate aspects of experience made some novel, if small interventions into existing methodological practice, within and beyond geography. To the best of my knowledge, no previous author had attempted to merge the three considerable bodies of literature concerning, firstly video recording as part of the data collection practice, secondly the wealth of studies concerning sensuous and embodied perception of film and thirdly the practice of audiencing as a methodological tool. Many studies have researched audiences reactions to films and many have advocated the richness of sensuous detail depicted in researcher or participant recorded films. In this study, giving the learner diver research participants an opportunity to witness footage in which they themselves featured, allowed them to communicate the difficulties they faced in terms of bodily

co-ordination, equipment use and environmental characteristics of the ocean. They were able to flag up the ways in which their attention phased quickly from one thing to another, how they became more aware of their inner bodies, and their lack of awareness of where their equipment was located on their body.

Consequently it seems that this approach to data collection could be of some use, not only to those researching the body and the senses, but also to those carrying out studies in settings where communication between researchers and participants is impossible or not feasible, where the pace or overwhelming content of an activity would make it difficult to remember all aspects involved, or to further attempt to 'get at' the senses and somewhat ironically non-representational aspects of embodied experience in alternative contexts to the one considered here.

9.2.2 How do scuba divers-learn and continue to engage with the underwater environment? What new sensations and somatic senses are involved?

The first part of this question filtered into all of the chapters, as I sought to move from analyzing equipmental prostheses of the body, to how the body-equipment cyborg senses itself and the environment, to a more actively conscious understanding of beings and things, and finally to how all such encounters are remembered once the real time perception has faded into memory. The second part of the question was more the quest of Chapter 5.

Chapter 4 employed a Heideggarian perspective to argue that tools, or dive kit can at once entwine and separate the diver from the oceanic environment and further reinforce the co-constructive nature of dive encounters. However, the lack of

attention that Heidegger attributes to sensuous perception, led the following chapter (Chapter 5) to contribute to answering this research question by means of the phenomenological perspectives put forward by Drew Leder (1990). Drew Leder's research draws heavily on the work of Maurice Merleau-Ponty (1962, 1969) and was thus better suited to thinking through the means by which scuba divers experience a re-organisation of the sensorium. Whilst they seek to problematize different aspects of embodiment, there are overlaps in the ways in which both Heidegger and Leder conceptualise the body's ability to rupture the flow of experience, and so bring to cognition the intricacies of experience. For Heidegger (1962) this is elaborated through the descriptions of tool use which I outline in Chapter 4. When divers are skilled and knowledgeable in using dive equipment, it becomes invisible, removed from them and beyond their conscious thought, operating seamlessly for the task at hand and enabling for perception to extend from the entwined, prostheticised body itself, to the wider underwater environment. At such times Heidegger labels tools as 'ready to hand' (1962). For Leder this is akin to a state of *dis*-appearance, not of tools but of parts or all of the body. So for example, as the learner divers articulated when they were diving with skill and in comfort, they would fail to notice that they were breathing in tune with the topography of the seascape, thus moving up and down, with the contours of the reef. By contrast though, often more the case during early stages of the PADI Open Water course, or in moments of carelessness, learners would encounter their dive equipment as a set of things, noticing at once what Heidegger calls their 'thingness', their separation from the body or their 'present-at-handness' and would lack the flow of movement needed to put them to use effectively. In terms of the sensorium this is reflected in Leder's notion of *dys*-appearance where lack of skill or

inappropriate biological make-up would highlight parts of the body, such as pain in the ears or an inability to control 'floaty' feet.

To an extent, this study relied upon the failure of the divers to take to ocean space like fish, for it was these moments of encountering equipment as a set of things, present-at-hand, and the body as noisy and unrefined, that made for rich and interesting discoveries of how the body adapts movement and shifts sensuous attention, in order to negotiate the underwater environment. Therefore, I would argue that the combination of Heidegger's (1962), and more recently Harman's (2002) conceptions of tool-being, in conjunction with the sensuously rich theorisations of Merleau-Ponty (1962), and more recently Leder's (1997) work, together offer a more holistic phenomenological understanding of the body. Whilst prolifically applied within human geography, the work of these theorists could provide for a number of particularly interesting starting points within tourist studies where embodiment, subjectivity and affect remain sidelined and under explored topics of study. This seems ironic since many tourist encounters explicitly aim to offer 'alternative' or 'novel' ways of being and feeling. Thus, deeper qualitative knowledge of the body, particularly within adventure and leisure tourism contexts, could contribute to wider research concerning the management, advertising and indeed safeguarding of tourist sites.

