Sub-Aquatic Meanings:  
A Phenomenological Study of Scuba Divers’ Experience of Place

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Abstract

*Sense of place* has emerged as a prominent concept for exploring the relationship between humans and the environment (Patterson and Williams 2005). Within resource-based recreation, evidence indicates that certain recreation settings are special and meaningful, and recreationists develop attachments to such places. Knowledge of the place meanings commonly ascribed to tourist destinations is both interesting in its own right, and useful for tourism operators to help better manage resources (Kaltenborn and Williams 2002). Scuba diving is a fast growing segment of the marine tourism industry (MINTEL 2003), and as a recreational activity intimately tied to a particular setting, it seems ideally suited to the development of *sense of place*. However, little is currently known about dive tourists beyond their environmental impacts (Rouphael and Hanafy 2007), and we know nothing of their subjective experience of the sub-aquatic world. The present study addresses this gap in tourism knowledge by investigating the kinds of experiences that make place meaningful for scuba divers, how these relate to existing literature, and how divers benefit from these experiences.

A detailed qualitative study of 16 scuba divers (7 female and 9 male) was conducted using the novel methodology of Interpretative Phenomenological Analysis (IPA). Rich, thick data was collected using in-depth semi-structured interviews and through a process of idiographic and inductive analysis, a structured set of common themes describing divers' place meanings emerged. This *Sub-Aquatic Meanings* (SAM) framework is a major contribution of this study, demonstrating a clear contribution of both physical and social aspects to the dive experience. Next, a process of interrogating the extant *sense of place* and restorative environments literature with respect to interview data and SAM yielded evidence for two novel theoretical claims which may have important implications for dive tourism practice. First, it is suggested that sense of place in scuba divers is of the strong form known as *place identity*. Secondly, it is suggested that the sub-aquatic environment is a *restorative environment* and that this explains why divers develop such strong ties to place and how they benefit from their experiences. My study also supports new developments in the theory of restorative environments (Staats and Hartig 2004) and provides much scope for future research into sense of place.
Now, you must not believe there is nothing down there but the naked sand; no, -
the strangest trees and plants grow there, so pliable in their stalks and leaves that
at the least motion of the water they move just as if they had life. All fishes, great
and small, glide among the twigs, just as here the birds do in the trees.

Extract from, *The Little Sea-Maid*
Hans Christian Andersen (1805 – 1875)
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Ultimately, I alone remain responsible for the contents of this dissertation, including any errors or omissions which may unwittingly remain. To conclude, I would like to share: "Our greatest glory is not in never falling, but in rising every time we fall" – Confucius.

Balvinder K. Kler
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Chapter One: Introduction

1.0 Rationale for the Study
Scuba diving as a form of recreation focuses on being underwater, or, in a *sub-aquatic* environment. Recreational scuba diving is a popular tourist activity and dive tourism is a fast growing segment of the international marine tourism industry. The majority of dive tourism focuses on being underwater, in marine environments, to view life in and around coral reefs (as opposed to lakes and rivers). Given that scuba diving depends on a particular type of physical setting, *place* is an important aspect of the recreation experience. However, at present, the literature on dive tourism focuses mainly on the areas of impacts and conservation. As yet, there is very little knowledge on place, specifically how scuba divers experience and benefit from contact with the sub-aquatic environment. The following section provides a background to the growth of recreational scuba diving and dive tourism in order to justify the decision to conduct a study on the relationship between scuba divers and sub-aquatic recreation places.

1.1 Recreational Scuba Diving
The aqualung or, Self Contained Underwater Breathing Apparatus (SCUBA) revolutionised underwater exploration in the 1940s (Cousteau and Dumas 2004) and later, opened up a new avenue for recreation: scuba diving. Scuba divers use a range of equipment including portable, but limited air supply, mask and fins, as well as weights and wet suits; and train to develop skills in order to become comfortable in the underwater environment (Dimmock 2007). As a recreational hobby accessible to millions, participation in recreational scuba diving has been attributed to a range of motivations. These include “a desire for a ‘wilderness experience’; a general interest in marine ecology; the fact that the sport is seen as ‘different’ and perhaps ‘special’ (image); an interest in particular underwater features (e.g., geological formations, shipwrecks) or marine life (e.g., sharks, other individual fish species, corals); pursuit of hobbies such as underwater photography; simply to experience the activity (mainly through resort dives); and, it may also be regarded as an adventure with some risk” (Davis and Tisdell 1995:28).
According to a leading dive certification agency, certified divers worldwide have increased from around 3.3 million in 1990 to 10 million in the year 2000 (PADI 2005). However, this figure only reflects the number of certified divers for one certification agency, whereas exact statistics on the number of active divers worldwide are difficult to quantify and remain undetermined (MINTEL 2003; Dimmock 2007). Scuba technology, specifically the advent of more reliable and affordable diving equipment has improved access to this attractive natural resource. Coral reefs constitute the second most biologically diverse ecosystem on the earth after tropical rainforests (Holden 2000); with over 4,000 different species of fish and 700 species of coral (ICRAN 2000). Scuba diving is no longer just a recreational sport: it has evolved into an increasingly popular tourist activity in countries with coral reefs (Rouphael and Hanafy 2007). The arrival of underwater tourism (Shackley 1998) has led to the advent of mass diving tourism (Van Treeck and Schuhmaker 1998). Some of the main international dive destinations are located within designated marine protected areas (MPAs) for example the Great Barrier Reef Marine Park (GBRMP) (Australia); Ras Mohammed National Park (Egypt); Bunaken Marine Park (Indonesia); and Hol Chan Marine Reserve (Belize) (Halpenny 2002). As noted by Davis and Tisdell (1996), it is often assumed that MPAs provide higher amenity values and are considered very attractive dive destinations, which make participation in scuba diving in such areas more appealing. However, dive tourism is not limited to MPAs and the next section presents an overview of the current trends as well as the focus of current research.

1.2 Dive Tourism
Dive tourism is one of the fastest growing segments of the international marine tourism industry (Miller 1993; Orams 1999). “Marine tourism includes those recreational activities that involve travel away from one’s place of residence and which have as their host or focus the marine environment (where the marine environment is defined as those waters which are saline and tide-affected)” (Orams 1999:9). These recreational activities include beach activities, sailing, cruises, sea-kayaking, surfing, whale watching, snorkelling and recreational scuba diving (Orams 1999; Jennings 2003). Scuba diving is not only ‘hosted’ by the sea, it is the only marine activity that offers complete immersion within the environment for tourists who seek to be active participants during a holiday.
(Cater and Cater 2001). As Dimmock (2007) explains, dive tourism is recognised as travel where at least one scuba diving expedition is included and the dive tourist may be a regular sport diver or occasional leisure diver. As a tourist activity, scuba diving is generally recognised as a non-competitive activity that comprises elements of fun, physical activity and freedom (Dimmock 2007).

According to a recent report, the dive tourism industry is changing. The international scuba diving market is no longer dominated by experienced and rich divers (MINTEL 2003), and as dive certification becomes more affordable, growing numbers of men and women are taking up the sport in the major tourism generating markets of North America and Western Europe. Also, more people are incorporating diving into their holiday plans, either for the express purpose of learning to dive or as the highlight of a trip to the Red Sea or Australia. Additionally, there are novice divers in America and Europe who complete their classroom and pool training at home but travel to warmer, more exotic locations to take their certification tests. Notably, these trends highlight how the scuba diver population is becoming more segmented and diverse. Also, these trends indicate the growing potential of scuba diving to become an important part of the international marine tourism industry (MINTEL 2003).

In some regions, the opportunity to ‘try scuba diving’ (or ‘Discover SCUBA’ courses) continues as a major selling point for beach resorts; a trend set by the all-inclusive Caribbean resorts in the late 1970s and early 1980s. Through the relaxation of age restrictions and the promotion of ‘try-dive’ experiences, dive certification agencies have competed with initiatives to allow greater numbers of people to experience scuba (Townsend 2003; Dimmock 2007). Better access, greater discretionary incomes, and packaged diver education available at attractive locations are contemporary features of an industry that caters to heterogeneous global diving markets (Dimmock 2007). According to Dimmock (2007), market trends indicate the growth in the popularity of scuba diving is set to continue. However, despite this potential, specific knowledge on the relationships between scuba divers and the recreation place is limited within tourism.
literature. A brief review of the current state of dive tourism literature is presented next to highlight a gap in knowledge.

1.2.1 A Review of Dive Tourism Literature
First, within the literature, there is information on diver motivations, characteristics and demographics which are normally specific to a certain location (Mundet and Ribera 2001; Todd, Cooper and Graefe 2001; Todd, Graefe and Mann 2002; Ditton, Osburn, Baker and Thailing 2002; Cottrell and Meisel 2004; Meisel and Cottrell 2004; Todd 2004). There is also literature on practices by dive tour operators to minimize their impact on the reef (Howard 1999); service quality attributes and evaluations (O’Neil, Williams, Maccarthy and Groves 2000; O’Neil, Williams and Maccarthy 2000); and the role of dive tourism managers in the provision of recreational scuba experiences (Dimmock 2004).

In one study, Fenton, Young and Johnson (1998) employed a photographic survey to determine whether reef visitors’ ideal images of the Great Barrier Reef were used in developing expectancies of the reef experience, and evaluative judgments of coral reef quality. This survey was conducted on 103 reef tourists (including snorkelers, scuba divers, tourists on glass-bottom boats and semi-submersibles). Results indicated that visitors’ expectancies of the reef experience are shaped by the stereotypical ideal images they possess of the reef environment, or, their cognitive baggage, which explains that reef environments are “as much sociocultural entities as they are biophysical ones” (Fenton et. al. 1998:189). Poignantly, the fast growing sector of dive tourism has received the greatest attention in the literature with regards to diver-induced negative impacts upon the reef environment. As a tourism resource, the coral reef environment is rich in attributes, but as recreational diving gains popularity, its potential to affect marine resources and fragile ecosystems is high (Davis and Tisdell 1996). Like other nature-based tourism, scuba diving occurs in and focuses on a ‘most fragile environment’; with its growth large areas of wilderness reserves are being converted into recreational playgrounds (Buckley 2000). The rapid growth and reliance of dive tourism on this natural resource makes a case for improved management and conservation of the marine environment to ensure long-term sustainability (Kenchington 1993; Garrod and Wilson 2003).
Since 1990, more than 30 peer-reviewed papers have been published on the impact and management of diving worldwide (Rouphael and Hanafy 2007). Most of this literature concludes that scuba divers can have negative impacts on the reef environment specifically on coral assemblages (Hawkin and Roberts 1994; Rouphael and Inglis 1997; Rouphael and Inglis 2001; Tratalos & Austin, 2001; Zakai and Chadwick-Furman, 2002; Musa 2003; Townsend 2003; Barker & Roberts, 2004). For example, damage has been observed when divers kick, hold, bump into, stand on or kneel on corals, either accidentally or intentionally (Tagle 1990). In general, studies indicate that the probability of divers coming into contact with corals will be determined by a range of personal attributes that influence the behaviour of the diver in the water. These include technical competence as a diver (Davis and Tisdell 1995), activities divers pursue whilst at the site (photography, training, exploration), and, their awareness of the environmental consequences of their actions. Diver impacts at a site, therefore, may be influenced more by the experience and behaviour of the divers than by the number of people who frequent the site.

Issues related to the diverse interests and skill levels of divers are a major challenge to resource managers in accommodating these varied recreational needs in underwater environments (Tabata 1992). The literature describes varying classifications of scuba divers. For example, Rice (1987) suggested three broad categories: ‘hard core’ (focuses on challenge, as well as specific flora and fauna at a destination), ‘tourists’ (scuba dives as part of a holiday), ‘potential’ (someone keen to learn). Whereas Wilks and Davis (2000) classified recreational scuba divers into five groups: certified instructors and dive masters; certified divers; divers in the process of training; ‘opportunists’ who engage in ‘try-dive’ scuba course whilst on holiday; and divers who engage in recreational diving at a distance from commercial operations (some may not be ‘certified’ but have access to equipment). To influence and manage such a diverse range of divers is a formidable challenge that lies ahead for the dive tourism industry. In response to these challenges, there is literature which addresses solutions related to improving an understanding of reef experiences amongst this wide array of scuba divers as outlined next.
1.2.2 Developing an Understanding of Reef Experiences

Within the literature, there is evidence of the efforts to develop an understanding of reef experiences and to expand knowledge about reef visitors. These studies highlight the growing importance which is being given to incorporate social science research into the dive tourism literature. This section provides an overview of these studies to pinpoint key aspects for extending the understanding of reef experiences.

Environmental education has shown to play a positive role in reducing negative impacts as demonstrated in the success of pre-dive briefings in controlling the behaviour of divers under water (Medio, Ormond and Pearson 1997; Halpenny 2002; Townsend 2003). Yet, based on research conducted at the Great Barrier Reef Marine Park, there are calls for further knowledge on the different ways that scuba divers interact with the marine environment (Ormsby, Moscardo, Pearce and Foxlee 2004). There is a growing body of literature which is focusing on this area. For example, Madin and Fenton (2004) evaluated the effects of an interpretive programme (in the Great Barrier Reef Marine Park) on reef visitors' knowledge and understanding of four key topic areas: reef knowledge, human impacts on the reef environment, reef health and reef tourism. Visitors aboard a dive liveaboard were surveyed over one week before, and after exposure to the interpretive programme. The survey identified significant changes in visitors' self-reported knowledge of the reef environment as a result of the trip. However, in order to grasp the complexity and richness of the dive experience, Madin and Fenton (2004) recommend that future work incorporates a social dimension inquiry of the attitudes held by scuba divers towards this fragile resource. They suggest that "by adding this attitudinal dimension to a programme evaluation, attitudinal, as well as cognitive, changes can be assessed and the results tested by comparing the predictive validity of attitudes upon behaviour" (2004: 135).

In a recent study, Thapa, Graefe and Meyer (2006) identified a positive association between recreation specialization and marine based environmental behaviours amongst 370 scuba divers in south-west Florida. As specialisation in scuba diving increased, environmentally responsible behaviours also increased; particularly, the affective
dimension of specialisation exhibited the strongest predictive power for environmental behavior. “Individuals who showed a strong emotional connection and vested interest in diving were more likely to read books and magazines or watch TV programs about the environment, marine life and conservation, and participate in community cleanup efforts” (Thapa, et. al. 2006:611). In another study, Dinsdale and Fenton (2006) used a photographic survey and personal construct theory to identify how people ascribe meanings to a coral reef environment. A total of 76 participants were surveyed and comprised of two groups: those who had working association with coral reefs, and those without. Findings identified that “participants with a broad range of experience of coral reefs prescribed similar meanings to the coral reef environment, suggesting they have a similar value systems” (Dinsdale and Fenton 2006: 253). Results were useful to build an understanding between different stakeholders in the community which lends support to collaborative resource management.

On a different note, a study by Maccarthy, O'Neil and Williams (2006) explores the concept of customer satisfaction in relation to the scuba diving consumption experience which they label as discrete and complex. Maccarthy et. al. (2006) contend that scuba diving is a hedonistic experience, arguing that dive tourism experiences provide not only objective, tangible benefits, but also involve subjective, hedonic, emotional or symbolic components. Additionally, it is suggested that satisfaction within the dive consumption experience is also based on the concept of efficacy of the skill of diving. Once the initial thrill of the introductory phases of experience begins to wane, improving skills and technical ability evolves as a basis for satisfaction, as seen in the case of skydivers (Celsi, Leigh and Rose 1993). According to Maccarthy et. al. (2006), the dive consumption experience involves both tangible and intangible elements which are used to derive a sense of meaning or satisfaction. Their findings indicate that “in situations of both technical and functional dissatisfaction the customer may still derive enough experiential satisfaction to offset the other negative aspects, and thus leave the encounter with an overall positive feeling” (Maccarthy et. al. 2006: 552). An interesting contribution of this paper is the call for a more qualitative approach to investigating diver satisfaction. “In essence, emotions, feelings and experiences surrounding this hedonistic pursuit
monopolise to such an extent the scuba-divers’ cognitive time and effort that it simply
becomes obvious during ethnography that what really determines diver satisfaction
eludes quantification” (Maccarthy et al 2006:548). Their study used an ethnographic
approach based on qualitative methods of inquiry.

1.3 Purpose and Distinctiveness of the Study
The preceding discussion has briefly overviewed dive tourism literature and pointed out a
gap in knowledge. It is ironic that while the dive tourism industry is growing, the
proliferation of research on the area remains in the realm of diver impacts and
conservation. The literature which sets out to expand an understanding of reef
depth experiences provides vital clues for further research. Pertinent points include first, most
studies were survey based and included a varied range of reef visitors (snorkelers, scuba
divers, other visitors). Secondly, there is evidence of the need to map the social
dimensions, specifically attitudes of reef visitors; as well as the meanings ascribed to
coral reefs by different stakeholders; and there are indications that experienced divers
engage in environmentally responsible behaviour. Finally, it has been suggested that the
hedonistic nature of dive consumption experience is best investigated through a
qualitative approach. These studies highlight the opportunity to expand knowledge and
understanding of reef experiences amongst scuba divers.

Based on the increasing popularity of scuba diving and growth of dive tourism, it is
proposed that one area which warrants investigation is an understanding of the
relationship between scuba divers and the sub-aquatic environment. Currently,
knowledge of recreational scuba diving experiences remains in the realm of popular
literature. Given this situation, an exploratory study on how scuba divers experience and
benefit from the sub-aquatic recreation place is proposed. In order to contextualise this
study, the terrestrial-based concept sense of place will be applied to a new context, the
marine environment. The following section introduces and outlines key aspects of this
concept.
1.4 Sense of Place in Resource-based Recreation

For over two decades, outdoor recreation researchers have been investigating the relationships between recreationists and 'places', or recreation settings. Given that outdoor recreation depends on particular types of physical settings, place is an important aspect of the experience, for example, trails for hiking or rivers for white-water recreation. Previously, recreation settings based in the natural environment used to be viewed purely as physical settings or commodities. The 'commodity metaphor' implied that people use recreation places as a means to participate in an activity, and hence recreation settings were interchangeable (Williams and Vaske 2003).

However, the winds of change arrived in the late 1980s, and replaced the commodity metaphor with the notion of resource-based recreation. Resource-based recreation is a term used for outdoor recreation where activities rely on natural environments which are viewed as resources (Farnum, Hall and Kruger 2005). Natural resources are not just raw materials to be inventoried and managed as commodities, but more importantly, "places with histories, places that people care about, places that for many people embody a sense of belonging and purpose that give meaning to life" (Williams, Patterson, Roggenbuck and Watson 1992: 44). With the advent of the applied field of human dimensions of natural resource management (Ewert 1996; Williams and Patterson 1999), resource-based recreation adopted a more holistic perspective of place to understand how people experience and benefit from contact with natural environments through recreation (Williams and Stewart 1998).

The literature on resource-based recreation has utilised this concept mainly through the discipline of environmental psychology to study the beneficial relationships between people and places (Williams and Patterson 1999). Indeed, place is an important component of any outdoor recreation experience. To quote Cresswell (2004:130): "place is the central concept which most perfectly expresses how humans create centres of meaning and fields of care in order to feel at home in the world. As Tuan (1977) noted, "what begins as undifferentiated space becomes place as we get to know it better and
endow it with value” (1977:6). Space becomes place through the transforming powers of meaning, value and familiarity (Tuan 1977).

According to Schroeder, “When people have highly valued aesthetic and emotional experiences in specific places or types of settings, these places and settings take on particular importance for them and become special places” (2002:8). Over time, such experiences can contribute to the formation of a bond between person and place, or a ‘sense of place’. Sense of place is the meaning and importance of a setting held by an individual or group, based on experience with the setting (Stedman 2003b). Sense of place is also referred to in the literature as place attachment, which, as summarised by Browns and Perkins (1992:284), “involves positively experienced bonds, sometimes occurring without awareness, that are developed over time from the behavioural, affective, and cognitive ties between individuals and/or groups and their sociophysical environment. These bonds provide a framework for both individual and communal aspects of identity and have both stabilising and dynamic features”.

As the literature review in Chapter Two will demonstrate, the concept of sense of place is multi-faceted, and has emerged as a prominent focus for exploring the relationship between humans and the environment (Patterson and Williams 2005). Currently, a three component view of sense of place is acknowledged within the literature: characteristics of the physical environment; human use and experience of the environment; social and psychological processes (meanings and affect) rooted in the setting (Brandenburg and Carroll 1995; Stedman 2003b; Hammitt, Backlund and Bixler 2006). This three component view is an outcome of input drawn from a range of disciplines including human geography, sociology and environmental psychology.

Based on repeated exposures with particular places and through social-psychological processes of people-place interactions, places take on an identity of their own (Fishwick and Vining 1992). Since resource-based recreation involves self selected activity-place interactions in some rather special and unique settings, landscapes, and places, human bonding with recreation places can be a common occurrence (Kruger and Jakes 2003).
Evidence indicates that certain recreation settings are meaningful places and the meanings recreationists attach to places are diverse and complex (Schroeder 1996; Bricker and Kerstetter 2002; Hammitt et. al. 2006). Instead of only examining specific attributes of places, researchers turned to exploring how recreationists relate to places as whole entities, confirming that recreationists have emotional and symbolic ties to the setting (Williams, et. al. 1992; Moore and Graefe 1994; Bricker and Kerstetter 2002; Kyle, Absher and Graefe 2003a).

Sense of place has been used for developing conceptual frameworks allowing managers to access, assess, inventory and monitor socio-cultural meanings of places and incorporate these into planning and management processes (Mitchell, Force, Carroll and McLaughlin 1993; Brandenburg and Carroll 1995). For example, this framework has been used for assessing how people evaluate natural environments; improve the provision of optimal recreation experiences; understanding resource conflicts and public’s reaction to, and proper role in management decisions (Williams and Stewart 1998; Warzecha and Lime 2001; Farnum, et. al. 2005). There is also growing evidence that links sense of place to environmentally responsible behaviour amongst recreationists (Mitchell et al 1993; Vaske and Korbin 2001; Kaltenborn and Williams 2002; Stedman 2002; Schroeder 2004; Halpenny 2006). Additionally, sense of place is part of current research into understanding the quality of wilderness experiences using ‘meanings-based approaches’ (Borrie and Birzell 2001; Andereck, Bricker, Kerstetter and Nickerson 2006). Meanings-based approaches have attempted to understand the wilderness experience in terms of the role that it plays in the broader context of the participant’s life (Arnould and Price 1993). Experiences are seen as dynamic and emergent, not static and discrete as noted by Patterson, Watson, Williams and Roggenbuck (1998: 449) “what people are actually seeking from their recreation experiences are stories which ultimately enrich their lives” (1998:449). Borrie and Birzell (2001) suggest that satisfaction is not derived from expectations being met, nor the on-site experience, but rather the extent to which the experience produces a fulfilling narrative that is consistent within the context of the recreationist’s life. Therefore, to understand the relationship between the visitor and wilderness environment, there is a need to identify place meanings, or the components of
sense of place. In this study, *place meanings* represent the feelings and subjective perceptions an individual ascribes to a specific place, and the importance of a setting which leads to the formation of a bond between person and place. “Understanding the multiple meanings that people have for the wilderness can help us identify the activities, benefits, and experiences that managers should aim to provide” (Borrie and Birzell 2001:36).

In a study on white water recreationists and their river setting, Bricker and Kerstetter (2002) found that place meanings encompassed the resource itself, as well as human relationships relative to the activities which took place on the river. The values most important to recreationists were revealed, as were those aspects of the experience which could compromise peoples’ satisfaction with their experience. Bricker and Kerstetter (2002) suggested that future work should continue to address the meanings nature-based places are given by individuals engaged in various activities. Additionally, they suggested a need “to explore whether visitors to natural resources have differences in description of special places based on the type of activity they are engaged in” (Bricker and Kerstetter 2002:421). However, as yet, the literature on resource-based recreation has not examined sense of place beyond recreation settings in the terrestrial environment. This study seeks to remedy this gap by conceptualising an understanding of sense of place amongst scuba divers for the sub-aquatic environment.

### 1.5 Research Questions and Objectives

Given the increase in the popularity of scuba diving as a tourist activity, and the gap in knowledge within dive tourism literature on how scuba divers experience and benefit from contact with the sub-aquatic environment, this study poses the following research question:

“How do scuba divers perceive and describe their experience of Place?”

As suggested by Moustakas (1994) the research question should be stated in clear and concrete terms, and key words should be defined, discussed and clarified so that the intent and purpose of the investigation are evident. For this study, the major components
of the research question are 'how', 'perceive', 'describe', 'experience', and 'Place'. The use of the word 'how' facilitates clear and concrete wording of the question and denotes an openness to whatever emerges about place in the course of interviews with participants. The word 'perceive' implies something about the relativity of place. For example, place is perceived in a different way by each individual; and, depending on the circumstances, the same person will perceive place differently. The word 'describe' refers to what place is and means for participants. The word 'experience' is a way of pointing to the fact that I will be seeking comprehensive stories from participants about their lived experience of Place.

The purpose of this study was to describe and interpret the meaning of place for scuba divers in order to understand how they experience and benefit from the sub-aquatic environment. The objectives of this exploratory study were to gain an understanding of:

1. What kinds of experiences make place meaningful for scuba divers?
2. How do these experiences relate to existing sense of place literature?
3. How do scuba divers benefit from the sub-aquatic experience?

Place in this context refers to the recreation setting, in this case, the sub-aquatic environment where 'sub-aqua' is defined in the Oxford Dictionary as "relating to swimming or exploring underwater, especially with an aqualung". Although place is synonymous with dive destinations, this study limits its concerns to Place, as a phenomenon, not a specific location.

1.6 Methodology and Method
In order to address the exploratory nature of this research question and objectives, this study was situated within an interpretive inquiry paradigm which provides for understanding lived experiences (Taylor and Bogdan 1984; Schwandt 1998; Patton 2002). Interpretivism assumes that human beings are the purposive source of meaning, and life can only be understood from within, not observed as an external reality (Hussey and Hussey 1997). Research assumes a clear relationship between researcher and participant, and as such, is value-laden. Because interpretive researchers are interested in
‘understanding’, they employ meaning-oriented methods, or qualitative methods, which are becoming more prevalent within tourism research.

Over ten years ago, Burns and Holden (1995: 13) suggested “those who study tourism should not merely concern themselves only with that which is business or that which is easily quantifiable. While such an approach may provide a mark of respectability for tourism studies in a world dominated by quantitative method, neglect of qualitative issues will inevitably lead to a poorer tourism produce for both the hosts and guests”. As noted by Walle (1997), an intrinsic aspect of tourism research seemed misplaced: the very subject matter within tourism research requires an understanding of people in their own terms, which is possible through the use of qualitative methodology. According to Hollinshead (1996:71), “qualitative researchers ought to think historically, interactionally, structurally, reflectively and biographically when they probe the lived experiences of the here and now in tourism matters of the sun, sand and sensation as in any other social/human setting”. Within the field of tourism studies, there is growing acknowledgement and acceptance of qualitative methodology (Walle 1997; Riley and Love 2000; Dann and Phillips 2000; Jamal and Hollinshead 2001; Phillimore and Goodson 2004). Based on the foregoing, this study seeks to contribute to the growing scholarship on studying lived experiences within tourism research.

This study employed Interpretative Phenomenological Analysis (IPA), a qualitative methodology concerned with how individuals make sense of their lived experiences (Smith and Osborn 2003). Phenomenology and hermeneutic inquiry form the dual epistemological underpinnings of IPA: where phenomenology is concerned with the way things appear to us in experience, contemporary hermeneutic inquiry draws attention to us as interpreters and sense-making individuals (Smith and Eatough 2006). IPA’s aim to gain an insight into the individual’s lifeworld is achieved through interpretative activity carried out by the researcher, emphasising that research is a dynamic process with an active role for the researcher (Smith and Eatough 2006). Sixteen British based scuba divers (7 female and 9 males) were interviewed about their experiences of a favourite or memorable dive destination. Interview transcripts were transcribed verbatim, and analysed to extract a range of central and sub-themes which constitute those aspects of
the experience which make place meaningful. Unique in phenomenological study, IPA also conducts an analysis of results in terms of existing theory and is capable of further understanding the phenomenon under study and making tentative theoretical claims to knowledge.

1.7 Outline of Dissertation
This chapter has introduced the rationale for this study highlighting a gap in knowledge within dive tourism literature. Next, the chapter briefly outlined the conceptual framework and outlined the research question and research objectives. Subsequently, the chapter introduced the qualitative methodology which was employed to describe and interpret the meaning of Place for scuba divers. Chapters 2 & 3 provide background on relevant literature and a discussion of the methodological issues involved in the choice of IPA as research method. Chapter 2 is titled 'Conceptualising Sense of Place' and presents a chronological background to the arrival and application of this multifaceted concept within resource-based (outdoor) recreation. This chapter seeks to clarify the origins of the various conceptualisations of place within the literature, as well as to define the use of place meanings for this study. Next, the chapter establishes a framework grounded within environmental psychology (as applied within resource-based recreation) for interpreting the findings.

Chapter 3 is mainly theoretical and discusses methodological issues to justify the choice of situating this study within an interpretative paradigm. The chapter then introduces the methodological assumptions related to this study and the intrinsic role of the researcher within this study is also made explicit. Next, the theoretical and epistemological underpinnings of Interpretative Phenomenological Analysis (IPA) are illustrated to justify the suitability of this qualitative methodology to the answer the research question. Having reviewed literature and justified my research method, Chapters 4 to 7 describe the study proper. Figure 1 illustrates the structure of my study.
Chapter 4 illustrates the research design and maps out an audit trail of data collection and data analysis. The chapter also discusses the techniques incorporated within the study to ensure its trustworthiness based on credibility, transferability, dependability and reflexivity. Results of the data analysis conducted in Chapter 4 are presented in Chapters 5, 6 and 7.
Chapters 5 and 6 present this study's primary contribution to knowledge: the Sub-Aquatic Meanings (SAM) framework which qualitatively describes the range of place meanings embedded in stories of scuba divers' lived experience. SAM is derived from participants' interview transcripts by a process of interpretation and consists of a set of descriptive themes that emerged as commonly meaningful. Chapter 5 focuses on themes based primarily on physical properties of the sub-aquatic environment and Chapter 6 describes themes more focused on social aspects. Both chapters are devoted to presenting a narrative account of sub-aquatic experiences that enables the voices of the participants to be heard. Results of a member check exercise designed to gain participant feedback on the analysis are presented at the end of Chapter 6.

Chapter 7 assesses the findings in light of the extant literature to provide empirical and theoretical evidence for two further contributions which may broaden our understanding of scuba divers' sense of place, and the desirable properties of the sub-aquatic environment itself. First, using the organising framework on sense of place suggested by Williams and Patterson (1999), each of the themes in SAM is revisited resulting in evidence suggesting that sense of place in scuba divers is of the strong form known as place identity. This analysis motivates a review of Attention Restoration Theory (ART) (Kaplan 1995) and the evaluation of evidence in my study to support the second claim that the sub-aquatic environment is a restorative environment. Empirical support and theoretical refinement for a new extension to ART by Staats and Hartig (2004) is also given here.

Concluding the dissertation, Chapter 8 revisits the research question and objectives, and summarises the journey made in meeting these aims. An outline of the findings and contribution to knowledge, as well as a detailed discussion of the implications for tourism practice of SAM and the claims of Chapter 7 is given. Finally, a critical reflection on this research journey is presented, including limitations and recommendations for future work.
Chapter Two: Conceptualising Sense of Place

2.0 Introduction
Place-related concepts have been applied in natural resource-based recreation and tourism to evaluate the relationships between recreationists and recreation settings. This chapter reviews the literature on sense of place in resource-based recreation. It is the intent of this review to clarify the various concepts within the literature, and, to justify the decision to approach the study of place through the discipline of environmental psychology, as applied in resource-based recreation research. This review of the literature is organized into six sections. The first section introduces the underlying concepts which guide this study: place and sense of place. This is followed by a chronological review which unravels the differing theoretical conceptualisations which exist in the literature, illuminating how place has been defined, observed and analysed within different perspectives. Subsequently, key aspects of the literature on resource-based recreation are illustrated before a framework for mapping place meanings is introduced. The final section discusses relevant studies from resource-based recreation which have bearing on the proposed study. Key points are evaluated and drawn out and this section concludes by establishing a gap in context and thus, situates the present study.

2.1 Conceptualisations of ‘Place’ and ‘Sense of Place’
Place is a concept used to understand how we make the world meaningful, and the way we experience the world (Cresswell 2004). A rich, multidisciplinary, pool of literature exists which concentrates on understanding meaningful relationships between people and place. This section aims to clarify the definition of place; sense of place; environment; landscape; and reefscape; terms which are used frequently within this study. According to the political geographer, John Agnew (1987 cited in Cresswell 2004), there are three fundamental aspects of place as a ‘meaningful location’: location, locale, and sense of place. Place is commonly used to refer to a location, somewhere with fixed co-ordinates situated on a geographical map; it is also a verb (the notion of ‘where’); it is not always stationary (for example, a ship). Locale refers to the material setting for social relations: the actual shape of place within which people conduct their lives as individuals and
interact with others (for example, a home, the city, a neighbourhood). Finally, "as well as being located, and have a material visual form, places must have some relationship to humans and the human capacity to produce and consume meaning" (Cresswell 2004:7) or 'sense of place'.

Two commonly used terms to refer to place are environment and landscape which deserve some clarification. "The environment is anything outside an organism in which the organism lives. Man's environment will include a country or region or town or house or room in which he lives" (Collins 1995 cited in Holden 2000:24). Landscape is an intensely visual idea and in most definitions, the viewer is outside of it, whereas 'places' are very much things where the person is on the inside (Cresswell 2004). As Cresswell (2004) explains, landscape refers to a portion of the earth's surface that can be viewed from one spot; the concept combines a focus on the material topography of a portion of land (that which can be seen) with the notion of vision (the way it is seen). In relation to this demarcation between environment and landscape, it is clarified here that this study is concerned with the sub-aquatic environment as the location for the activity of recreational scuba diving. The term reefscape (Love 2001) is also used specifically to refer to the underwater landscape of the sub-aquatic coral reef environment. The aim of this exploratory study was to understand the meaningful relationships scuba divers have towards the sub-aquatic environment and its reefscape: to describe a sense of place.

2.1.1 Sense of Place: An Interdisciplinary Concept

During the process of reviewing the literature, the complex nature of sense of place became apparent. Within the literature, sense of place is composed of a complex framework of interdisciplinary concepts, which are often presented in the literature with some form of unity or coherence. In fact, each discipline infuses a unique perspective towards place-based research, for example, sociology emphasises how the symbolic meanings of settings influence the social context of human interactions (Greider and Garkovich 1994) whereas human geography uses the broad term 'sense of place' to define the essence of human existence as one that is 'in-place' (Relph 1976; Tuan 1977; Buttimer 1980; Seamon 1980; Cresswell 2004). As a general definition, sense of place refers to the subjective and emotional attachment people have to place (Tuan 1977); the
entire group of cognitions and affective sentiments held regarding a particular geographic locale (Altman and Low 1992; Jorgensen and Stedman 2001); a spatial part of the environment that one is related to through one’s experiences, imagination, or feelings (Roberts 1996); and the meanings one attributes to such areas (Fishwick and Vining 1992; Stedman 2003b). Sense of place “is created by the setting combined with what a person brings to it. In other words, “to some degree we create our own places, they do not exist independent of us” (Steele 1981:9).

Within environmental psychology, the bond between people and places is referred to as ‘place attachment’ which includes affective (emotion and feeling), cognitive (thought, knowledge and belief) and conative (action and behaviour) qualities (Low and Altman 1992). According to Williams and Vaske (2003), in general, place attachment is the environmental psychologist’s equivalent of the geographer’s sense of place. At times, the term encompasses a spectrum of place-related phenomena such as place dependence, place identity, rootedness and satisfaction (Kaltenborn 1998). One clear definition of place attachment, is provided by Brown and Perkins (1992:284) who suggest it, “involves positively experienced bonds, sometimes occurring without awareness, that are developed over time from the behavioural, affective, and cognitive ties between individuals and/or groups and their sociophysical environment. These bonds provide a framework for both individual and communal aspects of identity and have both stabilising and dynamic features”. However, ‘place attachment’ can be particularly confusing at times because place attachment also refers more narrowly to a specific aspect of the overall relationship to place (Patterson and Williams 2005) which will be clarified later. In sum, place-based research has progressed within the jurisdictions of disciplinary boundaries as reflected in varying descriptions available in the literature (Stedman 2003b).

Within resource based recreation, place attachment is recognised as having two distinct sub-dimensions. First, place identity which captures an individual’s use of places in constructing and maintaining self-identity (Manzo 2003) and is used exclusively within resource-based literature as an individual-level phenomenon (Farnum, et. al. 2005). Secondly, place dependence which refers to a functional attachment based on the ability
of an area to match an individual’s intended use of the area, relative to alternative sites (Farnum et. al. 2005). These sub-dimensions are incorporated within the standardised measures of place attachment scales and have shown to demonstrate adequate construct validity and reliability (Williams and Vaske 2003). Additionally, resource-based recreation commonly uses the term sense of place “to the extent to which an individual values or identifies with a particular setting” (Kyle, Graefe, Manning and Bacon 2003), signifying an emotional connection. Both sense of place and place attachment are notably studied as forms of positive emotional connections to place (Manzo 2003). As Stedman (2003b) suggests, sense of place is composed of descriptive and evaluative components that are a function of landscape attributes, and, experience with the landscape, which may affect place-related behaviours.

In general, three key aspects to explain sense of place are acknowledged within the pool of literature, with slight variations: i) the characteristics of the physical environment; ii) human use and experience of the environment or human activities afforded by the place including social interactions; and, iii) social, psychological interpretations and constructed meanings of people-place interactions or meanings and attachment rooted in the setting (Tuan 1974; Relph 1976; Brandenburg and Carroll 1995; Stedman 2003a; Hammitt et. al. 2006). However, there are no standard definitions to articulate these components; as such what constitutes each component is rarely made clear within the literature (Stedman 2003b). During the literature review process, it became apparent that in actuality, each of these components originates from a different discipline with varied methodological assumptions about place. Given this situation, there is a need to clarify this three-component view, and therefore, this discussion continues with the aim to assesses ‘place’ and ‘sense of place’ literature to provide a background to what is known, unknown and uncertain in the literature. A chronological account to map the knowledge base and growth of place-based research is presented through two perspectives: phenomenological and psychological. It is anticipated that this discussion will explicate an understanding of these three components which constitute sense of place, as well as justify the chosen perspective or discipline guiding this research: environmental psychology. The next section discusses the phenomenological origins of place.
2.2 Phenomenological Perspectives of Place

The study of place is synonymous with the emergence in the 1960s of a humanistic critique of geography (Patterson and Williams 2005). A new school of thought emerged and ‘place’ explicitly became the central concept in geographical inquiry as opposed to the previous focus on geographical space (Cresswell 2004). “Place, to human geographers such as Yi-Fu Tuan (1977; 1974), Edward Relph (1976), Anne Buttimer and David Seamon (1980) was a concept that expressed an attitude to the world that emphasised subjectivity and experience rather than the cool, hard logic of spatial science” (Cresswell 2004:20). Their engagement took a distinctly philosophical turn looking to continental European philosophy for inspiration: phenomenology and existentialism were used to explore ‘place’ as an idea, concept and way of being-in-the-world (Cresswell 2004). Hence, the term ‘phenomenological’ in this context refers to the philosophy of Heidegger and the notion of dasein or ‘being there’ which focused on ‘dwelling’. Researchers using phenomenological approaches to place sought to define the essence of human existence as one that is necessarily and importantly ‘in-place’ (Cresswell 2004). The focus of this research was on home, neighbourhoods, and other significant places. An important outcome of this research was the notion of topophilia (Tuan 1974), which later evolved into the concept known as ‘sense of place’. Additionally, the literature specified the need to understand place as a holistic concept based on three components: physical setting, activities, and meanings (Relph 1976). The next section briefly introduces these two pivotal moments in the literature.

2.2.1 Topophilia

Sense of place originates from the neologism topophilia, or love of place, coined by Tuan (1974) to include all of the human being’s affective ties with the material environment, differing greatly in intensity, subtlety, and mode of expression. In considering the relationship between people and place, Tuan believed it was important to take into account humankind’s affinity toward the environment. He also suggested that human affinity or responses to the environment may be aesthetic (the intense sense of beauty in a scenic view); tactile (a delight in the feel of air, water, earth); or those more permanent and less easy to articulate feelings we have towards a place because it is home, the locus...
of memories, and the means of gaining a livelihood (Tuan 1974). The origins of topophilia are described in the following excerpt:

As a geographer, I have always been curious about how people live in different parts of the world. But unlike many of my peers, the key words for me are not only “survival” and “adaptation,” which suggest a rather grim and puritanical attitude to life. People everywhere, I believe, also aspire toward contentment and joy. Environment, for them, is not just a resource base to be used or natural forces to adapt to, but also sources of assurance and pleasure, objects of profound attachment and love. In short, another key word for me, missing in many accounts of livelihood, is Topophilia.

(Tuan 1990: preface xii)

The origins of focusing upon the positive relationships between people and place are grounded in this moment. Topophilia presented “a general framework for discussing all the different ways that human beings can develop a love of place” (Tuan 1990: xii). At the time in North America, environmental perceptions, attitudes and values were rising as people grew more conscious of the need to preserve the environment and its role in their lives. Since the publication of this seminal text on Topophilia (1974), the concept has evolved in various fields such as architecture, environmental psychology, sociology and geography but is commonly known as sense of place.

In a later publication, Space and Place: The Perspective of Experience (1977), Tuan suggested that place is created or shaped through personal experience with space. According to Tuan (1977), ‘space’ is more abstract than ‘place’ and he explained, “what begins as undifferentiated space becomes place as we get to know it better and endow it with value” (1977:6). Through personal experience, an emotional connection between person and place develops, either temporary or permanent. As familiarity increases, space transforms into place and acquires meaning: “abstract space, lacking significance other than strangeness, becomes concrete place, filled with meaning” (Tuan 1977:199). Moreover, Tuan also suggested that “the ideas space and place require each other for definition. From the security and stability of place, we are aware of the openness, freedom, and threat of space, and vice versa. Furthermore, if we think of space as that
which allows movement, then place is pause; each pause in movement makes it possible for location to be transformed into place" (Tuan 1977:6). Therefore, a place is a centre of meaning, or field of care based on human experience, social relationships, emotions and thoughts (Tuan 1977). Tuan’s publications made significant contributions towards the development of the idea of place (Cresswell 2004).

Another influential publication was Place and Placelessness by Relph (1976) where he introduced a subtle aspect to sense of place. Relph discussed place identity (1976:61), “The identity of a place is comprised of three interrelated components, each irreducible to the other – physical features or appearance, observable activities and functions, and meanings or symbols”. As a human geographer, Relph’s outlook was holistic, suggesting that the completeness of place is found through these three basic elements, of which ‘meanings’ is highly subjective and are created through experience with space. The significance of place to human beings is depicted through a comparison with space:

Space is amorphous and intangible and not an entity that can be directly described and analysed. Yet, however we feel or explain space, there is nearly always some associated sense or concept of place. In general it seems that space provides the context for places but derives it meaning from particular places (Relph 1976:8).

For example, to a visitor, a town may consist of buildings, with residents either busy shopping or selling merchandise. However, a resident, “experiencing these buildings and activities sees them as far more than this – they are beautiful or ugly, useful or hindrances, home, factory, enjoyable, alienating; in short, they are meaningful (Relph 1976:47). Additionally, Relph (1976) described an experience-based continuum of sense of place based on a steady accumulation of experience leading to a progressively stronger sense of place. This would mean, for example, those who have the ‘most experience’ will have the strongest place sentiment. Similarly, Sime (1986) suggests that ‘space’ denotes the physical environment whereas ‘place’ includes the meaning which the physical environment holds for people. Therefore, the importance of place lies in the domain of feelings about the physical environment and its meaning. In sum, ‘sense of place’ within the phenomenological perspective, is a sentiment that is highly subjective,
personalised, intangible, and, an interpretation of how we feel towards meaningful places in our lives, and how we come to value or identify with a particular place. On the other hand, initial psychological perspectives of place sought to ‘measure’ behaviour which will be discussed in the following section.