Chapter 6, and my own experiences of diving the wreck of *SS Thistlegorm* contributed perhaps to more the '*continued*' element of this question, as whilst I spent time diving the wreck, I moved on from Open Water to Advanced Open Water diver and consequently began further developing my underwater skill set. However the two main points of relevance of Chapter 6 to this research question was firstly,

the integration of personal associations and recollections into the embodied experience of diving the wreck. This argument drew mostly on the work of Bergson (2004) and Edensor (2005a, 2005b, 2005c, 2005d, 2007b), and sought to illustrate not only the way in which we draw in perception of past, often random, real and fictitious events into present experience, but further it sought to demonstrate that such engagements with space- because of their very intertextual nature- become extremely personal and subject dependent. The second main point of relevance here was how certain combinations of a material quality provide divers with an enhanced embodied sense of play. In other words, the confusion over the identity of the site of *SS Thistlegorm*, it's natural, cultural and decaying structure, and it's historical significance yet the total lack of policing protecting the heritage site, seem to provide opportunities to feel enchanted, by moving and interacting with its material textures. Thus, in certain contexts, divers can engage with underwater space in a manner that is considerably affective, atmospherically, emotionally and performatively. In this chapter then, I sought to demonstrate that shipwrecks (which form a significant number of the worlds most popular dive sites) can extend the limits of geographical field sites. Therefore the chapter contributes to contemporary debates concerning materiality, memory and the spectral, taking these arguments to the ocean depths, adding a further set of environmental attributes to nature-culture debates and the politics of space.

Chapter 7 was presented in almost a timeline manner, thus further contributing to the '*continued'* element of this research question. Using a Foucauldian approach to note how tourists' bodies are almost broken down and then rebuilt in a docile and narrative conforming manner, I argued that PADI as an institution, through the Open Water course, has the power to reconfigure (some) of the divers'

understandings of oceans habitats and their inhabitants. These also constructed normative ways of being, which the divers performed almost unthinkingly, and which were designed to minimize dive related disturbance/damage to oceanic ecosystems. Thus, from the start, the learner divers who took part in this research engaged with the underwater world with a sense of trepidation and respect. I would summarise that, for the most part, the more the research participants engaged with the various underwater beings they encountered, the more they became increasingly emotionally invested in the aquatic world.

More specifically though, by arguing that Levinas' (1989) theory of the 'face' can be adapted to include animals, I attempted to consider whether the learner divers related more favourably to some underwater beings than others, and to what extent this resulted in them taking part in environmental conservation or protection activities. The irony that emerged from this chapter was that the divers seemed to feel ethically obliged to increase their charitable efforts toward the ocean, as a result of their engagements with animals they could see human characteristics in. In other words, the harder the animal was to anthropomorphise (for example sea slugs), the less likely it was to invoke an ethic of care and duty in the diver. Therefore, whilst following Calarco's (2008) reinterpretation of the Levinasian 'face', may open it up to wider possibilities for application, it simultaneously seems to reinforce Levinas' original contention. Perhaps to be more specific I would alter the argument to read: the 'face' of the other must be able to be understood through a human narrative, if it is to invoke an ethic of care in the self. Consequently, Levinasian theorisations may indeed serve wider animal studies debates, yet perhaps it is the subjectivity and cultural baggage of the self that needs more considered interpretation. This seems to be further paradoxical considering one of the prime

reasons people learn to dive is to experience an 'otherworldly' environment, yet it is mostly the beings which they can see traces of themselves in, which appeal to them the most.

9.2.3 What is the role of technology in providing access to, framing and/or restricting the divers' perceptions of the environment?

Clearly it was the task of Chapters 3, 4 and 8 to answer this question. However, having already outlined Chapter 4's main conclusions above, I won't repeat them here. I will expand on the less obvious ways the other chapters contributed to answering this question though, and will outline the findings from Chapter 8 in more detail.

It became apparent whilst writing up Chapter 5 that most of the research participants' descriptions of sensing underwater space, involved discussions of their equipment. As noted in that chapter and Chapter 4, this was probably due to the fact that the participants were learners rather than more experienced divers. As learners then, it seemed more common for them to talk about sensuous engagements with their equipment than sensuous perception of the wider seascape. This illustrates the extent to which the learners' perceptions of the environment were hindered and restricted. Most notably it was the dive mask which framed real time perception of the environment, and the troubles divers faced with regards to fogging highlight the loss of environmental detail some experienced. The wetsuit was further argued to lessen the body's ability to sense the surroundings as it numbed touch. Whereas the fins and the BCD seemed to *enhance* the senses, expanding the surface area of the body and allowing viscosity and atmospheric