2.3 The Psychology of Place
In order to continue the discussion on the background of place-based research, this section first introduces how place was approached as a concept in cognitive psychology, followed by the approach to place in environmental psychology. Cognitive psychology produced one of the first models of place and introduced a focus on measuring behaviour (Canter 1977). David Canter, a psychologist, viewed place as a ‘technical term’ and considered Relph’s notion of place to be ‘romantic’ (Gustafson 2001a:6). For Canter, places could be conceptualised as an integrated system comprising three attitude domains where the cognitive (thoughts) and affective (emotions) meanings acted as regulators of an individual’s behaviour (conative) (Jorgensen and Stedman 2001). Canter suggested that “if we are to understand people’s responses to places and their actions within them, it is necessary to understand what (and how) they think” (1977:158).

He proposed a Venn diagram (Figure 2) illustrating that place is the result of relationships between actions, conceptions, and physical attributes (Canter 1977). According to Canter’s perspective, “we have not fully identified the place until we know (a) what

Figure 2: A visual metaphor for the nature of places (Canter 1977:158)
behaviour is associated with, or is anticipated will be housed in, a given locus (b) what
the physical parameters of that setting are, and (c) the descriptions, or conceptions which
people hold of that behaviour in that physical environment” (1977:158). Canter (1977)
pointed out that individuals conceptualise places differently and it was important to
consider places from the perspective of their users. The focus of this research was on the
work environment, for example hospitals. However, by focusing on cognitive meanings,
Canter’s model was criticised for omitting an explicit social and affective aspect. As
not as a phenomenon in its own right, but as an entity produced by the union of physical
attributes, activities, and people’s conceptions. In this interpretation, place has no clear
uniqueness as a phenomenon, and in fact, the word ‘environment’ could readily be
substituted with no substantial change in Canter’s presentation”.

Similarly, Sime (1986:56) noted, “the emotional tie to places does not figure as an
essential component of Canter’s model of relationships between people and physical
settings”. As Sime suggests “identifying psychological factors is important in
understanding the relationship of people to physical environments, and hence there is a
need for more attention on people’s actions and an understanding or descriptions about
the actual physical environment” (1986:55). Canter’s emphasis on scientifically
measuring the relationship between people and physical environments was very different
from those advocating a phenomenological approach to ‘place’. Additionally, Relph
(1978) was also critical of Canter’s belief that by measuring behaviour, the physical
environment and conceptions of a locale, it would be possible to establish the nature of
place. Relph (1978) reaffirmed that reference to meaning developed through engaging
with space was an important ingredient to the notion of place. Such calls to return to a
focus on the meanings of place were taken up by the field of environmental psychology.

2.3.1 A Transactional View of Place: Environmental Psychology
Environmental psychology is a branch of psychology concerned with studying human-
environment relationships to clarify how individuals perceive, experience and create
meaning in the environment (Williams 2004). Based on the foregoing discussions, a
transactional view of settings (Stokols and Shumaker 1981; Stokols and Altman 1987)
was introduced out of an effort to find a middle ground that was free of objectivist and subjectivist extremes. According to Saegert and Winkel (1990), there are five dimensions of the transactional perspective: the person in the environment provides the unit of analysis; both person and environment dynamically define and transform each other over time as ‘aspects’ of a unitary whole; stability and change co-exist continuously; the direction of change is emergent, not pre-established; and the changes that occur at one level affects the other levels, creating new person-environment configurations.

Environmental psychologists ask how social context, physical environment, psychological processes (including actions, affect, and cognitions), and temporal qualities fit together in meaningful and coherent patterns or wholes (Altman and Rogoff 1987). This world view assumes that temporal qualities are integral parts of phenomena, so events unfold at their own pace or in accord with changing seasonal or biological events (Altman and Rogoff 1987). As noted by Altman and Rogoff, “psychological phenomena are holistic events composed of inseparable and mutually defining psychological processes and social environments...transactional world view considers the whole to be composed of inseparable aspects that immediately and simultaneously define the whole” (1987:621). As such, environmental psychologists emphasise the constructed nature of place by describing the human actor as a social agent who seeks and creates meaning in the environment (Saegert and Winkel 1990). In sum, the transactional world view emphasises a holistic, dynamic and reciprocal relationship between the individual and the environment.

The use of environmental psychology is sparse within tourism studies. It has been suggested that in order to gain a more comprehensive understanding of tourism, there is a need to comprehend how tourists perceive and experience environments (Holden 2005). Holden (2000; 2005) discusses the work of Ittleson, Franck and O’Hanlon (1976), and Iso-Ahola (1980) and suggests five different, but overlapping modes of interaction that an individual may have in experiencing the physical environment. These five modes include experiencing the environment as external; as a setting for action; as a social system; as
emotional territory; and as self. These modes represent a range of feelings about the environment, that are not exclusive and the environment may be experienced in two or more modes at the same time. Holden (2005: 77) suggests that “how we view a particular environment is likely to determine how we interact with it as a tourist”. Holden (2005:78) also proposes that “visiting natural ecosystems such as coral reefs, mountain areas, or built environments such as Venice may inspire a sense of emotional awe in the environment”. In comparing these modes to sense of place literature, experiencing the environment as emotional territory implies an affective connection similar to the notion of place attachment, whereas experiencing the environment as self is similar to the notion of place identity. However, attempts to link these two strands of literature are limited, as is the prominence of environmental psychology within tourism research. This next section discussed the use of environmental psychology within resource-based recreation research.

2.4 Sense of Place in Natural Resource-based Recreation

Through environmental psychology, sense of place was adopted by the field of natural resource management (Williams and Stewart 1998) for its consideration of people as a rightful part of ecosystems (Williams et. al. 1992; Mitchell et. al. 1993; Schroeder 1996). Natural resource management moves away from focusing on the tangible or objective properties of the environment towards the importance of understanding the subjective, emotional, and symbolic meanings associated with natural places, and personal bonds or attachments people form with specific places or landscapes (Williams and Vaske 2003). Natural resources are not just raw materials to be inventoried and managed as commodities, but more importantly, “places with histories, places that people care about, places that for many people embody a sense of belonging and purpose that give meaning to life” (Williams et. al. 1992: 44). This section aims to delineate the conduct of sense of place research within resource-based recreation.

In the late 1980s, sense of place was adopted by the field of resource-based recreation to understand how people experience and benefit from contact with natural environments through recreation (Williams and Roggenbuck 1989). Resource-based recreation is a term used for outdoor recreation where activities rely on natural environments (Farnum,
et. al. 2005), for example, hiking (trails) or white-water recreation (rivers). Sense of place has been used for developing conceptual frameworks allowing managers to access, assess, inventory and monitor socio-cultural meanings of places and incorporate these into planning and management processes (Mitchell, et. al. 1993; Brandenburg and Carroll 1995). There is also growing evidence that links sense of place to environmentally responsible behaviour (Mitchell et. al. 1993; Vaske and Korbin 2001; Kaltenborn and Williams 2002; Stedman 2002; Schroeder 2004; Halpenny 2006).

As noted by Kruger and Jakes (2003), because resource-based recreation commonly involves self selected activity-place interactions in some rather special and unique landscapes, attachment to recreation places can be a common occurrence. In general, the literature on sense of place amongst recreationists concentrates on high amenity recreation areas (Williams et. al. 1992; Moore and Graefe 1994; Bricker and Kerstetter 2000). Within resource-based recreation, a great deal of research has addressed how much a setting means to a person, and less research has examined the particulars of what the setting means (Stedman, Beckley, Wallace and Ambard 2004). Within most of this research, sense of place is normally measured, to denote an individual’s strength or weakness mapped against three constructs: place attachment, place identity, and place dependence.

As noted by Stedman et. al. (2004), these are evaluative constructs, or different ways of emphasizing the degree to which a setting is important (reflecting attachment), supports one’s sense of self (reflecting identity) or is useful for achieving goals (reflecting dependence). A setting can succeed or fail to meet these criteria. Consequently, there has been a move towards understanding ‘what’ the setting means; to gain a descriptive sense of place or ‘place meanings’ (Schroeder 1996; 2004; Bricker and Kerstetter 2002). According to Schroeder, “When people have highly valued aesthetic and emotional experiences in specific places or types of settings, these places and settings take on particular importance for them and become special places” (2002:8). Therefore, to understand the relationship between the visitor and wilderness environment, there is a need to identify place meanings, or the components of sense of place. The literature has
also explored the temporal aspects of attachment, or a process-based notion of place to investigate how sense of place develops amongst recreationists (Smaldone, Harris and Sanyal 2005; Brooks, Wallace and Williams 2006). The next section introduces the use of sense of place as part of increasing studies focusing on the multi-phasic nature of leisure experience, specifically recollections.

### 2.4.1 Leisure as a Multi-Phasic Experience

Within outdoor recreation research, the leisure experience is described as *multi-phasic* and the total experience consists of five phases: anticipation, travel to, the actual on-site experience, the travel-back phase, and the recollection phase (Clawson and Knetsch 1966 cited in Borrie and Roggenbuck 2001). Within a multi-phasic experience, outdoor recreationists gain satisfaction or dissatisfaction from each phase of the experience. For example, it is suggested that a common pattern would consist of increasing joy, satisfaction, or benefit from *anticipation* through to *travel to* and including the *on-site* experience; they might be a drop in satisfaction during the *travel-back* phase, but then considerable recovery in benefits during the *recollection* phase (McIntyre and Roggenbuck 1998; Borrie and Roggenbuck 2001).

As noted by Curtin (2006), research on tourist recollections is rather thin; most research is undertaken on site or immediately after the consumption of an activity or the visitation of a place. Research on tourist recollections provides a new and interesting dimension; but one criticism is that our memories tend to become ‘golden’ (Curtin 2006). “When we recollect and reconstruct our past experiences, it is natural to be selective and imaginative” (Curtin 2006:303). However, as Van Manen (1997) noted, experiences have a temporal structure and cannot be grasped in their immediacy; instead they gather significance as we reflect on and give memory to them. This study is situated within the fifth stage of a multi-phasic experience, and seeks to understand the experiences of place as recollections. Within the literature, leisure experiences have been studied at various phases, as well as through four main approaches. The meanings-based approach to understanding the *quality* of leisure experiences has become apparent through the investigation of two closely related concepts, self-affirmation and *sense of place*.
2.4.1.1 Quality of Experience: Meanings-Based Approaches

Four approaches have been prominent in the measurement of the quality of wilderness experiences in the past thirty years: satisfaction approaches (evaluation of on-site conditions); benefits-based approaches (psychological outcomes); experience-based approaches (describing cognitive states experienced in wilderness); and more recently, meaning-based approaches (or documenting socially constructed meanings ascribed to the experience) (Borrie and Birzell 2001). Sense of place is part of a recent area of research into understanding the quality of wilderness experiences using meanings-based approaches (Borrie and Birzell 2001; Andereck, et. al. 2006). Where experience-based approaches have focused on the nature of experience as it is experienced (on-site), meanings-based approaches have attempted to understand the wilderness experience in terms of the role that it plays in the broader context of the participant’s life (Arnould and Price 1993). Experiences are seen as dynamic and emergent, not static and discrete.

In their study, Patterson, et. al. documented canoe trips within Juniper Prairie, Florida as an emergent experience, suggesting “what people are actually seeking from their recreation experiences are stories which ultimately enrich their lives” (1998:449). Satisfaction is not derived from expectations being met, nor the on-site experience; but rather the extent to which the experience produced a fulfilling narrative that is consistent within the context of the recreationist’s life (Borrie and Birzell 2001). Subsequently, Borrie and Birzell (2001) suggest that if the goal of wilderness recreation management is to provide quality wilderness experiences, then the meanings that people associate with those experiences may be one of the best measures of that quality. As proposed by Williams and Patterson (1999), in order to more fully understand the relationship between the visitor and the wilderness environment, there is a need for better efforts at identifying wilderness and landscape (place) meanings. “Understanding the multiple meanings that people have for the wilderness can help us identify the activities, benefits, and experiences that managers should aim to provide” Borrie and Birzell (2001:36). The strength of a meaning-based approach is that it allows social science researchers to highlight the importance of deep emotional bonds and place meanings that have been understudied in studies that use a commodity metaphor (Borrie and Birzell 2001). In this
study, *place meanings* represent the feelings and subjective perceptions an individual ascribes to a specific place, and the importance of a setting which leads to the formation of a bond between person and place.

In order to continue the discussion, four organising dimensions of sense of place based on a framework for mapping landscape (*place*) meanings (Williams and Patterson 1999) is introduced. This framework was chosen to guide the rest of the discussion primarily for the clarity with which it explains key concepts within sense of place (McCool 2001; Farnum *et. al.* 2005). This discussion also continues to elucidate the three-component view of sense of place as described in section 2.1.1

**2.5 A Framework for Mapping Place Meanings**

According to Williams (2004), environmental psychology is particularly relevant to natural resource management for its broad approach to conceptualising both the stimuli (large-scale environments) and subsequent responses (from immediate affective and behavioural responses to more extensive and enduring understandings and relationships to places). Much of applied environmental psychology describes the range and diversity of meanings people associate with particular places and the factors that influence the formation of these meanings (Groat 1995 cited in Williams 2004). This includes “understanding how relatively tangible and objective properties of the environment shape and influence human responses, as well as identifying the emotional and symbolic meanings people associate with specific landscapes or places” (Williams 2004: 338). To understand the background to identifying *place meanings*, the next section introduces the concept of *environmental meaning* as discussed by Williams and Patterson (1999).

**2.5.1 Environmental Meaning**

People-place relationships can be captured through the concept of 'environmental meaning' which includes perceptions, preferences, values, beliefs and attitudes (Williams 2004). According to Williams and Patterson (1999), environmental meaning includes the cognitive representations of the world in conscious awareness; the emotional interpretations of events; and interpretations rendered at low levels of conscious awareness. Environmental meaning is based upon Fournier's (1991) framework on
consumer-object relations. Environmental meaning is distinguishable according to the degree to which the meaning is objective, tangible and verifiable through the senses, or, whether it is primarily subjective, interpreted through experience and dependant upon associations (tangibility); the degree to which meanings are shared by members of a group, or, highly individualised created by the user through experience and interaction (commonality); and the degree to which meaning is associated with arousal, intensity, or depth of involvement (emotionality) (Fournier 1991; Williams and Patterson 1999; Williams 2004).

The tangibility issue has been addressed by Tuan (1974) where he suggests that the nature of environmental experience can be either direct (through the senses) or indirect (through symbolic processes). In sense of place literature, emotionality often focuses on place attachment as an emotional or affective bond between an individual and a particular place that may vary in intensity from immediate sensory delight to long-lasting and deeply rooted attachment (Tuan 1974). Emotionality can be seen as an indication of the depth or extent of meaning, with symbolic and spiritual meanings often associated with high levels of attachment to an object or place (Williams and Patterson 1999). Commonality relates to meanings which may be held by single individuals, but often form the ‘perceived social field’ of an environment to the extent that they are held in common with other occupants and/or shared through interaction and communication among members of organised groups (Stokols and Shumaker 1981).

Williams and Patterson (1999) introduce a framework for mapping place meanings which recognises four approaches to understanding the meanings people assign to natural landscapes. These include both adaptive and functional interpretations of the environment that seem inherent in the stimulus (‘aesthetic’ and ‘instrumental’ meanings); and meanings which develop through social interaction and are embedded in social practices (‘symbolic’ and ‘expressive meanings’). An important aspect of this framework is “to show that meanings exist within an ecological context, that places or landscape represent socially constructed systems of meaning” (Williams and Patterson 1999:144).
As depicted in Figure 3, the framework attempts to map the degrees of environmental meaning (tangibility; commonality; emotionality).

![Diagram showing forms of human-environment relationships with aesthetic, instrumental, symbolic, and expressive categories. Dimensions of meaning include tangible-common-interest and intangible-unique-attachment.]

Figure 3: Williams and Patterson (1999) Framework for Mapping Place Meanings

By mapping the dimensions of environmental meaning, it is possible to ascertain the category of place meaning: aesthetic, instrumental, symbolic or expressive. As noted by Williams and Patterson (1999), the application of environmental psychology to natural resource management has focused primarily on the aesthetic and instrumental approaches for characterising the meaning of natural resources. These approaches address relatively tangible environmental qualities that are easier to incorporate into the utilitarian philosophy guiding resource management and planning. Following from the shift towards ecosystem management, there have been calls to map and integrate the symbolic and expressive forms of environmental meaning into natural resource management (Williams and Patterson 1999; Williams 2004). The following section uses Williams and Patterson’s (1999) framework to delineate each of the four types of environmental meaning. As mentioned previously, this framework was chosen due to the clarity with which it explains the concept of sense of place, specifically the three component view which is frequently mentioned in the literature, but rarely explained in detail. Ultimately, this framework also provides an avenue within which to discuss the findings of this study.
2.5.1.1 Aesthetic Meanings

Based on Saegert and Winkel’s (1990) adaptive paradigm in environmental psychology, the aesthetic approach is based on the premise that biological and psychological survival motivates behaviour. According to this premise, psychological functioning has evolved to address three adaptive issues: how organisms come to know the environment; how organisms cope with stressful environments; and how the environment functions as a restorative or therapeutic medium (Williams 2004). Such adaptive responses or aesthetic meanings are determined at a biological level as a predictable response to features of the environment. This section deals mainly with the potential contribution of the physical environment to sense of place. Aesthetic meanings have been mapped with evidence confirming the intrinsic capacity of natural environments to promote health and well-being. Two well-known areas of research include Ulrich’s (1983) psycho-evolutionary framework on stress and Kaplan’s (1995) *Attention Restoration Theory* (or Theory of Restorative Environments) on mental fatigue. Research on landscape aesthetics and scenic quality research is also located here. Meanings are relatively tangible, emotionally evocative and provide for a widely shared and valued basis for decision making due to its generalisability (Williams and Patterson 1999). However, as noted by Williams (2004: 339), by treating the person as a biological and psychological individual, and the environment as naturally given, this approach ignores the social construction of reality through active, interpretive and behavioural engagements with the environment.

Nonetheless, there is growing support in the literature for potentially important contributions of the physical environment to shaping sense of place or place attachment (Stedman 2003a). Although Stedman agreed that social constructions were important, he argued that it was the environment that sets bounds and gives form to these constructions: “space is never truly ‘blank’ because the physical setting contributes important raw material to place meanings” (Stedman 2003b:823). For example, empirical evidence demonstrated that landscape characteristics were important to sense of place amongst homeowners by a lakeshore in Vilas County, Wisconsin (Stedman 2003a): the increase of shoreline development caused people to change the symbolic base of their attachment to lakes by treating more developed lakes as ‘social places’, and no longer ‘escape places’.
Shoreline development changed the symbolic base of attachment without affecting overall attachment. This study showed that landscape characteristics matter and underpin sense of place and satisfaction (Stedman 2003a). “Experiences are linked to the environment in which they occur; physical landscapes, by virtue of certain characteristics, enable or constrain a range of experiences that shape meanings” (Stedman 2003a:674). In effect, he suggests that meanings are constructed through behaviours that are enabled by the characteristics of the setting.

Some related evidence in the literature that supports the importance of the physical environment in creating a sense of place is available. Shumaker and Taylor (1983) concur that we are attached to places because of outstanding physical features suggesting a direct relationship between landscape features and sense of place. Ryden (1993:38) emphasises the physical nature of place as “grounded in those aspects of the environment which we appreciate through the senses and through movement: colour, texture, slope, quality of light, the feel of the wind, the sounds and scents carried by that wind”. Additionally, Jackson (1994:151) explains how some scholars “believe that sense of place comes from our response to features that are already there – either a beautiful setting or well-designed architecture. They believe that a sense of place comes from being in an unusual composition of spaces and forms – natural or man made”. Certain natural settings have such a strong ‘spirit of place’ that they will tend to have a similar impact on many different people, for example the Grand Canyon. This notion of genius loci or ‘spirit of the place’ denotes the general atmosphere, or character, which is the most comprehensible property of any place.

According to Roberts (1999), bioregionalists believe that each natural region has its own inherent character, which is distinguishable from one place to the next. It is this overall character of a bioregion, its geomorphology, water regime, soils, plants, animals and birds that express the regional personality or genius loci of the place. Under this premise, sense of place is imbued within the setting, and not constructed via experience. The genius loci are determined by how things are here, and shapes sense of place meanings. Norberg-Schulz (1980) in his analysis of the meaning of place in human orientation and
identification suggests four types of landscapes or natural places: the ‘romantic’ landscape (characterised by change, diversity and detail for example forest, mountain); the ‘cosmic’ landscape (continuity and extension for example the desert); the ‘classical’ landscape (balance between variety and continuity for example valleys, hills and basins; and the ‘complex’ landscape (a combination of the above as most landscapes are rarely pure in content). Each landscape can be analysed for its typology and physical features; its impact on regional identity; and the localised sense of place experienced within it, offering insight into the meaning of a place’s genius loci as well as the meaning of ecological and cultural ‘fitting’ (Roberts 1999). To these categories, the marine environment could be labelled as the ‘romantic reefscape’, a dynamic place, rich in diversity and detail, with strong genius loci. A further contribution of the literature connects nature, culture, and social relations in the creation of place, and suggests that some places are richer in natural elements than others which form the foundations of attachment and satisfaction (Sack 1997).

In sum, Stedman questions: “is it really reasonable to suggest that our constructed meanings are independent of the environment attributes found there? That these variables contribute to human behaviour, however, hardly suggests that they determine human behaviour” (2003a: 683). The literature calls for a move to systematise important theoretical statements about the interplay between the physical environment, human behaviour, symbolic meanings, and sense of place (Stedman 2003a). This discussion has clarified the background to the first component of sense of place acknowledged within the literature: the characteristics of the physical environment (Tuan 1974; Stedman 2003a).

2.5.1.2 Instrumental Meanings
Mapping goal directed meanings is the most widely applied approach in natural resource management where humans are viewed as rational decision-makers who select the most suitable option to meet functional goals (Williams 2004). It is considered well-suited to the rational, instrumental and commodity-oriented traditions of resource planning, and research on wilderness experiences in terms of recreation motivation and satisfaction is well developed in the literature. Psychological responses are considered instrumentally
dependant on specific properties of the environment. The main limitation of this approach however, is it views resources as means rather than an end and considers settings to be interchangeable, substitutable, even reproducible, as long as the replacement is similar (Williams and Patterson 1999). By focusing on goal-fulfilling attributes of a setting, this approach ignores the intangible meanings attached to a given landscape. Meanings are not necessarily determined by the resource users or by the activities that occur there, some meanings are derived from what a place represents symbolically (Williams 2004). Although instrumental meanings reflect shared functional relationships (for example the river as a location for fishing), individuals often differ in the extent to which they value a particular meaning, limiting the generality of instrumental meanings (Williams and Patterson 1999). Emotionality is represented by an appraisal of the product, service, or experience using the satisfaction construct.

Within outdoor recreation research, such meanings are depicted under the term place dependence. Place dependence represents the importance of a place in providing features and conditions that support specific goals or desired activities (Stokols and Shumaker 1981; Williams and Roggenbuck 1989; Moore and Graefe 1994; Williams and Vaske 2003; Moore and Scott 2003). This 'functional' attachment is based on an area's physical characteristics (accessible rock climbing routes or navigable whitewater rapids) which may increase when the area is accessible for frequent visitation and supports such activities (Williams and Vaske 2003). It may also be partially defined as how the current place compares with alternative places in satisfying needs of individuals (Bricker and Kerstetter 2000; Warzecha and Lime 2001). For example, Hammitt, Backlund and Bixler found that certain types of wildland recreation activities (trout-fishing) can be characterized as "having users who repeatedly use a limited number of specific resources (high quality mountain streams), who can become quite knowledgeable and bonded to these special places, and who may be reluctant to use alternate places" (2004:356). However, findings showed that the availability of substitutes equivalent or better in the local region were likely moderate the degree of place dependence for any one specific place (Hammitt et. al. 2004). In another study by Hammitt et. al. (2006), anglers who were quite experienced and familiar with fishing the Chattooga River (South Carolina,
USA), were not dependent nor rooted to this river as a place to fish. As such, Hammitt et. al. (2006) suggest that because we visit, and do not reside at recreation places, and have alternative places to recreate, the construct of place dependence is weak among some recreationists. Place dependence is an example of the second component acknowledged within sense of place literature: human use and experience of the environment (Tuan 1974). This component evaluates how the nature of activities in the setting (Relph 1976) contribute to sense of place. A second component of 'human use' is reflected in the next section: the social relations in a setting.

2.5.1.3 Symbolic Meanings
More recently, research into human-environment relationships has turned to mapping symbolic meanings. This sociocultural approach shifts away from the predominantly stimulus-based (adaptive) and goal-directed explanations of behaviour towards understanding place and landscape meanings as socially constructed within the meanings, values, traditions, and experiences of the people who define a space as a place (Williams and Carr 1993; Greider and Garkovich 1994; Brandenburg and Carroll 1995). Research into symbolic meanings originates from phenomenological studies of sense of place in human geography (Relph 1976; Tuan 1977) and place attachment within psychology (Altman and Low 1992). As suggested by Hummon (1992), sense of place involves both an interpretive perspective and an emotional reaction to the environment. Sense of place is “a personal orientation toward place, in which one's understandings of place and one's feelings about place become fused in the context of environmental meaning” (Hummon 1992:262).

Social relationships embedded in the setting are crucial to developing meanings. Riley (1992) suggests we question the degree to which places become memorable because of experiences occurring there, not because of physical attributes of the environment. Place serves a number of functions for individuals, groups and cultures: a sense of daily ongoing security and stimulation; predictable facilities; opportunities to relax from formal roles; the chance to be creative; and to control aspects of one's life (Riley 1992). Therefore, people who form an attachment to a recreational setting might be influenced by social relations, or based on meanings of and experiences in a place with family and/or
friends (Riley 1992; Hufford 1992). With this premise, attachment to place is influenced by other people who share the experience of a place. Consequently, social relations that a place signifies is an element which might be equally or more important to the attachment process (Low and Altman 1992). This explanation clarifies that human use and experience of the environment (Tuan 1974) includes not only the activities that take place, but also the social relationships (Relph 1976; Riley 1992) and shared experiences connected to place.

The third component of sense of place within the literature refers to social, psychological interpretations, and, constructed meanings of people-place interactions (Brandenburg and Carroll 1995). As noted by Riley (1992), it may not be attachment to a particular place that is central; rather, it may be affective attachments to ideas, people, psychological states, past experiences, and culture that is crucial. It is through the vehicle of particular environmental settings that these individual, group, and cultural processes are manifested. This sociocultural approach emphasises that sense of place is strongly socially constructed (Greider and Garkovich 1994; Williams and Stewart 1998; Eisenhauer 2000) suggesting that sense of place is not intrinsic to the physical setting itself, but resides in human interpretations of the setting, which are constructed through experience with it (Stedman 2003a). In effect, it is suggested “landscapes are the symbolic environments created by human acts of conferring meaning to nature and the environment, of giving the environment definition and form from a particular angle of vision and through a special filter of values and beliefs” (Greider and Garkovich 1994:1). Therefore, sense of place is based on the interplay between thoughts (cognitions) and feelings (emotions) and that “we attribute meaning to landscapes, and in turn become attached to the meanings themselves” (Stedman 2003b). Furthermore, the literature suggests that people who interact with a landscape in similar ways will share a degree of commonality in meanings (Ryden 1993; Greider and Garkovich 1994). As Greider and Garkovich (1994) suggest, “the symbols and meanings that comprise landscapes reflect what people in cultural groups define to be proper and improper relationships among themselves and between themselves and the physical environment” (1994:2). Additionally, it is recognised that most settings are imbued, to varying degrees with
multiple place meanings. According to Meinig (1979) there are as many different interpretations and meanings of a landscape, as there are people using the setting. For example, a scuba diver visits a recreation setting; a marine biologist traces habitats on a coral reef; and the fisherman throws his net to earn a living.

Similarly, Greider and Garkovich (1994) suggest that any physical place has the potential to embody multiple landscapes, each of which is grounded in the cultural definitions of those who encounter that place. From this point of view: “Every river is more than just one river. Every rock is more than just one rock” (Greider and Garkovich 1994:1). Therefore it is suggested “to understand human relationships with the natural environment, the subjective symbols and meanings through which a group of people socially constructs the landscape must be described” (Greider and Garkovich 1994:5). The commonality of symbolic meanings is discussed through social theory which stipulates through determinism that meanings are provided by a group and represent shared norms and rules. However, social reality is not a social fact imposed on the individual through the socialisation process, but a meaningful construction arising from intersubjective experience (Greider and Garkovich 1994). Under this approach, natural resources are valued not only for instrumental purposes, but also exist as places that people become attracted to and even attached to because such places possess emotional, symbolic, and spiritual meaning (Williams and Patterson 1999). As such, meanings are intangible and emotionally rich as products of a history with the place. According to Williams (2004), the main advantage of this approach is the recognition that environmental meanings extend beyond biological imperatives and individual goal-oriented meanings to include ways in which meanings is socially constructed, and shared or different within groups. Therefore, this section has clarified the second and third components of sense of place.

2.5.1.4 Expressive Meanings
Similar to the sociocultural approach, expressive meanings emphasises a socially constructed and more voluntaristic view of reality (Williams 2004). Expressive meanings are deeply rooted in a subjectively oriented phenomenology (Altman and Low 1992), emphasising individual level processes and recognising that individuals have the potential
to assign intangible and relatively unique meanings to places and things. Such meanings are captured in the concept of place identity and also place attachment. As noted by Cuba and Hummon (1993:112), "place identity arises because places, as bounded locales imbued with personal, social, and cultural meanings, provide a significant framework in which identity is constructed, maintained, and transformed". According to Williams (2004), individuals actively construct and affirm a sense of self through their affiliations with places to communicate this sense of identity to ourselves and others. Whereas place attachment can be seen as an emotional dimension of meaning, with symbolic and spiritual meanings developed through interaction with a place over time (Williams and Patterson 1999).

Earlier place attachment research which focused on the built environments, has moved on to include resident's attachment to resource and tourism dependent communities (McCool and Martin 1994; Vorkinn and Riese 2001); local residents' attachment to special places (Eisenhauer et. al. 2000); visitors attachments to recreation and tourist destinations (Williams et. al. 1992; Moore and Graefe 1994; Bricker and Kerstetter 2000; Vaske and Korbin 2001; Warzecha and Lime 2001); and mobility and place attachment amongst second home owners (Kaltenborn 1997; Williams and Kaltenborn 1999; Gustafson 2001b; Aronsson 2004; McIntyre, Williams and McHugh 2006). Place attachment research has extended its focus on residents towards transient visitors, with evidence that both groups can form an emotional attachment to place.

In the last ten years, place attachment has increasingly been used as a framework to study people-place relationships in resource-based recreation. Although expressive meanings may not provide a common basis for managing natural landscapes, they do demonstrate the importance of site-specific relationships and bonds (Williams 2004). As suggested by Brandenburg and Carroll (1995), places enable people to create individual meanings that are different from those held by their primary social group, and, at the same time, places embed the individual in a larger social context as place meanings are transmitted from a social group to the individual. "The importance of acknowledging individualised meaning
is that people are likely to resist management actions that threaten their individual sense of self" (Williams 2004:342).

Within resource-based recreation, expressive meanings are discussed under the term place identity. Place identity represents the symbolic importance of a place as a repository for emotions and relationships that give meaning and purpose to life (Williams and Roggenbuck 1989; Williams and Vaske 2003). Place identity is described as a cognitive sub-structure of self-identity (Proshansky, Kaminoff and Fabian 1983), in that people start to recognize a place as an important part of themselves based on a "combination of attitudes, values, thoughts, beliefs, meanings, and behaviour tendencies reaching beyond emotional attachment and belonging to a particular place" (Proshanky et. al. 1983:61). It concerns who we are; places in which we live, work, and play that define our selfhood, rather than only familiarity and/or affiliation for place, although these components may contribute to the identification process (Cuba and Hummon 1993). Place identity as a bond supersedes place attachment in that the individual finds it nearly impossible to imagine a meaningful existence, a meaningful notion of self, outside the place. This sense of belonging and even possessiveness towards places (Hammitt et. al. 2006) reaches the extent where these places may become ‘their place’, ‘a favourite place’, or the ‘only place’ for various types of leisure-recreation pursuits (Korpela, Hartig, Kaiser and Fuhrer 2001). As suggested by Hammitt et. al. (2006:22), “such feelings of belongingness involve aspects of connectivity and affiliation that may develop into a communal bond with the environment and/or other people through place-people interactions”. For example, the literature indicates that place identity enhances self-esteem (Korpela 1989); that a history of repeat visitation can lead to the formation of place identity (Moore and Graefe 1994); is an important component of communications about environmental values (Bott, Cantrill and Myers 2003); a strong correlation between recreation activity specialization (white water rafters) and place identity (Bricker and Kerstetter 2000); and recreation users with strong place identity were supportive of a recreation fee program (Kyle et. al. 2003). This discussion has clarified yet another contributing aspect to the three component view of sense of place based on how individuals interpret their relationship to place: social, psychological interpretations, and,
constructed meanings of people-place interactions (Brandenburg and Carroll 1995). This section has discussed how the meanings and attachment rooted in the setting (Hammitt et. al. 2006) are highly personalised and contribute to an individual's sense of place.

2.6 Review of Relevant Studies: Special Place Meanings
This section introduces two key studies on understanding sense of place which form the basis of the proposed study. Each study follows a qualitative approach to a greater or lesser extent. In the study by Schroeder (1996), a group of 23 volunteers were asked to describe their experiences of a specific place through short essays. Based on the study by Schroeder (using the same questions), Bricker and Kerstetter (2002) employed a mail survey to ask a wider sample of participants for descriptions of special places along a river popular amongst whitewater recreationists. Each study is reviewed in the following section to depict nuances and to draw out future work. In particular, the proposed study seeks to improve on the methodological approaches used by Schroeder (1996) and Bricker and Kerstetter (2002).

2.6.1 Schroeder (1996)
In line with the inclusion of ecosystem management as an approach to the stewardship of natural environments, came the recognition of sense of place as a valuable framework for understanding individual and shared values of places to provide input to the planning process for public land areas. Schroeder (1996) maintained that people's experience of natural environments is best heard by inviting them to tell their stories and listening to the experience that lies behind their words. As such, this study approached sense of place research from an emic perspective. However, the role of 'listening' in this case was conducted through the interpretation of written texts by the researcher. In this study, residents were asked to think of places within the Black River (Michigan) area that were special to them, to describe these places and to explain what thoughts, feeling, memories and associations came to mind about these places (Schroeder 1996). The study utilised an open-ended qualitative survey where volunteers were recruited through a flyer advertising the study. A total of 23 participants (8 residents, 11 regular visitors, and four first time visitors) wrote down their descriptions and mailed them back via a stamp self addressed envelope.
Once descriptions were analysed for key themes, the final interpretations were sent out for verification by participants. In the description of special places, a diverse range of places were associated with the river including locations; natural features; human made features; people; activities; and feelings; meanings, values depicting a range of place meanings. For example, the study found that the importance of experiencing beauty and serenity in natural places, and a harmonious blending of natural and human influences were important elements within people’s description of special places. Findings provided an inventory of special places that “provide an insight into the experiences that give rise to strong place attachment” which could “be viewed as one source of input in a larger planning and public involvement process” (Schroeder 1996:11).

2.6.2 Bricker and Kerstetter (2002)

In this study, whitewater recreationists were surveyed to understand the places they perceived as special along a 21-mile corridor of the South Fork of the American River in California. Bricker and Kerstetter (2002) replicated Schroeder’s (1996) qualitative study using a mail survey with open-ended questions probing for people’s description of special places. A total of 593 whitewater recreationists returned useable questionnaires which were analysed to produce a rich description of the meanings whitewater recreationists’ attached to special places along the river.

Place meanings were found to be multi-dimensional and complex, and comprise specific geographical locations to the social benefits accrued from visiting the river. Five base dimensions of place meanings were identified (each with several sub-dimensions): ‘environmental-landscape’, ‘human-social’, ‘recreation’, ‘heritage-historic’ and ‘commodity’. “Base dimension descriptions included references to places where feelings, emotions, values and satisfaction or dissatisfaction were reflected upon” (Bricker and Kerstetter 2002:418). Meanings affiliated to the river have important environmental dimensions: participants find meaning in both their attachment to the resource and the activity to which they are engaged within the resource. However, Bricker and Kerstetter (2002) also found in some cases, the importance of places hinged
solely on the environment, or solely on social relationships, without mention of the activity itself (white water rafting). Moreover, the complexity of special place meanings was evident in that various meanings interrelated as seen in three complex dimensions depicted in Table 1.

<table>
<thead>
<tr>
<th>Recreation-Environmental</th>
<th>Human-Recreation</th>
<th>Heritage-Environmental</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aesthetic-recreation</td>
<td>The gathering place</td>
<td>Natural appreciation</td>
</tr>
<tr>
<td>Protect-preserve</td>
<td>Challenge-Growth</td>
<td>Native environments</td>
</tr>
<tr>
<td>Seasons</td>
<td>Shared experience</td>
<td>Protect and preserve</td>
</tr>
<tr>
<td>Access</td>
<td>(family, friendships, teamwork)</td>
<td></td>
</tr>
<tr>
<td>Environmental Signals</td>
<td>Enjoyment</td>
<td></td>
</tr>
<tr>
<td>Reverence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degradation</td>
<td></td>
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</tbody>
</table>

Table 1: Dimensions of Place Meanings for whitewater recreationists (Bricker and Kerstetter 2002)

The complex dimensions of ‘recreation-environmental’, ‘human-recreation’ and ‘heritage-environmental’ indicate that the river was a meaningful place based on the combination of the activity, relationship or environment (social or physical). These findings indicate that place meanings are complex and multi-dimensional (Bricker and Kerstetter 2002). Bricker and Kerstetter insist that this insight into the varied meanings whitewater recreationists attach to this river would not have been gained by utilizing the evaluative measures (Williams and Roggenbuck 1989; Moore and Graefe 1994) which are popular in place attachment studies. By exploring recreationists’ descriptions, the findings documented a diverse ecosystem that includes both the natural environment and human relationships relative to the activities that take place within it. Bricker and Kerstetter (2002) recommend that to fully interpret the complex meanings associated with special places, the meaning and nature of “place” (i.e. place attachment) should continue to be addressed as well as clarification of the intensity and importance of “place”. Recommendations are made that future investigations incorporate various interview techniques as a way of probing and clarifying further written experiences and ideas (Bricker and Kerstetter 2002). Finally, it is suggested that future work should expand “to explore whether visitors to natural resources have differences in descriptions of special places based on the type of activity they are engaged in” (Bricker and Kerstetter...
2002:421). Such data is useful for managers as indications of important values, as well as revealing what aspects of the experience can compromise peoples’ satisfaction with their experience.

Based on the foregoing discussion, place is a particularly interesting focus of on-going, evolving, research, which has yet to be extended to the sub-aquatic environment. This study situates itself within the growing literature on understanding what makes a place meaningful and draws upon the opportunity to improve on the work of Schroeder (1996) and Bricker and Kerstetter (2002).

2.7 Conclusion
In conclusion, this chapter has introduced the concept of sense of place which will guide this exploratory study. At the same time, the review has clarified an understanding of varying theoretical conceptualisations of sense of place. The number three is prevalent within this literature: phenomenologists look at place identity as consisting of three components; early psychologists measured behaviour in place through an integrated system of three domains. Additionally, the literature on sense of place acknowledges the existence of three aspects of place experiences: the characteristics of the environment; human use and experience (includes activities and social relations); and the psychological and social constructed meanings of place. Moreover, from some points of view sense of place consists of three dimensions: place attachment, place identity and place dependence. Each of these elements was clarified and positioned in this literature review. Next, this chapter reviewed the application of sense of place within resource-based recreation; its potential within a meanings based approach to measuring quality of leisure experiences; and introduced Williams and Patterson’s (1999) framework for mapping place meanings. The final section reviewed key studies which present opportunities for further research and situates the proposed study. In sum, this review has provided an insight into the decision to explore the concept of sense of place and introduced a framework for discussing the results of this study.
Chapter Three: Methodology

3.0 Introduction

In order to establish the orientation for this research journey, this chapter begins with a discussion on the concept of methodology. Here, methodological assumptions and the meaning of terms such as ontology and epistemology are explained, in relation to their use as guidance in choosing an inquiry paradigm. Next, to clarify the choice of inquiry paradigms, this chapter briefly examines social science research by contrasting the positivist paradigm with the interpretivist paradigm. Subsequently, the chapter delineates methodological assumptions by addressing the ontological, epistemological, axiological and rhetorical positions for this study. At the same time, this discussion justifies the selection of the interpretivist paradigm and its phenomenological orientation. Finally, the chapter discusses the epistemological and theoretical underpinnings of the qualitative methodology which guides this study: Interpretative Phenomenological Analysis (IPA).

3.1 A Research Journey

Researchers are problem-solvers concerned with questions of how to gain understanding and knowledge of a situation or a process (Polkinghorne 1983). "The starting point of a research journey is a real-life issue that needs to be addressed, a problem that needs to be solved, and a question that needs to be answered" (Crotty 1998:13). It is ultimately the research questions, incorporating the purposes of the research which leads on to the issue of methodology and methods. Chapter One has presented the rationale for this study, as well as the main research question which is reiterated here: how do scuba divers perceive and describe their experience of place? The purpose of this study was to describe and interpret the meaning of place for scuba divers, which indicates a need to understand the significance of place experiences. The very nature of the rationale, research question and purpose calls for a specific form of investigation. To embark on this research journey, it is first necessary to differentiate between methodology and methods (Tribe 2001). Therefore, the following section introduces and defines the key terms of methodology, method, as well as inquiry paradigms.
3.1.1 Methodology versus Method

Methodology is the study of the procedures and methods which are used to obtain knowledge; it is the examination of the possible plans to be carried out so an understanding of a phenomenon can be obtained (Polkinghorne 1983). The chosen methodology directs us towards knowledge formation in an organized manner. Methodology involves specifying not just how you intend to collect evidence but why and involves asking what is the relationship between the method used to collect evidence, and the explanation, interpretation or understanding that you are seeking (Harvey, MacDonald and Hill 2000). In contrast, the study of method is concerned with “a particular way or developed routine for approaching a research question” (Tribe 2001: 443). As such, method mediates between research questions and the answers which data partially provides: methodology justifies and guarantees the process of mediation (Clough and Nutbrown 2002). “In the end, the characteristic task for a methodology is to persuade the reader of the unavoidably triangular connection between these research questions, these methods used to operationalise them and these data generated” (Clough and Nutbrown 2002: 38). Chapter Four will expand the discussion on the Method used in this study.

However, as this chapter will demonstrate, methodology also refers to the philosophical framework or paradigm that informs a given research approach. The approach to social science research is guided by an interrelated set of assumptions which a researcher has of the world: these are referred to as an inquiry paradigm. Additionally, Guba and Lincoln (1998) differentiate between paradigm and inquiry paradigm. “A paradigm is described as a set of basic beliefs that deals with ultimates and represents a worldview that defines, for its holder, the nature of the world, the individual’s place in it, and the range of possible relationships to that world and its parts” (Guba and Lincoln 1998:200-201). Whereas inquiry paradigms define for inquirers what it is they are about, and what falls within and outside the limits of legitimate inquiry. As suggested by Denzin and Lincoln, “paradigm issues are crucial; no inquirer ought to go about the business of inquiry without being clear about just what paradigm informs and guide his or her approach” (1998:185). Therefore, it is advisable that a novice researcher qualifies his/her beliefs
and research paradigm, to those with an interest in the research (Denzin and Lincoln 1998). Before these assumptions are presented, the following section outlines and defines the key components of methodological assumptions.

3.1.2 What are Methodological Assumptions?
The methodological issue for this study was to find a means of exploring how scuba divers perceive and describe their experience of place. This signifies the need to understand and interpret the meaning of their experiences and give due consideration to the parameters which bind the proposed study within a specific inquiry paradigm. The research process begins by understanding the various philosophical assumptions about what there is which exists to be investigated: what is real (ontology) and how do we know it (epistemology)? Therefore, a researcher should understand the ontological and epistemological assumptions within a chosen inquiry paradigm as these will form the foundations of the research, and inform the choice of methodology. The meanings of these terms are outlined in the following discussion.

*Ontology* is the study of being, and raises questions about the nature of reality. It asks what exists in the world; for example 'self', 'society', 'matter' or 'mind'. The ontological assumption addresses the question 'when is something real' (Guba and Lincoln 1998). As noted by Goodson and Phillimore (2004:34), "knowledge production relies heavily upon the ontology of the researcher - their definition of reality". Two extremes are often used to discuss the ontological nature of being in conventional philosophy, in terms of a subject-object dichotomy: idealism and realism. An *idealist* position argues that "the world is a function of a person who acts on the world through consciousness, and, therefore, actively knows and shapes his or her world. In contrast, a *realist* view sees the person as a function of the world, in that the world acts on the person and he or she reacts" (Seamon 2000:160). Because both points of view accept a split between person and world, this then leads to the question of how the two are related (Stewart and Mickunas 1990). Consequently, there is a need to understand the source of knowledge, or epistemology.
Epistemology is the theory of knowledge (Morton 2003) which asks the key questions of ‘what is knowledge’ and ‘how do we produce it’ (Harvey et. al. 2000) or ‘how do we know the world’ (Denzin and Lincoln 1998). Also, there is a need to ask, ‘what is the relationship between the researcher and that being researched’ (Creswell 1998). Within tourism research, epistemological questions would include:

- The character of tourism knowledge, the sources of tourism knowledge, the validity and reliability of claims of knowledge of the external world of tourism, the use of concepts, the boundaries of tourism studies, and the categorization of tourism studies as a discipline or field.

(Tribe 1997:630)

As indicated in the above quote, epistemology extends to the validity and reliability of claims of knowledge, for example, the standards of quality and verification (Creswell 1998) or trustworthiness (Lincoln and Guba 1985; Decrop 2004). A detailed discussion on the claims of knowledge for this study will be presented in Chapter Four. In sum, a researcher’s epistemology depends on what they want knowledge about, while the kind of knowledge that they seek determines their methodology (Jones 1993 cited in Goodson and Phillimore 2004). Based on the foregoing, “the basic beliefs that define inquiry paradigms are available by the responses to three defining interconnected questions that refer to three main elements of an inquiry paradigm which are ontology, epistemology and methodology” (Guba and Lincoln 1998:201), as follows:

- The ontological question - What is the form and nature of reality and, what can be known about reality?
- The epistemological question - What is the nature of the relationship between the inquirer and what can be known?
- The methodological question – How can the inquirer go about finding out whatever s/he believes can be known?

Additionally, Creswell (1998) suggests that in investigations where the researcher interacts closely with those they study, it is appropriate to clarify axiological (a researcher’s values and biases) and rhetorical (choice of language) assumptions in
defining an inquiry paradigm. All of these elements combined within a paradigm guide the scholar towards the choice of method and the extent of knowledge claim in fundamental ways. Denzin and Lincoln (1998) advocate that scholars should attend to this 'net' containing the researcher's epistemological, ontological and methodological premises. The next section briefly discusses the rationale and need for scholars to understand potential inquiry paradigms and the corresponding methodological assumptions.

3.1.3 Choosing an Inquiry Paradigm
Historically, the formal study of human and social phenomena only commenced after the scientific study of the natural world. Initially, it was proposed that the human sciences follow the methods used in the natural sciences, even though some scholars argued against this strategy. However, it was later accepted that two approaches to knowledge were needed: one for the natural world and one for human phenomena (Polkinghorne 1983). Thus, inquiry paradigms evolved in various modes in response to this proposal. According to Patton (2002) the importance of understanding alternative research paradigms is to sensitize researchers to the ways in which their methodological prejudices, derived from their disciplinary socialization experiences, may reduce their methodological flexibility and adaptability. He stresses how the most appropriate methodology must be chosen according to the research problems. However, this decision is often shrouded by aspects of academic socialization and training provided to young academics, according to the 'preferred' choice of paradigm upheld within a discipline or in an institution. This tends to make a researcher biased in favour of and against approaches without recognizing the main assumptions of the research journey. Therefore, one aim of this section is to juxtapose the researcher's understanding of the use of inquiry paradigms, in order to clarify the rationale behind the final choice.

Additionally, there is a need to understand the differences between paradigms as it is inaccurate for example, to claim ontological beliefs characteristic of a certain paradigm, but to use epistemological commitments (rules and methods) that are inconsistent with these beliefs (Patton 2002). Within social research there are four prominent paradigms used in research: positivism (realist ontology), postpositivism (critical-realist
worldviews), critical theory (ideologically oriented standpoints) and constructivism (and interpretivism) (dialectical outlook on the world’s multiple realities) (Guba 1990; Guba and Lincoln 1998). A brief overview of each is clarified next to outline major differences within each paradigm and how this affects the approach to research.

Positivism assumes an objective world which scientific methods can more or less readily represent and measure; the aim is to predict and explain causal relations among key variables (Gephart 1999). In essence, knowledge is limited to what can be logically deduced from theory, operationally measured, and empirically replicated (Patton 2002). However, such requirements limit what is acceptable as knowledge and “demands more certainty than the complex world of social phenomena could yield” (Patton 2002: 92). Postpositivism evolved out of such criticisms, and informs much of contemporary social science research. Postpositivism recognises that discretionary judgment is unavoidable in science, and proving causality with certainty in explaining social phenomena is problematic (Patton 2002). Moreover, knowledge is viewed as relative rather than absolute, and that all methods are imperfect, so multiple methods, both quantitative and qualitative, are used to generate and test theory and improve understanding over time of how the world operates (Patton 2002).

Critical theory encompasses several alternative paradigms under the headings of poststructuralism and postmodernism including neo-Marxism and feminism. Critical theory adopts a critical realist position, and values immediate inquiry which is participative, and which reflects the values of human players and seeks the elimination of false consciousness and the facilitation of a transformed world (Guba 1990). Constructivism is an offspring of interpretivism and according to Schwandt (1998) the proponents of constructivism and interpretivism share a common approach to human inquiry; to understand the world of lived experience from the point of view of those who live it. However, constructivist and interpretivist persuasions are unique in their epistemological and methodological stances. Interpretivism addresses essential features of shared meaning and understanding (Gephart 1999); whereas constructionists argue that knowledge and truth are the result of perspective which means all truths are relative to
some meaning context or perspective (Schwandt 1998). A detailed discussion on interpretivism will be presented in Section 3.3. It is beyond the scope of this chapter to highlight the different methodological assumptions in detail for each of the four main paradigms described earlier. Instead the next section will compare and contrast the differences between two of the main research paradigms in the social sciences, positivism and interpretivism. This next section will inform the subsequent discussion on the methodological assumptions of this study in order to justify the appropriateness of the chosen paradigm.

3.2 Positivism

Positivism suggests that there is a straightforward relationship between the world (objects, events, phenomena) and our perception, and understanding, of it (Willig 2001). In the social sciences, positivism attempts to apply a natural scientific approach to the study of the social world (Harvey, et. al. 2000). Positivism assumes that human society is subject to laws in the same way that the natural world is and aims to attribute scientific status to social research. Positivism accepts a division between fact and value in that only empirically verifiable ideas count as knowledge or truth. Positivism seeks to identify cause-and-effect relationships. It rejects data that cannot be observed and tests theoretical validity by checking predicted outcomes with observed outcomes which are deemed to be value-free. The methods employed look for correlations to discover patterns and general laws; data is converted into numbers (Gephart 1999). The ontological assumption of positivism is of realism, that an apprehendable reality is assumed to exist driven by immutable natural laws and mechanisms. Epistemological assumptions inform us that the investigator and the investigated ‘object’ are independent entities, and the investigator is capable of studying the object without influencing it or being influenced by it (Guba and Lincoln 1998). Also, findings are considered true and are replicable. Methods utilized in this paradigm include surveys, questionnaires, statistical modelling, hypothesis-testing, theory corroboration, and experimentation and are known as ‘quantitative methods’ (Gephart 1999).

However, as argued by Hussey and Hussey (1997), in the context of the social world, it is impossible to treat people as being separate from the social contexts; people cannot be
understood without capturing their perceptions of their own activities. Critics argue that positivistic methods strip contexts from meanings in the process of developing quantified measures of phenomena (Guba and Lincoln 1998). The necessity of looking for correlations and capturing complex phenomena in a single measure in numerical form can be misleading. Additionally, the question of a value-free outcome is also questionable, as researchers do bring their own interests and values to the research. This would mean they cannot be objective as they become part of what they observe. Moreover, as pointed out by Walle (1997), the very subject matter of tourism research requires an understanding of people in their own terms; and to fully address questions of understanding and meaning (Hollinshead 1996; Walle 1997). However, positivist principles of data collection often exclude participants’ meanings and interpretations. The methods utilised impose outsider’s meanings and interpretations on data that require statistical samples which often do not represent specific social groups and which do not allow generalization to or understanding of individual cases (Gephart 1999). As such, it has been suggested that “the normalization of a positivist epistemology has, unduly limited the development of tourism research as a social science” (Botterill 2001:212) and that tourism researchers should search for a more satisfactory epistemological solution. Positivist concerns to uncover truths and facts using experimental or survey methods have been challenged by interpretivists who assert that these methods impose a view of the world on subjects rather than capturing, describing and understanding these world views (Gephart 1999). Before examining interpretivism, the next section provides a brief overview on how research into sense of place within resource-based recreation has been approached through a positivist methodology which relies on quantitative methods.

3.2.1 Quantitative Studies in Resource-based Recreation

'sense of place' or 'place attachment' has emerged as a prominent concept for exploring the relationship between humans and the environment (Patterson and Williams 2005). As explained in the previous chapter, this concept flourished through the scholarship of phenomenological researchers and human geographers. As noted by Seamon (1982), the phenomenological approach rejects the language of conventional positivistic science that emphasises hypothesis-testing and prediction via general laws of human behaviour. Similarly, Stedman (2003b:825) acknowledges that the phenomenological approach has
much to recommend as it provides details and intimate knowledge about how place works in a given setting for a given group of actors. However, he asserts that this approach may impede the development of general principles that can be examined across settings, which has been the norm within natural resource management.

Within resource-based recreation, researchers have acknowledged the utility of quantitative measures and hypothesis testing (Stedman 2003b). The advancement of such research began when Williams and Roggenbuck (1989) developed a place attachment scale consisting of a range of statements in questionnaire form, based on a series of Likert scaled statements designed to measure the strengths and weaknesses of an individual's place attachment. The original scale consisted of 61 items which approach place dependence and place identity as sub-dimensions of place attachment, defined as an emotional bond. Within this equation, place identity was referred to as a form of attachment resulting from the importance of the physical environment to self-definition; and place dependence defined as how the setting compares with other alternatives supporting behavioural goals. This multidimensional approach interrelated place identity, place attachment, and place dependence. The measures for the constructs of place identity and place dependence have been refined through extensive testing of their psychometric properties (Williams and Vaske 2003).

There is ample evidence of studies utilising this scale to evaluate how much or the extent of stronger or weaker forms of place attachment (Shamai 1991; Williams, et. al. 1992; Moore and Graefe 1994; Kaltenborn 1998; Warzecha and Lime 2001; Bricker and Kerstetter 2000). Analysis has utilised correlation matrixes and factor analysis to investigate the associations between dimensions. For example, Jorgensen and Stedman (2001) explored a three factor model of place attachment composed of subdimensions of attachment, identity and dependence, all contributing equally to place attachment. In opposition to their hypothesis, the findings showed that a single evaluative dimension consistent with the definition of attachment explained the observed responses, not the subdimensions. In general, the recent trend in 'place' research has been toward quantitative measures. However, "a general critique of these quantitative studies is the
unsatisfactory relation between the literature they cite and the questions they examine empirically" (Stedman 2003b:825). Stedman suggests that the complexity of place concepts is not incorporated into actual measures and hypothesized relationships. As such, Stedman (2003b) laments that the thematic areas of sense of place theory have not been adequately tested in quantitative research approaches. Notably, his discussion points out that place-based research will either continue on the qualitative descriptive end, which do not build general predictive models, or quantitative approaches on the other end, which do not address many of the questions raised by theory. Therefore, in order to gain systematic knowledge about sense of place, the suggestion is for a middle ground approach, “testing hypotheses informed by theory that examine the influence of particular variables and the conditions that affect the relationship” (Stedman 2003b:825). Even though Stedman supports the use of quantitative measures in place-based research, ultimately he declares “I am not advocating an elimination of the phenomenological perspective in place research. The approach used should reflect the nature of the question one wishes to answer”. He adds, "those who are proponents of quantitative measures of sense of place must follow the example of those more qualitatively oriented by asking questions and testing hypotheses that reflect the richness set forth in the qualitative research" (Stedman 2003b:828). And this is ultimately, the main point to consider: purpose. Studies applying quantitative methods have a clear purpose: the aim is to investigate the association, whether strong or weak between place attachment, place identity, place dependence and other variables. This knowledge would be applicable across a range of settings due to the generalisability of findings and provide information that could be used to improve management of recreation experiences. The discussion in section 3.2 has provided a brief explanation of positivism as an inquiry paradigm. An overview of sense of place research organized within this paradigm has been briefly outlined. The next section discusses the role of interpretivism as an inquiry paradigm.

3.3 Interpretivism
Interpretivism developed in reaction to the dominance of positivism in the 19th and 20th centuries. Interpretivism aims to capture subjective human meanings, to see things through the eyes of those who live them. Interpretivists assume that knowledge and meaning are acts of interpretation. Interpretivism is often linked to the thought of Max
Weber who advocated the need to ‘understand’ social phenomena in terms of ‘meaningful’ categories of human experience. Interpretivists argued that natural sciences aim towards scientific explanation (Erklären), whereas the goal of social sciences is an understanding (Verstehen) of the ‘meaning’ of social phenomena (Schwandt 1998). Verstehen was not about the process of getting inside the actor’s head; it was a matter of grasping intersubjective meanings and symbolising activities that are constitutive of social life (Schwandt 1998). This reasoning contrasts the interpretive approach against the positivist approach which was focused on causality, or the identification of cause-effect relationships. For this reason, the need arose to employ different methods in each approach, leading on to the distinction between quantitative and qualitative research methods (Crotty 1998).

The ontological assumption of the interpretivist paradigm is that action and behaviour are generated from within the human mind (Hussey and Hussey 1997). Human beings or the human mind is the purposive source or origin of meaning. Human life can only be understood from within and cannot be observed as some external reality. The epistemological assumption relies on a clear relationship between the investigator and what is being researched. Also, verification of what actually exists in the social and human world depends on the researcher’s interpretation, for only the researcher can grasp these multiple realities through tacit understanding (Riley and Love 2000). Given the concern with understanding meanings, interpretive researchers preferred the meaning oriented methods (instead of measurement) of qualitative research. Qualitative research is an inquiry process of understanding, based on a distinct methodological tradition of inquiry that explores a social or human problem (Creswell 1998). As suggested by Denzin and Lincoln (1998), qualitative research provides a crucial perspective that helps scholars ‘understand’ phenomena in a different way from a positivist perspective. They defined qualitative research as:

multi-method in focus, involving an interpretive, naturalistic approach to its subject matter. This means that qualitative researchers study things in their natural setting, attempting to make sense of, or interpret phenomena in terms of the meanings people bring to them. Qualitative research involves the studied use and collection of a variety of empirical materials – case study, personal
experience, introspective, life history, interview, observational, historical, interactional, and visual
texts – that describe routine and problematic moments and meanings in individuals’ lives.

(Denzin and Lincoln 1998:3)

Similarly, Lincoln and Guba (1985) referring to naturalistic inquiry as an example of
qualitative research, identified a number of distinct characteristics (in relation to
positivistic inquiry): natural setting; human instrument; utilisation of tacit knowledge;
qualitative methods; purposive sampling; inductive data analysis; grounded theory;
emergent design; negotiated outcomes; case study reporting mode; idiographic
interpretation; tentative application, focus-determined boundaries, and special criteria for
trustworthiness (1985:39-43). Therefore, qualitative inquiry is oriented toward
exploration, discovery, and an inductive approach. An inductive approach involves
immersion in the details and specifics of the data to discover important patterns, themes,
and interrelationships; research begins by exploring, then confirming, guided by analytic
principles rather than rules and ends with a creative synthesis (Patton 2002). Tourism
researchers are increasingly adopting qualitative approaches which differs from the
previously positivist orientation of much research in this subject field (Walle 1997; Riley
and Love 2000). This next section provides a brief overview on how research into sense
of place within resource-based recreation has been approached through an interpretative
methodology which relies on qualitative methods.

3.3.1 Qualitative approaches in Resource-based Recreation
As discussed in Chapter 2, sense of place, or place attachment research experienced a
revival through the discipline of environmental psychology which led to the concept
being used in natural resource management. Within environmental psychology, the
transactional world view holds that phenomena should be viewed holistically, and is
composed of mutually defining aspects instead of distinct and separate parts (Altman and
Rogoff 1987). Indeed, sense of place has traditionally been characterized by more
qualitative research based in phenomenological approaches that emphasised treating
place as a totality rather than as component parts that may ‘cause’ each other (Kruger
1996 cited in Stedman 2003b). In a phenomenological study, the researcher seeks to
capture and describe how people experience and make sense of some phenomenon.
Pioneering scholars Tuan and Relph articulated place in phenomenological terms (Altman and Low 1992), and supported the necessity of using qualitative approaches to understanding the totality of place attachment (Seamon 1992), rather than breaking it into multiple variables.

The phenomenological approach rejects the language of conventional positivistic science that emphasises hypothesis-testing and prediction via general laws of human behaviour (Seamon 1982). Phenomenological approaches are often suspicious about prediction and causality, seeking instead to understand how the everyday world is constituted as a totality, and as such a majority use qualitative methods (Stedman 2003b). Thus, to know or understand place requires us to look at place from a perspective that encompasses and can illuminate meaning and action. Meanings are expressed through enactment and engagement, which are social activities and thus observable and understandable using an interpretive methodology (Kruger and Jakes 2003). Kruger (1996:2 cited in Stedman 2003b) asserts "the empirical-analytic model...abstracts humans from nature and place and devalues the knowledge that people have", thus minimizing important symbolic meanings and the complex, multifaceted nature of lived experience. According to Stedman (2003b) the phenomenological approach has much to recommend as it provides details and intimate knowledge about how place works in a given setting, for a given group of actors. Ultimately, it is in consideration of research question and purpose that provides an answer to the most suitable approach for a study. Studies of place have recognized the need for depth and richness in data about people’s connections with special places which are accessible through the use of qualitative research methods (Mitchell et. al. 1993; Brandenburg and Carroll 1995; Schroeder 1996; Bricker and Kerstetter 2002; Andereck, et. al. 2006).

Sections 3.2 and 3.3 have contrasted two inquiry paradigms, positivism and interpretivism in a bid to choose the most relevant inquiry paradigm to this study. As mentioned in section 3.1.2, to choose an inquiry paradigm relevant to the proposed study, it is necessary to answer three defining interconnected questions related to the elements of an inquiry paradigm (Guba and Lincoln 1998). The next section will delineate the
methodological assumptions of this study according to the framework by Guba and Lincoln (1998) with the addition of axiological and rhetorical assumptions as suggested by Creswell (1998).

3.4 Assumptions of the study
Following from the previous discussion, this section aims to justify the selection of interpretivism as the guiding inquiry paradigm for this study in order to answer the research question stated in Chapter 1. Chapter 2 has introduced the concept of sense of place, as utilised in resource-based recreation and discussed the opportunity to extend the conceptual framework to a new context (Schroeder 1996; Bricker and Kerstetter 2002). The preceding discussion in this chapter has clarified the need to choose an inquiry paradigm within which to frame the research question, based on the objectives of the study. The aim of the proposed study was not to investigate broad patterns and trends, for which a survey consisting of numbers on a scale would have been sufficient. The main objective of this study was to explore and understand the meaning of place for scuba divers. Through a diver’s interaction with place, the marine environment becomes a ‘lived world’ full of values and meanings (Suvantola 2002). This indicates that empirical research designed from a qualitative perspective would fit the purpose of this study best. This section elaborates the ontological, epistemological and methodological (Guba and Lincoln 1998) and the axiological and rhetorical (Creswell 1998) assumptions of the proposed study.

3.4.1 Ontological
The ontological question asks ‘what is the form and nature of reality and what can be known about reality?’ The ontological assumption addresses the question ‘when is something real’? Creswell (1998) observes that for the qualitative researcher, the only reality is that which is constructed by the individuals involved in the research situation. Indeed, Hollinshead (2004:67) advises tourism researchers to be “careful about the ways they go about investigating existential, aspirational and experiential issues – that is, the very ontological matters of being, becoming, and meaning”. He encourages tourism researchers towards the adoption of Verstehen styles of research that are differentially
empathetic to the lived experience, or, to the worldview realities that are 'real' to distinct institutions or to particular interest groups (Schwandt 1998).

This study is concerned with the ways in which individuals perceive the world, and is interested in participants' subjective experiences of the world, rather than the objective nature of the world (social or material) (Willig 2001). Lived experiences are unique to each individual; therefore, reality consists of different, personal versions of the same world. This is because experience is mediated by the thoughts, beliefs, expectations and judgments the individual brings to it (Willig 2001). Hence, for this study, multiple realities exist side by side, and the researcher is dependent upon participants' accounts to understand a given reality (Creswell 1998). Therefore, in this situation, the positivist ontological position about social reality existing independently of the individual, who directly determines perception of reality, is not useful for this study. Also, this study does not question whether participants' accounts of what happened are 'true' or 'false', or to what extent their perception of an event corresponds to an external 'reality'. Given this, the concern is with how participants experience the situation, thus subscribing to relativist ontology (Willig 2001). However, at the same time, it is recognised that people's interpretations are bound up with shared social interactions and processes. Therefore, this study acknowledges that reality is the outcome of language and inter-subjective meaning construction.

3.4.2 Epistemological

The epistemological question asks 'what is the relationship between the inquirer and the known' (Denzin and Lincoln 1998). A researcher's epistemology according to Creswell (1998) is literally the theory of knowledge, which serves to decide how the social phenomenon will be studied. In order to gain an insider's perspective on participants' perception of their lived experiences, the researcher will interact with the participants and plays an integral part as the instrument of data collection. As such, there must be an attempt to reduce the 'distance' or 'objective separateness' (Guba and Lincoln 1998) between researcher and those being researched. This is in line with the epistemological position that data is contained within the participants' lived experiences and because of this, the researcher engages with the participants in collecting the data. Therefore,
language will be the means by which participants communicate their experiences to the researcher (Willig 2001).

As such, interviews will be conducted with participants as the main mode of data collection. Interviews will be transcribed and this text will represent an insight into the participants’ view of the world (Willig 2001). Moreover, the researcher assumes the task of interpreting participants’ experiences, or to describe and understanding the meanings of their experiences (Kvale 1996). As depicted within the research question, there is a need to understand how participants’ perceive and describe their experience of place. The answer to this question indicates the role of the researcher to ‘describe’ and interpret participants’ experiences. As noted by Van Manen (1997), in such cases, the methodology requires the ability to be reflective, insightful, sensitive to language, and constantly open to experience. The next section describes the assumptions related to the issue of proximity to one’s subjects, or the axiological aspects of investigation as this study is value-laden, and not value-free. The positivistic position on the epistemological question is inappropriate, because it postulates that the act of investigating such a reality would have no effect on that reality.

3.4.3 Axiological
As suggested by Creswell (1998) and Denzin and Lincoln (1998), to clarify methodological assumptions, there is the need to address the concept of axiology: a researcher’s values and biases. The close distance between the researcher and participants has implications for the axiological assumptions or the role of values in a study. Axiology is also one aspect of ensuring the trustworthiness of a qualitative study. Jamal and Hollinshead (2001) have argued that in order to move towards more interpretive, qualitative tourism research, it is necessary to depart from more static, quantitative and positivist knowledge bases to more dynamic, experiential and reflexive approaches. There is recognition that social agents are central to the construction of knowledge and that the researcher’s voice is one among many that influence the research process. “The qualitative researcher as ‘bricoleur’ understands that research is an interactive process shaped by his/her personal history, biography, gender, social class, race, and ethnicity, and those of the people in the setting” (Denzin and Lincoln 1998:3). Therefore, the
researcher should admit the value-laden nature of the study and report on her values and biases (Cresswell 1998).

3.4.3.1 Reflexivity: Personal and Epistemological

Within axiological assumptions, is the concept of reflexivity which corresponds to the realisation that researchers and their methods are entangled with the politics of the social world they study (Gubrium and Holstein 1997). Reflexivity has “allowed researchers to acknowledge themselves as living, breathing, embodied human beings, who brought their previous experiences and worldviews to their project of inquiries” (Ateljevic, Harris, Wilson, Collins 2005: 9). According to Willig (2001:10), “reflexivity requires an awareness of the researcher’s contribution to the construction of meanings throughout the research process, and an acknowledgement of the impossibility of remaining ‘outside of’ one’s subject matter while conducting research”. As suggested by Holliday (2002) reflexivity is the way in which researchers come to terms with and capitalize on the complexities of their presence within the research setting, in a methodical way. The researcher does not pretend to escape subjectivity and therefore accounts for it wherever possible (including impressions, irritations, feelings), for example in research diaries. These reflections form part of the interpretation and become data in their own right. Therefore, the final study findings are composed of the subjectivities of both the researcher and those being studied.

In particular, Willig (2001) suggests two types of reflexivity: personal reflexivity and epistemological reflexivity. “Personal reflexivity involves reflecting upon the ways in which our own values, experiences, interests, beliefs, political commitments, wider aims in life and social identities have shaped the research” (Willig 2001: 10). As suggested by Moustakas (1994), this autobiographical statement clarifies the experiences of the researcher leading to the topic, including puzzlements or curiosity about the topic. In accordance with the need to clarify personal reflexivity, a short biography of the researcher, who is also a certified scuba diver, is attached in Appendix A and provides a glimpse into the researcher’s background. On the other hand, epistemological reflexivity encourages researchers to reflect upon the assumptions (about the world, about knowledge) made in the course of the research, and to think about the implications of
such assumptions for the research and its findings (Willig 2001). Epistemological reflexivity will be addressed in Chapter Eight.

3.4.4 Rhetorical
The rhetorical question refers to the choice of language in the written text. By acknowledging rhetorical assumptions, the researcher asserts the use of specific terms, and a personal and literary narrative within the dissertation. This includes the use of metaphors, the use of the first-person "I", and a focus on stories. "Words such as understanding, discover, and meaning form the glossary of emerging qualitative terms and are important rhetorical markers in writing purpose statements and research questions" (Creswell 1998:77). Additionally, the language used is based on definitions that evolve during a study, defined by the participants (Creswell 1998). According to aspects of reflexivity, the rhetorical assumption "allowed researchers to write themselves in to their interpretations and accounts using a first-person style of narrative" (Ateljevic, et. al. 2005:10). Therefore, from this point on, the voice of the researcher within the text reverts into the first-person 'I' where necessary, based on the rhetorical assumption.

Section 3.4 has delineated the methodological assumptions for this study focusing on ontology, epistemology, axiology and rhetorical assumptions as located within a specific inquiry paradigm, interpretivism. The next section moves on introduce the theoretical and epistemological underpinnings of Interpretative Phenomenological Analysis (IPA), the qualitative methodology chosen to guide this study. IPA is not merely a technique for data collection; it includes suggested procedures for analysis, theorising the data, and interpreting findings in light of theory.

3.5 Interpretative Phenomenological Analysis (IPA)
Interpretative Phenomenological Analysis (IPA) is a newly developing, and expanding methodological tool used by health psychologists whose focus is on understanding individuals' experiences (Smith 1995; Smith, Jarman, Osborn 1999; Smith and Osborn 2003). "Phenomenology and hermeneutic inquiry form the dual epistemological underpinnings of IPA" (Smith and Eatough 2006:323). This section aims to outline the theoretical underpinnings and epistemological assumptions for IPA. The intent of this
review is to clarify the use of IPA as an approach to understand the lived experience of place for the participants in this study. This discussion begins with a brief outline of IPA, followed by an overview of its theoretical background which is grounded in phenomenology. The central concern for IPA is the analysis of how individuals make sense of their lived experiences (Smith and Eatough 2006). IPA is interested in mental processes and tries to record what is real in participants’ minds, but strictly from their own phenomenological perspectives (Smith and Osborn 2003). Smith, Jarman and Osborn’s (1999) definition of IPA clearly describes its purpose as an analytical tool:

"the approach is phenomenological in that it is concerned with an individual's personal perception or account of an object or event as opposed to an attempt to produce an objective statement of the object or event itself. [...] Access [to the participant's personal world] depends on, and is complicated by, the researcher's own conceptions and indeed these are required in order to make sense of that other personal world through a process of interpretative activity. Hence the term interpretative phenomenological analysis is used to signal these two facets of the approach".

(Smith, et. al. 1999: 218-219)

Therefore, IPA is concerned with the way things appear to us in experience: how, as individuals, we perceive and talk about objects and events (Smith and Eatough 2006). Additionally, contemporary hermeneutic inquiry draws attention to how we are interpreting and sense-making individuals (Smith and Eatough 2006). However in a research scenario, IPA accepts the impossibility of gaining direct access to research participants' lived worlds (Willig 2001). Therefore, within IPA, the reflexive role of the researcher in the interpretation of participants’ perception and experience is intrinsic and is known as the dual interpretation process or double hermeneutic (Smith and Osborn 2003). In sum, “the participants are trying to make sense of their world; the researcher is trying to make sense of the participants trying to make sense of their world” (Smith and Osborn 2003: 51). “As a result, the phenomenological analysis produced by the researcher is always an interpretation of the participant’s experiences (Willig 2001:53). IPA is a relevant methodology if a research project is centred on exploring the experiences of individuals (Shaw 2001). As a qualitative methodology, IPA is useful in that it uses thick rich description to gain an insight into the meanings of participants’
experiences. Further details on the general method and analysis for IPA will be explained at the start of Chapter 4. IPA was introduced by Jonathan Smith (a British psychologist) in 1996 to move away from the positivist inquiry paradigm dominating the discipline of psychology. However, its theoretical underpinnings are based in the philosophical tradition of phenomenology, and the aim of the next section is to outline this background and introduce its methodological implications for IPA.

### 3.5.1 Phenomenology

Within the research literature, “the term ‘phenomenology’ has become so popular and has been so widely embraced that its meaning has become confused and diluted” (Patton 2002:104). As observed by Patton (2002), this term is often used interchangeably with ‘interpretivism’ to mean a qualitative approach; to refer to an inquiry paradigm; an interpretive theory; a social science analytical orientation; a major qualitative tradition; or a research methods framework. According to Moran (2000:4), phenomenology is radical way of doing philosophy, a practice rather than a system; a diverse field with distinct strands. Rooted in a philosophical tradition developed by Edmund Husserl (1859-1938), transformed by Heidegger (1889-1976), and reinterpreted Merleau-Ponty (1908-1961) and others (Hammond, Howarth and Keat 1991), this is an approach that analyses the meaning of peoples’ lived experiences. This section aims to outline the key tenets of phenomenology, in order to clarify the theoretical and epistemological underpinnings of IPA.

#### 3.5.1.1 Lived Experiences

Phenomenology is essentially the study of lived experience. A phenomenological study describes the meaning of the lived experiences for several individuals about a concept or phenomenon (Creswell 1998). But what is ‘lived experience’? Van Manen (citing Dilthey 1985) suggests that in its most basic form, lived experience involves our immediate, pre-reflective consciousness of life: a self-given awareness which is, as awareness, unaware of itself (1997:35). The following excerpt clarifies this notion:

> A lived experience does not confront me as something perceived or represented; it is not given to me, but the reality of lived experience is there-for-me because I have a reflexive awareness of it,
because I possess it immediately as belonging to me in some sense. Only in thought does it become objective (Dilthey 1985:223 cited in Van Manen 1997)

Accordingly, the lifeworld (Lebenswelt or external horizon), the world of lived experience, is both the source and the object of research (Van Manen 1997). As explained by Seamon (2000:161), “the lifeworld refers to the tacit context, tenor, and pace of daily life to which normally people give no reflective attention” and “includes both the routine and the unusual, the mundane and the surprising”. The lifeworld is referred to as “the world as lived by the person and not the hypothetical external entity separate from or independent from him or her” (Valle, King and Halling 1989:9). For example, our lived experience of time, anger, love, care, learning, is open to inquiry. The inquiry asks ‘what is this experience like?’ as it attempts to unfold meanings as they are lived in everyday existence. As noted by LeVasseur (2003:408), “traditional science has not been concerned with the lived experiences of individuals, because these are largely unmeasurable and difficult to appreciate through sensory observation”. In contrast, “human meanings are the key to the study of lived experience, not causal variables. In a nutshell, phenomenology insists that daffodils are indeed different for the wandering poet than they are for the hard pressed horticulturalist” (Ashworth 2003:13).

Now, the literal meaning of the term ‘phenomenology’ is derived from two Greek words: phainomenon (an ‘appearance’) and logos (‘reason’ or ‘word’). Hence ‘a reasoned inquiry’ which discovers the inherent essences of appearances, meaning anything of which one is conscious (Stewart and Mickunas 1990: 3). Husserl developed a method for systematically investigating the structures of consciousness or essences. Essences, the things that make a phenomenon what it is, exist in conscious experience. For Husserl, consciousness is always directed towards an object: ‘there is an indissoluble unity between the conscious mind and that of which it is conscious (Stewart and Mickunas 1990). It is through consciousness that a person is present to the world, and the essence of consciousness is intentionality (Sadala and Adorno 2001). The following sections outline the key tenets of phenomenology: intentionality of consciousness; refusal of the subject-object dichotomy; bracketing and phenomenological reduction.
3.5.1.2 Intentionality of consciousness

The first tenet is an emphasis on the intentionality of consciousness: that experiences contain both the outward appearance and inward consciousness based on memory, image, and meaning (Creswell 1998). Due to its origins from the language of its German philosophers, the use of the word intentionality is very specific. Searle explains:

The word suggests that intentionality in the sense of directedness, must always have some connection with ‘intending’ in the sense in which, for example, I intend to go to the movies tonight. (German has no problem with this because intentionalität does not sound like absicht, the word for intention in the ordinary sense of intending to go to the movies). So we have to keep in mind that in English, intending is just one form of intentionality among many. (2000:85-86)

Intentionality recognises that all conscious experiences have both an objective and a subjective pole: to understand a phenomenon means understanding both. The objective pole is known as noema (the intended object) whereas the subjective pole is referred to as noesis (the intending act). For example, noetic acts might include seeing, hearing, feeling, thinking, judging whereas noematic objects include the sights seen, the words heard, the feeling felt, the thoughts thought and the ideas judged (Boeree 1998). Husserl used the two concepts of noesis and noema to reveal intentionality of consciousness (Ehrich 2003) which leads to the interpretation of an experience (Sanders 1982). “Noema is the objective statement of behaviour or the experience, while noesis is a subjective reflection of the objective statement” (Sanders 1982:357). For example, a group of six divers descend towards a coral reef, each ‘sees’ similar aspects of the reef, yet, each diver will have different feelings and thoughts about the dive. In this example, the noema is the ‘what’ or the content of the dive that each diver saw, while the noesis is the ‘how’, or the mode in which each diver experienced the dive. The noesis refers to the way in which the divers understood the dive, whether they felt content, concerned and other subjective responses. As noted by Ehrich (2003:43), “together the noema and the noesis lead each person to interpret an experience in a unique way”.

Figure 4 depicts a pictorial diagram that presents these basic concepts including intentionality, noesis and noema, and introduces ‘the horizon’. In order to understand
Figure 4, imagine ‘I’ as a person who perceives what is given (‘the light’) and enters into an encounter with it (‘the lit’); a person who may be awakened to memory, wish, imagination, or judgment, a person relating to the ‘thing itself’ and the ‘thing as a whole’ (Moustakas 1994). The object being ‘lit’ is at the same moment doing the ‘lighting’ up.

By developing a phenomenological version of the correspondence relation between act and object, we can be assured of ‘correspondence’, an agreement between the act of knowing and the object known (Stewart and Mickunas 1990). The noesis and noema refer to meanings: when we look at something, what we see intuitively constitutes its meaning (Moustakas 1994). An object is an intentional structure because such structures come with ‘horizons of meaning’; horizons that relate them in an indefinite number of ways with other objects, and structure their potential, that is, what can be expected of them in the course of lived experience (Husserl 1973). This horizon is inescapable – the noema is understood in terms of its horizon and in turn, thematizes its horizon (LeVasseur 2003). According to Moustakas (1994), whether one is perceiving, remembering, judging, or imagining, there are common threads in one’s intentional experience of something; as well as unique meanings in each of these acts of experience. “During these acts, shifts will occur as one looks from a different frame of reference,
mood, or internal locus. When one looks with confidence, what one sees will be radically different than when one looks with doubt” (Moustakas 1994: 71).

Accordingly, the focus of any phenomenological investigation lies with the phenomenon itself, not the subjective experience of participants. The noesis of the experience becomes of interest to the researcher only as a way of understanding the phenomenon itself (Ehrich 2003), as a horizon of meaning. Therefore, consciousness through intentionality is understood as the agent that attributes meanings to objects (including actions, gestures, habits and human actions). Without these meanings, it would be impossible to discuss an object or an object’s essence. The task is to analyse the intentional experiences of consciousness in order to perceive how the phenomenon is given meaning, and to arrive at its essence (Sadala and Adorno 2002). “In phenomenology, perception is regarded as the primary source of knowledge, the source that cannot be doubted. Intentions, united with sensations, make up the full concrete act of perception; the object achieves full-bodied presence” (Husserl 1970 cited in Moustakas 1994:52). Therefore, the focus of a phenomenological study is on “exploring how human beings make sense of experience and transform experience into consciousness, both individually and as shared meaning. This requires methodologically, carefully, and thoroughly capturing and describing how people experience some phenomenon – how they perceive it, describe it, feel about it, judge it, remember it, make sense of it, and talk about it with others” (Patton 2002: 104).

3.5.1.3 Refusal of the subject-object dichotomy
Phenomenology shifts attention from Descartes’ question of the reality of the world, to its meaning as phenomena (Stewart and Mickunas 1990). This theme flows from the principle of intentionalität where the reality of an object is only perceived within the meaning of the experience of an individual (Creswell 1998). According to the phenomenological perspective, it makes no sense to think of the world of objects and subjects as separate from our experience of it (Willig 2001). Therefore, the notion of intentionality is used to argue against any person-world division: “human consciousness and experience necessarily involve some aspect of the world as their object, which in turn provides the context for the meaning of consciousness and experience” (Seamon
1982:131). As noted by Seamon (1982), Heidegger argued that people do not exist apart from the world but rather, are intimately caught up in and immersed. This "undissolvable unity between people and world" (Stewart and Mickunas 1990:9), is what Heidegger called *Dasein*, or *being-in-the-world* emphasises a sense of immersion and integral person-world fusion (Seamon 2000). As such, it is impossible to ask whether person makes world or world makes person because both exist always together and can only be correctly interpreted in terms of the holistic relationship, being-in-the-world (Seamon 2000). "The essential focus of phenomenological investigation, is the indivisible entity of experiencer-experiencing-experience-or-thing" (Seamon 1982:132). It is noted that the person is sometimes more active in his relation to the world (cognitive intentionality) and sometimes more passive (habitual behaviours and routines), but ultimately is immersed in his world, including the physical environment (Seamon 1982). These were the guiding principles adopted by phenomenologists such as Tuan and Relph to study the relationships between people and places.

3.5.1.4 Bracketing and phenomenological reduction

*Reduction* entails concentrating on the phenomenon, becoming absorbed in it, and through *bracketing*, 'return to the things themselves', as experienced, and see them as they are. In order to do so, a researcher must move away from their subjective experience (*natural attitude*) and must attempt to mentally bracket out all personal presuppositions (e.g. biases, prejudices, theories, philosophies). This act denotes placing presuppositions out of question for the present, while the larger context is being investigated to provide a pure description free from subjective influences. Stewart and Mickunas (1990:26) explain: "What one ignores when performing the reduction is his previous prejudice about the world. By narrowing his attention to what is essential, he hopefully will discover the rational principles necessary for an understanding of the phenomenon under investigation".

However, not all strands of phenomenology subscribe to these notions. Followers of Heidegger and Merleau-Ponty consider bracketing an untenable project because humans are considered too much *'beings-in-the-world'* to complete such a task. As noted by Ashworth (1999), Merleau-Ponty interpreted the process of bracketing to refer not to a
turning away from the world and a concentration on detached consciousness but to resolve to set aside theories, research presuppositions, ready-made interpretations in order to reveal engaged, lived experience. The debate on this issue is current and ongoing (Giorgi 1985; 1997; Ashworth 1999; LeVasseur 2003). Moreover, there is no clear outline on 'how to bracket': one suggestion is that the researcher lists all presuppositions that s/he is consciously aware of to create a checklist as evidence as a sensitising exercise (Boeree 1998; Hycner 1999; Fischer and Wertz 2002). Where Husserlian phenomenology focused on epistemological issues and the way in which knowledge is acquired, his student Heidegger transformed phenomenology to focus on issues of ontology and interpretation. Heidegger referred to human reality as *Dasein* (‘being-there’) which emphasises the situatedness of human reality in the world: ‘being there’ stresses the fact that human existence is always existence in the world (Stewart and Mickunas 1990). As such, the *hermeneutic* phenomenology advocated by Heidegger places an emphasis the nature of being, or the person in context as explained in the preceding section. Moreover, it was Heidegger who began the hermeneutic turn in phenomenological philosophy by stressing how all understanding involves interpretation (Langdridge 2007).

To better understand how a purely descriptive phenomenological study is performed, I conducted a pilot study in November 2005 based on interviewing one diver. Details of this pilot study are given in Appendix A, but the main outcome was a change from using a purely descriptive method, towards one which was interpretative, IPA. This decision was based on the difficulties to prove any form of bracketing had successfully taken place.

### 3.5.2 Descriptive versus Interpretative Phenomenology

*Descriptive phenomenology* is the most classically Husserlian method which focuses on identifying the essence of the phenomenon through bracketing and phenomenological reduction, and, also builds on existential philosophy (Langdridge 2007). This method is also known as 'empirical-structural phenomenology' (as propagated by Giorgi 1985) or 'transcendental phenomenology' (after Moustakas 1994). At the core of descriptive phenomenology is the very deep respect for the uniqueness of human experience, as such
the focus is on *description* and understanding, but there is absence of interpretation (Hycner 1999). To recap, a phenomenological study describes the meaning of lived experiences for several individuals about a phenomenon (Creswell 1998). “The classic approach to phenomenology is a hermeneutics of meaning-collection, with the researcher remaining close to the participant, attempting to give voice to the participant’s experience with as little of the researcher as possible” (Langdridge 2007:158). The focus within hermeneutics of meaning-collection is on “understanding meaning through a fusion of horizons (of reader and text) where we seek to understand the meaning of the text as it appears to us” (Langdridge 2007:53).