pressure to be interpreted by the diver. It was also argued that, whilst these prostheses frame and hinder perception, without them, perception in such an environment would not be possible at all. As the thesis progressed more elements of technology/equipment were introduced and the methodology and autoethnographic sections of writing highlighted that the extremely technological nature of diving seems to result in more 'tools' being added to the dive assemblage, the further one progresses along a dive career ladder. For diving *SS Thistlegorm* this involved getting to grips with a simple point and shoot camera and a torch. By the time of the main bulk of the fieldwork I had progressed, and additional tools had come to encompass a video camera, a white slate, a knife, an inflatable marker buoy a computer, a compass and a metal poker, most of which dangle from various parts of the body or the BCD. Thus the process of incorporating further technological kit into the habitus seems never ending, with all tools at once in some way extending and further limiting perception.

The camera and the video camera were the second main additions which served to frame and mediate perception of the underwater world, particularly visually but also aurally. This was true both whilst using them, and then later looking at the imagery produced by them. Whilst examples crop up throughout the thesis, it was the task of Chapter 8 to theorize this in detail. By highlighting the various techniques used by videographers, to frame scenes to make them visually entertaining and to cut and edit footage to make it more spectacular I sought to make visible the extent to which visual imagery of Koh Tao's dive sites is mediated from the moment of being shot to the moment of being screened. When understandings of this is combined with a Bergsonian (2004) take on memory, it not only became apparent how untrue footage is to real time encounters, but it also

became apparent that many learner divers fail to notice the difference between real-time perceptions and the filmic representations which supplant these. Relating to the wider literature concerning tourist imagery on the one hand and memory work on the other, this chapter sits in between the two. Thus it enriches the tourism studies literature, which has yet to consider images of tourists which are not taken by them, but in which they feature, and it also brings a more situated 'real life', rather than 'experimental', example to existing psychological research which tends to orchestrate the conditions for memory alteration and fabrication to be studied.

9.2.4 How are tourist's experiences of underwater mediated?

Throughout this thesis I have sought to highlight the many means by which tourist experiences of underwater space are mediated. Not just by the obvious examples of the research participants' prosthetic use of tools, or through the image construction techniques outlined in Chapter 8, but less obvious examples as well. These included the shaping of diver performance, so that it conforms to PADIfied ways of moving and treating wildlife. PADI and its dive professionals, I would argue, are as instrumental to the mediation of underwater space as the equipment and visual representations. Not only do the learners become self policing with regards to their own small scale movements, but their initial open water encounters are all guided and shaped by the instructor: where to go, what to look at, when to stop. The individual diver has very little, if any, say in such decisions and even once qualified, divers still must compromise their desired path of exploration with that of their buddy.

The result of watching television documentaries, films and news reports served to mediate people's real life perceptions of underwater creatures, which were sometimes reconceptualised and sometimes not. The learner divers were often disappointed by, for example the colours of the reef, the 'lack' of fauna, or their inability to instantly dive with skill, in comparison to their normalized (often incorrect) pre-dive conceptions, gleaned from the above noted popular culture representations. As these small, isolated and fleeting thought processes, registered in the research participants they highlight moments of tourist experience that did not fulfil expectations. I would argue that even these moments of disappointment are a form of mediation. The ocean and its inhabitants maintain their usual rhythms, yet tourists' preconceptions can alter their relations to and understandings of these.

Historic materialities and personal histories gave me the power to populate *SS Thistlegorm* with ghostly recollections, subjectively mediating the affective atmosphere of the site. Similarly watching *Titanic*, served to shape one woman's embodied performance at *SS Thistlegorm.* For many a research participant (including myself), having seen *Finding Nemo* resulted in considerable empathy and anthropomorphizing time spent with Clown Fish. Steve Irwin's 'death by Sting Ray' distanced many of the participants from what could otherwise have been enchanting interrelational encounters. These may seem like less obvious moments of mediation, but all of these external influences, in some way or another, altered real time embodied encounters with the animals and materialities of ocean space.

When we combine such small moments of mediation with the more obvious aspects of equipmental, technological and visual-cultural mediation it seems somewhat inconsistent that, for many tourists, SCUBA diving represents an escape from all

things land based (culture and the digitised, technologically dense routines of everyday life), supposedly offering an immersion into a natural world.