However, critics have argued that descriptive phenomenology stays too close to describing meaning as expressed by the participants, and fails to take this further through interpretation (Langdridge 2007). The criticism is that “descriptive phenomenology does not do enough work – analytically speaking –to satisfy the demands of many qualitative researchers” (Langdridge 2007:158). Those who accept this argument have gone in the footsteps of Heidegger and Merleau-Ponty to explore the possibility of a more *interpretative phenomenology*. Hermeneutic phenomenology and IPA are examples of this approach: both are phenomenologically informed but seek to be explicitly more interpretative than classical approaches. IPA converges with Husserlian phenomenology in that it focuses on the study of lived experiences and is concerned with an individual’s personal perception or account of an object (Smith, *et al.* 1999). However, IPA diverges from this path in terms of its epistemology, and aligns itself with hermeneutic phenomenology, with a focus on interpretation. IPA is informed by phenomenological philosophy, but, there is less emphasis on description, and greater focus on interpretation, as well as greater engagement with mainstream psychological literature (Langdridge 2007). As noted by Larkin, Watts and Clifton (2006:110), “IPA is concerned with understanding the person in context, and exploring persons’ relatedness to, or involvement in the world...we learn about a particular person in context and about how something has been understood”. Bearing this in mind, the decisions made with regards to how an IPA study is conducted, from data collection to data analysis, and the criteria for judging its quality should be based on the theoretical and epistemological
underpinnings of interpretative phenomenology. These matters will be elaborated on further in the following chapter.

3.6 Conclusion
This chapter has presented the elements that are necessary to embark on a research journey. This chapter has explained the difference between methodology and method; the importance of clarifying the chosen methodological assumptions; and the purpose of inquiry paradigms. The discussion was geared towards the justification of the chosen inquiry paradigm (interpretivism) and the qualitative methodology (IPA), to answer the research question and purpose of this study. The decision to work within an interpretive paradigm corresponding to a phenomenological research approach was based on clarifying the five main philosophical assumptions of the study with implications for practice including the ontological, epistemological, axiological (including reflexivity) and rhetorical assumptions. The epistemological and theoretical underpinnings of IPA were presented through a discussion on phenomenology. It was clarified that IPA is seen as an approach which aligns itself with interpretative phenomenology. Chapter Four will begin with a brief literature review on the general method associated with an IPA study, followed by a discussion on the research design of this study including data collection, data analysis, and techniques incorporated to establish trustworthiness.
Chapter Four: Method

4.0 Introduction
Chapter Four presents a discussion of the method associated with IPA as applied in this study. This chapter consists of two key sections. The first section provides a review of the literature on the general method for conducting an IPA study. This section discusses three aspects of method: data collection, data analysis and establishing trustworthiness. These sections can be seen as the foundation pillars that were used to construct the research design for this study, and, provide an important background to the decisions made in this study. The second part of this chapter presents the research design using this same format, but focuses on the decisions and actions taken related to data collection, data analysis and the techniques incorporated for trustworthiness. A brief summary of the findings are presented in the data analysis section. Also, a range of additional material which supports the research design has been placed in the appendices section, and these will be highlighted. Finally, the chapter ends with an overview of this chapter.

4.1 Method for Interpretative Phenomenological Analysis (IPA)
IPA is one approach to phenomenological psychology which advocates less emphasis on description (the norm in descriptive phenomenology) and greater engagement with mainstream social-cognitive psychological literature, or explanation (Langdridge 2007). IPA is inductive, and research questions are usually framed broadly and openly where “the aim is to explore, flexibly and in detail, an area of concern” (Smith and Osborn 2003:53). As noted by Langdridge, “the focus of IPA studies is on how people perceive an experience, or rather, what any particular experience means for them: a focus on the lifeworld” (2007:107). The experience of the lifeworld remains the core of all phenomenological inquiry, and, as such, researchers do not begin the process with a predetermined research hypothesis, instead the starting point is an exploratory research question (Langdridge 2007). “This focus on experience and the meaning it has for participants marks out IPA as a phenomenological method” (Langdridge 2007:107). Therefore, the aim of all IPA studies is the detailed exploration of a participant’s view of the topic under investigation (Langdridge 2007). To conduct an IPA study, there are
clear, systematic guidelines on method which originate from the philosophical disciplines of phenomenology and hermeneutics as discussed in the previous chapter. I have chosen to structure this chapter around data collection, data analysis and trustworthiness, aspects which explain the three types of results which are produced by an IPA study, as depicted in Figure 5 below.

Figure 5: Processes and Outcomes in an IPA study
The idea is to present a discussion on the general method associated with IPA, before using the same structure later to present the method associated with this study. Sections 4.1.1 and 4.1.2 will provide a review of the issues associated with data collection and data analysis that should be considered in the research design. Section 4.1.3 provides a discussion on research quality by juxtaposing conventional and naturalistic inquiry; introduces the concept of trustworthiness; and, identifies a range of techniques which can be used to establish research quality at both stages of data collection and data analysis. The next section outlines a review of data collection methods for an IPA study.

4.1.1 Data Collection
As in any qualitative study, an IPA study proceeds with data collection and attention must be paid to sampling issues and the selection of participants, and the use of semi-structured interviews. This section begins with a discussion on aspects related to sample size within an IPA study.

4.1.1.1 Sample Size
In a phenomenological study, there are no in-advance criteria for choosing participants, although considerations can be given to choosing participants with a similar socio-demographic status profile (Moustakas 1994). Alternatively, the subject matter to be investigated may define the boundaries of the relevant sample (Smith and Eatough 2006). According to Moustakas (1994), the essential criteria for locating and selecting participants in a phenomenological study include: s/he has experienced the phenomenon; is intensely interested in understanding its nature and meanings; is willing to participate in the interview and (perhaps a follow up interview); grants the investigator the right to tape-record the interview and publish the data in a dissertation and other publications.

As a principle, IPA studies are conducted on small sample sizes as these can provide sufficient perspective given adequate contextualization (Smith and Osborn 2003). The aim of an IPA study is to select participants in order to illuminate a particular research question, and to develop a full and interesting interpretation of the data (Brocki and Wearden 2006). As suggested by Smith and Osborn (2003), the aim is to say something
in detail about the perception and understandings of the particular group being studied. As such, IPA studies tend to be concerned with examining divergences and convergences in smaller samples, rather than prematurely make more general claims (Smith and Osborn 2003). According to Smith and Osborn (2003), sample size depends on a number of factors and there is no right or wrong answer to the question of sample size. The justification to the use of small samples is because IPA studies begin with an idiographic mode of inquiry, or case-by-case approach, followed by a comparison across cases (Smith and Osborn 2003). For example, Brocki and Wearden (2006) examined 52 peer reviewed journal articles within the IPA literature published between 1996-2004 and found that studies have been published with samples of one, four, seven, nine, twelve, sixteen, eighteen, twenty, twenty two; the largest number of transcripts was forty-eight based on interviews with twelve patients and their spouses separately, on two occasions.

According to Denzin (2001), idiographic inquiry assumes that each individual case is unique and shaped by the individuals who create it. Such investigations provide an emic perspective, which means to study experience from within; through the use of thick description, narratives and accounts that attempt to capture the meanings and experiences of individuals (Denzin 2001). Additionally, emic investigations are particularising, and do not seek to make generalizations. The concern in an idiographic study is to do justice to each participant’s account, which although time consuming, allows the researcher to make specific statements about each participant: the intensity of this analysis precludes large sample sizes (Smith and Osborn 2003). Therefore, the use of large data sets may result in the loss of nuanced meanings, and a consensus towards the use of smaller sample sizes is observed within IPA studies (Brocki and Wearden 2006). Additionally, the criteria of ‘willingness’ plays an important part in the selection of participants. As noted by Smith and Eatough (2006), inevitably the research sample selects itself, as potential participants should be viewed as free agents who choose to participant or not. In being pragmatic, “it is not unusual to have to adapt the criteria for inclusion if it transpires that not enough of the originally defined group agree to take part in the study” (Smith and Eatough 2006:329). Selection of the sample is conducted through purposive sampling, discussed next.
4.1.1.2 Purposive Sampling
IPA specifies the need to seek a fairly homogenous sample: a group for whom the research question will have relevance and personal significance; IPA aims to understand the experiences of this group and as such uses ‘purposive’ or ‘purposeful’ sampling to select participants (Smith and Eatough 2006). Specifically, the aim is to gather detailed information about the experience of a fairly specific group on a fairly specific topic (Langdridge 2007). Purposive sampling requires the selection of information-rich participants (Patton 2002); individuals who can offer specific and purposeful knowledge about a particular social phenomenon (Lincoln and Guba 1985); and, participants who are experienced, knowledgeable and can provide a variety of perspectives (Rubin and Rubin 2005).

4.1.1.3 Semi-structured Interviews
The vast majority of IPA studies are conducted on data obtained from face-to-face semi-structured interviews (Willig 2001; Smith and Osborn 2003; Brocki and Wearden 2006; Smith and Eatough 2006), which are designed to enable the participant to articulate as much detail about the experience as possible (Langdridge 2007). As IPA attends to the experiential world of the participant seeking to understand it from their perspective, Smith and Eatough (2006) suggest the metaphor of ‘researcher as a traveller’ who:

wanders along with the local inhabitants, asks questions that lead the subjects to tell their own stories of their lived world, and converses with them in the original Latin meaning of conversation as ‘wandering together with’ (Kvale 1996:4)

In order to wander with participants within the interpretative focus of IPA, the researcher adopts a probing stance towards the meaningful worlds offered by the participants. A semi structured life world interview is defined as “an interview whose purpose is to obtain descriptions of the life world of the interviewee with respect to interpreting the meaning of the described phenomena” (Kvale 1996:6). By using a semi-structured format, the researcher treats the participants as experiential experts on the topic under investigation (Smith and Osborn 2003). Therefore, this dual focus (traveller and researcher) requires the semi-structured interview for an IPA study to be “participant-led, yet guided by the researcher who remains empathic and where necessary, questioning”
At all times, the aim is to produce meaningful and useful conceptual accounts of the phenomenon under investigation. Semi-structured interviews generate qualitative data and are more manageable as these are conversations organized loosely around an interview guide. Additionally, an interview guide serves as a framework for the main body of a semi-structured interview and “will contain an outline of the topics to be covered, with suggested questions that need answering in order to shed light on the phenomenon being studied” (Kvale 1996:129). Arksey and Knight (1999) stressed that an interview guide is a flexible guide and not a rigid framework. An interview guide differs from an interview schedule in relation to the type of questions used. Both closed and open questions can be used, but open-ended questioning is far more common given that the aim is to encourage communication. Interviews are normally tape-recorded and then transcribed verbatim.

4.1.2 Data Analysis

The IPA approach “is both phenomenological and interpretative in that it views the analytic outcome as resulting from an interaction between participants' accounts and the researcher's frameworks of meaning” (Touroni and Coyle 2002:196). “Different methodological approaches are based upon different assumptions about the nature of the world, the meaning of knowledge and the role of the researcher in the research process” (Willig 2001:144). Within the IPA approach, the researcher’s own assumptions and explanations are a necessary precondition for making sense of participants’ thoughts and feelings (Willig 2001). An IPA researcher works at different levels of interpretations or analysis, which can be labelled idiographic, inductive, and interrogative (Smith 2004). Basically, this involves analysing the data from this study individually, collectively and in context (locating the findings within existing body of research). The purpose of this section is to clarify each one of these levels of interpretation.

4.1.2.1 Idiographic Level of Interpretation

IPA usually involves the systematic qualitative analysis of transcripts of semi-structured interviews conducted with participants (Smith and Osborn 2003). At this first level of analysis, IPA is strongly idiographic and each participant's transcript is considered one case. Analysis at this level begins with a detailed examination of one ‘case’ until a
degree of closure is achieved, before moving on to a similar examination of the second `case' and so on through all the `cases'. Idiographic research assumes that each individual case is unique and shaped by the individuals who create it; this *emic* approach requires "that the voices and actions of individuals must be heard and seen in the texts that are reported" (Denzin 2001:43). Steps taken to analyse the data or the analytic strategy related to the idiographic `coding' and deriving themes from transcripts is presented in detail in section 4.2.2.1.

4.1.2.2 Inductive Level of Interpretation

Once each case has been examined at the idiographical level, a cross-case analysis takes place as the table of themes for each individual are examined for convergences and divergences (Smith 2004). The outcome of this integration of cases is the production of a master list of themes formed inductively for all the cases. As explained, data collection for IPA is based on purposive sampling, where information rich participants are selected or the group of participants is *homogenous* to the extent that they share the experience which they are asked to describe to the researcher (Willig 2001). Therefore, at the 'inductive' level of interpretation, the researcher looks across the entire corpus of data (all cases) to obtain a more generalised understanding of the phenomenon (Willig 2001). Themes consisting of meanings and experiences are combined in phenomenological inquiry based on the principle that these purposefully sampled, homogenous, individuals share aspects of their lifeworld (Wilson and Slack 1989). The outcome of this level of interpretation is a thematic framework which describes the lived experience being investigated. The analytic strategy and findings of the inductive level of interpretation will be presented in section 4.2.2.1 and 4.2.2.2.

4.1.2.3 Interrogative Level of Interpretation

The third level of analysis in IPA is known as 'interrogative' and involves using the findings of the study to "interrogate and illuminate existing research" (Smith 2004:43). This stage involves comparing the findings of this study with previous studies, and locating the results within the existing body of research. "IPA synthesizes ideas from phenomenology and hermeneutics, resulting in a method which is descriptive because it is concerned with how things appear and letting things speak for themselves, and,
interpretative because it considers there is no such thing as uninterpreted phenomenon” (Smith and Eatough 2006:325). Within IPA, it is possible to utilise a theoretical account by engaging with existing theoretical constructs during interpretation (Larkin et. al. 2006). For example, data leads the researcher to draw upon a theoretical account to discuss the emerging analysis. The outcome is twofold: an explanation of the lived experience, and extensions to the extant literature, which also discusses implications for practice. The interrogative level of interpretation will addressed within Chapter 7.

4.1.3 Trustworthiness
As discussed in Chapter 3, this study embraced interpretivism as its inquiry paradigm due to the focus of its exploratory research question: to understand and interpret lived experiences. With an emphasis on understanding, interpretivism embraces subjectivity: and assumes that reality is not objective, single and divisible, but socially constructed, multiple, holistic and contextual (Decrop 2004). However, this raises concern about research quality, or:

“How can an inquirer persuade an audience (including self) that the findings of an inquiry are worth paying attention to, worth taking account of? What arguments can be mounted, what criteria invoked, what questions asked, that would be persuasive on this issue? (Lincoln and Guba 1985: 290)

As Lincoln and Guba (1985) explain, different paradigms make different knowledge claims, as such criteria for what counts as significant knowledge vary from paradigm to paradigm; hence they believe that the naturalistic or interpretative paradigm should be graced by its own appropriate set of criteria. They propose that a crucial feature of any naturalistic, qualitative research design is to establish trustworthiness (Lincoln and Guba 1985). Trustworthiness refers to scientific inquiry that is able to demonstrate truth value, provide the basis for applying it (applicability), and allow for external judgments to be made about the consistency of its procedures, and the neutrality of its findings or decisions (Lincoln and Guba 1985; Decrop 2004). Trustworthiness (Lincoln and Guba 1985) is meant to be analogous to the language of validity in positivistic research. Instead of the positivistic terms and criteria of ‘internal validity’, ‘external validity’,
‘reliability’, and ‘objectivity’, they suggest the use of ‘credibility’, ‘transferability’, ‘dependability’, and ‘confirmability’ and propose a range of suggested techniques to operationalise and establish the trustworthiness of qualitative research (Lincoln and Guba 1985). Table 2 provides an overview of these criteria: both conventional and naturalistic terms are provided, as well as a suggested list of techniques that can be used to judge the trustworthiness of a naturalistic or qualitative inquiry.

| Establishing Trustworthiness: A Comparison of Conventional and Naturalistic Inquiry |
|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Criterion          | Conventional Term | Naturalistic Term | Naturalistic Techniques                              |
| Truth Value        | Internal Validity  | Credibility        | • Prolonged engagement                             |
|                    |                    |                    | • Persistent observation                           |
|                    |                    |                    | • Triangulation                                    |
| Applicability      | External Validity  | Transferability    | • Referential adequacy                             |
|                    |                    |                    | • Peer debriefing                                  |
|                    |                    |                    | • Negative case analysis                           |
|                    |                    |                    | • Referential adequacy                             |
| Consistency        | Reliability        | Dependability      | • Member checks                                    |
|                    |                    |                    | • Reflexive journal                                |
| Neutrality         | Objectivity        | Confirmability     | • Confirmability audit                             |
|                    |                    |                    | • Reflexive journal                                |

Table 2: Establishing Trustworthiness (derived from Lincoln and Guba 1985: 289-331)

The centrality of researcher subjectivity within an IPA study means that traditional criteria for evaluating research quality which are based on an assumption of researcher objectivity and disengagement from the analytic process are inappropriate (Touroni and Coyle 2002). The criteria for evaluating an IPA study draws on most of the criteria located within naturalistic inquiry to establish its trustworthiness: these focus “not on the quantity of information gathered but rather on its quality and richness” (Decrop 2004:157). The following section provides a brief overview of each of these criteria: credibility, transferability, dependability and confirmability, as well as the suggested techniques to operationalise these criteria. Within IPA however, due to the intrinsic role of the researcher, confirmability is replaced by reflexivity, as will be explained in Section 4.1.3.4.
4.1.3.1 Credibility
In order to demonstrate truth value, a researcher must “carry out the inquiry in such a way that the probability that the findings will be found to be credible is enhanced” (Lincoln and Guba 1985:296). Five major techniques with a range of activities that can contribute to the credibility of a study include: i) prolonged engagement in the field, persistent observation, and triangulation (data sources, methods, investigators and theories); ii) an external check on the inquiry process (peer debriefing); iii) negative case analysis; iv) referential adequacy; v) member checks (a direct test of the findings and interpretations with the participants) (Lincoln and Guba 1985; Miles and Huberman 1994; Decrop 2004). This next section discusses one key aspect of establishing credibility, that of ‘member checks’.

4.1.3.1.1 Member Checks
According to the literature, ‘member checks’ is a technique for establishing credibility within qualitative research (Lincoln and Guba 1985; Patton 2002). Within interpretative research, the credibility criterion is the naturalist’s substitute for the positivist’s internal validity (Lincoln and Guba 1985). Also known as ‘member validation’, or ‘authentic interpretations’, this task involves taking the findings and conclusions of a study back to the participants, or, some subset of them to check or test whether these make sense (Breakwell 2006). According to Patton (2002), researchers can learn a great deal about the accuracy, completeness, fairness and perceived validity of their data analysis by allowing participants to react to the findings. This task relies on the integrity of participants, and if there is no reason to doubt this, conducting member checks is a valid way to “establish the meaningfulness of the findings and interpretations” (Lincoln and Guba 1985:315). The mode of conducting member checks ranges from conducting follow-up interviews with individuals, focus group interviews, and perhaps the most popular mode, through feedback forms or written communication. The next section introduces the use of member checks within IPA and discusses both practical and theoretical concerns related to the conduct of such an exercise.

4.1.3.1.2 Member Checks within IPA
Although member checks are an accepted mode of ensuring the credibility of qualitative research, member checks do not as yet seem to be the norm within IPA studies. Based on
a review of 52 IPA studies published in peer reviewed journals, Brocki and Wearden (2006) confirm that only in a limited number of IPA studies were participants asked for feedback on preliminary interpretations (for example, Smith 1999; Turner and Coyle 2000; Alexander and Clare 2004), whereas Touroni and Coyle (2002) discussed their analysis with people who did not meet the study criteria. The norm within IPA is for analyses to be checked and validated through an independent audit (Smith 2003). These independent audits are carried out by other academics or professionals who are involved in the research (for example, Duncan, Hart, Scoular and Bigrigg 2001; Smith, Michie, Stephenson, Quarrell 2002; Alexander and Clare 2004), or, by independent researchers (for example, Walker, Holloway, Sofaer 1999; Turner and Coyle 2000, Robson 2002; Clare 2002).

Where participant feedback was requested in an IPA study, it was conducted through written communication. For example, Alexander and Clare (2004) sent a written summary of results to their 16 participants who had been interviewed, with an invitation to comment, and four participants responded. "We read and reflected on these responses, and this led to some minor changes in emphasis in the presentation of the thematic account" (Alexander and Clare 2004:74). Similarly, Whittington and Burns (2005) sent a written summary of results (themes) on the dilemmas of residential care staff to their 18 participants. Participants were asked to comment on the themes using a feedback form to "maximise the authenticity of the account" (Whittington and Burns 2005:65). Nine of the 18 participants responded and provided feedback. Three participants referred to the theme summary as an accurate account of service workers' views in general, three suggested that such generalisations could never be completely accurate because of the individual differences between staff, and three participants did not make clear comment on the issue. Additionally, Warwick, Joseph, Cordle and Ashworth (2004) in their study on chronic pelvic pain (CPP) also sought member validity from their 8 female participants. A draft of the manuscript was given to one of the participants, and a woman with CPP who was independent from the study. "They confirmed that the results were consistent with their experiences of CPP" (Warwick, et. al. 2004: 121).
There is both a practical and theoretical concern related to seeking participant validation. First and foremost, there are issues related to the relative power of researcher and participant, related to the ability of a participant to provide honest feedback or to criticise a researcher (Lincoln and Guba 1985; Emerson and Pollner 1988; Langdridge 2007). Moreover, only participants who have a positive attitude and interest in the research are likely to agree to provide feedback through follow-up interviews. As such, the idea that repeated interviews increases openness and honesty might in fact be an artefact of differential dropout (Breakwell 2006). A more theoretically driven concern is the dual interpretation process or double hermeneutic (Smith and Osborn 2003) incorporated within an IPA study. In effect, the researcher is making sense of the participant making sense of his/her experience. The reflexive role of the researcher is recognised as intrinsic to the interpretation process in IPA, with “the phenomenological analysis produced by the researcher is always an interpretation of the participant’s experiences” (Willig 2001:53). Therefore, participants may or may not agree with what the researcher has interpreted because this is based on the researcher's subjective, interpretative analysis. Additionally, according to Langdridge (2007), “people may not be able to adopt a meta-perspective on their own experience (step outside the natural attitude), being embodied beings-in-the-world, inseparable from their own experience. Asking someone to stand back from their experience and adopt a God’s eye perspective is very likely asking the impossible, unless one subscribes to a Husserlian belief that this is possible of course”. Ultimately, it is up to the researcher to make a judgement in light of these issues about the value of using participant feedback. Indeed, Langdridge (2007) suggests that if we take our participant’s experiences seriously, it is no surprise that we return and explore our findings with them. This can provide valuable feedback “on whether they feel their experience has been rendered accurately and illuminated further” (Langdridge 2007:80).

4.1.3.2 Transferability
Transferability reflects the ability to apply the study to different population, settings or contexts (Lincoln and Guba 1985). The establishment of transferability is very different from the conventional external validity, in fact, in a strict sense, it is impossible (Lincoln and Guba 1985). Within qualitative research, one cannot specify the external validity of an inquiry, instead the researcher can “provide only the thick description necessary to
enable someone interested in making a transfer to reach a conclusion about whether transfer can be contemplated as a possibility" (Lincoln and Guba 1985:316). To enable judgment to be made about transferability to other settings because of shared characteristics, the research design should incorporate the use of homogenous, purposive sampling, and, be composed of thick description which entails describing the participants and data extensively (Decrop 2004). Ultimately, the results of an individual IPA study must be considered contextual: culturally bound, historically contingent and situated for one specific group of participants. However, “it is possible for subsequent studies to be conducted with other groups, and so gradually, more general claims can be made, but each founded on the detailed examination of a set of case studies” (Smith and Osborn 2003:54).

4.1.3.3 Dependability
Dependability is analogous to the term reliability and is a precondition for validity in a positivist study (Lincoln and Guba 1985). However, reliability refers to whether results can be replicated in a future study, whereas dependability concerns itself with ‘consistency of results’ (Lincoln and Guba 1985). According to Yardley (2000), reliability may be an inappropriate criterion against which to measure qualitative research if the purpose of the research is to offer just one of many possible interpretations. As a qualitative methodology, “IPA is inevitably subjective as no two analysts working with the same data are likely to come up with an exact replication of the others’ analysis” (Brocki and Wearden 2006). Therefore, dependability refers to how well mapped the study is so that other researchers following the same procedures can reach similar results (Lincoln and Guba 1985). Dependability is sought via an auditing process that examines both the process and the product of the investigation. Dependability can be sought by an audit trail, as well as by inviting an independent auditor to review this audit trail. This independent audit can be used to determine dependability and confirmability simultaneously (Lincoln and Guba 1985).

To ensure dependability, Smith (2003) proposes an independent audit which can occur at two levels. At one level, this involves the researcher filing all the data in such a way that someone else could follow the chain of evidence that has led to the final report (Smith
In an interview project, this audit trail would include “initial notes on research question, interview schedule, audiotapes, annotated transcripts, steps taken for coding transcripts, and initial categorisations, draft reports and final report” (Smith 2003:234). The researcher should file the data in such a way that someone else could inspect the trail and check that a coherent chain of arguments runs from raw data to final write-up thus enhancing the rigour of one’s claims. On the other hand, an independent audit involves presenting the ‘audit trail’ to a researcher who played no part in the project (Smith 2003). This audit trail should cover the data collection procedures, as well as the data analysis process. If described in detail, this material provides a ground for the independent auditor to judge that the results are based on the accounts of participants, not on the researcher’s biased imagination. Here, the independent researcher’s is “attempting to ensure that the account produced is credible and justified in terms of the data collected, but not necessarily the only or definitive account which could be produced” (Smith 2003:235). Moreover, in keeping with the ontological assumption and qualitative design of this study, the aim of this independent audit is not to produce “a single report which claims to represent ‘the truth’, nor, necessarily to reach a consensus” (Smith 2003:235). The concern here is with how systematically and transparently a particular account has been produced.

4.1.3.4 Reflexivity vs. Confirmability
The final criteria to establish trustworthiness within qualitative research is that of neutrality. A researcher needs to establish confirmability or “the degree to which the findings of an inquiry are determined by the subjects and conditions of the inquiry and not by the biases, motivations, interests, or perspectives of the inquirer” (Lincoln and Guba 1985:290). However, within an IPA study, the dynamic role of the researcher in interpreting participants’ experiences or the double hermeneutic circle is implicitly recognised. Therefore, findings are presented as the researcher’s ‘interpretations’ of the participants experiences and on the part of the researcher, there is a commitment to the self-critical theme of reflexivity. “A reflexive text is one that informs or reminds readers that the author has interpreted data to construct the version they are reading, and that the reader has an involvement in and a position on the research topic” (Coolican 2004:234). As such, confirmability is not pertinent to interpretative phenomenology because first, the
researcher’s experience becomes part of data, and secondly, reality is perceived as dynamic and changing (Morse, Barrett, Mayan, Olson and Spiers 2002). Reflexivity is used for the process in which researchers are conscious of and reflective about the ways in which their questions, methods and own subject position might impact on the knowledge produced in a research project (Langdridge 2007). In Chapter 3, the discussion on axiological assumptions discussed the need to be clear about the value laden nature of a qualitative research project. Also section 3.4.3.1 discussed the utility of personal and epistemological reflexivity. Indeed, Elliot, Fischer and Rennie (1999) refer to reflexivity as a form of ‘owning one’s perspective’ where the researcher discloses their own values and assumptions. This allows readers to interpret the analysis, and to consider possible alternative interpretations (Willig 2001). In order to adopt and ensure a reflexive approach is incorporated, a researcher can choose to reflect on the issues depicted in Table 3 which cover both personal and epistemological reflexivity.

<table>
<thead>
<tr>
<th>Adopting a Reflexive Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Why am I carrying out this study?</td>
</tr>
<tr>
<td>b. What do I hope to achieve with this research?</td>
</tr>
<tr>
<td>c. What is my relationship to the topic being investigated? Am I an insider or an outsider? Do I empathise with the participants and their experience?</td>
</tr>
<tr>
<td>d. Who am I, and how might I influence the research I am conducting in terms of age, sex, class, ethnicity, sexuality, disability and any other relevant cultural, political or social factors?</td>
</tr>
<tr>
<td>e. How do I feel about the work? Are there external pressures influencing the work?</td>
</tr>
<tr>
<td>f. How will my subject position influence the analysis?</td>
</tr>
<tr>
<td>g. How might the outside world influence the presentation of findings?</td>
</tr>
<tr>
<td>h. How might the findings impact on the participants? Might they lead to harm and, if so, how can I justify this happening?</td>
</tr>
<tr>
<td>i. How might the findings impact on the discipline and my career in it? Might they lead to personal problems, and how prepared am I to deal with these should they arise?</td>
</tr>
<tr>
<td>j. How might the findings impact on wider understandings of the topic? How might your colleagues respond to the research? What would the newspapers make of the research? Does the research have any implications for future funding? What political implications might arise as a result of the research?</td>
</tr>
</tbody>
</table>

Table 3: Questions to Encourage a Reflexive Approach to Research (Langdridge 2007)

Using a reflexive approach contributes towards the credibility of findings in that it shows that the participants’ realities have been constructed and influenced by the researcher’s subjectivity. The question which arises is how can a researcher demonstrate reflexivity to
the readers of the research? Langdridge (2007) suggests three ways to incorporate both personal and epistemological reflexivity in a phenomenological project. First, inform the reader of the position of the researcher with regard to the topic being investigated. Next, during data analysis, bring oneself into the analytical process as necessary. Finally, reflect on the findings and implications at the end of the project and on how one's own position influenced the project.

4.1.3.4.1 Persuasiveness of Text
Therefore, an alternative criterion to a confirmability audit is the criterion of persuasiveness by 'grounding in examples', applied through an inspection of interpretations and data (Elliot, et. al. 1999). In effect, interpretations are illustrated by verbatim extracts from the data set (interview transcripts) to allow readers to assess the persuasiveness of the analysis. The extent to which a manuscript resonates with the reader is deemed to establish trustworthiness: Polkinghorne (1983) advocates four criteria to help readers judge the correctness of phenomenological accounts: vividness, accuracy, richness, and elegance. "Vividness is a quality which draws readers in, creating a sense of reality and genuineness. Accuracy refers to believability, helping readers to see the phenomenon as a part of their own world of experience and meaning. Richness refers to the fullness and colour of the description and relates to the aesthetic qualities of the phenomenon; a rich description helps the reader enter into the description emotionally as well as intellectually. Finally, elegance relates to descriptive economy, and a disclosure of the phenomenon in a graceful, even poignant, way" (Seamon 1987: 7). Additionally, it is suggested that the reader of a phenomenological study should come away with the feeling that "I understand better what it is like for someone to experience that" (Polkinghorne 1989:46).

The above section has provided a brief review of the literature with regards to the general method related to conducting an IPA study. The discussion revolved around three key aspects: including data collection, data analysis and establishing trustworthiness. Next, the chapter presents the discussion on the method implemented or the research design for this study.
4.2 Research Design: Scuba Divers’ Experience of Place

Based on the requirements of the IPA method on data collection, data analysis and establishing trustworthiness, this section presents the research design for this exploratory study on scuba divers’ experience of place as depicted in Figure 6 below.

Figure 6: Research Design for Study on Scuba Divers’ Experience of Place
This section is divided into three main areas which correspond to sections 4.1.1, 4.1.2 and 4.1.3 related to data collection, data analysis and measures taken to establish the trustworthiness of this study. Sections 4.2.1, 4.2.2 and 4.2.3 provide audit trails, as well as an insight into the decisions and tasks related to conducting this study.

4.2.1 Data Collection
Between November 2005 and September 2006, sixteen participants were interviewed to illuminate the research question: “how do scuba divers perceive and describe their experience of Place?” The following sections present an audit trail of details relevant to aspects of data collection. The discussion begins with an overview on the selection of participants and discusses sampling issues. Additional information which supports the discussion in this chapter has been relocated to the appendices section and pointers to which will be given as necessary.

4.2.1.1 Sample Size
For this study, the decision on sample size was based on a number of factors including availability of suitable participants, willingness to be interviewed, and the richness of transcripts. A total of sixteen scuba divers were interviewed for this study. Although this sample may appear small, it conforms to the recommended norms of IPA which focus on small purposive samples, and an idiographic mode of inquiry, followed by integration across cases. “The number of participants is small enough for one to retain an overall mental picture of each of the individual cases and the location of themes within them” (Smith et. al. 1999:225). However, it is noted that this sample cannot be seen as representative of all scuba divers, as achieving a representative sample is not the aim of most approaches to qualitative research. The aim is to produce an in-depth analysis of the accounts of a small number of participants to produce an understanding of a phenomenon. Therefore, any conclusions are specific to that group and any move beyond the group must be taken tentatively (Touroni and Coyle 2002). Participants for this study were selected through purposive sampling, which is discussed next.

4.2.1.3 Purposive Sampling
For this study, the basis of selecting participants was based on the subject matter: to illuminate the experience of Place from the perspective of scuba divers. In order to
adhere to the criteria of homogenous, purposive samples, or *information-rich* (Patton 2002) participants, it was necessary to seek scuba divers who were based locally, and were willing to share stories about their dive experiences through interviews. Additionally, the following criteria were developed: British-based divers, who were passionate about diving, certified for at least 3 years and dived internationally at least once a year. These criteria were chosen to ensure that participants were homogenous, to the extent that they were active scuba divers, and, felt strongly about the sub-aquatic, marine environment: aspects considered most important to the understanding the experience of Place. Most people can train to become certified divers through courses arranged by a range of dive agencies through which one then obtains a dive license (as listed in Figure 7). As long as participants held a certified license, they were included in this study, and I did not discriminate between different agencies.

| CMAS: Confédération Mondiale des Activités Subaquatiques |
| BSAC: British Sub-Aqua Club |
| IANTD: International Association of Nitrox and Technical Diving |
| NACD: National Association of Cave Divers |
| NAUI: National Association of Underwater Dive Instructors |
| PADI: Professional Association of Dive Instructors |
| SSI: Scuba Schools International |

*Figure 7: List of International Accredited Dive Agencies*

A flyer was designed to advertise for potential participants (Appendix B). To convince potential participants, it was stipulated within the flyer that the researcher was a fellow diver as follows: “Would you be willing to share your experiences of the sub-aquatic environment with a PhD student who is also passionate about diving?” I believe this was one factor that convinced participants to be interviewed. The flyer was disseminated through a network of personal acquaintances focusing on potential participants who were based around Surrey and London (based on logistics of cost and accessibility via public transport). In doing so, I excluded a number of willing participants who responded to the flyer but were based beyond these areas. Nevertheless, a total of seven participants were found through a network of personal acquaintances that knew of a diver, or advertised my
flyer through their office website. Also, a total of six individuals accepted my invitation to participate in the interview, two of whom I met at the London International Dive show in March 2006; three other participants were procured through snowball sampling. Snowball sampling is an approach for locating other information-rich key participants (Patton 2002), where the sample is expanded by asking one participant to recommend others for interviewing (Babbie 1995). In order to trace additional divers, each participant was requested to recommend a diver friend who might be willing to be interviewed for this study. Although each participant recommended a diver friend, willingness or ability to participate remained their friend’s prerogative, and in the end only three other divers were sourced through snowball sampling. Moreover, up to four potential participants who initially responded to the flyer dropped out which meant scheduled interviews were cancelled, and the cycle of seeking out new participants started all over again, with time moving on. Such experiences were important learning points, proving that the idea to ‘interview’ participants often sounds practical, but can prove to be challenging. As mentioned earlier, willingness to participate is became the most important criteria in an interview study, but one that is beyond the researcher’s control.

As a general overview of participants’ demographics, the sixteen divers interviewed for this study included seven females and nine males within varying age groups (as in Table 4 overleaf). Of these, seven held undergraduate degrees, seven had postgraduate degrees and two participants held professional qualifications. Except for one postgraduate student, all participants were in full time employment. Participants had been diving for a number of years as shown in the table and it is assumed this contributes to their status as information rich participants. Participants were given alphabetically chosen pseudonyms (‘A to P’), not only for reasons of confidentiality, but also to provide a systematic and sequential way to remember each person during the analysis process. Further details for each participant’s diving background are available in Appendix C, Diver Biographies.
<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Education</th>
<th>Occupation</th>
<th>Diving Since</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alex</td>
<td>Mid-thirties</td>
<td>Undergraduate</td>
<td>Database Manager</td>
<td>1996</td>
</tr>
<tr>
<td>Ben</td>
<td>Early thirties</td>
<td>Postgraduate</td>
<td>Doctor (Radiologist)</td>
<td>1991</td>
</tr>
<tr>
<td>Celia</td>
<td>Late twenties</td>
<td>Professional Qualification</td>
<td>Accountant</td>
<td>1990</td>
</tr>
<tr>
<td>Diane</td>
<td>Late-thirties</td>
<td>Undergraduate</td>
<td>Communications Manager</td>
<td>1995</td>
</tr>
<tr>
<td>Ethan</td>
<td>Late twenties</td>
<td>Undergraduate</td>
<td>Financial Controller</td>
<td>1998</td>
</tr>
<tr>
<td>Fiona</td>
<td>Mid-thirties</td>
<td>Undergraduate</td>
<td>Human Resource Manager</td>
<td>2005</td>
</tr>
<tr>
<td>Gina</td>
<td>Mid-thirties</td>
<td>Postgraduate</td>
<td>Engineer</td>
<td>1999</td>
</tr>
<tr>
<td>Harry</td>
<td>Early thirties</td>
<td>Undergraduate</td>
<td>Banker</td>
<td>1997</td>
</tr>
<tr>
<td>Ian</td>
<td>Late forties</td>
<td>Undergraduate</td>
<td>Computer Consultant</td>
<td>1990</td>
</tr>
<tr>
<td>Jack</td>
<td>Late forties</td>
<td>Postgraduate</td>
<td>Lecturer</td>
<td>2003</td>
</tr>
<tr>
<td>Kieran</td>
<td>Early twenties</td>
<td>Undergraduate</td>
<td>Postgraduate Student</td>
<td>2002</td>
</tr>
<tr>
<td>Lee</td>
<td>Late forties</td>
<td>Postgraduate</td>
<td>Training Consultant</td>
<td>2003</td>
</tr>
<tr>
<td>Marie</td>
<td>Mid-thirties</td>
<td>Postgraduate</td>
<td>Doctor (GP)</td>
<td>1998</td>
</tr>
<tr>
<td>Neil</td>
<td>Late fifties</td>
<td>Postgraduate</td>
<td>Doctor (GP)</td>
<td>1965</td>
</tr>
<tr>
<td>Olivia</td>
<td>Late twenties</td>
<td>Postgraduate</td>
<td>Human Resource Managers</td>
<td>2002</td>
</tr>
<tr>
<td>Pam</td>
<td>Late forties</td>
<td>Professional Qualification</td>
<td>Goldsmith</td>
<td>1984</td>
</tr>
</tbody>
</table>

Table 4: Demographic Information on Participants

4.2.1.4 Interview Guide
The relevant topic areas and core questions were based on the study by Schroeder (1996), which were replicated by Bricker and Kerstetter (2002) as detailed in Chapter Two. The method developed by Schroeder involved identifying people who are likely have strong feelings about an area, and then asking them to write about the features of this special place and the kinds of experiences that have contributed to those feelings (Schroeder 1996). This method has successfully identified the effective components of the relationship between people and the environment. By asking individuals to identify places they consider 'special', the method acknowledged the conceptual elements of place from an emic perspective (Bricker and Kerstetter 2002). However, in both the Schroeder (1996) and Bricker and Kerstetter (2002) studies, participants were asked to write about their experiences in a mail survey. I chose to replicate their questions and conduct semi-structured interviews following the suggestion by Bricker and Kerstetter.
In order to understand scuba divers' experience of place, participants were asked to share stories about their favourite dive destination/s, assuming these are considered 'special' places. Asking for stories about a 'favourite' destination served as a starting point for participants to share their experiences. However, as I discovered during the interview, some participants had more than one favourite destination and others identified a current favourite. At times, I altered the question to reflect a 'memorable' destination; ultimately, this was just a way to encourage them to share their stories about places which they considered special. The interview was composed of four sections. The first section probed for dive history and details about dive holidays; whereas the final section asked for demographic information. The two middle sections were designed to obtain descriptions about the features of place and the kinds of experiences that contributed to their thoughts and feelings. The interview ended by inviting the participant to share any additional thoughts about their dive experiences. The first three questions about place were based on Schroeder (1996):

- Please describe your favourite dive destination.
- What does this place mean to you?
- What thoughts, feelings, memories and people connected with this dive destination stand out for you?

Additionally, two general questions sought to elicit more details about the dive experience, and served as useful counterchecks to the previous questions:

- How would you describe the experience of diving to someone who has never attempted SCUBA?
- How would you describe your feelings at the end of a dive? What thoughts stand out for you?
The focus of these questions was to encourage participants to describe their experiences of place and of scuba diving in general. A list of potential probes was developed to prompt participants’ responses to seek further elaboration, clarification and specific examples. In most cases during an interview, although I had a list of probes prepared, I had to develop a more suitable probe in relation to the particular response on the spot. As noted by Moustakas (1994), although the researcher may in advance develop a series of questions aimed at evoking a comprehensive account of the person’s experience of the phenomenon, these are varied, altered, or not used at all when the participant shares the full story of his or her experience.

4.2.1.5 Interview Procedures
Once potential participants replied to the flyer, a formal invitation letter was sent to them to explain the purpose of the study; to highlight the questions I would ask in the interview; and to gain confirmation of their willingness to participate. Additionally, participants were encouraged to bring along to the interview their dive log books, and photographs of dive trips to serve as useful reminders of holiday experiences. I assumed that logbooks and photographs might highlight a particularly memorable dive experience which they could then describe. Both email and phone correspondence was used to set up the interview date, location and time. To assure confidentiality of their responses, a ‘Confidentiality Agreement for Participants’ was designed to confirm their voluntary agreement to participate, and consent to publish the material; my assurance of anonymity when using their interview data; and that the recording could be switched off if they so wished during the interview. This agreement was mailed with the invitation letter, but I normally brought along a copy which participants’ signed at the end of the interview. Sample copies of the invitation letter, confidentiality agreement and a complete list of interview guide are attached in Appendix D.

4.2.1.6 Interview Settings
Interviews took place in four main locations, at times convenient to the participants. Appendix E ‘Audit Trail’ provides further details on each interview including date, time, location, length of interview recording (possible due to the use of a digital voice player), length of transcript, comments regarding the interview, and a snowball trace of how I
found each participant. Although guidance on interview settings advises against interviewing in cafés and other ‘noisy’ locations (Patton 2002; Rubin and Rubin 2005), these are often the most convenient locations. In the end, five interviews were conducted in cafés, and although care was taken to sit in a relatively quiet area, on three occasions, the background noise made for a painful transcribing session. Interestingly, the three interviews which took place at the participants’ homes in a relaxed atmosphere were longer in length. Interviews in participants’ offices normally took place after the end of their working day.

All interviews were recorded using an Olympus Digital Voice Recorder (model VN240PC) with permission from the participants. As a standard procedure, I would begin each interview by producing my dive certification card to prove I was a diver, and as an ice-breaker to start the conversation. Interviews lasted between twenty two minutes to just over an hour (exact details are provided in Appendix E). Before beginning the interview, participants were briefed again about the study and informed about the structure of the interview. Most participants continued to chat informally about their dive experiences once the recording was switched off. However, a few participants continued chatting in a more serious tone after the recorder was switched off, and others sent emails the following day with more thoughts. Almost half of the participants brought their log-books along and looked through these during the interview, which proved useful as it assisted their process of recollection.

To show my appreciation for taking time out to be interviewed, I ended each interview by giving the participant a brochure on ‘Diving in Sabah, Malaysian Borneo’ where I am from, and, inviting them to visit me on a dive holiday in Sabah someday. Although all sixteen participants had heard of diving in Borneo, none had been there yet. In addition, sixteen prizes for a lucky draw were procured from the Sabah Tourism Board and a private donor, consisting of promotional items related to diving and Sabah. Each participant was sent a thank you letter along with their prize at the end of this study. A copy of the letter and photos of prizes are attached are Appendix F.
4.2.1.7 Transcription of Interviews

Transcribing involves translating from an oral language, with its own set of rules, to a written language with another set of rules. Transcripts are not copies or representations of some original reality; they are interpretative constructions that are useful tools for given purposes (Kvale 1996:165). Once an interview was over, I listened to the complete recording to get a sense of the whole and to become sensitive to the richness of the text. I then personally transcribed all the interviews, which proved to be a useful engagement or first round of analysis. As noted by Rubin and Rubin (2005), transcribing interviews yourself forces you to pay attention to what participants said, and helps in preparation for the next interview. Transcription included listening to literal statements and noting down significant non-verbal (gasps, sighs) and pare-linguistic communications or the intonations, the emphases, the pauses (Hycner 1999) for example terms like `you know', `um hum'. While transcribing, I focused on listening to voice intonation and also referred to my interview notes for additional body language cues. A full copy of a transcribed interview transcript is attached in Appendix G. I chose to attach the transcript for Neil (who has been diving for 40 years) for its richness in describing the experience of the sub-aquatic environment.

In addition, an important learning point from the first transcription was the realisation that I was interrupting the participant. Even though I had arrived at the interview with the intention to listen, it was not until transcription, when I could hear the number of times my voice was audible, that the lesson was learnt. Subsequently, I confined myself to asking questions, probing for clarifications and spoke when it was necessary. As I discovered, there was a fine line between being the ‘listening’ interviewer, and engaging in a conversation with a fellow diver. Currently, the benefit of using a digital voice recorder includes recordings are downloadable to one’s laptop. Transcription commenced by opening a word document and the ‘digital wave player’ software, and moving between the two windows. While transcribing, I made notes of any thoughts that occurred about the interview; learning points, the detection of biases, opinions or ideas. Although transcription was time consuming and laborious, it was extremely useful to personally transcribe the interviews. Within the transcription, I have included non-verbal
language in square brackets. For example, [smiles]; or “And they’re only about this big [finger length]” to convey a description; also to point out my response to the participant. Whereas to express a stressed intonation, I have underlined the word, for example: “animals underwater are really, really, spectacular”. Within the narrative accounts presented in the findings chapters, where part of the conversation was irrelevant, I have excluded text by placing brackets and ellipsis as follows: (...).

4.2.1.8 Redundant Data
At the end of transcription and analysis, there was additional data within each transcript which I have labelled ‘redundant’ data. Although an interview is guided by the researcher, it is participant-led, and inevitably some participants introduce personal opinions into the interview, which are not descriptions of experiences. Such scenarios are unavoidable, more so in a situation where the researcher is a tourism student investigating the experience of dive destinations. A few participants had their own ideas of which aspects of scuba diving I should be investigating; although outside the area of my inquiry, these ideas may serve useful as a basis for future work. For example, I have data related to customer satisfaction with dive tour operators; good and bad examples of the dive tourism industry catering for the needs of scuba divers (for example, access baggage provision on international flights); the culture amongst divers on liveaboard trips; and opinions on diver impacts.

4.2.2 Data Analysis
This section will describe the process of data analysis within this study, and demonstrate how the findings (themes and sub-themes) were derived from the data (interview transcripts). As noted by Wolcott (2001:93), “the unique combination of your field setting and you in it will never be replicated, but discussing how you analysed your data can be a great help to other researchers with comparable field notes, experiences, and data sets of their own”. Therefore, an important aspect of a qualitative study is the provision of adequate information about the process of data analysis (Miles and Huberman 1994; Wolcott 2001). Data analysis can be defined as the “systematic procedures to identify essential features and relationships” (Coffey and Atkinson 1996:9), or a way of transforming data through interpretation. Within descriptive phenomenology,
the term data analysis is avoided as it usually means breaking into parts, and could signify a loss of the whole phenomenon (Hycner 1999). A preferred term is “data explication which implies an investigation of the constituents of a phenomenon while keeping the context of the whole” (Hycner 1999:6). Remaining true to the context is also an intrinsic aspect of an IPA study but here the term ‘analysis’ is used more frequently to entail explication of data.

4.2.2.1 Analytic Strategy: ‘Coding’
Analysis and interpretation remain tasks which the researcher undertakes, and closeness to data is encouraged within a phenomenological study (Creswell 1998). The key aspect within IPA is that analysis and interpretation is contextualised and remains grounded within the interview transcripts, or the source material. This section describes the analytic strategy consisting of seven stages which were used to code and derive themes from the interview data. As discussed earlier, an IPA study proceeds with an idiographic analysis for each case or interview transcript, before seeking an integration of cases, or the inductive analysis. Data explication of the interview transcripts was based on meaning condensation, which entails an abridgement of the meanings expressed by the participants into shorter formulations, or, a reduction of large interview texts into briefer, more succinct formulations (Kvale 1996). For the purpose of analysis and interpretation, I relied purely on using the facilities of word processing software. I did not revert to the use of popular qualitative software, which ultimately assists to organise, manage and present data: interpretation remains a task for the researcher. Table 5 overleaf provides a summary of the seven stages of analysis, specifically the coding of interview transcripts at idiographic and inductive levels.
The following section will describe how the interview text was condensed in the form of margin codes, emergent themes, and grouped into clusters of sub-themes and central themes.

**Stage 1: Researcher’s Initial Encounter with the Text**

Once transcription was over, I read through the transcript a number of times to become as familiar as possible with the participant’s account. I found my familiarity with the transcript had been facilitated by being personally involved in the transcription process. Reading through the transcript a number of times led to a better ‘understanding’ of participant’s experiences. To begin coding, a word document with three columns was created and the transcript was placed in the middle column. Steps taken to code the interview data made use of the left and right hand columns of the word document. The first stage of coding involves going through the transcript making notes that reflect initial thoughts and jotting down key-words in the left column, referred to as the left-hand margin codes. Notes were made describing about those features of the sub-aquatic experience that appeared most salient in the transcript including significant actions; associations; attributes; perceptions; or feelings expressed by the participant. This step is “a rigorous process of going over every word, phrase, sentence, paragraph and noted significant nonverbal communication in the transcript, in order to elicit the participant’s meanings” (Hycner 1999: 145). At this stage, I have begun the process of “making sense
of the participant trying to make sense of their personal and social world” (Smith 2004:40) albeit at a descriptive level.

Stage 2: Identification of Emergent Themes

The transcript is read again during the second round of this process, using the left-hand margin codes as pointers to produce a list of emergent themes in the right hand column, referred to as the right-hand margin codes. Emergent themes are conceptual and capture the essential quality of what is represented by the passages within the text (Willig 2001). This is a more systematic reading where I worked through the text line-by-line, guided by the left-hand margin codes to create emergent themes depicting my interpreted meaning of each passage. Where an emergent theme has been identified, page and line numbers are noted. Within this stage, I ask critical questions of the descriptions within the transcripts following Smith and Osborn (2003:51): “What is the person trying to achieve here? Is there something leaking out here that wasn’t intended? Do I have a sense of something going on here that maybe the participants themselves were less aware of?” This involves moving from phenomenological description towards a greater degree of interpretation of data, making clear distinctions between my interpretation, and what the participant actually said for interpretation must be grounded within participants’ accounts (Smith and Osborn 2003). These right-hand margin codes or emergent themes are used to produce clusters of themes in stage 3.

Stage 3: Clustering of Themes

In order to introduce structure into the analysis, a separate document was used to list the emergent themes from stage 2. These themes are then examined for similarities or contradictions, and, an attempt is made to order them into coherent themes (Langdridge 2007). This step is known as the clustering of themes. Clusters are formed of concepts that share meanings or references, or, clusters characterised by hierarchical relationships with one another (Willig 2001). Clusters of themes are given labels that capture their essence and can be labelled using participant’s words, brief quotations or descriptive labels (Willig 2001). According to Smith and Osborn (2003), this stage involves a more analytical or theoretical ordering, as the researcher tries to make sense of the connections
between emerging themes. This includes naming of clusters, a burden that sits on the researcher's shoulders, involving a task where artistic judgment, skill and creative insight are exercised (Hycner 1999).

In order to cluster emergent themes together, I returned to the interview transcript, to ensure the themes made sense with the source material, and was consistent with the participant's account. Accordingly, the process of naming clusters involved a constant movement between re-reading transcripts, pondering over the clusters, and looking for a precise 'label' by referring to the transcripts, as well as Roget's Thesaurus (2004) and the Oxford English Dictionary (2002). Certain labels were taken directly from the transcripts (an expression uttered by a participant). The emergent themes were clustered into groups of sub-themes. Some emergent themes illuminated two separate sub-themes, and were therefore clustered into both. At this stage, any emergent theme which did not fit well into the structure of sub-themes or was not rich in evidence within the transcript was dropped; other emergent themes were moved into more succinct clusters. Next, sub-themes with significant connections were then grouped under specific central themes. Sub-themes impart a nuanced understanding of distinct experiences, whereas central themes express the essence of the sub-themes (Hycner 1999). This act of 'looking for connections' is made easier by considering whether any of the themes act as magnets, drawing others towards them, and helping to explain each another (Smith, et. al. 1999).

Stage 4: Production of Summary Table of Structured Themes
At stage 4, a summary table of structured themes which emerged from the interview data is produced for this participant. This summary table or 'directory' includes the overarching central theme; it's clusters or sub-theme labels; and their emergent themes, with brief quotations that illustrate each theme and references to where relevant extracts may be found in the interview transcript (page and line numbers) (Willig 2001). As an example:
Central Theme
Cluster Label 1 or Sub-theme
Emergent Theme brief quote/keyword page and line numbers

Themes should capture something about the quality of the participant's experience of the phenomenon under investigation (Willig 2001). Themes within this table are chosen not only on the basis of prevalence within the data, but also based on the richness of passages which exemplify a theme, and also how the theme illuminates other aspects of the account (Smith and Osborn 2003). Table 6 is an extract from the summary table of themes for one participant, Neil, whose idiographic analysis encompasses all themes which emerged within the final master list of themes. A full copy of Neil’s summary table of themes or directory is attached in Appendix H.

<table>
<thead>
<tr>
<th>Central Theme: Being in a Different World</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-theme or Cluster 4: Discovery and Learning</td>
</tr>
</tbody>
</table>

- Emergent Theme: Patience and Observation
  - 'I'm very interested in marine life and behaviour' 11.9
  - 'I think a lot of it is training your self to do it.' 11.21
  - 'I saw this fish go past, and it suddenly ripped a piece of seaweed off you know, and swam off with it.' 11.25
  - 'it came out and swam off and came back with another piece of weed. And it was building its nest.' 11.27
  - 'these clumps of weed I thought were just washed in or something I'd found over the years were in fact the nests of these wrasse.' 11.29

Table 6: Extract from Neil's Summary Table of Themes ('Directory')

Stage 5: Continue Idiographic Analysis for Each Participant

At this stage, stages 1-4 were repeated for each of the remaining 15 participants until a summary table of themes has been produced for each participant. Themes from the first participant's account (Alex) were used to orient the analysis of subsequent transcripts. As analysis progressed, new clusters were also discovered and necessitated the adjustment of theme labels: either a 'label-change' or relocation of sub-theme, amalgamated under a different central theme. This occurred as I developed a better understanding of material once the process moved on to examining all sixteen transcripts one by one. When new sub-themes emerged in subsequent interviews, I tested these against earlier transcripts to check how these enlightened, modified, or fitted into earlier sub-themes. For example,
similar sub-themes and central themes were identified for participants, but often articulated differently, for example, different situations experienced in the same way, or similar situations experienced differently (Ehrich 2003). The final master list of themes has undergone various alterations based on re-interpretations which only ended with the analysis of the last transcript. In total, I created sixteen summary tables or ‘directories’ for each of the participants.

Stage 6: Inductive Analysis - Master List of Shared Themes

In this stage, the analysis moves into the inductive stage where an integration of cases occurs. First, themes common to all or most of the interviews are clustered together in a cyclical and iterative process. Shared themes are identified based on common patterns described within participants’ accounts of sub-aquatic experiences. The aim was to “respect convergences and divergences in the data” or “recognising ways in which accounts from participants are similar but also different” (Smith and Osborn 2003:73). This involved returning to the transcript to re-check a theme’s meaning to confirm my interpretation. Themes in the master list (both central and sub themes) were given a definition and page references. Themes were also re-checked to ensure all expressions appropriately fitted into the cluster. A table depicting each participant’s contributions to these shared, common central and sub-themes is available in Appendix I. Any themes that were unique to a single or a minority of interviews were also noted and relabelled as unique themes within participants directories. Unique themes provide important counterpoints to the shared themes (Hycner 1999).

Secondly, a table depicting a master list of themes is produced (as in Table 7 overleaf) which captures the quality of participants’ shared experience (Willig 2001). Some rearrangement took place until a hierarchy of themes were established resulting in four central themes which encapsulated nine sub-themes in a meaningful way. I have chosen to refer to this final table of themes, as the Sub-Aquatic Meanings or SAM framework. A detailed explanation of key definitions will follow in Section 4.2.2.2.
Final Table of Themes:

Sub-Aquatic Meanings (SAM) Framework

1. Sense of Wonderment
   a. Beauty
   b. Encounters with Marine Life
   c. Adventure

2. Being in a Different World
   a. Discovery and Learning
   b. Overcoming Physical Limitations

3. Splendid Isolation
   a. Remoteness
   b. Serenity

4. Fellowship
   a. Sharing the Experience
   b. Strengthening Bonds

Table 7: Final Table of Themes ‘Sub-Aquatic Meanings (SAM) Framework’

Stage 7: Presentation of Narrative Account

Finally, in stage 7 the master list of themes from the SAM framework was used as a basis for weaving a narrative about scuba divers’ experiences of the sub-aquatic environment. According to Smith and Osborn (2003:77), this master list of themes is the basis for the account of the participants’ responses, which takes the form of the narrative argument interspersed with verbatim extracts from the transcripts to support the description. The presentation of results is organised around the themes that emerged from the analysis to provide a convincing account of the nature and quality of the participants’ experiences (Willig 2001). Although analysis commences at an individual level, as a guideline, the following factors can be considered in terms of presentation of results: “the degree of commitment to the idiographic level of analysis and reporting; the richness of the individual cases; how one wants to compare and contrast cases; and the pragmatic constraints one is operating under”(Smith and Osborn 2003:54). As such, a decision has to be made, whether to give an exhaustive and nuanced account about each participants’ experience, or to say something more general about a group or specific population, as it is rarely possible to do both in larger samples (Smith and Eatough 2006). Working within
the confines of a dissertation, findings in this study are presented via a narrative account based on the master list of themes.

4.2.2.2 Sub-Aquatic Meanings (SAM) Framework

The Sub-Aquatic Meanings (SAM) framework addresses the first research objective: what kinds of experiences make place meaningful for scuba divers? The SAM framework is an original contribution to knowledge in that it provides an understanding about the experiences related to a specific recreation place: the sub-aquatic environment. Be that as it may, the framework is contextual as it is based on general or shared themes which were common to most, or all of the sixteen participants in this study (Hycner 1999). The SAM framework consists of the following central and sub-themes: the first central theme, ‘Sense of Wonderment’ (composed of the sub-themes of ‘Beauty’; ‘Encounters with Marine Life’; ‘Adventure’); secondly, ‘Being in a Different World’ (composed of ‘Discovery and Learning’; ‘Overcoming Physical Limitations’); thirdly, ‘Splendid Isolation’ (composed of ‘Remoteness’; ‘Serenity’), and fourthly, ‘Fellowship’ (composed of ‘Sharing the Experience’; ‘Strengthening Bonds’). In order to illustrate the hierarchical relationships between themes and sub-themes, the SAM framework is represented here using a tree diagram (Figure 8).
On a horizontal level, there is some overlap between meanings, which are discussed within the narrative accounts illustrating the complex nature of sub-aquatic meanings. An important distinction was evident, in that, themes could be separated into those focusing on the physical aspects of the sub-aquatic environment, and themes depicting social interactions. This demarcation is depicted in the diagram above and is used to structure the presentation of the narrative accounts. The physical aspects of SAM framework will be discussed in Chapter Five whereas the role of social interactions will be discussed in Chapter Six. The next section briefly introduces the four central themes, while the in-depth explanation and definitions are reserved for the next two chapters.

**Sense of Wonderment**
A salient part of the findings is that participants' descriptions about their experiences focused upon the rich biodiversity of the reef; its marine species; unique underwater topography; and recreational pursuits underwater. In addition to regular diving, participants shared stories about night diving, drift diving, diving into caves, deep diving, and even the joy of diving at dawn illuminating the extended scope of experiences available underwater. In their experience of place, participants consistently mentioned an awed admiration and appreciation for nature, as well as respect, and the desire to care and protect. Three interconnected sub-themes labelled ‘Beauty’, ‘Encounters with Marine Life’, and ‘Adventure’, contribute to a thorough understanding of this central theme as will be discussed in Chapter 5.

**Being in a Different World**
The sub-aquatic realm is a treasure trove for unique experiences that differ completely from life and recreation on land. Participants’ accounts contained numerous descriptions related to being in a different world with specific reference to the opportunity to gain knowledge and experience novel situations. For example, the freedom of movement underwater achieved through neutral buoyancy, or weightlessness is described by participants as an intrinsic aspect of the pleasure of scuba diving. Two sub-themes describe these experiences: ‘Discovery and Learning’, and ‘Overcoming Physical Limitations’ which will be examined in Chapter 5.
Splendid Isolation
Splendid isolation is a central theme which describes the sub-aquatic world as a location to be away, both geographically and psychologically. Place is described as a sanctuary to be experienced alone, or with like-minded people; and, as a location to escape the normal routines of life and experience rejuvenation. Participants' experience of place is described in relation to other divers: the people they meet on liveaboards, at dive resorts, and the people they are paired up with for diving (dive buddies). Social interactions seem to be an aspect which affects the quality of the dive experience. On the other hand, a sense of tranquillity and peace is also experienced underwater, amidst all the life on the reef. Descriptions are explored under two sub-themes labelled as 'Remoteness' and 'Serenity' in Chapter 6.

Fellowship
For a majority of participants, dive companions reinforce the experience of place. This sense of sharing was depicted through the reassurance provided during the dive (safety), the importance of shared conversations at the end of a dive, and the culture of camaraderie amongst people who share a love for the marine world. On the other hand, being able to share the experience of place with close friends and family was also important. Scuba diving as a recreation activity was seen to facilitate the formation of lasting bonds. Two sub-themes depict how these aspects of social relations contribute to strengthening place experiences are labelled 'Sharing the Experience' and 'Strengthening Bonds'. These themes will be presented in Chapter 6.

4.2.3 Trustworthiness
Previous sections presented a discussion on establishing the trustworthiness of a research endeavour. The analysis of an IPA study involves a high degree of subjectivity as it is shaped by the researcher's interpretative frameworks (Touroni and Coyle 2002). In line with the principles of phenomenology, any attempt to report on another individual's experience will necessarily be distorted by the researcher's own conceptions (Smith and Osborn 2003). Therefore, the dynamic role of the researcher in the interpretation of the participant's perception and experience is acknowledged in IPA. As such, the phenomenological analysis produced by the researcher is always an interpretation of the
participant’s experience (Willig 2001). Be that as it may, it is necessary for a research project to incorporate measures to ensure its trustworthiness: this section presents a discussion on these very issues.

Table 8 provides an overview of the criterion, terms and techniques that were incorporated into the research design and which should be used to judge the trustworthiness of this study.

| Establishing Trustworthiness: A Study on Scuba Divers’ Experience of Place |
|-----------------------------|-----------------------------|-----------------------------|
| **Criterion**               | **Conventional Term**       | **Naturalistic Term**        | **Techniques Incorporated** |
| Truth Value                 | Internal Validity           | Credibility                 | a. 'Prolonged engagement': Fellow Diver |
|                             |                             |                             | b. Peer debriefing           |
|                             |                             |                             | c. Member checks             |
|                             |                             |                             | d. Unique Cases              |
| Applicability               | External Validity           | Transferability             | a. Purposive sampling        |
|                             |                             |                             | b. Diver Biographies         |
|                             |                             |                             | c. Reflexive Diary: Data Collection |
| Consistency                 | Reliability                | Dependability               | a. Audit trail – Data collection |
|                             |                             |                             | b. Audit trail -Data analysis & Coding |
|                             |                             |                             | c. Independent Audit         |
|                             |                             |                             | d. Reflexive Diary: Data Analysis |
| Neutrality                  | Objectivity                | Reflexivity                 | a. Locating the Researcher   |
|                             |                             |                             | b. Persuasiveness of Text: Narrative account using verbatim extracts from transcripts |

Table 8: Establishing Trustworthiness: A Study on Scuba Divers’ Experience of Place

Table 8 corresponds to an earlier discussion in Section 4.3.1 where a long list of suggested techniques were presented in Table 2 Establishing Trustworthiness (derived from Lincoln and Guba 1985: 289-331). Table 8 is a practical version of Table 2 and the discussion which follows aims to explain the techniques used to establish the trustworthiness of this study. Each one of the techniques incorporated in the research design provides adequate credibility, transferability, dependability and reflexivity: each will be addressed next.

**4.2.3.1 Credibility: ‘Prolonged Engagement’ - Fellow Diver**
In general, prolonged engagement in the field is an opportunity for a researcher to firstly learn the local language, and to establish trust with the participants. The social world of scuba divers is rich with its own terminology and language. It is suggested that in order
to conduct an interpretive study, the researcher should learn the language spoken in the field setting (Denzin 2001). In this study, as a fellow diver, 'prolonged engagement' took on a different form, as I already had an understanding of the 'language' used amongst divers. The interviews were indeed seeped in terminology, so familiarity with diver vocabulary, as well as knowledge of the situations described proved to be useful during interviews. I also believe most participants agreed to be interviewed because the researcher was also a diver. Establishing trust and friendship was relatively easy because we were scuba divers and understood that each had experienced the magnificence of the reeffscape: this enabled easy ice-breaking conversations, and a relaxed atmosphere during initial contact, interviews, and subsequently, during the member check exercise. As Ecott (2001:104) suggests, "divers are often slow to talk about it, especially to non-divers, perhaps wanting to keep that part of their adventure a secret". Divers enjoy shared conversations, it is part of the social culture, as noted by one participant: I think...divers do this a lot, you've got your shared experiences, and so what they do...is what we're doing now, is that you talk about where you've been and what you've done- (Jack). Finally, because most of my participants had more logged dive experiences, I treated them as my peers: fellow divers with stories to share to an interested listener which enhanced the rapport between us.

4.2.3.2 Credibility: Peer debriefing
The development of the SAM framework was deliberately subjected to the scrutiny and constructive criticism from academic colleagues and peers at the data analysis stage. All sub-themes and themes have undergone various iterations over the months of data analysis. For example, based on the first six idiographic analyses a total of seven central themes had been produced. These were later reduced to five central themes whereby a clear overlap between themes was evident to colleagues and peers who pointed these out. As analysis progressed with the rest of the cases, the final total of central themes was further reduced to four themes. Over the months of data analysis, academic peers also sought various clarifications on the labelling and coding processes related to the data analysis. This provided valuable insights into how the data was being interpreted. Peer debriefing was useful in ensuring the final table of themes, or SAM framework had been
scrutinised and was grounded in participants’ descriptions which helped the researcher to avoid spurious conclusions about the data.

4.2.3.3 Credibility: Member Check Exercise

As stated in section 4.1.3.1.1, by presenting the SAM framework to the participants, two useful outcomes can be obtained. First, establishing the credibility of the thematic framework and secondly, acquiring supplementary data which could contribute towards refinement of the themes if need be. According to Lincoln and Guba, the credibility of research is substantially enhanced if “the reconstructions that have been arrived at via the inquiry are credible to the constructors of the original multiple realities” (1985: 296). The primary source material or data for deriving the themes for the SAM framework were participants’ transcribed semi-structured interviews. Therefore, participant feedback was procured to establish credibility of the researcher’s interpretations of participants’ experiences of place, as well as to add to the richness of data and maximise the authenticity of the SAM framework.

This member check exercise took place at the end of the study and was seen as a mode of critically evaluating the quality of the research conducted or its credibility. In order to conduct this exercise, a member check report was composed to provide a summary of the SAM framework complete with definitions of central and sub-themes. Attached to the member check report was a personalized directory of SAM (the summary table of structured themes) for each participant composed of emergent themes; sub-themes; central themes; unique themes, and their corresponding verbatim extracts, or narrative. This directory showed where each participant’s interview gave rise to and contributed towards the framework (indicating where in the transcript with page and line numbers). Unique themes were also incorporated into each participant’s report to ascertain the importance of these in relation to the shared or common, central themes. On a practical level, the report refrained from using academic terms to ensure the report was intelligible for participants (Langdridge 2007). For example, the report was titled ‘Sub-Aquatic Meanings: A Study of Scuba Divers’ Experience of Place’ without the use of the academic term ‘phenomenological’. Also, central and sub-themes were labelled ‘common’ themes to signify shared themes amongst participants. Definitions of themes
were supported by verbatim excerpts from interviews as examples to illuminate themes. A copy of the member check report created for this study, specifically for Jack is attached in Appendix J.

An invitation was sent to all participants to partake in this member check exercise, through a follow-up interview. Eleven participants responded to the invitation, five of whom agreed to be interviewed: Jack, Marie, Harry, Fiona and Pam. Six others were unavailable for an interview, but were willing to review the report, and sent written feedback via email: Gina, Neil, Lee, Ben, Ethan and Olivia. Therefore, the member check exercise consisted of follow-up interviews with five participants, and feedback via email from six other participants. Due to the 'inductive' nature of an IPA study, the final master list of themes is based on an integration of cases. Therefore, individual participants' directories may not have all the experiences or themes within the master list. This may make it difficult to trust a participant's comments on a theme they did not have, but at the same time, this is an opportunity to validate such themes. Therefore, the interview guide was structured around this issue and asked participants questions regarding their own themes; remaining common themes; and their unique themes. The focus of the feedback concentrated on procuring answers to three main questions:

- Do you feel I've captured the essence of your experience by assigning your words to the common (central) themes?
- Do the common (central) themes that were not found in your interview still resonate with your own experience?
- Are your unique themes actually more important to you than the common themes?

These questions were designed to enhance the credibility of my findings, in terms of how well the themes fitted participants' experience of the sub-aquatic environment as discussed at the interview, and how well they thought themes fitted the experience of sub-aquatic environment in general. It is also important to point out that during this member check exercise, participants were not asked about the theoretical implications of my
framework as they are non-specialists. The focus was on confirming my interpretations of their accounts as presented in the SAM framework.

Interviews were set-up and conducted between June-August 2007. This involved contacting participants via email and inviting them to participate in this exercise; sending them a copy of the report in advance to read; and arranging interviews. These were semi-structured interviews which lasted between 30-45 minutes. A diagram of the SAM framework was left on the table throughout the interview for ease of reference. Interviews were once again recorded, transcribed and analysed: where necessary, this additional data was re-examined using the IPA coding stages specified earlier and served to enhance the richness of data already collected previously. Details of these interviews are available in Appendix K Audit Trail for Member Checks. A copy of one transcribed member check interview (for Jack) is also attached in Appendix L. Also, the idiographic analysis or summary table of themes from the member check interview for Jack is attached in Appendix M. The outcome of this member check exercise was positive and participants confirmed the common themes within the SAM framework. This outcome enhances the credibility of my findings. Complete results of the member check exercise using verbatim extracts from participants’ follow-up interviews and email feedback are presented towards the end of Chapter 6, in Section 6.5.

4.2.3.4 Credibility: Unique Themes
During the inductive level of analysis, where a master list of themes was produced based on the idiographic analysis of sixteen transcripts, a range of themes were left out of the final table. The reason for this was that the frequency of these sub-themes was low or not widely shared amongst participants. Such sub-themes are considered ‘unique themes’ which provide important counterpoints to the common themes (Hycner 1999). Descriptions related to these themes were included in the findings chapter as an extended insight into the sub-aquatic experience. The inclusion of such ‘negative case analysis’ serves to account for all known sub-themes which increases the transparency of this study. Unique themes were labelled ‘Observing Other Divers’, ‘The Challenge of Certification’, ‘Underwater Photography’, and ‘Dive Atlas Beckons’. 
4.2.3.5 Transferability: Diver Biographies
In order to paint a picture about the participants, diver biographies have been created for each participant and are located in Appendix C. There is a need to know the participants’ backgrounds, as Munhall (1994:96) suggests, “the closer we stay to the human dimensions of our interest, the more it will reflect on the reality of meaning”. Over the period of data analysis, these diver biographies acted as the ‘horizon’, which informed my interpretation; a base from within which each participant’s account of their experience made better sense. Biographies aimed to provide thick description including demographic details, as well as a dive history profile including information about when they took up scuba diving; dive certification levels, number of logged dives, whom they dive with; past destinations and future dive travel plans. Participants were asked to list past dive destinations to gain a general idea of their dive travel experience, and to list their future plans to obtain an idea of their dive aspirations. Participants were also asked if they had a favourite dive destination. Next, a short write-up on each participant is provided to indicate why they took up scuba diving, and remain active divers. This information can be used to ascertain the likelihood of transferability, for example, if someone wanted to conduct a new study, albeit with a different group of divers, they could choose sixteen new divers who are homogenous to the participants in my study (hence the need for thick description of participants’ backgrounds). By choosing several tightly bound groups, there is potential for making cautious claims to generalisability later, but always based on the detailed examination of a set of case studies (Smith and Osborn 2003).

4.2.3.6 Transferability: Purposive sampling
In this study, a group of homogenous, information rich participants were recruited through purposive sampling, which in effect was a step incorporated in the research design to enhance the trustworthiness of the findings. It was assumed that the meaningfulness and insight generated from information rich participants would enhance an understanding of the sub-aquatic experience. For this study, the purposive sample of sixteen participants is introduced through the creation of diver biographies (Appendix C) which provide a background about their dive experiences and history. This information can be used to establish the extent that participants were knowledgeable and could
provide a variety of perspectives. Indeed, Dupuis (2001) suggests that the provision of biographical details serves as a snapshot of the extent that participants are information rich, thus enhancing the trustworthiness of this study.

4.2.3.7 Transferability: Reflexive Diary on Data Collection
Throughout this research project, I kept a ‘diary’ to make notes and reflect upon the research process. To be precise, from October 2003 to September 2007, I filled up twenty reporter’s notebooks and have accumulated a set of ‘diaries’. Notes were made about the research journey itself; schedules; ideas; suggestions from conference presentations; as well as methodological decisions. In terms of data collection, on the train journey home after an interview, I would jot down notes in my ‘reflexive diary’, including feelings about how the interview went, learning points and ideas for the future interviews. When I started transcribing an interview, I added notes to this diary which provided useful reflections during the analysis phase. Additionally, to ensure the transcription of interviews was accurately conducted, I adhered to strict measures of listening to the recording, against the full transcript, referred to notes in my diary, and corrected any errors or omissions.

In one of my jottings, I have noted down the decision not to use triangulation as a technique to enhance credibility. Section 4.1.3, specifically Table 2 has shown how triangulation is just one in a long list of possible techniques which can be used to establish trustworthiness. Triangulation is one technique of improving the probability that findings will be credible and consists of four different modes: “the use of multiple and different sources, methods, investigators, and theories” (Lincoln and Guba 1985:305). The key rationale originates from the research question itself: “how do scuba divers perceive and describe their experience of place”? In a study on lived experiences, the inquiry asks ‘what is this experience like’, and to obtain that answer, I needed to use a method that would provide this information directly. After all, one of the central tenets of phenomenology is “to determine what an experience means for the persons who have had the experience and are able to provide a comprehensive description of it” Moustakas (1994:13). Hence, IPA encourages the use of semi-structured interviews to obtain concrete descriptions of experience from the source: participant/s. As such, I did not
incorporate the use of different data sources for data collection. Although I encouraged participants to bring along their log books and share photographs, these were intended to serve as useful reminders. An extract from this diary, which was later re-used in my MPhil to PhD transfer report states: "logbooks and photographs might highlight a particularly memorable experience during a dive trip. Reference to these materials as articulated during the interview will add to the overall meaning of the experience and add in memory recall". In the end, even though all participants were invited to share these materials, only half the participants did (details in Appendix E Audit Trail).

4.2.3.8 Dependability: Audit trail for Data Collection & Data Analysis
In this study, the provision of an audit trail has been incorporated into the research design from data collection through to analysis. Section 4.2.1 has presented the audit trail for the data collection process including clarifying how data was collected and attaching materials used in relevant appendices (flyer; invitation letter; confidentiality agreement; thank you letter; transcripts; member check report; member check interview transcript; process of data explication). Also, an audit trail of the interview setting is also provided in Appendix E. The explication of data and coding (or moving from transcripts to themes; the labelling of themes) are clearly explained in Section 4.2.2 and the researcher’s role in interpreting the data has been clarified. The audit trail serves to describe the processes of data collection and analysis, to clarify how these interpretations were achieved to produce the SAM framework.

4.2.3.9 Dependability: Independent Audit
The methodological assumption within qualitative methodologies is that human knowledge and experience of the world cannot comply with an objective reality, as reality is shaped by one’s own subjective experiences (Yardley 2000). Within the IPA approach, researchers recognise that their analysis is characterised by subjectivity, in that the task at hand is to offer their own interpretations of participants’ accounts. For some, this may raise questions of validity of the findings. Therefore, in order to verify that the analysis presented was systematically achieved and was supported by data, an independent audit (Smith 2003) was carried out.
This audit was carried out by an independent researcher, a colleague whose work also focuses on qualitative research and who has knowledge of IPA. She collected data using interviews and analysed her work using the interpretative approach. This independent researcher was provided with the transcripts; coding procedures (as listed in Section 4.2.2); summary table of themes for each participant for 3 transcripts (for Lee, Marie and Olivia); the final master list of themes; a diagram of the SAM framework; and several related appendices which formed part of the audit trail for data collection. The 'auditor' was informed of the purpose of the task, and informed that she should follow the 'chain of evidence' or 'audit trail' through the different stages of analysis (Smith 2003). The role of this independent researcher was to ensure 'goodness of fit' (Elliot et. al. 1999) between the evolving themes and the original data. This included checking that the extracts were assigned and themes clustered appropriately; and, that the summary table of themes reflected the participants' accounts. It was hoped this 'auditor' would be able to identify any excessively idiosyncratic interpretations.

In keeping with the qualitative approach of this study, no formal inter-rater reliability checks were carried out which merely produce an interpretation agreed upon by two people rather than functioning as a check of objectivity (Yardley 2000). Besides, the aim of this validity check was not to "produce a single report which claims to represent 'the truth', nor, necessarily to reach consensus" but to ensure the credibility of the final account (Smith 2003:235). Instead differences in opinion were discussed once the audit was over: clarifications were made with regards to the labelling of themes which originate from two sources, the researcher's interpretations, and, verbatim extracts from participants, for example 'Sense of Wonderment' (Fiona), Overcoming Physical Limitations (Diane) and Sharing the Experience (Alex and Marie). In the end, by following the audit trail, the goodness of fit of all themes as delineated according to the seven stages of coding was ascertained by this independent researcher.

4.2.3.10 Dependability: Reflexivity in Data Analysis
IPA research explicitly recognise the role of the researcher in interpreting data: in effect, there are two circles interlocking, one the participant, the other the researcher: both are trying to make sense of experience. My role in this 'double hermeneutic' is to interpret
the participant's experience. Here, an important aspect to consider is reflexivity, or, being aware of how I was carrying out my task. As I reached the stages of data analysis, I constantly reminded myself to question: what do I hope to achieve with this research; what is my relationship to the topic being investigated; do I empathise with the participants and their experience; who am I, and how might I influence the research I am conducting (Langdridge 2007). The very idea for this research originates from my entry as a scuba diver into the sub-aquatic world. In this situation, I was a fellow diver interpreting other divers' experiences. I had to ensure I carried out my responsibility to interpret their experiences in a dependable manner.

For example, I have notes where I feared my interpretations might be biased towards those aspects of the reefscape which I find appealing. In the case of 'Encounters with Marine Life', I was concerned that I would be overemphasising the role of 'fish' which is one of the main reasons I dive. However, as my study progressed and it became clear that each participant described such encounters, I concluded that this was probably not an issue. Interesting nuances to such experiences were interpreted, and it was fascinating to discover how one phenomenon could be experienced in so many different ways. Additionally, during analysis, whenever I conducted the clustering of themes, or the labelling of themes, I was careful to double check and recheck the end results with the source: transcripts. Meaning condensation (Kvale 1996) of data is useful in coding data, but for a grounded understanding of what went on during an interview, I would refer to the recordings and transcripts. During transcription, I had noted down intonations which proved useful during analysis. At times, I would return to the recordings as intonations proved pivotal to deciding the mood within an extract. Finally, at both idiographic and inductive levels of interpretation, I ensured I doubled checked the analyses to ensure it was grounded within the participants' experiences.

4.2.3.11 Reflexivity: Locating the Researcher
In this study, it was hoped that the researcher would be sensitised to different aspects of the data set due to her interpretative position as a tourism researcher and fellow diver, thereby yielding a rich analysis. Due to my role as researcher and diver, I am obliged to address the issue of bias, and, clarify my role in the conducting this study as discussed in
Section 4.1.3.4. Therefore, as a sensitizing exercise (Fischer and Wertz 2002; Langdridge 2007), I created a personal biography (Appendix N) which can be used to understand my role as a diver and researcher in the dynamic process of interpretation. The biography clarifies my personal background, dive history, why I chose this topic and how I feel about the sub-aquatic environment. This biography is an attempt to both locate and clarify my role in this project specifically how my biases and assumptions might have influenced my interpretations. A few further thoughts are provided here in order to ‘locate’ myself within this research.

First, my dive history is by no means as extensive as most of the participants in this study. Secondly, during the course of this study, I was based in the United Kingdom and did not dive at all; having trained and only ever dived in the tropical waters off Borneo, the idea of diving in cold water and training to use a dry-suit did not hold any appeal. This prejudice made me reflect upon my own identity as a scuba diver, and the realisation emerged: I was passionate about diving in warm, blue, tropical waters, in a wet-suit, but not necessarily passionate about all forms of scuba diving. Besides, living on a student budget also excluded my participation in scuba diving: it is an expensive hobby, one which I started to delve in as an employed person with disposable income. Therefore, during the period of this study, I was sadly relegated to being a virtual diver. To stay in touch, I ‘consumed’ dive experiences through internet websites; popular magazines and books; as well as through the rich stories shared by the participants. For example, over the course of this study, I immersed myself in reading literature on swimming and scuba diving (Hamilton-Paterson 1987; Cardone 1992; Sprawson 1992; Harrigan 1992; Chowdury 2000; Deakin 2000; Ecott 2001; Love 2001; Kittrell, Kittrell and Kittrell, 2002; Cousteau and Dumas 2004). My interpretations might have been inspired to some extent by this literature, through an inspired understanding of the dive experience. Be that as it may, by making these issues explicit, I was alerted to constantly verify my findings against the transcripts or empirical data which was at hand. Themes and sub-themes were continually examined against transcripts to ensure participants’ experiences of place were being addressed in the dissertation, albeit, through my interpretations.
4.2.3.12 Persuasiveness of Text: Resonance with Reader

Both Chapters 5 and 6 have been kept descriptive in an effort to "let the data speak for itself" (Wolcott 1994:10). However, the organisation and categorisations of data are based on the researcher's interpretations: an important aspect of reflexivity as discussed in Section 4.1.3.4.1. This qualitative analysis aimed to provide a rigorous and comprehensive description of themes within the SAM framework using a narrative account which would hopefully stimulate resonance in readers. Hence, central and subthemes were presented using a narrative account illustrated with verbatim quotes from participants, which allows readers to interrogate the interpretations made by the author. Each account has been chosen in terms of richness of the passage or prevalence within the data to illuminate a theme (Smith 2003). Also, these accounts depict a form of temporal mapping where persons are connected to situations focusing on who does what with whom, when, and where (Denzin 2001). For this reason, names, activities, locations feature prominently in these verbatim extracts, which, in fact are the voices of participants. Chapters 5 and 6 are an opportunity for the reader to listen to participants' voices, and judge the credibility (Lincoln and Guba 1985) of these accounts through aspects of vividness, accuracy, richness, and elegance (Polkinghorne 1983) of this interpretation of sub-aquatic meanings. The narrative account is presented in such a way that if readers, taking all other guidelines into account, can judge it to have represented accurately the subject matter, or to have clarified or expanded their appreciation and understanding of it (Elliot et. al. 1999).

4.3 Conclusion

Chapter Four was divided into two sections. Section 4.1 presented an overview of the general method associated with IPA, and Section 4.2 presented the research design for this study. Both sections were divided into three corresponding sub-sections on data collection, data analysis and establishing trustworthiness. Specifically, Section 4.2 has provided an audit trail of the research design for this study. The next chapter presents a narrative account of the findings based on the SAM framework to delineate participants' experiences of the sub-aquatic environment.
Chapter 5: Interpretations of Sub-Aquatic Meanings I

5.0 Introduction

The previous chapter (section 4.2.2.2) has introduced the Sub-Aquatic Meanings (SAM) framework which consists of shared themes derived from the inductive level of analysis. This chapter presents the narrative accounts for sub-aquatic meanings which illustrate the contribution of the physical environment. ‘Sense of Wonderment’ is supported by the sub-themes of ‘Beauty’, ‘Encounters with Marine Life’, and ‘Adventure’. ‘Being in a Different World’ is depicted under the sub-themes of ‘Discovery and Learning’ and ‘Overcoming Physical Limitations’. The narrative account presents descriptions of how place is experienced illustrated by verbatim extracts from the interview data. Finally, the chapter concludes by drawing out the key points introduced in this account of sub-aquatic meanings.

5.1 The Physical Environment and Sub-Aquatic Meanings

A large section of the place meanings within the SAM framework were based upon features and attributes of the physical environment. As Tuan (1974) suggested, the environment may not be the direct cause of topophilia, but environment provides the sensory stimuli, which as perceived images, lend shape to our joys and ideals. Evidence from this study supports Stedman (2003a) who suggested that characteristics of the physical environment provide important ‘raw material’ which underpin sense of place. Strong indications of the contributions of the physical environment were apparent within the descriptions related to Sense of Wonderment and Being in a Different World which is the reason for the moving borderlines which have been drawn around these two themes as depicted in Figure 9.
Sub-aquatic meanings based on the physical environment were based on personal transactions between the reefscape and diver. In order to proceed, the discussion examines each sub-theme located within the border: to depict the contribution of the physical environment to sub-aquatic meanings.

5.2 A Sense of Wonderment
Based on the interpretive analysis of transcripts, ‘Sense of Wonderment’ is representative of place meanings related to the sense of awe experienced towards the splendour of the marine environment. Wonderment embraces feelings of admiration, amazement and fascination aroused when encountering familiar, strange, or surprising features, and inhabitants underwater within the living reef. It also refers to the wide variety of diving related activities which present a sense of excitement. This label originates from a phrase uttered by Fiona: *So you’re breathing in an environment that’s completely alien and you’re floating along, (...) and it’s just, it’s a sense of wonderment really.* I chose this label as it illustrates a shared emotion amongst participants: regardless of the number of logged dives or visits underwater, in one way or another, the element of wonderment was obvious within their descriptions. A nuanced understanding of ‘Sense of Wonderment’ is...
presented within its three sub-themes: 'Beauty', 'Encounters with Marine Life', and 'Adventure'. These sub-themes are complex and interconnected; overlap at times; and consist of small parts that contribute to a bigger picture. Next, each sub-theme is introduced and defined and subsequently, illustrated by interview extracts to unravel 'Sense of Wonderment' in this context.

5.2.1 Beauty

Evident within participants' accounts were feelings and thoughts which referred to an aesthetic appreciation of the physical attributes of the marine world. Such accounts were grouped under the sub-theme of 'Beauty' to signify the perfection, splendour, and magnificence of nature underwater. Gazing upon beauty within the sub-aquatic environment brought much joy to the participants. Most smiled deeply, or laughed during the interviews as they reminisced on this beauty which evoked deep sentiment. Inherent in participants' descriptions about 'Beauty' were explicit references to qualities that gave pleasure to the senses: the coral reef; the marine life that lives within and around the reef; and sensory aspects of colours, shapes and sizes. However, at a more implicit level, there were references to underwater topography (arches, caves) and the sub-aquatic genius loci which produced transcendental emotions. Additionally, an intricate undertone to this sub-theme was the desire to care and protect this fragile resource.