9.3   Main thesis contribution to wider research

In summary I would argue that this thesis contributes to the wider geographical and tourism literatures in three main ways. With regards to both geography and tourism and even the wider social sciences, I would consider it to offer an innovative methodological approach to data collection and analysis, for those studying embodied and difficult to communicate aspects of experience. With regards to human geography, the thesis attempts to broaden the limits of conceivable field sites, in order to demonstrate that (underwater) seascapes are as socially and culturally complex as more commonly studied urban and rural landscapes. Similarly, I have demonstrated that a number of contemporary debates in human geography (the body, materiality, haunting. mediation, subjectivity and memory work, and interrelational ethics) are applicable to the ocean depths. Finally, with regards to tourism studies, this thesis takes into account aspects of tourist experience from a number of theoretical and philosophical standpoints which are rarely considered by tourism scholars (mainly phenomenology). However, I would argue that the multisensory and mediated nature of many tourist activities lends them to be studied from such a phenomenological perspective, which can in turn feed back to more traditional analyses of management, impact, conservation and sustainability.

9.4 Thesis Limitations

I have already pointed out many of the limitations to this research project, however I will bring them together here.

9.4.1 Methodological limitations

As I noted above and in the introduction, due to the cost of the equipment I used throughout the fieldwork and the cost of diving on a daily basis, the only way could have gained both of these for free, was as part of an internship. However the content and style of the footage needed to be captured for research and for the internship were to some extent conflicting. The films I used for audiencings were somewhat more stylized and shorter than I would have liked. In an ideal world I would have filmed research participants continuously, I would not have edited the footage in any way and I would have shown them the whole length of the footage. However, I had neither the financial resources nor the time frame to make such practices a reality, and I doubt that, as holidaymakers, the research participants would have been willing to engage in such a lengthy process anyway.

Furthermore, I would have liked to have used the videography and audiencing technique with research participants whist diving *SS Thistlegorm* as this would have enriched the autoethnographic account and could have further illustrated the potential of the methodology to 'get at' the affective aspects of experience, in a quite different context to the reef environments which form the rest of the thesis.

With reference to Chapter 8, I believe that post holiday follow up interviews, a significant period of time after the research participants' Open Water Courses,

would have made this chapter richer in empirical evidence concerning the demise of memory accuracy, over time. Instead, the quotations and examples used are confined to a time period of one or two days after the participants finished their Open Water Course. Whilst these begin to reflect the arguments being made in the chapter, they do not reflect the *extent* to which they apply.

Whilst I argued that I wanted to research learner rather than experienced divers' engagements with underwater space, in order to explore how the body adapts to a new and considerably different way of being and moving, in hindsight it would have been interesting to include more intermediate and advanced divers in the research process as well as researching local club divers for whom the activity is not part of a tourist experience. This would have enabled me to trace the change over time of such adaptations and would have provided a fuller perspective on diver-animal encounters, and may have provided richer sensual descriptions of the environment rather than the inner body and its relationship to the equipment.

9.5   Possible avenues for future research

The lack of embodied attention given to underwater space means that there are many possible avenues of future research in this area. Here I will consider some which would extend the research findings of this thesis.

Here I have studied how the tourist body learns to negotiate a novel and otherworldly environment. But, for many the underwater world characterizes their daily routine. Furthermore, the types of seascape which are explored on a daily basis by, for example, police divers, oil rig technicians, deep sea cable layers,

ecosystem surveyors, documentary camera people, are vastly different in terms of temperature, ecosystem, visibility and depth. Uncovering such diverse human-seascape relations would further bring the ocean into geographical debates and would offer some points of comparison to this study. Similarly as noted above, studying the phasing process of the sensorium as it becomes increasingly skilled would provide a further dimension to this thesis. Thus, engaging with divers (even recreational divers) who are at different stages of the PADI (or similar certifying bodies) career ladder would aid such an endeavour.

The tension of shipwrecks as sites of heritage and natural colonization, in addition to their potential as tourist attractions seems particularly under explored within the tourism literature. Aside from considering the ecological effects of sinking ships, tourism studies has yet to think through how best to manage such sites so that they remain valuable ecologically *and* economically. Furthermore, as sites of cultural heritage, shipwrecks could provide further avenues of research for historical geographers and material culture scholars.

9.6   What Next?

Writing this thesis has sedimented both my theoretical interests in the body, materiality, memory and mediation as well as my contextual love of all things related to the oceanic environment. Should I be lucky enough to gain funding or employment that would enable me to pursue these research interest generally, or indeed those listed in 'Possible avenues for future research' more specifically, I would love to continue contributing to 'Sea Geography' debates. If not, I'll have to be content braving the cold British waters!

Appendix 1

Attached DVD

The enclosed DVD provides an example of the footage captured during the fieldwork phase of the research. It has been edited and re-arranged into themes concerning which sense was talked about when the same footage was shown to the research participants. I have since used this short film to accompany conference presentations based on Chapter 5.

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