But what is beauty? Beauty is an advantage; a status; it attracts visitors to natural resources; and certain tourist attractions are designated 'areas of outstanding natural beauty'. Yet, on a personal level, as the phrase goes, beauty is in the eye of the beholder, for it is a private response of delight in nature that etches a memory deep within our consciousness. In this sub-theme, descriptions focus on experiencing scenic beauty within the marine environment. Scenic beauty includes all manner of attributes within the physical environment, for example, landscape, snowscape, cloudscape and seascape. 'Beauty', in this discussion, refers mainly to the reefscape, a term coined by William Saville-Kent (1845-1908), prominent marine biologist and author. "Reefscape is more than underwater landscape. Reefscape is where the rocks are living, plants grow downward, the sky glows through a refracting barrier of water, and there is no air save
that which humans take with them" (Love 2001:6). Therefore, the experience of beauty underwater has a brilliance of its own. Moreover, in order to dive there is a need for some form of education and training, and not everyone who walks on land ventures into the ocean with an aqualung. To experience the reefscape first hand, one needs to indulge in snorkelling, snuba ('reef-walking') or scuba diving, and as such, this vista is only accessible to a select group of individuals. Such feelings of privilege enhanced the experience as expressed poignantly by Olivia: All that stuff is down there, you know and only a small fraction of the population ever sees it...so you feel a bit special because you feel a bit like you’re seeing a secret. Similarly, Lee also described the experience as a privilege: I think because you’ve seen things that you...you come up and you just see the water, and you think, all that stuff’s under there. So you know it’s a special experience, kind of a privileged experience I think. Hence, sub-aquatic ‘Beauty’ was also illustrated as a privilege.

On another note, De Bolton asserts that “beauty is fugitive, it is frequently found in places to which we may never return or else it results from a rare conjunction of season, light and weather” (2002:218). Therefore, he reflects “that a dominant impulse on encountering beauty is the desire to hold on to it: to possess it and give it weight in our lives”. It is this aspect of giving ‘Beauty’ prominence in one’s life that is clearly reproduced within the place meanings herein. ‘Beauty’ was expressed in varying degrees including the colour within the reefscape in particular, of coral and marine life. As previously explained, some sub-themes are complex and share features; as such a fuller description of experiences with marine life is presented under a separate sub-theme in the following section. In this section, participants’ experience of place was described based on direct observation of sensory stimuli provided by colour, visibility, and difference. Lee explained how the colours of the reefscape impressed him in comparison to the terrestrial environment:

Because there’s this feeling of being in another world really, another scenery... And I guess, the colours surprise you because they’re you know, they’re bright, they’re translucent or they’re vivid. You know, they’re more...more vivid than the colours on the land.
Finding 'Beauty' in the smaller attributes of the reefscape is apparent in this next example which focuses on the colours of marine life. When Olivia expresses her delight and amazement at the beauty of nudibranches; the experience of difference comes into play yet again:

I guess some of it's awe... in like 'wow' especially when you look at things like natural...natural features: things that have grown... the colours are amazing. Or you're looking at the animals... Animals underwater are really, really spectacular and you don't expect them to be. (...) It's amazing that... like nudibranches, you know... the little sea slugs are far more beautiful underwater than the slugs we have on land.

Additionally, the 'Beauty' of coral was also illustrated as being fragile, and more importantly portrayed an understanding which escapes many non-divers: that coral are alive. Here, Marie describes coral, both generally and the cold-water coral she has seen on her dives in the United Kingdom (UK):

Soft corals I think are completely weird. Corals you see in this country are bizarre! But, umm... beautiful, fragile, definitely depends on the type of coral though... beautiful, fragile, weird, all of those. Amazing! Yeah! You don't think of them as being alive, that's for sure.

During the interviews, participants who dived regularly around the British Isles repeatedly informed me of the 'Beauty' they experienced whilst underwater. British diving is not limited to wreck diving; for example, there are seventy-seven different species of sea anemones and corals found in Britain and Ireland (Wood 2006). In this next example, Olivia's illustrates the beauty of a colourful, 'anemone garden' at her favourite place for diving in the UK, Cornwall:

My favourite in the UK is a place called Raglands Reef in Cornwall. The reef is just lots of gullies, and the water rushes up backwards and forwards along these gullies. And there're just hundreds of anemones. And they're bright orange, and yellow and white and there're hundreds of them and they are gorgeous. It's just like a massive garden. It's one of the most beautiful things I've ever seen. And you just pop in and out of each gully and each gully is as beautiful as the next. And it's just amazing.
According to Olivia’s descriptions, the experience of the reefscape is deservingly beautiful based on colour and difference. Similarly, other accounts continued to focus on experiencing ‘Beauty’ within the reefscape in terms of sensory pleasure derived from the colours and the affirmation of being in a different environment. For example, Pam also elaborated on these differences in terms of colours and diversity illustrating various degrees of ‘Beauty’:

Well, I think it’s the variety of them, the colour, they’re different, their shape. It’s like some mad artist has invented every weird creature he could think of, and put it down there. They’re completely mind-blowing. You know, animals are all, kind of the same, four legs, heads, ears, whatever. But I mean, fish are such shapes – you know, I mean you have boxfish, lionfish or scorpionfish, whatever you want to call them... I mean, there’s just so many of them.

On another level, participants described how experiencing unique underwater topography provoked deep emotions, which I have interpreted as a sense of the sublime (De Botton 2002). The “power of places to arouse the mind to sublimity” (De Botton 2002:165) in this context refers to the dramatic, mystical and ethereal splendour described by participants about their experiences underwater, a sense of seeking to connect with nature, or ‘oneness’. Such feelings of oneness have been observed amongst surfers. To explain “the sheer joy of being in the water”, Capp (2004) draws on the notion of ‘the oceanic feeling’ for explanation of this connection with a force vastly greater than oneself, a primal ‘at oneness’. The French writer Romain Rolland (1866-1944) introduced the sensation of ‘the oceanic feeling’; a metaphor to suggest the origin of religious sentiments was born of a feeling which is always with us, a sensation of ‘eternity’, of something limitless, unbounded, or oceanic (Mills 1999; Capp 2004). The oceanic feeling is an emotionally aesthetic event similar to a sense of the sublime that is so subjective and arcane, often beyond which words can define (Mills 1999). Within this study, such descriptions add new dimensions to the meaning of ‘Beauty’, as portrayed in Neil’s account of Dolphin House Reef, in the Southern Red Sea and Diane’s depiction of the Blue Hole in Dahab: both destinations are in Egypt. Both accounts focus on these different aspects of ‘Beauty’.

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Neil, who has been diving for 40 years and is also a specialist cave diver, describes sublime notions and oneness experienced within Dolphin House reef in the Southern Red Sea. Although the location is home to a colony of spinner dolphins, it is the underwater caves that impressed him the most due to their magnificence, which he compares to the experience of being in a cathedral:

On one side of it, there was this marvellous network of caves, where the light flooded in through the roofs—it had these beautiful skylights, the sunlight streaming through. And you could swim through the caves, weave in and out, go in another entrance, come around and come back and just spend hours.

And the divers would be there suspended in clear water with the light...the dappling of the light coming through—beautiful. I could spend all day there. Pity it's miles off-shore [laughs] It's something I'd like near the beach! Simply...I think in those places, it's the...it's the experience of light and shade that you get...in underwater caves like that. The way the daylight comes down and shines, it's almost like being in a cathedral you know...like looking through a stained-glass window. Well, I don't know...it's just that [pauses] (...) it just feels very...I think it's very (...) it's calming I suppose! It feels very tranquil!

Diane considers Dahab her favourite dive destination in the Red Sea and has returned up to six times to dive at the Blue Hole. First, she describes the location in terms of geographical detail expressing awe with the site itself:

What they've got is they've got very amazing, underwater, topography. They've got like caves, and caverns, and little unexplored canyons, so there're lots of things there. They've got one or two standard dive sites that everybody does. (...) The Blue Hole in Dahab which is like a very famous dive site. (...) What it is like a lagoon, and then there's the sea and between the lagoon and the sea, there's an arch underwater. At the top of the arch, it's about 50 metres. So, people go down to 50 metres and then swim through this arch and then come up, and that's kind of like the famous dive in Dahab.

However, it is when Diane describes her emotions that the magnificence of this spectacular dive site emerges and extends towards feelings of oneness:
I think the site itself is a really amazing place, it's just very, it never fails to impress you because it's so enormous. This arch is so enormous, it goes...the bottom of it is...well it's on a slope but it's sort of about 90 metres on the inside and it just falls away to a 120, 130 metres towards it. So, it's really deep at the bottom. And it towers right up above you ...it's like a huge, huge cathedral...Yeah! That's what it's like, it's like a really huge cathedral.

But also, sometimes you can be in, hanging there in the middle... so you're hanging underneath this archway and there's nothing below you, that's what it feels like. But you can see the blue sea and quite often big tuna and things like that will come in underneath you. So you can see, you get this feeling of how tiny you are.

For Diane, 'Beauty' was experienced in terms of largeness and expanse, comparing the experience of the arch as one of being in a cathedral, but also expressing a deeper emotion: the oceanic feeling. In the last few accounts, it became evident that participants' experiences of 'Beauty' extend towards the intangible and transcendent aspects of place which symbolise the sub-aquatic genius loci.

A more nuanced description of 'Beauty' was evident as some participants described feelings of stewardship towards the marine environment. 'Beauty' evoked feelings of care. As Celia so endearingly conveys: I think it's a beautiful world! And I think it's a hidden treasure and I think it would be appreciated by so many more people if it was protected more. Participants not only expressed a desire to care and protect this fragile resource, they described their own actions and contributions towards stewardship. For example, Gina explains that when she is underwater:

I spend a lot of time, clearing things up, picking bottles up, picking snorkels up, picking plastic, cutting fishing lines and wrapping them up. Killing crown-of-thorns! [makes gestures of how she skills the starfish] Four days with cyanide! That's how you kill them properly. I've also done the whole thing where you just pick them on to a stick, and then you just stick, stick, stick. Yeah! Getting rid of them...so I think you can do a lot of positive things. Yeah! I spend a lot of time, I think a lot of people do ...clearing up led weights and stuff like that...

On a similar note, Celia who has been diving since the age of twelve expresses a deep sense of responsibility towards protecting the reef. For divers like Celia, who have been
employed as dive instructors, their sense of self has become intertwined with the sub-aquatic world. The depth of Celia’s appreciation and desire to protect the reef is visible in the following account, an event that occurred while she was on holiday:

And I’m, fortunately or unfortunately very protective of the reef and quite an intolerant dive leader! I can’t tolerate people crashing into the reef! And I think of, I’m quite an emotional person when it comes to that sort of thing. One of the worst examples that I’ve ever been exposed to was off [pauses] off Java (...) There were a bunch of... I don’t even remember where they were from (...). And the guy that did the brief was very thorough; he knew that I was an Instructor.

But there was this one guy that thought it would be fun to take a photograph of him sitting on a big flat coral. The flat coral was about the size of this table, and he’d crashed his cylinder into it and broke it. This was about 2 years ago. I, well, my sense of humour didn’t really last very long. I sent him off the dive. You’re looking at a flat coral the size of this table that’s probably taken a couple of a hundred years to get to that! It’s got intricate, intricate families of fish, and invertebrate and things like that have established their places in that environment. And then somebody carelessly throws a cylinder on it and breaks it.

Although these last two accounts express a deep understanding of the ecological foundation of the reef, there is also a notable association between how participants think about the reef, what they feel, and how they behave within this environment. These descriptions provide an indication of the values and attitudes held by participants towards the reef environment. For now, this section has described nuanced views of ‘Beauty’ which contribute to understanding the ‘Sense of Wonderment’ experienced by participants. The following section describes how ‘Encounters with Marine Life’ introduce another dimension to the understanding of sub-aquatic meanings.

5.2.2 Encounters with Marine Life
The marine explorer and conservationist Jacques Cousteau explained that the best way to observe fish is to become a fish (Cousteau and Dumas 2004). Indeed, the aqualung allows divers to momentarily become fish, and interact with marine life. Within this study, numerous participants described experiences related to interacting or observing marine life which were grouped into a separate category to refer a specific form of ‘Sense of
Wonderment’. ‘Encounters with Marine Life’ describes the nature of physical interactions with marine life, of all sizes. As Love (2001:6) succinctly explains, “On land, wildlife flees the human encounter; underwater, fishes move largely indifferent to human intrusion. Reefscape provides quite a different encounter with wildness”. Being surrounded by different shoals of reef fish, or, floating next to a turtle are some examples of the interactions between diver and marine life. In fact, the desire to encounter marine life often becomes the driving force in choosing destinations, as Celia explained: *probably the first 5 or 6 years of my diving career I was pretty obsessed at seeing as many fish as I could [laughs]. In fact, I went, I would purposely go to different dive destinations to try and see different fish*. The ability to interact and observe marine life in an authentic setting was a significant aspect of place experience.

In this study, participants spoke of ‘memorable’, ‘incredible’, ‘fantastic’, ‘magical’ or ‘impressive’ encounters not only with large species like manta rays, seals, dolphins, and sharks, but also with micro life such as seahorses and nudibranches. As Jack explains, the smaller residents of the reef are important to the experience, *enhancing a sense of privilege* as depicted in ‘Beauty’ earlier:

> I mean, anything really, any small ... – those sorts of things, and those are fascinating! I mean, particular my kids, they go nudibranch hunting! (...) they’re not optically well camouflaged for some reason...they’re obviously in the wrong place. You’ve got these yellow and black worms or nudibranches or whatever, and they find those absolutely fascinating.

> And you know that...one is that you get that sense that you’re really lucky because you’re seeing things – that you might see in a book, but actually, you’re seeing them first hand. And you wouldn’t see them anywhere else. That’s the other thing. You couldn’t go out for a walk and see them. So, that...that’s really, really special!

‘Pelagic’ is a buzzword amongst divers, which in this context refers to the big, fast creatures of the open waters for example sharks, manta rays, dolphins, whales, and barracuda. (Jackson 2006). Also included on the list are turtles and dugongs; all inhabitants of the ocean that retain the status of ‘charismatic megafauna’ (Love 2001). Specific places where pelagic encounters took place are forever bestowed a symbolic
significance. Furthermore, hidden behind each encounter was an engagement that provided enjoyment and inspiration; as well as an achievement that boosted self-confidence and improved self-knowledge. Participants' accounts depicted the wonderment of first time, repeat, and educational marine encounters all of which are tied to participants’ experience of place. Amongst the participants, some consistently return to the location of first encounters. Gina fondly depicts the Solomon Islands, her favourite dive destination with pride in terms of first time marine life encounters, both big and small:

‘Where I first swam with dolphins! Oh! It's just, because it's just one of those things that everybody always wants to have done; swam with dolphins. And they're wild dolphins as well. And they all kind of swam around a little bit: they're quite inquisitive. A big pod - so that was really nice. For me, seeing my... I saw my first hammerhead which was good. And first seahorse, cause seahorses are pretty... [They're the ones that carry the babies...] [both laugh] Yeah! But they're kind of special aren't they? Something... I've got a real thing about seahorses – ah- it was really amazing’.

Similarly, Kieran remembers his first encounter with a turtle whilst diving in Sharm al-Sheikh in the Egyptian Red Sea:

That was really cool, that was amazing, that was the first turtle I'd ever seen. And everyone was trying to get a picture with the turtle [laughs]. It's quite fun. Yeah! I think I've got one somewhere. It was really good...I just stood back and watched it...just to see how it is in the water.

Marie has over 200 logged dives and enjoys diving because: It's another world – I just love the idea that this is some other life going on there. And we're all getting to experience and be part of it, just for that time and just watching what's going on. On a holiday with her husband, Marie dived at the Similan Islands in Thailand which she considers as her favourite place, for various reasons that include an encounter with a whale shark:

When I think about the whale-shark, it was just amazing. Awesome is the word! Yes! That was where I met my first 12 metre whale shark. [chuckles] Well, we've got video footage and it's just
amazing. The width of this thing...the mouth width! You can see the person in it and the width of
the mouth is longer than the person who’s next to it. It’s that big and that just puts it into
perspective. And that kind of memory [pauses] is just awesome, that’s it! And just the grace and
the beauty and you just feel completely inept and inadequate along with all your gear, and kit and
all the rest of it. Just amazing, isn’t it? Fantastic! Loved it! [laughs]

Evident in the above descriptions are elements of excitement and enjoyment from the
interaction with these pelagic creatures. In another account, the bewitching arrival of a
manta ray during a dive in Egypt two years ago left a lasting impression on Alex. It was
the only time he saw one of these elusive creatures up close, making his dive on St.
John’s Reef in the Southern Red Sea both enjoyable and memorable:

I think, I think for me, it was two years ago, we were down...down south in the Red Sea, there’s
an area called the Brothers and Elphinstone which is... which is probably six hours south of
Hurghada and we were diving there and it’s the only time I’ve ever seen a manta ray.

Because I do underwater videography as well...and I probably had, myself and this other guy Rick
who I dived with, we probably had the best part of ten minutes totally to ourselves with this manta
ray. And it was just swimming around as I was filming it... it probably swam within a couple of
feet of me.

I’ve got some photos where you could almost reach out and touch it, you know. And that,
probably that ten minutes, is probably one of the most incredible ten minutes I’ve ever had, when
I’ve been diving. And for me, the reef we were on, which is called St. John’s reef is probably the
strongest memory I’ve had of diving. It’s just phenomenal. Never experienced anything like it!

Ten minutes with a manta ray transformed St. John’s Reef, Egypt into a significant place,
his strongest memory of diving. But Alex confessed: St. John’s is just, just a stunning
dive site because I saw the manta ray. If I go back to St. John’s again, I’ve never really
dived there since...but if I go back again, I’m kind of aware that it may not be anyway
near living up to those expectations for me. Places where first time encounters with
marine life occurred become symbolic points of reference. This indicates the significance
of marine creatures in the experience of place.
In this next description, Ian explains that he is fond of the Maldives for it affords him the chance to dive with manta rays; one reason to return whenever the chance arises. He describes his manta ray encounters and the buzz it extends:

Every time I’ve been to the Maldives, we’ve seen a lot of manta rays close up. So that’s a nice, type of, sort of sea life that you know, you don’t see frequently. [Smiles] They’re large...they’re very graceful creatures, they’re not spooked by humans, and generally, they appear to like swimming through your bubbles. They like the tickling effect. You will see them circle around and around over a diver’s bubbles. And when they’re there, they’ll stick around for a while. It’s like with any large sea creature when you’re underwater, dolphins, mantas, big sharks. It’s a buzz! That’s all you’re diving for!

Similarly, this presumed guarantee of an encounter attracts Diane to return to the Farne Islands (UK) for the sole purpose of diving with seals:

One of my favourite places is the Farne Islands...near Newcastle. We’re going there to dive with the seals, and the underwater scenery is quite interesting. (...) And seals! Which are just like underwater dogs, you know, they’re quite playful...come zooming around you the whole time. So you don’t know whether you’ve got a seal coming up in front of you or behind you, or...you know? There are seals flying over the top of you, and underneath you, and stuff...it’s amazing! And that’s like an encounter with sea life; it’s that kind of dive. It’s very scenic, it’s very beautiful, very, very, stunning underwater scenery, but seals are what make it really insane!

For both Ian and Diane, these respective destinations represent a certain guarantee, where they know their expectations of an encounter often materialise enhancing their dive experience. Additionally, as Ian succinctly explained, divers dive in the hope of encountering large pelagic species, in order to experience their presence and its related ‘buzz’. Based on such encounters, divers then convey human characteristics upon these creatures. Notably in the accounts presented thus far, the dolphins were ‘inquisitive’; the whale shark and manta ray were ‘graceful’; and the seals ‘playful’. Such occurrences continue to enhance the qualities of animal charisma, as well as the importance of those locations where such encounters are prevalent.
On the other hand, some participants reflected on their marine life encounters in terms of understanding the fragility of life and being underwater. In this example, Lee describes a dive in South Africa:

This wasn't with a great white...we were diving a wreck and you know, I'm not sure what type shark it was but it was quite a big shark kind of, came quite near us. [laughs] Well, I mean, nothing dramatic happened but it just, it just made you realise that this is not our place. You know, there are big predators here and they're...you know, this is their world – and we're here by invitation [laughs].

Participants also described instances of modifying their own behaviour in order to encounter marine life. In this next account, Olivia describes with pride how patience, coupled with training, facilitated her interaction and encounters with marine creatures. Here she portrays the pleasantness of an encounter when it is the pelagic species that chooses to investigate the diver:

When you do a dive and something chooses to interact with you ...So when you do a dive and [lowers her voice] a seal is interested in you or if you're abroad, and a big ray comes over to investigate you or to play in your bubbles, or the dolphins all play with you or things like that. When you...when you do a dive, and something chooses to investigate you or spend time with you; it's really...you feel really special and it's quite magical because they've come to you.

You see lots of divers... chasing stuff away. And from a BSAC point of view, we're trained to just enjoy the reef, (...) and let stuff come to you. And generally, stuff will come to you; if you're chasing it, they get really disinterested in you. So, we've been really lucky with the few experiences that we've had. We've had seals, you know, playing with us, lying down and stuff. And that's really special and it makes you feel, you know, really energised and excited [smiles].

Not only does the encounter boost Olivia's self-esteem, it was evidence of her competence. In this account, Olivia also refers to the advantage of her training and skills provided by her dive club (BSAC) in guiding her towards such experiences. However, further discussion on competence and what it allows a scuba diver to experience are discussed under the next sub-theme of 'Adventure'. This section has presented descriptions related to encounters with marine life as a feature of place, whereas the next
section describes how participants actively engage with the marine environment through different forms of diving.

5.2.3 Adventure

According to the Oxford Dictionary (2002), adventure is defined as "an unusual, exciting, and daring experience". In general, scuba diving is a recreational pursuit, which has elements of adventure. The sub-theme of 'Adventure' includes participants' accounts of engaging with the marine environment as an arena to enjoy varied types of diving some of which are linked to the notion of risk and exploration. For example, wreck diving, night diving; drift dives (diving with currents); deep dives (technical) and cave diving. Recreational scuba diving is governed by a range of certification agencies; dive certification gauges one's competence, thus making these various forms of dive recreation accessible. The complex nature of sub-themes is evident as most descriptions in this section are interconnected with aspects of 'Beauty' and 'Encounters with Marine Life'. Be that as it may, the main aspect of the descriptions in this section are relate to the wonderment experienced through 'Adventure'.

To engage in recreation within the reefscape is alluring to most participants for the variety of experiences associated with different forms of diving. Wreck diving is one specialist aspect of scuba diving; a mode of engaging with underwater heritage (for example, sunken ships, planes) that provides an element of adventure. A sense of exploration, discovery and movement within the wreck are reflected by Lee as he spoke about diving off Cape Town, South Africa. He perceives his enjoyment as exemplified by being able to dive through a part of history:

There's something quite fascinating about wrecks, I don't know why because when you see ships on the water, it's just a ship isn't it, you know. But when something's been underwater for a long time, and you go inside, I suppose part of it is the mystery of it... the thing, part of it is the sort of feeling of exploring something you know? There's nobody else there, what's happened to this...? So you get some nice stuff on the ships, and a lot of marine life around you know, so it's nice, nice diving.
I guess it’s the sense of exploring, of going inside something: it’s quite a …gives you a feeling of you know, you want to know what’s inside, bit of mystery, bit of exploration, you discover things you know. You go in the old wheelhouse, or where the captain used to stand or you know going in and out of the windows and doors and things. It’s just fun…it’s fun and it’s a little bit more interesting than just a normal dive [smiles].

Scotland is a premier cold-water dive destination that offers a range of historic wreck dives in its waters. Marie and her husband dive these wrecks on their weekend dive club outings. In this next account, Marie focused on the physical details within a wreck, being curious about its history, and experiencing joy at the ‘Beauty’ within the wreck. Similar to Lee’s description, the following account describes the wonderment of exploration, of being able to move through history, underwater whilst at the same time enjoying the wreck as a living entity:

Whereas there it’s the wrecks, it’s a little bit of history and if you know the story of the wreck before you go down, you can picture it, you’re swimming down the corridors of the wrecks, and you go into little rooms and cabins and sit in the bathtub or you pretend to wash your hands or climb the ladders or whatever on these wrecks. They’re just so intact still. But they’re covered in life, loads of beautiful coral which is again just- I don’t think you think that’s going to be what British diving is about. I think you just think it’s going to be boring, and black and white, and dark and murky. But actually, it’s really pretty stuff.

Marie reiterates: it’s just the history, just actually being there, touching it, swimming down the corridors of the wrecks or around the outside and thinking, ‘what happened? Where was it?’ Participants expressed their wonderment at being part of history and a feeling of pride at being able to witness the living reef that envelopes the wrecks in this final port of call. It seemed as though the providence of a wreck lies in the growth of coral upon it, and, the marine life that swims through or settles within. Other than history, wrecks were experienced from the perspective of being a living entity composed of marine life and coral experienced through wreck diving. Alex explains:

And I’m a huge wreck diver, so, I love the…you get some incredible wrecks there. And even on the wrecks over in the Red Sea, (...) one of my favourite dive sites is the Thistlegorm, (...) It’s just stunning, it’s an old World War Two wreck and it’s a merchant ship at sea and it’s still got

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tons of stuff inside it and you can move around it. And then you know, you come off of there and you see sharks still, you see turtles, there’s two turtles living in the wheelhouse, and you get soft and hard corals that are now growing on it and it’s almost becoming a reef, you know. It’s just stunning.

Night diving is another feature of experiencing the marine environment which affords the opportunity to view different forms of life on the reef. In this example, Ethan describes a night dive on a wreck at his favourite dive destination, Grand Cayman, in terms of patrolling barracuda, eeriness and mystery:

The one that is most memorable to me was the night dive that we did around the wreck. It’s the one with just walls of barracuda just following you around. It was all quite eerie. And then the instructor just shone his torch underneath the hole and it looked like there was this boulder, this huge boulder and couldn’t quite work out why he was shining his torch around. And then he swam on a bit and this boulder started moving and coming towards me, and it was absolutely huge. It was bigger than I was...It was a turtle but it was...the whole, kind of eeriness of it was, ‘My God! What is that thing?’ It was so big! And then it turned out it was this turtle, and that really sticks in my mind.

Sub-aquatic meanings are intricately connected and although divisions into sub-themes is useful for description, but to truly understand the nature of the sub-aquatic experience requires a more holistic perspective. Ethan’s account above is composed of ‘Adventure’ and ‘Encounters with Marine Life’, for example. Evident in Jack’s account of his family holiday to Osprey Reef out in the Coral Sea are aspects of ‘Beauty’, ‘Encounters with Marine Life’ and ‘Adventure’ (night diving into a cave) which in combination provide the ingredients that make a place meaningful. Jack fondly recalls his experience of one particular night dive:

When we were out there, we did a series of night dives, and there is a little cave. And what they’ve got in these caves are these wonderful fluorescent fish. And so what you do is you go into the cave, so you swim in with your torch. You go into the cave and there’re four or five of you...it’s really just hollow in the reef. It’s about...I don’t know, about 15 metres down, something like that.
Then what you do is arrange yourself, just in a semi-circle, switch the lights off. And then you've got these fluorescent fish that... actually it's not their eyes that are shining but they've got two fluorescent patches above their eyes. And one by one, what happens is you get pairs of light start switching on all around. And they're only about this big [finger length], so they're only about you know... I don't know 38 mil maximum long. But they're... it's absolutely fascinating.

Following his description of the dive, Jack then explains how through this adventure, he is rewarded with a heightened sense of efficacy of his dive skills, and the reward of experiencing 'Beauty' depicting a true 'Sense of Wonderment' with Osprey Reef.

Why is it memorable? One is that... it's actually pretty damn scary! You swim into a cave, at night, you know, you've got to get your buoyancy right. There's sediment in the bottom there and if you stir it up, not only you know, can you not see anything, but the lights are off... you put the lights off, that's pretty awful; if you go up, you bash your head.

But then suddenly, there's this beauty of seeing you know, these wonderful, sort of lights switching on, one by one by one. And of course, if you then switch a light on them, they switch off completely! So they all go out, switch your torch off again and then they come on, one by one, by one, by one... that for me, that's one of the most memorable things that I've seen. So the sort of, the slight fear that you're wrestling with – you're in a cave, at night, underwater, you've got to navigate your way out, but then the beauty of seeing these things.

As visible in this account, Jack described the experience of nature through a night dive as a reward. Similarly, Gina recalls the rewards associated with a dawn dive which allows her to observe nature:

My favourite dive, actually, is a dawn dive which is really like a kind of night dive and a day dive at the same time. Because I love the idea that dawn hasn't broken yet... I know you have to get up at half-five – I don't like that bit. But then you go dive, and it's kind of dark. And everything's starting, starting to wake up, and the sharks are normally feeding. And then all the night stuff is still out, all the eels and then, all the shells and stuff moving around. And then, that's all happening, all at the same time, and then you have this whole thing where you come to surface and it's daylight an hour later. That's pretty wonderful.
The sub-theme of ‘Adventure’ involves unusual, exciting, exploratory, and daring experiences, indicating that it is possible to gain this experience through varying sub-aquatic experiences. The underlying aspect of participants’ descriptions of ‘Adventure’ remains the element of wonderment that evolved out of the experience, where the sub-aquatic world acted as the backdrop to this experience of ‘Adventure’.

Section 5.2 has collectively described the relationship between participants and the marine environment, in terms of the ‘Sense of Wonderment’ experienced in terms of ‘Beauty’, ‘Encounters with Marine Life’ and ‘Adventure’. Places became symbolically connected to the location of such experiences. Descriptions ranged from an aesthetic appreciation of colour underwater to encounters with small creatures to charismatic pelagic species, and the thrill of various extended forms of scuba diving. Moving along the SAM framework, the next section introduces the second central theme, which has been labelled ‘Being in a Different World’.

5.3 Being in a Different World

‘Being in a Different World’ is the label given to the next central theme within the SAM framework. This section begins with a brief definition of the theme, before moving on to descriptions presented through its two sub-themes. Here again, the ‘label’ for this theme is based on phrases verbalised by participants. First, Lee articulated: So there’s a sense of being in a different place, you know? This is not like the real...this is not like the terrestrial world, this is a different world, a different space here. On a similar note, Olivia described her delight in encountering strange creatures or ‘aliens’: Like going to another world! (...) But when you get down there, it is like another world and they are like little aliens especially like cuttlefish, they look really funny. Within this central theme are accounts of participants describing their experiences of this different world which have been grouped into two sub-themes.

Most participants expressed their delight in the acquisition of knowledge through first hand learning. Such accounts were grouped under the first sub-theme, ‘Discovery and Learning’. As Love (2001:9) notes, “science on the reef embraces so many diverse and alluring fields: marine ecology, oceanography, plate tectonics, ethnobiology, and more. I
come as a tourist to reef sciences, gleaning a thread of knowledge from here, weird and wonderful facts from everywhere". Indeed, the opportunity to learn underwater is extensive and in this study, participants experienced and recollected place in terms of the range of avenues available for ‘Discovery and Learning’ experiences. A second sub-theme, ‘Overcoming Physical Limitations’ focused on the experience of being in water, which presents the opportunity to breathe underwater, as well as to be free from the confines of gravity, to experience weightlessness. To be neutrally buoyant is a skill that is learnt by all divers. In this study, participants described being weightless as an experience in its own right and connected it to achieving a sense of freedom. As such, place is also synonymous with the somatic experience available underwater where participants become more aware of their own body. Each sub-theme is presented in the subsequent sections, illustrated by participants’ accounts.

5.3.1 Discovery and Learning

This section will present descriptions related to the experiences of ‘Discovery and Learning’ which take place underwater and are intricately connected to the experience of place. Indeed, the desire to return or to seek new dive destinations was based on familiarity with a place or the desire to gain further knowledge about the marine world. This act of learning was akin to the desire to own the beauty experienced underwater. In the words of John Ruskin (1819-1900), author and poet, “there is only one way to possess beauty properly and that is through understanding it, through making ourselves conscious of the factors (psychological and visual) that are responsible for it” (De Botton, 2002:220). Based on the interpretive analysis, ‘Discovery and Learning’ encompasses accounts which heightened participants’ understanding of the marine world.

According to Pam, in comparison to the terrestrial environment, the marine world is more invigorating in terms of what it offers. In this example, Pam reflects on her underwater experiences:

It is so interesting and so many different forms of life, things that you would look at and think – ‘oh! That’s a plant’ but it’s an animal. And it just shows you, I think, how little you know of your whole world. (...) Every time you dive, and you can probably dive forever, and every time you
dive, you'll come back and think, 'what was that thing'? Was it a coral or wasn't it? I just love that kind of...it's completely different to being on land!

Not only does her description express delight, but it also indicates a desire to learn. Often, place was described as a 'classroom' where being inquisitive is acceptable and stimulating, as Marie explains:

I just – it's like I'm watching a little soap opera going on in front of you. [Both laugh] Honestly! Honestly! That's how I feel! These little fish...just kind of watching them chase each other, different types and then another fish will come in and try to feed on them...And watching them all retreat into the coral when they...just that little amazement...Just thinking 'what on earth is going on'. Do they have minds? Do they know what they're doing – this little instinct, just wondering and watching and thinking and...amazing, amazing! I'd go in and think, what is their little life all about? Do they have a routine? Don't they have a routine, you know? That sort of thing!

As a 'classroom', the sub-aquatic environment offers ample opportunities for learning. In this example, Jack describes his excitement of observing partnerships reinforced by natural selection:

A shrimp gobi, you can't see the shrimp – but you know, this idea that you've got a shrimp that digs out a hole and you've got the gobi that can't do anything but lives in the hole with it. But the gobi keeps watch; the shrimp is very, very short sighted, so keeps digging. But when the gobi gets worried because they's a predator coming, the shrimp goes into the hole as does the gobi – and so you've got this sort of, wonderful symbiotic relationship.

The gobi is a tiny sandy-colored fish that shares its burrow with the alpheid shrimp (Love 2001). The shrimp maintains the burrow for itself and the gobi as shelter, while the gobi keeps watch and guards the shrimp from harm (Love 2001). Being able to observe and learn about this complex ecosystem provides a sense of achievement for participants. Observing marine life and learning also emerges in Celia's account of being underwater:

I just, I think it's incredible the way ...I'm a nature freak; I love anything to do with the wildlife. So I suppose underwater just gives me another dimension to wildlife. I think the intricacies of the way their world works, it's like, it is...I mean, if you watch Shark Tale and that sort of thing...It
literally is like a little city underwater, um...and they've obviously got their rules that they live by

[laughs] Yeah! So, I don't know, it's just a sort of parallel universe really.

If on land we become sensitised to our surroundings, visits to the underwater world allow for a form of relearning, enhancing an understanding of the reef environment. In this next account, Ben reflects on the learning process in comparison to his three months stay in the Philippines with a reef conservation group years ago:

And sort of thinking about the dive, you know, what you've seen, the things you've seen different before. And spend some time actually looking at books, you know...learning...sort of learning what you saw before, so you can name it rather than say, 'oh, there's that blue fish again' to actually know what it is rather than not knowing. (...) because in the Philippines, we had to know like 250 fish, and then all the corals, and all the invertebrates, (...) to know them all off by heart...cause you were ticking them off on a list, you know. So, a lot of that I've forgotten now, so it's trying to re-learn it again: 'Yeah! I did know the name of this fish'. And that sort of relearning...that is good!

Underwater, knowledge of the environment also acts as a protective shield against harm. In a poignant example, Neil describes his excitement of encountering basking sharks off the south coast of England:

We'd actually been diving, when afterwards... we were on the Cornish coast and this is only about 2 or 3 years ago and we were looking at basking sharks. We actually got the opportunity to go and snorkel when the sharks were coming around (...) ...there was something quite impressive about seeing these huge, you know, 6 metre fish go past. Years ago, I'd have probably been quite anxious but I think what I have learnt is ...when you know about something, then you know it's not going to harm you, then you're relaxed about it. And I wasn't anxious about being in the water with something that size because I knew it wasn't going to do me any harm.

As a knowledgeable diver, Neil had a composed encounter with the basking sharks due to his knowledge about the mild mannered nature of the second largest fish in the world. Not only did this encounter provide a valuable self-reflection, it reinforced the learning that occurs by experiencing a different world. Additionally, it is through the experience of place that an understanding of life on the reef comes to pass. During the interview, as
Jack displayed photographs of his family dive holiday at the Great Barrier Reef, he picked out the one of his younger son (then aged 12) hovering over an anemone and its house guest, the clownfish. Jack recalled with delight that his son could explain the intricacies of fish biology:

It was the time when Finding Nemo came out, so the youngster spent all of his time taking pictures of ‘Nemo’, you know? And he loves it. But the other thing is that they say, well Nemo’s mother died and so the father took over. And he said, ‘well that’s rubbish of course because you know with clownfish, the female is the dominant one and they change sex, so if the female dies, then Nemo’s father would have become his mother’.

Being a witness to the learning process is a recurrent theme which was also expressed by Olivia. Here, she explains her sense of accomplishment at being able to help others learn about the marine environment through her knowledge:

Especially if it’s a new diver and it’s the first time they’ve seen a seal or.... You know, their reaction to it is always really great. And you get a lot of fun from that because it makes you feel good because it’s partly down to you that they experienced that because you’ve helped train them, you know, you spent time giving them the courage to go into the water.

You saw a bit of slime from a turtle who’d just been eating soft coral, followed the slime and found the turtle. You know, your bit of knowledge helped them have that experience. So, I get a really big kick out of that...a really big buzz that I helped somebody experience something that’s exciting to them. Yeah! Makes you feel good.

Participants continued to reveal how the opportunity to learn presented itself by chance occurrences underwater. Neil described his process of ‘Discovery and Learning’ through a recent incident where he was patient enough to observe a fish building its nest:

I remember the first time, a few years ago, I saw a corkwing wrasse making its nest. And I must have seen them before, but I just happened to be on a dive – it was partly because I was bored... because I was swimming around and I couldn’t see anything to photograph. There was some weed and I saw this fish go past, and it suddenly ripped a piece of seaweed off you know, and swam off with it.
I thought, what’s going on? I’ve never seen a fish doing that you see. So I followed it and realised it dived down, it came out and swam off and came back with another piece of weed. And it was building its nest. And what’s more, these pieces of...these clumps of weed I thought were just washed in or something I’d found over the years were in fact the nests of these wrasse. And I’d suddenly...actually seeing and learnt about fish behaviour.

(...So I think a lot of time...a lot of divers miss things because they're swimming around at high speed. Sometimes, you know, you’ve got to try and just sit down and you know, look. [laughs] And wait!

Yet again, it is evident that the process of ‘Discovery and Learning’ which participants experience underwater leads them to experience a sense of accomplishment and joy. This triumph is the outcome of a realisation that the experiences this other world has to offer require dedication and devotion.

‘Being in a Different World’ has been explained in this section using accounts which highlighted the delight in experiences related with ‘Discovery and Learning’. Such experiences saw curiosity turn into familiarity, the unknown into the known and confirmed participants’ emotions about the brilliance of being in another world. The English poet William Wordsworth (1770-1850) once said, “come forth into the light of things. Let Nature be your teacher”: a message visible within the accounts presented in this section. The next section introduces a more unique aspect of underwater experiences which were evident within participants’ accounts.

5.3.2 Overcoming Physical Limitations
The second sub-theme of ‘Being in a Different World’ is a combination of experiences underwater related to accounts concerning ‘Overcoming Physical Limitations’. The label for this sub-theme was used by Diane to describe the realisation and thrill related to being able to breathe underwater using SCUBA technology (presented in an excerpt below). Additionally, participants repeatedly described the kinaesthetic awareness they gained from the state of neutral buoyancy; a unique, grace of movement that is not possible on land. “Neutral buoyancy is a state of equilibrium. It occurs when an object in a liquid is weighted so precisely that it neither sinks downwards nor floats upwards. A neutrally
buoyant object hangs suspended in the liquid like a bubble frozen in a block of ice. This balance between floating and sinking is what scuba divers seek to achieve, which brings them as near to a sensation of weightlessness as can be experienced without going into space. This liberation from gravity's tiresome pull frees not just the body, but also the mind" (Ecott 2001:101). This final section presents descriptions that illustrate such experiences, for these are aspects which make place meaningful for the participants in this study.

At the heart of scuba diving is the fact that humans enter an alien environment, where technology keeps them alive. As Lee noted: the fact that we need all this gear to survive to get to see little fish [laughs] very relaxed and in their own environment. And for us, it's such an unnatural environment in a way because we have to put all this stuff on, or we can't stay down there long. (...) and yet, all this other life is just there, you know. Diane reinforces the triumph of technology and human ability in the following account:

There's something really unreal about diving because you're not supposed to be able to breathe underwater. You know? And when you first get in the water, it's almost like your brain is going, 'Hang On! You can't do this!' And you have to think about the fact that you breathe because your brain is going, 'No! No! No! You can't breathe underwater'. So a lot of it is overcoming your kind of physical limitations, you know, which is a nice thing.

A number of other participants also reflected on the processes of being able to breathe and survive underwater as part of the experience. Being underwater is different in many ways as Harry points out:

Breathing underwater is an alien concept to us all. Sound is amplified yet it is not noisy. You feel in some way as though you are in a submarine, yet without the trappings of a boat or submarine. The feel of the water all over, or even a cold flush down the back of the wetsuit, can make you feel alive and tingly.

Asked how he would describe the feeling of diving to someone who had never tried scuba, Ian replied:
Your hearing is very much attenuated, you can hear things underwater, but it tends to be background noise. It's you know, fish chewing on things, the crunching...Generally, it's the fish crunching on things, yeah? You certainly don't hear other divers doing anything. So your hearing's very much attenuated. You're not touching things generally because you're swimming in mid-water. So you haven't got an awful lot of tactile experience. Most of it's visual, yeah? Certainly a lot of feel of the water on your body but your hearing's attenuated, you're not speaking, you're in a quiet world really.

Although Ian's account confirms the importance of visual capacity underwater, in a subtle way he also points out the pleasantness of being in a 'quiet world'; further deliberations of a similar kind are presented in the next chapter. 'Overcoming Physical Limitations' is perhaps most poignantly related to the joy of experiencing neutral buoyancy. As Fiona reflected: There's a sense of weightlessness and there's a sense of freedom. A sense of something you've never done before, completely different from anything you could imagine. For example, Gina affirms that she sometimes dives purely to experience this sensation:

I think I'm diving for that whole feeling of weightlessness and just being in the water. Even if I don't really see anything that good, but haven't been diving for six months, I just feel really happy to be doing it again. And just be underwater...[pauses] and playing with peoples' bubbles and [both laugh] all that kind off messing about.

As depicted in the account, even when the sub-aquatic environment is void of coral or marine life, for a diver there is always an intrinsic experience of place which remains: weightlessness. Various participants expressed this notion. A clear expression of weightlessness within the analysis was the freedom of movement in a three dimensional space. This awareness of movement is expressed by Ben as: I think it's sort of...a feeling of almost weightlessness and you're sort of free to go, you know, sort of forwards and backwards but, side to side but there's also the up and down thing. The novelty and freedom of being able to move in this way was also described by Lee:

I suppose it's when you're diving, there's a three dimension experience, I find. You know, because you can go up and down and sideways, so you're totally free in the water to go any way
really. And look at things from lots of different angles. This wonderful, feeling of the freedom underwater because you can move in all directions.

Other than freedom of movement, being weightless is also described as relaxing for example, Olivia explains:

I really enjoy having that freedom in the water...Just like that...you feel weightless so...it's actually very relaxing and it's a really nice experience in that you are...[pauses] no best way to describe it really. Just that you have this weightlessness so it's very freeing.

Indeed, Olivia has made an important point; it is indeed difficult for a diver to describe to a non-diver how it feels to be weightless. One has to leave the confines of Earth to achieve neutral buoyancy, either underwater or in Space. And for some participants, this was how they made sense of being weightless. For example, Alex spoke of experiencing freedom through being weightless, in terms of being able to live out a childhood dream. He describes night dives as a chance to assume a different role, to pretend to be a spaceman (astronaut):

Its just freedom you know. It's kind of um...And if it's with blokes ... (...) one of the easiest things is, cause most blokes when they were kids, you know, dreamed of being a spaceman kind of thing, you know. And the weightlessness and all that kind of stuff...and it's the closest you can get to it, you know? It's just phenomenal, you know?

In terms of...like with night dives... I don’t do night dives really for any of the marine life or anything like that you see, you know. When I do a night dive, I’ll drop down and you’re not very deep, maybe 15, 20 metres and I’ll turn my torch off, total blackness and just sit there, you know. And just, you get your perfect buoyancy and you just float, you know, and it’s kind of, like, it must be like being in space.

In a later part of her interview, Olivia articulates her feelings of being a scuba diver and compares it to being an astronaut. She expresses a sense of pride and a feeling of accomplishment in travelling to an exclusive place: Like being an astronaut, closest thing to being an astronaut! I’ll never be an astronaut; I’ll never go to the moon. But I don’t want to go to the moon because under the ocean is much prettier. It is!
On a different note, some participants compared the experience of weightlessness to flying and achieving what is impossible on land, as depicted here by Diane:

I think it's like being able to fly. You know when you're a kid and you dream that you can fly or you dream that you can, you know, do things that are impossible – that's how it feels because you're weightless. And also you can look down upon things without having to be on them. You know, so you can swim over a wreck and you can see the sight right away but you don't have to go down there just because it's there. You can look...you can decide where you want to be in 3D. And I don't think there's anything else that really gives you that kind of freedom. It's totally different.

Similarly, Ian also points out how 'flying' underwater is an outcome of neutral buoyancy, and how it provides a three dimensional experience of place:

But part of it is you're in 3 dimension [pauses] and it really is as close as you're ever going to get to personally flying. You're not going to be able to do it in the air really unless you strung underneath a hand-glider, yeah? And that's a bit dodgy...if something goes wrong in diving, you don't generally plummet to the bottom. It's a lot more controlled. But yeah, the three-dimensional aspect is what's just fantastic about it.

In Neil's description of diving through caves and around coral walls, he describes how weightlessness enhances the accessibility of special experiences. In this extract, he describes the feeling of floating underwater as magical and wonderful:

As a photographer you know, you're always looking I suppose for things that are clearly pleasing to the eye. You see these wonderful sort of, veins, the cave walls, the frames of the cave entrances. (...) And there you are, floating you know, weightlessly through these things. You know, not touching walls or roof which again, I suppose you could say is a magical experience. It's something that you can't experience anywhere else. So that feeling weightlessness there I think is very...is accentuated.

I find, that you get these strong sensations that you...you know, you're in an environment where you can do, sort of, do anything... is if you dive a really good steep sheer wall in very clear water. (...) Where you've got 50 metre wall and you get a number of divers who are spread out – you
feel as though you could be sky-diving but without any of the fear of falling. I did it in Crete a few years ago and I've never felt quite... it was wonderful. You know, drop anywhere. I did... some people get agrophobia actually. I've heard of divers getting quite anxious when they can see that far. But no, that didn't bother me [chuckles]

Neutral buoyancy is a technique which all scuba divers learn as part of their training, for example, to float above a reef, without making contact with it, or, to navigate through wrecks. Yet, the prominence of weightlessness in participants' descriptions of their experience of place suggests this freedom of movement is an attractive feature of the marine environment in itself. 'Overcoming Physical Limitations' encompasses key aspects of the experience of place which are linked to being weightless. The following description from Pam affirms such experiences, but weightlessness to a higher level by referring to it as a sensuous experience:

I would say... it's like...[pauses]... it's like complete freedom to me... because you're in the water but you're completely weightless, hopefully! And you can go up, down, sideways and the world's like all around you. You're not kind of rooted to the grounded. Here, you're stuck in the ground and can only move in one direction. But under the water, I think it's just an amazing sense of freedom. And if you're in blue water, I think it's just so beautiful and it's... (...) It just seems so open and so sensuous and I think that's it.

This section has illuminated the experience of being able to breathe underwater and the feeling of weightlessness. These experiences confirm a feeling of triumph by 'Overcoming Physical Limitations' which contribute to the uniqueness of 'Being in a Different World'. More importantly, this sub-theme has highlighted that weightlessness is considered as an intrinsic aspect of the experience of place for the participants in this study. At this point, two central themes of which emerged from the data have been described, interpreted and presented showcasing how participants experience the sub-aquatic environment.

5.4 Conclusion
This chapter has introduced the physical components of the SAM framework. First, 'Sense of Wonderment' referred to participants' descriptions of the rich marine diversity
experienced in place. To delineate these aspects, three sub-themes were introduced: ‘Beauty’; ‘Encounters with Marine Life’ and ‘Adventure’. Each contributed specific aspects of the experience which made place meaningful for the participants. Sensory stimuli within the marine environment, encounters with micro and pelagic species, as well as the opportunity to partake in various forms of diving were unravelled within these three sub-themes. Places were intricately related to the experiences which occurred, whether first time encounters or during return visits. Subsequently, the second central theme was presented: ‘Being in a Different World’ focused on the unique opportunities experienced underwater. These were depicted under two sub-themes: ‘Discovery and Learning’ and ‘Overcoming Physical Limitations’. The sub-aquatic world was described as a natural classroom with abundant opportunities to learn and re-learn about nature. Whereas being able to breathe underwater and to experience weightlessness were pinpointed as important aspects of place experience. All themes were illustrated using accounts or descriptions from the interview transcripts to provide a rich, thick description of place experiences. The following chapter presents the next two central themes within the thematic framework which focus on social aspects of place.
Chapter 6: Interpretations of Sub-Aquatic Meanings II

6.0 Introduction
The previous chapter presented two themes, 'Sense of Wonderment' and 'Being in a Different World' which depicted how place was perceived based on physical aspects of the sub-aquatic environment. This chapter discusses the contribution of social interactions to sub-aquatic meanings where place experiences are intricately connected to the absence and presence of other divers. Place is also depicted as a sanctuary for relaxation. First, place as a haven for 'Splendid Isolation' is described within its sub-themes of 'Remoteness' and 'Serenity'. Secondly, place as a setting for the formation and strengthening of bonds amongst friends and family, or 'Fellowship' described within the sub-themes of 'Sharing the Experience' and 'Strengthening Bonds'. Finally, the key points of this chapter are reiterated to examine how these themes contribute to an understanding of sub-aquatic meanings.

6.1 Social Interactions and Sub-Aquatic Meanings
The literature is very clear on the role of social relationships to an individual's sense of place (Tuan 1977; Relph 1976). Indeed, as presented in Chapter 2, 'human use and experience of the environment' includes both the activities, and social relations which are connected to place. Social interactions within recreation settings have been discussed in terms of positive contributions towards place meanings (Arnould and Price 1993; Bricker and Kerstetter 2002; Brooks et. al. 2006). For example, Bricker and Kerstetter (2002) discussed two aspects of place relationships for white-water recreationists: first, the 'human-social' dimension (the river seen as a 'gathering place' and for 'social enjoyment'); and secondly, the 'human-recreation' dimension (the river as a place for 'challenge-growth'; 'shared experience' with family and friends through teamwork in creating a bond with others; and 'enjoyment').
Sub-aquatic meanings in this study labelled ‘Splendid Isolation’ and ‘Fellowship’ discuss two varying aspects of social relations, as depicted by the moving borderlines in Figure 10. Although themes are located within a ‘social’ border, the contradiction between these two themes was evident: themes related to the absence and presence of other divers and how this affected the experience of place. All social interactions were not necessarily desirable; yet there were also strong indications of camaraderie. In their study of visitors to the Rocky Mountain National Park, Brooks, et. al. suggest that “place relationships involve people, their interactive experiences in places, and the accumulation of place meanings over time” (2006:340). Evidence from this study revealed two different sides to the on-site social interactions that helped participants create and assign meanings towards the sub-aquatic environment, as presented in the narrative accounts next.

6.2 Splendid Isolation
Generally, scuba diving as a recreational activity is synonymous with the terms: dive buddy, dive clubs and dive community suggesting a form of cohesion amongst divers. However, some of the evidence from this study provides an opposing view to cohesion. As will be described, the absence and presence of other divers are intricately woven into
meanings of place. The third central theme within the SAM framework has been labelled 'Splendid Isolation'.

This label is based on interpretations of participants' accounts illustrating the preference for seclusion; the desire for a private world; and, a withdrawal into a 'concealed' location that welcomes only the select few. It infers to the social character of space, or the space people need around themselves to feel comfortable (Van Manen 1997). Specifically, 'splendid' in the phrase refers to the degree of contentment and satisfaction derived from sharing a certain location, with like-minded others. It is not a call for complete solitude, merely a preference to share place with other divers, who have a similar level of dive experience and interests. Deep beneath the surface of the sea, participants ascribed meanings to place based on two fluid and interconnected aspects: 'Remoteness' and 'Serenity' which provide an understanding of how social interactions and experiencing tranquillity contribute to the experience of 'Splendid Isolation'. Each sub-theme is presented next, illustrated with verbatim extracts from the transcripts to delineate the central theme of 'Splendid Isolation'.

6.2.1 Remoteness
In a simple sense, the sub-theme labelled 'Remoteness' refers to geographical distance and the time as well as cost needed to reach a destination. However, on a deeper level 'Remoteness' signifies the absence of a crowd, the temperaments of other divers, which are interlinked with distance and cost. First, participants depicted place in terms of its 'Remoteness' which offered in distance, seclusion, privacy and the desired type of dive experience by default, because cost and distance kept the 'others' away. In general, participants referred negatively to these 'others', both inexperienced divers, as well as crowds of divers. Indeed, descriptions were very much focused on how participants responded to the presence of other divers in their lived space. Additionally, distance was linked to an acceptance of paying a premium, but one that afforded the exclusivity of diving in small groups. 'Remoteness' corresponded to being in a place where they were able to dive in small groups of like-minded divers. 'Remoteness' is perceived to attract the more dedicated and experienced group of divers. It is also linked to the provision of opportunities to dive in unspoilt, untouched marine environments with greater visibility,
and a better chance of viewing pelagic species. Such places afforded participants the chance to experience space as they wished, and for this reason, was linked to enjoyment and satisfaction. Although desirable, 'Remoteness' at a more nuanced level, descriptions were also linked to elements of adventure, risk and safety in travelling to secluded destinations. A number of participants named a favourite or memorable dive destination which are used here as examples of 'Remoteness' and these accounts provide interesting support for this sub-theme.

Diving in small groups and, with experienced divers was evident within the descriptions provided by Ben and Gina. Ben shared details about his only trip to the Coral Sea (Australia) on a liveaboard dive holiday. He considers the Coral Sea his favourite dive destination. In the following extract, Ben illustrates how cost and distance afforded a better dive experience; it made the location more exclusive because it was remote and away from 'inexperienced' divers:

(...) we sailed out fourteen hours from Cairns, so you go straight over the Barrier Reef...because that's sort of old news, you know? You keep going out to the Coral Sea where there you know, it's just, people can't get there, day trippers just can't get there. So, all the inexperienced divers, who have sort of, trashed quite a lot of the Barrier Reef just sort of can't get there...because they are not going to pay to do all that sort of diving. So, it's much, much more empty and it's just sort of untouched.

I think it was the only four day liveaboard, out of Cairns. I think there were a few three day ones, but most of them concentrated on the Barrier Reef rather than going out past. And (...) you paid more and you spent more time on the boat to do that, but you know the diving we got!

Within Ben's description are examples of a desire to seek 'Remoteness' which is perceived to offer seclusion and privacy, as well as an 'untouched' dive location. Ben had only been to the Coral Sea once, but he was looking forward to a few return trips in 2007 as he was moving out to live in Australia. Another participant, Gina, named the Solomon Islands as her favourite dive destination for various reasons. These Pacific islands are the location of where she first trained for her certificate in 1999 under Scuba Schools International (SSI). She admits: 'I learnt there and then I've also dived lots of places
since. No where's really come close to it. So I've ended up going back even though it takes 32 hours to get there, and you know, it's a real expensive place to go and everything else. And last time I went there, there was a coup whilst I was there. But still... it's still really special to me'. Gina's description enforces the importance of the Solomon Islands not only as the location of her dive training, but also for the myriad range of experiences that have occurred during her stays. Gina returns to the Solomon Islands on a yearly basis as she perceives that the 'Remoteness' of her favourite place ensures only serious divers make the journey out there:

I like it because, the first thing it's remote. Okay? I hate diving in big groups you know? Four, six, maximum! I don't like diving in big groups. So, it's quite exclusive, but small. It's quite adventurous, (...) it takes a certain kind of diver to go there, as in they really want, they really want to be diving. So you don't get lots of people who don't know what they're doing, which I don't like!

In another example, Neil chose to describe 'memorable' places instead and yet again, 'Remoteness' resurfaced. His good friend had recommended a dive operator in the Red Sea, where divers camp in the desert and then drive off to dive sites. He explains:

So this sounded really good you know, get away from it all, no hotels, nothing like that, just tents. So we booked one of these holidays and it was great, you know. We got completely away from it all, for about nine days. We could just walk into the water, it was house reef, beautiful coral, very remote. And so, we've kept going back with the same outfit.

Both Gina (a coup) and Neil (camping in the desert) pointed out experiences on the periphery of diving with an element of adventure which enhances their memory of place. Once the experience of place is satisfactory, this serves to entice participants to return to the same location. Moreover, Neil also described the enjoyable experience of diving in small groups in Marsa al-Ahmed, Egypt:

(…) down near a place called Ras Banas which is right in the Southern Red Sea at the beginning of this year. And that was some of the best diving I'd ever had – absolutely terrific! And there were only six people there, when we were there. Three French, one Dutchman and my wife, and 1... [chuckles]
Similarly, Jack also chose to describe a memorable place, in this case, the Coral Sea. Jack perceived distance as being able to attract ‘fairly experienced’ divers and afford the opportunity for diving in peace, away from crowds. Being able to dive away from crowds, amongst experienced divers seemed to enhance his enjoyment of the dive:

I really, really enjoyed Osprey Reef (...) It's in the Coral Sea so you've got almost a day's sailing from the Great Barrier Reef (...) (...) I think, I mean for me, the beauty of it is that if you're there and you pick it right, you're the only boat there. And so you know, you don't have this ... where the sea is swamped by divers going up and down. You tend to get fairly experienced divers as well so that makes life a lot easier. You're not always looking over your shoulder to see if someone's about to drown or bump into you.

A few participants described situations where their dive buddy was a novice or inexperienced and unable to cope underwater. Specifically, they described the effect of this on themselves: feelings of responsibility were evident amongst participants towards fellow divers. In this example, Ethan expresses the sense of responsibility he felt while diving during bad weather:

I think in Thailand, there are some great dive sites but we were a bit unlucky with the weather. Yeah! The visibility wasn't particularly clear. Some of the currents were quite strong, so it turned into quite an effort to dive instead of completely, easy, relaxing diving. Because I was diving with somebody with less experience than myself, I was a little bit more worried with how they were going to cope with the conditions.

Ben depicted his sense of responsibility when diving with an inexperienced buddy again, instead of enjoying his dive; he keeps a watchful eye on his buddy:

I always see myself looking after, you know, the inexperienced buddy until I don't have to cause you know?(...) I mean if somebody, if somebody ascends then they're not going to damage the coral generally because they're not in a hanging environment. But you sort of think, well, if I watch somebody else ascend and get a pneumothorax and I'm out on the boat with them... I think, well I'm a doctor as well so I've got that, sort of that duty. -Ben
'Remoteness' was also interlinked to aspects of 'Beauty' as discussed in the previous chapter. Some participants linked the diversity within the marine environment to the 'Remoteness' of a destination. For example, in these locations participants described place in terms of good visibility, untouched reefs, and the range of marine life encountered. As Ben describes the Coral Sea: *I think it was more just because you were just so isolated, you just had very good visibility, so you could see forty metres, easily.* Whereas Jack depicts Osprey Reef as a remote location (also in the Coral Sea) which gave him the valuable chance to view nature without interference, once again referring to the lack of crowds:

But also, because it's so... isolated, you get a lot of the large pelagics there. And so, they've got a range of grey whaler sharks and a range of the reef sharks there. You see hammerhead sharks coming in, and (...) you get things like the potato cods; you get napoleon wrasse; those sorts of things. So there's a complete range of fish come in. Chances that you're see things like minke whales and stuff like that, although we didn't see them. (...) And you are isolated...chance for seeing nature, as close to nature without man's interference which is really quite important.

As portrayed in the descriptions thus far, the sub-theme of 'Remoteness' refers to participants' responses to the presence of other divers in the experience of place. Favourite or memorable destinations were described as places with qualities of lived space desired by these participants: distance, seclusion and privacy. The 'Splendid Isolation' desired by participants called for diving amongst like-minded or experienced divers, preferably in small groups in order to focus on enjoying place. For these participants, 'Remoteness' results in contentment and satisfaction with place as presented in the above accounts. The next section discusses the second sub-theme which is related to the experience of tranquillity underwater.

6.2.2 Serenity

Amongst the participants in this study, a shared element in their descriptions of place was the sentiment of 'Serenity'. Participants described places in terms of scuba diving and through it the pleasure associated with being underwater. Recreational pursuits are often connected to being able to escape from our daily work routines to relax. Being underwater was depicted as 'therapeutic', 'totally engaging', 'peaceful', but most of all
'relaxing': a sanctuary. The labelling of this sub-theme as 'Serenity' is attributed to Celia (quoted below). 'Serenity' made the experience meaningful: it was a mode of quietness; provided peace of mind, relaxation and a feeling contentment. Time seems to slow down and place transforms into a base for repose by allowing distance from daily life, or a 'Splendid Isolation. The following section illustrates these emotions as expressed by the participants.

In this first example, Celia describes the location of her favourite dive site at Sodhwana Bay. Evident within the description is not only the importance of watching life on the reef, but also the outcome of being underwater:

There's specifically a reef called Stringer which is two small little islands of coral in the middle of the ocean. It's only 13 metres deep but it's a ...a sort of a baby sanctuary. Most of the coral fish have... have swarms of little babies there, so there's just loads and loads of really juvenile fish about, (...).

In a word, serenity! It's just...somewhere where I can be away from everything. (...) I think because there's so much life there, it's just like a completely other world and it just fascinates me. I can sit on the side of a reef and watch the dynamics of a family of triggerfish; and just watch it for hours. (...)

Personally, it is... when I'm underwater, it gives me an opportunity to completely clear my head. Nobody can talk to me, nobody can interrupt me, do anything! And it's just a universe that's so completely removed from reality. Um...it's definitely a release, it's therapeutic I think.

Most participants depicted similar sentiments of 'Serenity'. For example, under the shroud of darkness Ben relates how he perceives night diving as relaxing because it enables him to slow down and concentrate on smaller areas:

Night diving is, I find incredibly relaxing. Because, well...you know, rather than looking around at everything around you as a lot of people do when they're diving during the day...you've got to concentrate on this sort of bit of light which is you know only a foot across on the coral wall. And you just sort of get really close you know and just look at that bit. You can't look over you know
to your left or your right or up or down [makes hand signs] you've just got to look at that bit...and then look at that bit, and then look at that bit.

And that's all you do...and you can, I can spend you know an hour going maybe not ten feet but maybe ten metres along cause you're just intently looking at this sort of little area. And I just think it's very, very relaxing and very, very nice. You're not trying to swim miles and miles to do that. (...) Just relax, take it easy, and just go not very far ...and it's good!

A few participants shared stories of their early days as divers, and pointed out that being relaxed underwater was inextricably connected to focusing on the coral and marine life around them. For example, Fiona explains:

The time when I was thinking a negative thought was when there was nothing there. We were swimming along and there wasn't much life anywhere – just a lot of sand and I guess because there wasn't anything to focus on, the reality of what I was doing suddenly hit me. There I was at 18 metres down and totally dependant on my equipment and my skills to keep myself alive. It seems dramatic but that's what I was thinking.

Additionally, Olivia reminisced about her early diving days, in particular a dive which took place in Mexico on a family holiday, her first dive overseas after gaining certification in the United Kingdom (UK). Her account points out the connection between skills, and being able to benefit from the reefscape:

We did a dive, and about half-way through the dive, I was like, you know what...I can actually do this, I'm not going up and down like a yo-yo. I'm not worried; I'm not stressed; I'm calm and relaxed. I'm actually looking at stuff rather than worrying about my buoyancy, or my air. It suddenly, the penny dropped, that I could do it, and that I could actually start looking at the stuff around me instead of worrying about what I was doing.

We dropped of a reef slightly, and there was a small, sort of ledge, cavern type thing, and there was a massive turtle sat in there. I'd been through a really awful time and I just sat there looking at him, and he was looking at me. And I was like, this is okay actually and I really like it. And I...it suddenly occurred to me that I was in the water, and I had no stress and no worry...
In both these accounts, once participants started focusing on the attributes of the reefscape, the act of diving and the equipment became almost secondary to the experience. This indicates that self-efficacy allows for an enhanced experience of ‘Serenity’, culminating in the therapeutic qualities of the experience. However, as Neil explains, one has to attain a certain level of efficacy to reach this experience:

there is something utterly marvellous about sinking below the surface, seeing a different world there and breathing normally. And being... you know, relaxed! But you got to reach that stage of relaxation. A lot of people take a while to get there, but it’s worth getting to that point where you can just drop in, and feel, sort of, at one with it.

In this next example, Alex depicts feeling more relaxed whilst diving overseas in warmer waters than in the UK. Here, he compares elements of dive equipment and qualities of the marine environment in two destinations. When asked to describe the experience of scuba diving, he replied:

Relaxed I think, definitely relaxed. (...) In the UK, its hard diving: it’s cold; it’s dark; you’ve got dry suits on; you’ve got a lot of weight on, twin-sets, rebreathers, all that kind of stuff. Whereas in the Red Sea, you just feel free because, you know, you’ve got a single tank, 3mm suit, there’s no effort to it, it’s just relaxing, you know...You come up from a dive, you never get tired, never get worn out.

In general, participants were in agreement that although the location of a dive site was significant to their experience, just being underwater using SCUBA was equally enjoyable. Diane, a keen wreck diver, dives on a regular basis around the British Isles and dives overseas regularly. In this extract, her descriptions also referred to the experience of ‘Serenity’. The maxim, ‘leave your worries behind’ rings true as she explains:

And it’s almost like when you’re diving, you forget about, you know, I never worry about work or worry about arguments with people or anything like that. When I’m underwater, that is like totally engaging, that’s everything, just completely fills...fills you up with being in the present moment.
Diane's description illustrates that being underwater is a time when ordinary life is left behind. The diver focuses on what is going on around her right then and there, culminating on a feeling of 'Serenity'. Additionally, Pam chose to illustrate qualities of the reefscape which provide a form of escapism:

The Sea...I don't know...it's just such a mystical environment from the everyday world. I suppose a bit of escapism. You know, you're just....You know I feel when you're underwater you could almost be...you could be on the moon. You know, it's just so different from normal, everyday life. So a complete, get away from everyday life. You know, when you diving or you've had a dive, all your normal everyday problems or whatever are just gone. You don't even think about them; you just ...you know it's a total unwind.

In the above example, Pam highlights the importance of being in a different environment in order to relax and unwind. Kieran describes a before and after scenario, suggesting a change occurs from the moment a diver sinks beneath the waves:

When I jump in [pauses] I'm very relaxed...after...you get on the boat, you're getting all this kit on, it's really hot, you're getting all hot and bothered basically. But as soon as you...from the moment you jump in, it's kind of, all of a sudden, something’s different. And if you like, something just takes over and you just do the dive, instead of thinking about what you're doing before.

I'm conscious of the things I have to do, like check my air or look out for my buddy or do something like swim to a certain point. But I just feel a lot more chilled out. I don't, like swim hard to get anywhere; I just kind of take it, relaxed and slowly, slowly swim around.

The 'Serenity' of being within the marine environment via SCUBA is echoed by Ian who succinctly described: (...) I like to be able to potter around at my own speed. You know, it's a big relaxation. The most relaxing part about diving is the dive itself. All the rest is hard work: lugging cylinders, weight belts, bouncing up and down in boats. And yet, it seemed a small price to pay for being rewarded with a sense of 'Serenity'. Additionally, Jack depicts his experience of scuba diving as: 'It's this wonderful mixture of high-adrenalin and relaxation which sounds really strange'. Jack's depiction of scuba diving
is interconnected to the earlier discussion on ‘Sense of Wonderment’. In this example, he illustrates incidents of high-adrenalin versus relaxation underwater:

(...)

There are times, say when you’ve got to do a drift dive and you’re all kitted up and you’ve got to jump off the back of the boat at the same time, you know. There are times when you’re in a very strong current, or maybe you’re trying to control your nerves if you do a penetration into a wreck, and you think, ‘Oh! Goodness, if this goes wrong...’ So that’s sort of high adrenalin and you know that you can’t let it take over, you know that you ...because you just use your air so quickly.

And the other times of course, you know, you’re sitting there thinking, well actually ...there’s a turtle floating by, you know. I’m at 5 metres, it’s beautifully blue, there’s the sun coming through, you know? You just have to look at the reef, it’s multi-coloured and that is so relaxing, you don’t use any energy, you’re just hovering there. And so, you’ve got these complete contrasts, and I think that probably, for me, any how, sums it up. So there is the relaxation.

His account depicts how the experience of place can be transformed from a high-adrenalin experience to one of ‘Serenity’. Jack’s account succinctly depicts features of the reefscape which contribute to the experience of scuba diving. As noted by Pam (also speaking of tropical diving): it’s the vision, it’s the colour and the activity. Well, it makes me feel quite happy, excited, in a very good mood. It’s very uplifting. In this final account, Alex describes an isolated location as ‘peaceful’ and laments the lack of time he has to be there:

(...) there’s a place, again down South in the Red Sea called Elphinstone where if you get yourself down to about 60 metres, there’s an archway in the reef where you can go right through the reef...

(...) And that’s just incredible...and because you’re quite deep, there’s nobody else down there and it’s just peaceful. 60 metres to 65 metres, something like that...Yeah! Well, it’s kind of deep. But so you don’t get much time down there...

In his account, Alex wishes for more time to continue his peaceful experience deep within the waters. Various modes of experiencing ‘Serenity’ have been described by different participants. Mostly they described place as a relaxing experience, which provided peace of mind and a sense of serenity with their surroundings. Therefore, this
section has presented the theme titled ‘Splendid Isolation’ which encompasses aspects of ‘Remoteness’ as well as ‘Serenity’. Both sub-themes look inward to a state of mind experienced within the reefscape.

6.3 Fellowship

As the chapter moves on to this final central theme, once again meanings revert back to the presence of other divers. Under ‘Fellowship’, sub-aquatic meanings were linked to the positive role of significant others who share the dive experience and consolidate participation in this recreation activity. Participants described their social ties to friends and family with whom they shared a love of the sub-aquatic environment as a recreation setting through scuba diving. I chose the label of ‘Fellowship’ defined in the Oxford Dictionary as “friendliness and companionship based on shared interests”, extending to friends and family. The words ‘shared experiences’, ‘common interests’, ‘dive buddies’, ‘learning’, exemplify much of the narratives within this section. This sense of camaraderie afforded a sense of trust and friendship, as well as the element of safety during the dive experience. ‘Fellowship’ was divisible into two distinct but overlapping sub-themes, one with a focus on activities underwater and the other capturing how relationships to place were grounded in social interactions outside the water: ‘Sharing Experiences’ and ‘Strengthening Bonds’.

6.3.1 Sharing the Experience

‘Sharing the Experience’ is a sub-theme which discusses social interactions related to both friends and family. Participants were asked to describe if there were any people connected to their experience of a favourite place. Specifically, participants were also asked if they had a regular dive buddy to understand if, at all, this aspect affected their experience of the sub-aquatic environment. Dive certification is equivalent to the membership of a worldwide community of scuba divers. Within this community, the dive buddy system is an inbuilt element of scuba diving: divers are paired up for purposes of safety underwater. The dive buddy system has evolved to become an inherent social aspect of diving, with some participants confirming that regular dive buddies enhanced their consumption of the dive experience; and formed the basis of building life-long friendships.
In this study, three participants were married to their favourite dive buddy and described the benefits of having a spouse who dived. For those without a dive buddy, the system offers the flexibility of arriving at a destination and being paired up with another diver. Participants who were active members of dive clubs, and travelled on club trips had the added advantage of being able to pair up with other regulars in the club. Ultimately, it seemed sub-aquatic meanings were linked to ‘Sharing the Experience’ with other divers who had similar interests. These aspects are explored next. One perspective of ‘Sharing the Experience’ is described by Jack who spoke about the other divers he met on the trip to Osprey Reef:

What you tend to do is get kindred spirits as well (...). So the people that you are diving with are kindred spirits; they've got an interest in it. (...) What they're interested in is the same sort of thing as we are, (...), the marine life.

The experience of place is enhanced with the presence of like-minded divers, who Jack poignantly referred to as kindred spirits. Shared interests in the marine environment were also evident when Harry described his fondness for Madagascar as a favourite place. He spoke of meeting some wonderful people, some of whom I keep in contact with today:

I was living out in Madagascar for almost 3 months with a large group of people from all walks of life, who had come to share an ambition to dive in a wondrous place, as part of a voluntary scientific research project - Frontier UK. Because everyone (...), shared a love of the ocean world, it was incredible to both dive in this amazing place, plus also be able to relive it with people who had also experienced it.

A range of descriptions focused specifically on the role of a dive buddy for numerous reasons. Gina who tags dive trips to her business travel and is often without a dive buddy explained that a dive buddy can act as a guide who points out what you might have missed seeing, and also acts as a reference point to the exhilaration you feel:

And it's really nice if you can get the right dive buddy, and there's been a few times, like a few times when I've dived with an instructor or something, and you're just so in tuned with each other and what you're looking at. And they see something and they point it out to you and you had
almost already seen it. You're exactly the same level and everything. (...) So sometimes when I've really got on with the buddy, you just feel really good. Makes you feel really good and really satisfied. You know, you feel like you've got to give the other person a real hug. And then you talk about what you saw, what you didn't see...

On the other hand, Alex spoke about his long term friendship with Rick based on their enthusiasm for scuba diving: He's my dive buddy, out of the sort of best part of 500 dives I've done, I've probably done two thirds of them with him. Their diving history together is based on training and working together, in addition to a mutual interest in technical diving:

Well, he was originally my instructor. (...) I went on a Red Sea trip, (...) So this was about two months after I'd done my Open Water. So this guy Rick, he took me for my Advance and then, because he was working through the dive school I was learning with...I did a lot of my dive mastering for him. He was Instructor. I did all my DM-ing. And that was when we really kind of hit it off I think because I was working with him weekend after weekend. And then that was it, we were both interested in technical stuff so we starting moving in through those routes. It was good.

'DM-ing' is a term used to refer to a person's role as 'Divemaster' who assists the Instructor during training sessions. As Alex described, the close friendship with his dive buddy is based on a history and passion for diving. Participants also highlighted the importance of diving with others who had achieved a similar level of competence. Procuring 'the right dive buddy' as expressed by Gina in an earlier account was imperative to the enjoyment of the dive. Similarly, Ben also described the importance of diving with someone of a comparable level of competence for reasons of safety which make the dive more relaxing. Here, the experience of place was influenced by the competence of the dive buddy:

But, that's why if I can dive with somebody more experienced, I do! So I know I haven't actually got to watch them at all. Yeah! When they're experienced, it's great! I mean, this guy I did the night dive, you know, you just sort of looked at him and just, you can just see; puts his kit together quickly, in the water, yeah! Yeah! Fine! Off we go! And you just know! And there's just that extra relaxed, relaxing thing you know?
In this next example, Neil describes an unfavourable aspect of ‘Sharing the Experience’, with diving with strangers:

And it’s one of the difficulties you have if you’re diving with you know, a stranger. You’re not sure what’s going on. I remember diving once with somebody in Cornwall I’d never dived with. And he seemed a bit odd throughout the dive – it might’ve been that he didn’t want to pose for my pictures! But at the end of it, he was violently sick, you know he came up… And then he told me he’d had a dreadful hangover because he’d been drinking the night before. And I sort of thought, well yeah I thought there was something strange about you [laughs]. But I wish he’d said something before we went in though. I’d never met him before, it was one of those…you go out on a boat and sort of you know…

This account points out how rules and regulations are not adhered to and the elements of risk which some divers are willing to take without consideration of their own safety, and of their dive buddy. Most participants described the preference of diving with a buddy who was competent. Here, Alex describes the comfort level of diving with a known buddy; this extract is also the origin of the label for this sub-theme:

It’s more about, it’s more about, it sounds kinda cheesy but sharing the experience as opposed to being there to rescue somebody...because not wanting to sound funny but a lot of the people I’ve dived with in the UK are totally, totally self sufficient and confident. (...) So you’re kind of not used to having to baby sit people. So therefore, the people you dive with, it’s about sharing the experience rather than being there as a fallback for them, you know…

In this next account, Lee describes another element of scuba diving that enhances the dive experience. He pinpoints ‘comradeship’, visible in the non-competitive aspects of scuba diving, where support and trust create a bond due to the shared experience of place:

There is a nice comradeship about the activity, which is nice. (...) because the activity you do involves the buddying (...) and you have to help each other get kitted up and stuff like that. The comradeship is probably tighter than playing at the tennis club or something. (...) When you’re playing tennis with somebody, you’re on opposite sides of the court. So I would say from that point of view – it’s a nice, from that angle as well – it’s a nice experience.
You’re quickly accepted into the group that you’re diving with, there’s a good feeling of camaraderie when you’re doing it because you have to help each other. And you’re doing the activity together, you have to rely on each other under the water, you know. You may have just met this person but you’re buddied with them, you know trust them and they have to trust you. And then when you come up, there’s that exhilarated feeling, a feeling that you’ve done something together – you’ve got a little bond there. Whatever happens you’ve done that together and that’s nice, you know?

As depicted in Lee’s description, positive aspects of ‘Sharing the Experience’ amongst scuba divers are visible through the act of ‘buddying’. Additionally, being present for safety, or to ‘help’ and to ‘rely’ on each another creates ‘camaraderie’ and a ‘bond’ amongst divers. On the whole, these aspects contribute to ‘Sharing the Experience’ and extend beyond friends and acquaintances, to members of the family. Marie who has been diving since 1998 took up diving at university: *My husband is my regular dive buddy!* *It’s good! It means you’ve got someone you rely on all the time.* Their shared love of diving exemplifies a partnership that enhances their dive experiences and is based on both functional (safety) and affective aspects of diving:

If I went diving without him, I’d be apprehensive about who my dive buddy was because we just know each other’s kit, we know each other’s...the way we dive. I know if I can’t see him next to me, I know that he’ll be behind me, or where to look for him and stuff like that. So from that point of view, it’s really good.

Marie also illustrated the delight in having her husband as a dive buddy, in terms of sharing and learning from each other; grounded in their joint history of learning to dive together:

You come up and you talk, (...) I’m a lot more into watching the small stuff, the ‘life’ and hanging around whereas he’s more into looking at the bigger picture of the stuff and what’s going on. But yeah, definitely, definitely, you’re just kind of seeing things and say ‘ooh! Did you see that, did you see that?’ Or in my case, I usually say, ‘What on Earth was on that bit on the boat? And he’ll say, ‘it was this’ [chuckles].
I think it's because we learnt together and you kind of see... when you see people learning, and doing all the drills and practising... And just that (...) we've been together ten years or whatever and you know someone well enough that you know what their instincts are.

Neil depicted similar sentiments about his regular dive buddy, his wife. He described the joy of being able to share the sub-aquatic experience with his wife, and the ability to understand someone’s moves instinctively which prove to be a useful safety mechanism:

So, if I want to dive with anybody, I’d prefer her. It's lovely... it's really nice that we've got something to share you know – I think that’s the thing about it. And I think, the thing about, because you talk about the dive afterwards... I find the only problem with diving is you cannot talk underwater because I'm a great talker anyway! (...

But underwater, you can’t say, ‘well, I wonder what that is’, ‘move there’, or ‘do that’ or ‘go over there’ or ‘let’s look at this’. It's all... has to be done by hand waving. So in a way, if you dive with somebody very regularly, you’re much more likely to develop a rapport and understand what the other person might be getting at. And if there’s a problem, you’re more likely to understand it.

In general, shared conversations were a feature mentioned by all participants as a definitive aspect of the enjoyment of the experience which created a bond amongst divers. Lee attributes the importance of these conversations in terms of having shared a ‘special activity’:

Everyone talks a lot when you come up, it doesn't matter who you’ve dived with, everyone talks quite animatedly. (...) With diving, (...) partly it's that you've done this special activity together, you know. You ‘buddy’ with somebody, so essentially you've had a bit of risk with them; you've seen some things that other people hadn't seen. You go back up on the boat and everyone starts to talk and still quite exhilarated. And then you go off and do a second dive, you know, you’re more relaxed and you come up and you feel good again.

Or quite simple, as Kieran explains his feelings at the end of a dive:

I just feel really happy and like, we talk about what we saw and ‘I didn’t see this last time’ and have a joke with some people who completely missed the wreck or... just didn't see what we saw and someone else saw a conger eel and you didn’t. It’s just... with a group of friends... we’ll just chat about it and have a laugh about what we just did.
Sharing experiences through conversations is an intrinsic aspect of the social interaction amongst divers. Jack agreed with this aspect of the community spirit: *I think...divers do this a lot, but you've got your shared experiences and so what they do...is what we're doing now, is that you talk about where you've been and what you've done. You talk about the good dives, you talk about the bad dives.* ‘Fellowship’ is experienced in terms of having a like-minded group of individuals who understand the pleasures and perils of diving into the sub-aquatic environment. ‘Fellowship’ extends to sharing knowledge about the more functional aspects of scuba diving as Jack notes:

You talk about equipment, and kit, and cameras, and stuff like that...So, you get tips about, you know, if you've got your shutter on this speed or whatever...or if you were doing that, or if you want to see this, then you know, go there. What you've got is a very supporting group that have common interests: So, I think you’re part of that as well.

In this next example, Ian describes a dive holiday which was exemplary due to the potential to learn about underwater photography from other divers in the group contributing to self-development:

When I went to Sulawesi, I went on an organised party, which was organised by the travel agent, it was an escorted school photography tour: it was all photographers. And as chance would have it, I knew about fifty percent of them before I left anyway. I got to know them at the British Society of Underwater Photographers in London and things like that. So that was a lot easier. I'd met the guy who was leading it before, and so that'd help. If you're in a 'like' group...I've done a couple of these photo tours before. And they work well, everyone's got a common interest, you know? You're learning from each other all the time, it's quite a nice way of doing it. - Ian

Sharing experiences through conversations forms a base from within which the sense of community or ‘Fellowship’ becomes linked to the meanings of place. It also refers to elements of knowledge, belongingness and the formation of long term friendships. This section has presented descriptions related to the sub-theme of ‘Sharing the Experience’. The final sub-theme is delineated next.
6.3.2 Strengthening Bonds

Based on interpretations from the data, the central theme of 'Fellowship' was extended to include the sub-theme of 'Strengthening Bonds'. This sub-theme illustrates how relationships to place are grounded in social interactions with significant others. I chose the term 'Strengthening Bonds' as through the shared activity of scuba diving and experiencing the reefscape, relationships became stronger providing a special sense of 'Fellowship', specifically amongst members of the same family and also friends. Elements of responsibility while diving, between father and son, or father and daughter also surfaced within the descriptions and elucidate a nuanced perspective on 'Strengthening Bonds'.

This sub-theme was explicit in the descriptions provided by two participants, Jack and Lee, both fathers who had encouraged their children to take up scuba diving. Jack's wife is a diver as well, whereas Lee's wife has tried snorkelling but is not confident with being in the water, and does not wish to attempt scuba diving. Both participants asserted how dive holidays played an important role in shaping their family's ongoing relationship with each other and with the marine world.

Jack, his wife and two sons were used to summer holidays consisting of hiking and being in the outdoors. However, their family holidays together changed direction to dive holidays for specific reasons which succeeded in strengthening the bonds between parents and their teenage sons. Jack explains:

We'd decided we'd go to Cairns to learn to dive, and then to go out on a dive boat on the Great Barrier Reef. The other thing, the other reason ... you have to know this, is that our kids had got to the age, (...) they were 15 and 12. They'd got to the age where they were bored with family holidays.

(...) we sat down and we thought, well, what could we do, you know, as a family that would address all of this? This is where diving came in, so the idea that it's actually something they can participate in. It's actually not too strenuous in a way, it's challenging...mentally challenging...you're studying to get your various badges you've got to think of what you're doing.
There's a little bit of adrenalin for them as well. They agreed that this would be a really good way to spend a holiday. It was a last attempt to keep our family holidays together [smiles]

The other interesting thing is the boys, you know, now my lads are 17 and 14. But they're still interested in family holidays, they still want to come diving, you know. The point in a way is, that that was what our hope was, that diving would do this. But suddenly, yes it has!

On the other hand, Lee first introduced his children to the marine environment through snorkelling in Florida in 1996 when they were aged seven and five. They had also tried snuba diving (where air lines link the diver to the air tanks on the raft at the surface) and had an enjoyable time. This culminated in a promise to train for scuba diving once the children were old enough. Eventually, Lee took up diving whilst he was working in Cape Town, South Africa in 2003. Subsequently, that same year on a family holiday to the Bahamas, his children gained their Open Water certificates. Lee also described scuba diving as a family activity: I'm really glad they learnt...I mean it was something they wanted to do...they're actually 17 and 15 now. In the following poignant description, a father explains how sharing the experience of scuba diving has served to strengthen bonds with his children:

And it's great when you're underneath...there's a nice...it's something you do together you know? And...the kids getting older - they still like to do it. So it's a nice kind of family activity; it's exciting; it's a little bit different you know, each summer time, we've had great fun with that...

I like doing things with my kids! Over the years, it's nice as your relationships change in the family... it's nice to feel that you can do things with them that are still relevant. You know, when you can't push them on the swings anymore, but they don't want to do that anyway. So we go diving together or you know, go hiking together or whatever, but things that they like to do as well. So from that point of view, it's a nice family activity.

Participants also described the element of responsibility which they experienced when sharing this activity with their children, specifically. Here it seemed regardless of the competence of the dive buddy, when diving involves a son or a daughter, familial duties come into the equation. In these next descriptions, aspects related to 'worry', ‘keeping an
eye on your buddy' and 'protective' serve to highlight the strengthening of family bonds. Jack illustrates the nature of diving with his younger son:

When I'm diving with the younger one, it's you know, almost nervous and very protective and, he's a perfectly competent diver. Sometimes when they buddy each other and I buddy my wife, I'm actually more worried about you know, having two teenage boys and so in a way, you're always keeping an eye on them rather than keeping an eye on your buddy. So there is that, and I mean you do get slightly anxious, particularly if you're buddying someone who's a relation.

Neil described how his love for photography is sometimes interrupted by his affection and care for his daughter:

...And people go diving for different reasons. I think my photography keeps me going – I tend to not... the trouble is at the moment is that if I'm with... I've been diving with my daughter recently, keeping an eye on her. So I tend to go down and not take one picture because I'm too busy looking at the other diver [laughs]

Similarly, Lee spoke about pairing up as dive buddy to his daughter, and the sense of responsibility he feels is unavoidable when diving with his children:

I was the buddy to my daughter when we dived in the Caribbean, and somebody else... one of the instructor's was the buddy to my son on other dives. Yeah, that was nice, it was fun [pauses]... Yeah, well, I suppose I felt quite protective of them, particularly my daughter you know, because she's obviously a lot smaller. I think she was 14 when we went last time. (...) So yeah, slight concern but yeah ... I suppose I have the attitude that this is such a fantastic activity [laughs] and they love it, so you know, as long as we can make it safe, within reasonable limits, that's fine you know. But I find, obviously as a father – protective eye on what's going on – I don't swim off on my own, and leave them on their own, I keep a pretty close eye on what's going on.

Membership of dive clubs and the sense of camaraderie experienced also served to 'Strengthen Bonds'. Here, Marie describes the social side of being active divers:

And I think the other thing about going there is also the experience of being with a club because that was a club trip. So that's a big part of it, you know, you socialise with them in the evenings,
we took turns to do the cooking, and there's a lot more camaraderie (...) With the club, it's very
different, you're up in the evening, you're having a good laugh, quite a bit of alcohol involved as
well usually. Yeah! It's really good fun! -Marie

Similarly, also highlighting the social aspects of diving, Kieran describes his weekends
sojourns to the South Coast of England with his dive club. Here he explains a typical dive
trip to Weymouth:

I'll drive down there normally, like on a Friday night, after work, we'd drive straight down there,
we're into camping at the moment so we'll all pitch up tents, have all my mates down there, we're
all in a big tent. My friend's got that houses all of us. (...) So we all go down there, we get there,
we put the tent up and then we walk into town, have a few drinks and some food. Then in the
morning, we get up really early, and get down to the pier where the boats going to come...Old Harbour it's called and lug all our kit onto the boat – we go and hire some powerboats, they've got
some really nice powerboats down there. I've been really active in the dive club, so for a
year...the first year, I was just, sort of, going on every single trip I could [laughs].

The descriptions above have mapped out various nuances in relation to the influence of
interpersonal relationships on the experience of scuba diving and place. Two sub-themes
have delineated an understanding of how 'Fellowship' is experienced in relation to shared
experiences in place, which serve to strengthen bonds. With that, the presentation of the
SAM framework or, the narrative accounts of how participants experienced place draws
to an end. However, a number of unique themes also emerged from the data, and the
following section introduces these.

6.4 Unique Themes

Within a phenomenological study, it is important to note themes that are unique to a
single interview or a minority of the interviews; these serve as important counterpoints to
the general theme (Hycner 1999). In line with the need to enhance transparency of
findings and interpretations, this section presents four unique themes: 'Observing Other
Divers'; 'The Challenge of Certification'; 'Underwater Photography'; and 'Dive Atlas Beckons'. These unique themes were evident only within a minority of the interview
transcripts, and as such, do not contribute to the thematic framework. However, these
themes do provide an insight into aspects of place experience, and are useful in identifying areas of research for future studies on scuba divers.

6.4.1 Observing Other Divers

Through a few interviews, it emerged that coral and fish were not the only life forms being experienced underwater. Participants inadvertently ended up 'experiencing' other divers, normally in a disapproving manner. Whilst underwater, it was interesting to note the thoughts and actions that emerged due to participants' observations of other divers. Although on holiday himself, Ben voluntarily acts in a responsible manner to assist other divers who have weaker skills:

Most of the, most dive holidays I go on, I sort of help somebody by, normally people put too much air in their BC and then ascent and don't dump air. You see them going up and up and up. So you end up taking extra weight with you. You know, I take extra weight just to sort of, pop it in and dumping, dumping people's air out of their BC's and stuff and, but you know, I'm just there as another diver you know? Sometimes I think, well actually should I take my Divemaster card or just take my Open water card or my Advanced card, and just dive on that and then they will never know this sort of thing.

Towards the end of the account, Ben expresses a preference to be 'just another diver', but the desire to be helpful is overwhelming. On the other hand, Marie observes other divers in terms of how their unfavourable behaviour underwater:

If people are too close, people who don't have a lot of respect underwater either for other divers or for what their looking at, corals or things like that... (...) So, people who are kind of teasing wild life, or you know, not being careful with their buoyancy and wrecking coral and things like that. People who kick up the rubbish and then, you know, kick up all the silt and then you're behind them and you can't see anything. That sort of thing!

Based on the descriptions above, for a few participants, the experience of place is tied to such encounters with other divers. Their own enjoyment of place is hampered by focusing on other divers. However, only a few participants expressed such experiences. As will be discussed in the following chapter, a more prominent focus of place experience is to be away or apart from other divers.

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6.4.2 The Challenge of Certification

Other than learning about the marine world, participants also pinpointed a sense of accomplishment from improving their dive skills through training. An intrinsic element of scuba diving is certification, where divers can continue to train for different forms of specialities to improve their skills and competence. These are not compulsory and in general, only the more avid divers take up such courses. For this group of avid divers, skills are a mark of efficacy that enhances their self-competence and personal growth. Over time and experience, knowledge through first hand experience about the marine environment also increases and enhances subsequent dives. For example, Jack derives great pleasure from his skills training which he views as part and parcel of being a scuba diver:

The other thing is it's a challenge. You know, that's what I've always tried to do is that you know, we got our Open Water certificate, then we did our Advanced, then we did our Rescue Diver, you know. And at some stage, what I want to do is...we did Nitrox, you know. Then at some stage what I want to do is as I said, is to do some Technical Diving. And I actually like the studying, I like the academic...the science behind it, you know and those sorts of things; and I find that also quite a challenge.

This sentiment is echoed by Lee who also embraces the challenges of certification, logging dives and learning which he perceives contribute to the overall experience of diving:

I think as well, the thing of getting certified, when you're doing the diving and the fact that you log dives, it adds a...makes it slightly more serious, something more...like you do an activity that's...you're not just lying on the beach. You're doing something that, you know, you need a little bit of skill and training to do. And each time you do it, you know, you get a little bit better, you learn something more.

To some extent, this unique theme refers to part of the experience of place, as most of the skills training occurs underwater. Meeting and exceeding the challenge of certification is intrinsic to these participants' sense of achievement. This aspect enhances their appreciation of both scuba diving, and through it, all that the sub aquatic world has on offer.
6.4.3 Underwater Photography

Two participants described the sense of accomplishment experienced by developing peripheral skills related to scuba diving, specifically underwater photography. In this example, Neil describes his foray into underwater photography which he perceives as an added achievement of engaging with the marine environment:

Then I got interested in underwater photography, in about 1982. I had a very old Nikonos underwater camera I bought from somebody. And I didn’t take, I didn’t get very good pictures with it. And then I got a flashgun with it which fired flash bulbs. And then gradually, I got a better one, and then a better one, and a better one, and the photographs started to improve. And I went over to digital underwater photography in about 2 or 3 years ago. But I’m quite proud because this picture is one of mine, [showing me the book] on the dive guide to Dorset and a number of the other photos inside as well. So I reckon I reached a reasonable degree of competence with it. That’s one of my daughters there [points to book].

Underwater photography was described as a mode of engaging with the reefscape: ‘seeing’ place through the lenses of a camera. For Ian, underwater photography is an important factor when planning his dive holidays: As you go abroad, more and more on holiday, you’re not just going for the diving, certainly at my level of experience, you know? So, I’m looking for photography! In this account, Ian reveals his aspirations:

And as a photographer, you’d be looking for something a little bit new ...something slightly different okay? To that end, there are a number of places which I would quite like to go, simply because of the creatures and the marine life that you can see there, yup? (...) I’d be looking for particular sea creatures which I either haven’t seen before or I haven’t seen in numbers. So there’s places like Cocos Island which has all schools of hammerheads; there’s the Galapagos with its own unique marine life there. (...)

Apart from that, there’s the vast variety of small colourful marine creatures...certainly in the Indonesia area, yup? Moving from basically I guess, Thailand through Borneo through Sulawesi ...And then the Indonesian archipelago to sort of Australia, yeah? It’s got very rich biodiversity there, especially in some of the more remote places. So that’s the sort of area I’d go for, it’s picking a subject, knowing where you want to photograph and going to the place to do it. As a photographer, you’ve got to have in your mind’s eye, the sort of photograph that you want.
As Ian describes, the experience of place is made meaningful by the opportunity to photograph and add to his portfolio of photos on underwater marine life or wrecks. Underwater photography contributes to Ian’s passion for scuba diving.

6.4.4 Dive Atlas Beckons
At times during the interview, participants were normally asked if they would like to return again to their favourite destination. Some interesting responses were received which are grouped under the theme ‘Dive Atlas Beckons’. In the first example, Alex ponders over his experiences in the Red Sea:

If I had a lot more time, I probably wouldn’t go back to the Red Sea. I have a real strong affinity with the Red Sea because I’ve had some real incredible diving there. But I’m very aware that’s you know, that a lot of that’s self-inflicted and self-fulfilling because I go there so much, I’m bound to see some good things there. If I had more time, I’d want to explore other areas you know, other places.

These sentiments were shared by Jack about Osprey Reef in the Coral Sea:

I’d like to go back there again…(...) I mean I’ve always asked myself wouldn’t it be nice to be one of these researchers that goes out there on a weekly basis, you know and dive this… I think it would loose its magic in that respect. So, yeah, it’s beautiful, I’d like to go back there again, but actually when you look at you know, things like the diving atlas of the world, there are many other places to go and have a look at so…

‘Dive Atlas Beckons’ refers to the lack of attachment towards any one place due to the desire to visit as many dive destinations as possible. In a way, this signifies how each place experience is unique, and has something different on offer.

Overall, the unique themes provide a glimpse into aspects which also contribute to the experience of Place. A few participants end up observing other divers, whereas others relish the challenge of scuba diving. Some portrayed their achievement in underwater photography and the desire to experience more of the dive atlas. These themes provide counterpoints to the themes in the framework; but emerged within a limited number of
the interviews and do not contribute to the SAM framework. These unique themes can be viewed as areas of future research on scuba divers.

6.5 Enhancing Credibility: Member Check Results

In this section, I will discuss the results of credibility checks for the SAM framework. In order to enhance the credibility and trustworthiness of my findings, a member check exercise was conducted: a discussion on the role of member checks and the conduct of this exercise has been specified in Chapter 4 (specifically Sections 4.1.3 and 4.2.3). Seeking feedback from the participants from whom the data was originally gleaned is one mode of enhancing the credibility (‘internal validity’) of the SAM framework. Additionally, this member check exercise served to enhance the richness and thickness of the data collected, some of which provided refinements to the understanding of the SAM framework. Feedback was procured in two ways: five participants were interviewed for their views, and six others sent written feedback via email in response to receiving their ‘member check report’.

First, this discussion examines the basic credibility of the SAM framework. In effect, participants were asked to comment on their own themes, other central themes and their unique themes. All eleven participants referred to the summary of findings in the report as consistent and resonating with their experience of the sub-aquatic environment. This member check exercise showed that participants understood and agreed with the central and sub-themes which I had identified and interpreted. Participants confirmed that the findings adequately described their experience of place, as is discernible through the following selection of quotes:

“This was excellent - I think you have captured the themes really well - I love the descriptors you have put to each of the themes” - Gina (via email)

“I thought that that was quite well...summarised because those are probably the main things you get with dives, so I thought that did it quite well". - Harry
"So, just in terms of your themes, I think you’ve done very well to pull those ones out. Yeah! I think that’s good, they certainly resonated with me". - Jack

"Thanks for the attachments, which I think look really interesting, and the themes certainly rang true with my experience" – Lee (via email)

"Yes! Yes! I’ve been through it... [refers to SAM diagram] I think that does go under that sort of heading, definitely" - Pam

"It definitely captured what I was talking about...my experiences." - Marie

"I think you have captured the essence of what I wanted to communicate very adequately" – Neil (via email)

"I had a quick look through the report and it looked good. I definitely agree” – Ben (via email)

This positive response contributes the credibility of my findings, at idiographic level, as well as at inductive level, or the SAM framework. I did not receive any form of disagreement with regards to the themes during this member check exercise. These interviews also presented an opportunity to glean additional data which was also analysed using IPA. Next, I present some additional narrative accounts which illustrate three key aspects: participants in agreement with their own themes, in agreement with other themes, and their views on unique themes. Interviews were based around three questions (Section 4.2.3.3) and participants shared a few new stories, but also, there was a notably reference to stories shared in their first interviews, confirming the significance of those favourite memories.

6.5.1 Agreement with Own Themes
This section presents a selection of the responses procured during these second interviews where participants were in agreement with the assignment of their interview data to specific labels, or themes. The inclusion of first central theme, ‘Sense of Wonderment’ received a positive response. In this first example, Pam confirms the role of ‘Beauty’ as a theme:
Absolutely! Beauty, is sort of ...99% of it for me I think! (...) I mean, to me, it is one of the best things I do, you know, in my hobbies as it were...that is possibly my favourite thing. (...) I mean I only dive to go and see all the beautiful things that are down there. [laughs]-Pam

Fiona reaffirms the role of ‘Beauty’ in enhancing her experiences, as she described her latest dive holiday to St. Lucia:

And that was the most beautiful diving: crystal clear water, beautiful colours and lots of different types of coral. Very nice coloured, well-protected, (...) lots of sea life too. Sort of sea-snakes, lobsters, rays...you know, a whole range of stuff. - Fiona

Additionally, the presence of marine diversity reinforced the experience of ‘Beauty’ which again, was described as a privilege:

Whale-sharks, manta-rays, just absolutely amazing! And even just the dives at the beginning, they’d say, ‘oh! this is just a try-out dive; it’s quite a boring one just to see if you know what you’re doing’. You go down there, and you can’t see the rocks or the coral for the number of fish that are just swimming around. Amazing! Just absolutely stunning! I just remember, it’s another world down there and you get to be a part of it for forty minutes, fifty minutes or whatever. So, ‘Beauty’ is definitely a big part of it! - Marie

In terms of ‘Encounters with Marine Life’, data reinforced the clear demarcation of the importance of encounter with pelagic species versus the smaller creatures notably associated with muck-diving (for example, nudibranches and seahorses):

I was just looking at some of your themes here, about people saying about swimming with dolphins, or swimming with manta rays...I mean, personally, yeah, it’s nice to see them, it’s nice to see sharks, but actually, I’m much more interested in some of the smaller [smiles] creatures. I find those are the fascinating ones. - Jack

The opportunity to ‘interact’ with marine life, or to observe them up close was pinpointed, yet again, to be essential to the sub-aquatic experience. Cuttlefish are akin to chameleons as these creatures have the ability to change their skin colour, which flashes a
changing pattern both as communication to other cuttlefish and as a camouflage from predators. Here, Fiona describes being engrossed in watching a cuttlefish change its colours:

I was surprised to see that even though we had gone much further on this dive than before... I had plenty of air left, so we paid a visit to a few of our favourite parts before making our way back. This was when I spotted my little cuttlefish! I don't need to tell anyone how great these fellas are...[smiles] I got really close and he backed and forthed before me, changing colour and mood. It's times like that you really do need to watch your air! [laughs] But it's just things like that that make you go - "that's why I dive". - Fiona

Participants agreed with the inclusion of 'Beauty' as one aspect of the 'Sense of Wonderment' experienced underwater, as Harry explains:

You can go in any direction and witness something amazing! A spotted stingray, hiding under a rock, a lionfish and Spanish dancers dancing in the refracted sunlight...colourful nudibranches crawling through the coral gardens, plus a vast array of coral reef fish of all shapes, sizes, colours and personalities. (...) Close encounters with marine life is also something you just can't appreciate in the same way from your armchair [pauses]... the colours, the motion... (...) the shapes, all add to this sense of being with something of fantasy. - Harry

The sub-theme of 'Adventure' also received agreement with a clearer link to the idea of 'Remoteness' as explained by Pam:

'Adventure' is definitely there because normally when you're diving, you're in a...a rather special place. It's not often... you're sort of in the middle of a city and you go diving. You normally have to go somewhere slightly remote, to go diving. So, there's definitely that! (...) But most places like Sodhwana, and the Great Barrier Reef, the Red Sea - you're away from the...kind of, the trappings of civilization mostly. - Pam

The second central theme, 'Being in a Different World' is illuminated by two sub-themes, the first of which is 'Discovery and Learning'. Feedback on this theme was also encouraging and supportive:
I mean because it is a different world, it's not... really our world, is it? Because we can't actually survive down there without all our mountains of equipment. (...) being in the water is just another dimension... well, literally another dimension. (...) you do see things that are completely different! I mean on land, it's pretty ... you know that’s a plant, that’s a bird, but under the water you know [pause] a thing could be anything, you know? [/laughs] - Pam

In the next example, Jack describes his amazement and delight in witnessing the symbiotic elements of the marine ecosystem in action:

actually seeing that, sort of ... marine life interacting – that’s the other thing. So, you see, a gobi and a shrimp, and I think, those are absolutely fascinating. So you’ve actually got a bit of life going on there and it’s not that you’ve just got this huge pelagic swimming by, but there’s something really going on there. I mean, even down to things like a clownfish or whatever, an anemone fish, you know, going in and out of their anemone, I mean, you’ve got a real ecosystem and one of the beauty is that you can see that as well. - Jack

Whereas Pam reaffirms the importance of the learning which occurs, enabling the accumulation of special experiences:

(... ) in the Mediterranean, I saw a similar thing but on a baby scale because there was a school of little fish and there were little predators which I think were tuna (...) And these little tuna were hunting these fish, this school of baby fish and that was amazing. This must be what it’s like to be among fish! Having dived longer and you kind of learn, you can like sit and wait, stuff comes to you, you don’t have to keep going to look for it. You don’t have to rush around. - Pam

An interesting sub-theme related mainly to being weightless underwater was labelled ‘Overcoming Physical Limitations’. During this member check exercise, feedback showed that participants agreed with this theme based on their own interview data, and once again, linked it to the sense of freedom of movement which is experienced, as reiterated by Harry and Pam here:

A sense of freedom, plus an unnatural feeling of being able to breathe and float underwater. Like you’re floating in mid-air but underwater... and you can control the way you move up and down. It’s kind of like flying I suppose. - Harry
Because here on land, you can only ... you're on the ground, you're rooted, you're here! Whereas under the water, you can go up, you can go down, you can go sideways, you can look at a thing upside down. If it goes under a rock, you can just turn over and look underneath. Whereas here something goes under a rock, you've got to pick the rock up if you can, or lie on your stomach ... face on the ground. Whereas there... it's like complete freedom really – that's how I feel underwater really! - Pam

The third central theme ‘Splendid Isolation’ is composed of ‘Remoteness’ and ‘Serenity’ which also received positive feedback. As participants described future dive trips, their focus on isolated, far away dive destinations, to enhance the prospects of experiencing ‘Remoteness’ became evident:

I am off to Micronesia in September to dive around Palau. I’m going on a liveaboard tour so should be excellent! It’s been a longstanding dream of mine, so it will be mind blowing. - Harry

We’ve booked at Christmas to go and dive at Djibouti. (...) I mean it’s fabulous diving, apparently. Everything’s 3 or 4 degrees higher... temperature wise... higher, than up in the North of the Red Sea. So they say, the fish are bigger, the fish are more colourful, you know, the reefs are better, they’re untouched, you’ve got all of that. But, the quid pro quo is you know, you’ve got a heck of a journey to go there. - Jack

In this next example, Pam agrees with the sub-theme ‘Serenity’ linking it to the potential to encounter ‘something amazing’:

‘Serenity’ is part of it... I mean, even here in the UK, even though the environment isn’t that exciting or beautiful, it’s still... does take your mind off, you know, whatever’s gone before, really because you’re just there, and ... there’s always a sense of anticipation. You always think ‘well, I might just see something amazing’. (...) like I said before, you normally have to go somewhere that is away. And I mean, that is lovely – it’s lovely being away from everything, peace and quiet... yeah, I mean that is definitely part of it. - Pam

Through this member check exercise, it became apparent that the inclusion of the fourth theme of ‘Fellowship’ which resonated with the participants, played a dual role: underwater and on land. This sense of camaraderie was pinpointed as an important
aspect which reinforced the underwater experience. Here, Pam highlights the dual nature of ‘Sharing the Experience’ underwater, and reliving it later on land through shared conversations aimed not only at imparting knowledge but also to consolidate memories. In particular, her description shows a link to the role of the dive buddy in enhancing what can be experienced underwater:

If you experience the underwater, normally when you come up, you talk about it, obviously. And that, kind of, I suppose reinforces the experience down under because down there, you’re not always sure that somebody’s seen what you’ve shown them. Because...especially, like a new diver and there’s an octopus on a rock, they can’t actually see what you’re showing them, particularly that kind of thing. So...no, I think it’s lovely. I think if I dived on my own, it would take away some of it...because it is lovely to share it, and then to come up and talk about it, and then years later to say, ‘remember that dive...what happened’- yeah, that is a big part of it. - Pam

An interesting nuance which came through was that ‘Fellowship’ out of the water played an important role in enhancing the sub-aquatic experience. In this next example, Jack describes a family holiday on a liveaboard, to a remote destination with good diving that was blemished by a group of inconsiderate divers on board:

a group of divers who wanted to party, wanted to be up all night, and were pretty unpleasant about it if anybody said, “hold on a moment, it’s 3 o’clock in the morning and we’re trying to get some sleep”. And we found five days on a boat, with people like that, even though the diving was good, actually, you suddenly realised, you’re cooped up, and that wasn’t much fun. It’s just that, there’s this sense of yes, you’re going to somewhere remote, yes, you’re paying quite a lot to go and see this, and there’s all the wonderment, but actually, it still relies on the people that you do diving with and they can make it...they can make it a really good holiday.

They can make it neutral, you know, you don’t interact much. Or they can make it a thoroughly miserable experience. You know, even down to when you’re kitting up in the morning on the dive deck. If you’re got someone that you’ve had a row with three hours beforehand because they wouldn’t let you sleep, and they’re massively hungover... I mean, this is absolutely true – and they won’t talk to you, or they’re being rude, or whatever, you know that can ruin it as well. So you realize that actually, there are a lot of things that go together to make it...so that really, in a way comes to the ‘Fellowship’ as well, which I thought was a good theme. - Jack
The first part of the interview set out to ask participants how well the themes fit their experiences of the sub-aquatic environment as discussed at the interview, and how well themes fit the experience of sub-aquatic environment in general. The task was to ascertain whether I had successfully interpreted their experiences as set out using the SAM framework, as depicted in their 'directory'. Participants were in agreement that 'Sense of Wonderment', 'Being in a Different World', 'Splendid Isolation', 'Fellowship' and all the respective sub-themes resonated with their experiences and provides support for my interpretations.

6.5.2 Agreement with other Themes
The second key question within this exercise was to ascertain if the central themes that were not found in a participant's interview still resonated with their own experiences. The response showed that participants supported those themes which were not captured from their own interviews, attributing the reason to a difference in experience and personality. For example, Jack discusses 'Adventure' as something he used to identify with:

The 'Adventure' thing, (...) I can identify it with people that I've dived with, and I think, if you talked to me, maybe, three or four years ago, I would have said, "yeah, that's great". But...maybe I'm getting older, and a bit spooked out by these things [laughs] (...) I mean I think you're absolutely right in terms of 'Adventure'. Having said that, things like diving at dawn, and the light and things like that, you can get your 'Adventure' in different ways there. So I thought that was right. -Jack

In this next example, Marie describes how the feeling of 'Overcoming Physical Limitations', with reference to being weightless becomes more fleeting than obvious with every additional dive:

When you haven't dived for a while, and you first go in [pauses], you think about it, and say, 'Wow! I've forgotten how good this feels', but by the end of the day, or season, it doesn't come up anymore. (...) So when you first go in for a dive... and I'll probably feel it the first time I go in now, you just...the gear is so heavy normally, and when you get into the water, you feel relieved. But by the end of it... you forget about it after a while. - Marie
Another participant who had not discussed this in the first interview was Jack who agreed his level of experience meant he no longer thought of any physical limitations. However, he could understand the significance of this theme and admits that for some divers, the experience of being weightless was a continuous occurrence:

I just think back to doing my pool bits on the PADI Open Water Dive, after about two minutes of having my head underwater with the regulator in, that was fine. [...] You became a fish [smiles] Yeah! And you don’t think about it! And so you know, you jump off the back of a boat – so I don’t see it as a physical limitation. But I can understand that... [...] my wife, who was an international swimmer, ... she still needs to have a reality check. Every time she goes diving, even though she’s at home in the water, when she puts her head under and has to breathe through a regulator. So I can see how this works... -Jack

The central theme ‘Splendid Isolation’ and it’s sub-themes of ‘Remoteness’ and ‘Serenity’ were not found in the analysis of Marie’s transcript. When asked to comment on the inclusion of these themes within the SAM framework, she referred to her own personality, pointing out a personal preference, that for her the social aspects of scuba diving, in terms of conversations and meeting other people are of primary importance:

I think that’s about me...I’m somebody who needs to be with other people, needs to be chatting, and talking, and whatever. So for me, the isolation isn’t as important as it probably is for people who enjoy the being underwater, being quiet, the silence... - Marie.

This section has provided a narrative account of participants agreeing with those themes which were not found in their idiographic analysis. This provides further support for the SAM framework.

6.5.3 Importance of Unique Themes
The final question within this credibility check asked participants whether their unique themes were actually more important than the central themes. This was another measure to verify my interpretation of the SAM meanings framework. Participants appreciated the
inclusion of unique themes and agreed that these were very personal aspects which originate from their dive history and special interests. Jack discussed his personal themes at great length (Appendix L Interview Transcript) and in this next example, Neil who has been diving for 40 years explains the importance of two of his unique themes ('Underwater Photography' and 'Desire to Share the Experience')

I would say that my interest in marine life photography and the desire to share my enthusiasm is a very important theme. I think this is bound to happen when you have dived for as long as I have. One needs to have some kind of purpose for one's diving eventually rather than just swanning around enjoying the view – however nice the view it! - Neil

Even though a few participants confirmed the importance of their unique theme, these could not be included in the main SAM framework. During the inductive level of analysis, such themes were only evident in a minority of participants' idiographic analyses. Feedback also showed that for other participants, unique themes were not as important as themes within the framework:

Yeah! Right...I don’t think it’s as important as these ones [points to framework] ...I don’t think it happens as often enough to be important as the other themes. - Fiona

6.5.4 Refinement of SAM Framework based on Member Checks
Here I will discuss any refinements of the SAM framework based on data from the second interview. Based on this member check exercise, refinements to the original definitions in the framework were made through discussion with participants. In general, those themes related to the physical environment and sub-aquatic meanings were uncontroversial; this included 'Sense of Wonderment' ('Beauty', 'Encounters with Marine Life', 'Adventure') and 'Being in a Different World' ('Discovery and Learning', 'Overcoming Physical Limitations'). The narrative accounts presented in section 6.5.1 neither contradict nor extend the current definitions of these themes.

On the other hand, the themes related to social interactions were found to possess nuances only hinted at in the initial interviews. 'Remoteness' had been indicated as an important
component of place: it ensured only dedicated divers made the journey, and was an opportunity to be amongst like-minded and a smaller group of divers. New data introduced aspects of safety which were only implicit before. These were related to risk in case of emergencies, and the role of both the dive buddy and the dive operator in ensuring safety. In the next two examples, Harry explains the importance of being safe over being isolated and Jack describes the potential risks of ‘Remoteness’:

The ‘Remoteness’ aspect you have is quite interesting, but I wouldn’t want to dive alone. I do like to get away from people when I dive but it’s away from most, not all people. You do get unpleasant people sometimes, but most of the time, it’s good to know someone’s there, you know? – Harry

...there was that group of divers that got marooned at Elphinstone. You know, you hear these stories about – one guy decided to leave them and just swam and he made it, five miles back to the shore in the Red Sea. The others all perished. You suddenly think to yourself, “Goodness! This isolation is good, but actually, it’s also risky”. You’re depending aren’t you, an awful lot on the professionalism and the competence of the boat that you’re with. - Jack

Similarly, Marie hints at the importance of being able to trust the competence of fellow divers, again, for reasons of safety:

I think one of the advantages because we’re with BSAC, it’s a club based system, you do know exactly the level of all the other divers. So that’s quite good. So I would be happy to dive with anybody in my club! – Marie

Through these second interviews, it became explicit with regard to ‘Fellowship’ that there were two aspects to this theme: on land human bonds are reinforced through a love for a shared activity, strengthened through conversations and a sense of belonging to a group. Underwater, the ability to share the experience reinforces this sense of ‘Fellowship’. But yet again, the element of safety is evident when the dive buddy is a trusted partner. In this example, Marie depicts feeling safe when diving with her husband, who has been her dive buddy for the last ten years:
My husband is my dive buddy... we joined the university club in London and learnt to dive together to have a hobby, something we did together, sort of 7 or 8 years ago [laughs]. And because we learnt together... we know each other's movements... it definitely makes me feel safe when I'm diving with him. Definitely!

This member check exercise has served two purposes: first, to strengthen the credibility and trustworthiness of my original interpretations and the SAM framework. Secondly, this exercise served to refine the definitions for the sub-theme ‘Remoteness’ and the central theme ‘Fellowship’ to include aspects of safety underwater. This last issue will prove to be important in the next chapter where my framework is interrogated with respect to extant literature.

6.6 Conclusion
This chapter has presented two of the final central themes that emerged from the interpretations of interview data. Sub-aquatic meanings were found to be based upon the aspect of social interactions: the absence or presence of other divers was pivotal to the experience of place and was discussed under the central theme of ‘Splendid Isolation’. Two interconnected sub-themes that delineate the specific properties of this central theme were ‘Remoteness’ and ‘Serenity’. ‘Remoteness’ captured a desire for geographical distance perceived to restrict the place to a select few. The presence of other like-minded and competent divers was longed-for, as it enabled a heightened sense of enjoyment in place. On a related note, participants described affective connections to being underwater which equalled to feeling relaxed, content and achieving a peace of mind; or ‘Serenity’.

The fourth and final central theme was labelled ‘Fellowship’ to encompass descriptions which relate to companionship based on shared interests. Although this theme lies more on the peripheral boundaries of place meanings, it is crucial to an understanding of how places are experienced. Here too people play an important role but in this theme, the depictions are of a more positive note. ‘Sharing the Experience’ with significant others, both friends and family was evident in the total experience of scuba diving, and hence linked to place. Meanings were related to the chance to dive with kindred spirits who appreciated the reefscape; a supportive community that shared knowledge, often through
conversation; and the ability to form life-long friendships. Experience of place was also
described in terms of how ‘Fellowship’ allowed for the ‘Strengthening Bonds’ amongst
members of one’s own family, or friends. Unique themes were also briefly reviewed to
remain transparent about the data. The results of a member check exercise conducted to
enhance the credibility of findings were also presented in this chapter. Participants
agreed with the analysis, and this exercise was useful in the refinement of definitions for
‘Remoteness’ and ‘Fellowship’. Both Chapters 5 and 6 have deliberately been kept
descriptive in an effort to ‘let the data speak for itself’ (Wolcott 1994:10) albeit, through
the researcher’s interpretations. However, the following chapter links all four themes
together and critically analyses the relationships between each theme in relation to the
extant literature on sense of place in resource-based recreation.
Chapter 7: Discussion

7.0 Introduction: Interrogating the Literature

As discussed in Chapter 4, an IPA analysis proceeds in three stages: the idiographic, inductive and interrogative. In common with descriptive phenomenology, the idiographic and inductive stages produce a thematic framework describing a particular lived experience, but do not seek to evaluate or explain it; the Sub-Aquatic Meanings (SAM) framework presented in the previous two chapters is the result of both idiographic and inductive levels of interpretation for this study. Unlike descriptive phenomenology, the interrogative stage of IPA seeks to go beyond description to a fuller understanding of an experience by examining the thematic framework within the theoretical context of the extant literature and this is the purpose of this chapter. Interrogation of the literature will often be concerned with comparing the thematic framework to existing conceptual structures describing the same, or similar, phenomena and as a result, a number of contributions, both to knowledge of the lived experience itself and the literature, may be made.

It may be possible to utilise existing theory to refine description of the lived experience and to better understand it. Though usually excluded from the process of interpreting themes, existing theory can provide a conceptual framework to express the themes once created and in doing so, a contribution to our knowledge of the lived experience might be made using accepted concepts and terminology. Having made connections at a conceptual level between the descriptive themes and existing explanatory and predictive theory, it may be possible to explain the lived experience by considering the motivations for the activity studied and their implications for tourism practice. If the SAM framework is the ‘what’ of the lived experience then this might be considered its ‘why’ and an important aspect of the motivation for an activity are the benefits it affords its participants. Lastly, the study’s findings may suggest extensions and/or revisions of the theory examined and directions for future work.
It should be noted that, as I have conducted an exploratory study, my sample size currently precludes generalisation of my themes to the entire population of scuba divers. Achieving a representative sample is not the aim of a qualitative study; instead the aim is to produce an understanding through an in-depth analysis of the accounts of a small number of participants. Hence, any conclusions are specific to this group and any move beyond the group must be undertaken tentatively. A larger scale study with a representative sample size can be conducted as future work. The theoretical consequences of my study discussed next use the tentative assumption that the SAM framework is generally applicable. As the central aspect of scuba divers’ lived experience studied here, this chapter begins by interrogating the literature on sense of place.

7.1 Scuba Divers’ Sense of Place: Dependence or Identity?

A key distinction in sense of place literature is that between place dependence and place identity. Individuals who are merely dependent on place to accommodate their desired activities consider locations interchangeable to some degree, whereas individuals who identify with place have much of their personal beliefs, emotions and history invested in particular locations (Proshansky et. al. 1983; Cuba and Hummon 1993; Bricker and Kerstetter 2000; Williams and Vaske 2003; Smaldone et. al. 2005; Brooks et. al. 2006, Hammitt et. al. 2006). According to Farnum et. al. (2005), knowledge of tourists’ place dependence or identity may be important for the recreation and tourism industry in order to provide quality recreation experiences. Similarly, Kaltenborn and Williams (2002) suggest that managers need to understand varying types of place meanings, including the attributes of the environments that attract people, create quality experiences, and condition their views regarding the management of such places.

Knowing that recreationists have high levels of place identity, as opposed to place dependence, would be valuable knowledge for managers because it would suggest that there is potential for repeat visitation providing that those place meanings that support such strong attachment are preserved (Stedman 2002). Recreationists with place identity
would also be more willing to accommodate rises in fees and fund conservation measures (Kyle et. al. 2003a; Vaske and Kobrin 2003). In contrast, recreationists with place dependence would be less likely to display these behaviours (Hammit et. al. 2004; 2006). In line with IPA’s interrogative level of interpretation, this section examines whether evidence for place dependence or place identity in scuba divers was found in my study. By doing this, SAM itself will be also be better understood in terms of existing theoretical constructs.

Method

Williams and Patterson (1999) provide a clear, practical method to determine place dependence or place identity by classifying place meanings, and relating them to the sense of place in the people possessing them (McCool 2001; Farnum, et. al. 2005). Recalling the more detailed discussion of Williams and Patterson (1999) given in Section 2.5, place meanings are classified into four types, describing the relationship between people and places: aesthetic, instrumental, symbolic and expressive. Each type of place meaning is defined in terms of three continuous dimensions: tangibility, emotionality and commonality and these dimensions are used to classify a given place meaning. I provide a brief summary here on these dimensions of meaning based on Fournier (1991) and Williams and Patterson (1999).

Tangibility is concerned with whether a place meaning is primarily objective or subjective. A meaning is tangible if it can be attributed directly to properties of the environment and intangible if it is mainly dependent on an individual’s mental associations or experience. In other words, is the meaning in the world or in the mind of the individual? The philosophical question of whether meaning can possibly be objective or whether it is all ultimately subjective and relative is time-honoured and still debated. Here, it will be assumed that meaning can be objective. There may be gradations of tangibility.

Emotionality is not whether a place meaning is emotional as opposed to emotionless; rather it is about the depth of the emotion associated with it. Interest is a level of
emotionality associated with immediate sensory pleasure or play; emotions may be experienced and expressed forcefully, but they are not necessarily lasting or especially significant. High emotionality reflects a deep emotional bond, which may not be expressed as obviously, but may be more profound.

*Commonality* is concerned with how many people share a given place meaning, and includes communities of varying sizes. A meaning is common if it is part of a shared body of meanings and unique if it is possessed only by an individual, possibly like that associated with a cherished or favourite place. Commonality overlaps with tangibility to some degree because if a meaning is tangible, it is objective and therefore might reasonably be expected to be shared by all who have had the opportunity to acquire it.

Figure 11 shows the correspondence between the three dimensions and the four types of place meaning. If, for example, a place meaning is highly tangible, evokes little emotion and is commonly held, it is an *aesthetic* type of place meaning whereas intangible meanings, with strong emotional content held uniquely are *expressive* meanings. Between these two extremes, *instrumental* and *symbolic* meanings are found.

Types of place meaning are associated with the sense of place in the individual possessing them and this is the issue of interest here. High levels of aesthetic and instrumental meanings reflect the weaker form of sense of place known as *place dependence*, and high levels of symbolic and expressive meanings reflect *place identity*,
where an individual’s self image is highly invested in a place. To discover whether scuba divers’ sense of place can best be described as place dependence or place identity, I used the three stage method summarised below:

i) **Assign values of tangibility, emotionality and commonality to each theme in the SAM framework.**

Tangibility will be judged based on the use of sensory language and an assessment of the situation discussed. Emotionality will be inferred based on the use of emotional language and from my transcription notes on the intonations participants used when describing their experience. Commonality here is not a measure of the number of people in my sample to share a theme because by definition, themes within SAM reflect those experiences shared by most or all of my participants. Rather, it is a measure of how prevalent a meaning is in the general population and will be estimated here. Though intended to be a reasonable assessment of commonality, this may require further study to confirm it.

ii) **Classify the type of place meaning for each theme based on its three values.**

Figure 11 shows the types of place meanings associated with points along the continuum of dimensions, so this is straightforward. Cases with dimensions that have no easy position on the continuum will be settled by considering the dimensions most important to the place meaning and asking where they lie.

iii) **Determine whether divers have place dependence or identity.**

By examining the types of place meaning in SAM as a whole, any predominance of place meanings would reveal itself: the discovery of mainly aesthetic and instrumental meanings would indicate place dependence, but a predominance of symbolic and expressive meanings would indicate place identity.
The results of this process are described next. Here, once again, narrative accounts will be used as evidence to provide examples of dimensions of meaning. It should be noted that each theme may display different aspects and could be assigned more than one place meaning, a paradox at first glance perhaps. However as suggested by Williams (2004), the totality of any particular relationship to an environment is likely to involve an amalgamation of aesthetic, instrumental, symbolic and expressive meanings emphasising a holistic view of nature. These different aspects may emerge at different times in a single experience.

7.1.1 Beauty

The theme of 'Beauty' emerged to reflect not only the sensual appreciation of the colours, shapes and sizes of the reefscape, but also a feeling of oneness with nature. Place meanings for 'Beauty' were found to display both aesthetic and symbolic aspects at different times of a dive experience.

7.1.1.1 Aesthetic Beauty

At an aesthetic level, the sub-aquatic environment is an immediate sensory delight to revel in and to be enjoyed for no other reason. As might be imagined, participants often discussed their experiences of 'Beauty' in terms of the immediate properties of the sub-aquatic environment itself. Colours were described as especially impressive, indicating a high level of tangibility. It seemed that the emotional content of these experiences was basic sensory pleasure rather than some deep emotional response; participants appeared excited, but not profoundly moved, by what they saw and this suggests that 'Beauty' was experienced with interest rather than deep emotionality.

...especially, um...the colours, when I think of diving in the Red Sea, I think of all the colours. You get just the most incredible reefs, and especially the fire corals where you see these yellows, with these, all these different coloured fish and it's just phenomenal. Absolutely phenomenal! But, colours is what I see, you know, especially the golds and the oranges and it's just beautiful. - Alex

You know underwater, of course, at the Barrier Reef, it's blue, it's spectacular. Pretty deep! But not that deep because you've got the light. (…) So you'd go down the shot-line (…) you just go to
the bottom of the shot and you can look around you and see clouds of fish everywhere! There was always fish under the boat you know and that was just marvellous... -Pam

The preceding kinds of sensory descriptions were shared by all my participants and the strong reliance on objective properties of the sub-aquatic environment suggests that the reefscape is objectively beautiful and would be recognised as so by most people. In other words, this place meaning has high commonality. The combination of tangibility, emotional interest and commonality indicates an aesthetic place meaning. As noted by Tuan (1990:94) “the most intense aesthetic experiences of nature are likely to catch one by surprise. Beauty is felt as the sudden contact with an aspect of reality that one has not known before; it is the antithesis of the acquired taste for certain landscape or the warm feeling for places that one knows well”.

7.1.1.2 Symbolic Beauty

At other quieter times, the splendour of the natural world can provide a more profound encounter, symbolically humbling one with the realisation of a power greater than oneself. Participants described subjective experiences of ‘Beauty’ whose meaning relied less on the physical properties of the environment and more on what its size and power represent. This sense of oneness was described not in terms of excitement but with a tone indicating a more profound emotional bond as depicted next:

I think the site itself is a really amazing place, it’s just very, it never fails to impress you because it’s so enormous. This arch is so enormous, (...) it’s sort of about 90 metres on the inside and it just falls away to a 120, 130 metres towards it. So, it’s really deep at the bottom. And it towers right up above you ...it’s like a huge, huge cathedral... (...) so you’re hanging underneath this archway and there’s nothing below you, that’s what it feels like. But you can see the blue sea and quite often big tuna and things like that will come in underneath you. So you can see, you get this feeling of how tiny you are. - Diane

On one side of it, there was this marvellous network of caves, where the light flooded in through the roofs –it had these beautiful skylights, the sunlight streaming through. (...) Simply...I think in those places, it’s the...it’s the experience of light and shade that you get...in underwater caves like that. The way the daylight comes down and shines, it’s almost like being in a cathedral you know...like looking through a stain-glassed window. Well, I don’t know...it’s just that [pauses]
it's very difficult...it just feels...it just feels very ...I think it's very...I find quite...it's calming I suppose! It feels very tranquil! But beautiful...[pauses]- Neil

In one way, it feels very natural, in another way, you think, well you know, you have got to go to great lengths to do this – so it's not really natural for human beings is it? It's kind of...but I suppose that's what makes it a special experience, you know? And you feel you have this insight, or this window on...you know, huge part of the planet that you don't normally have access to. So I think that's... You know, it's privileged. You always feel good after a dive you know, because it's a physical activity. But it's physical activity with a difference I think because you've seen things that you...you come up and you just see the water and you think, all that stuff's under there. So you know it's a special experience, kind of a privileged experience I think. - Lee

It is interesting to consider whether this aspect of 'Beauty' is commonly held or highly individual. A similar kind of meaning has been found in many natural settings and is referred to as genius loci or spirit of place (Roberts 1999; Fredrickson and Anderson 1999; Schroeder 1996; 2002). As Pearce explains, human response to dramatic landscapes lies “not so much in their beauty and composition but in the recognition of power greater than that of humans” (2005:149). Being a small part of the great scheme of things is also called the “diminutive effect” (Gallagher 1994) which according to Roberts (1999:72) “enables one to see oneself in proportion and in a fitting manner relation to all other beings that live and support life. It is the sense that everything is valuable in and for itself and that the whole forms a unity in which each being, including oneself, has a place. It is the beginning of natural piety”. I will assume that the potential for this experience is quite widely shared but that not all have yet realised it, resulting in a medium to low level of commonality. The combination of intangibility, deep emotional bond and low commonality indicates a symbolic place meaning.

7.1.2 Encounters with Marine Life

This theme describes the nature of physical interactions with marine life, and as with 'Beauty', it displayed aesthetic, symbolic and expressive aspects. Seeing, and physically interacting with attractive sub-aquatic creatures was found to be enjoyable in its own right but also meaningful within the social context of the diving community and at an individual level.
7.1.2.1 Aesthetic Encounters with Marine Life

Descriptions of ‘Encounters with Marine Life’ were often given in terms of immediate sensory properties such as colour and shape, indicating high tangibility. Emotionality appeared to be the excited interest of basic sensory pleasure and but not a deeply emotional response as visible next:

Well, I think it’s the variety of them, the colour, they’re different, their shape. It’s like some mad artist has invented every weird creature he could think of, and put it down there. They’re completely mind-blowing. You know, animals are all, kind of the same, four legs, heads, ears, whatever. But I mean, fish are such shapes – you know, I mean boxfish, different design, scorpionfish, whatever you want to call them. I mean, there’s just so many of them. –Pam

The reef is just lots of gullies, and the water rushes up backwards and forwards along these gullies. And there’re just hundreds of anemones. And they’re bright orange, and yellow and white and there’re hundreds of them and they are gorgeous. It’s just like a massive garden. It’s one of the most beautiful things I’ve ever seen. And you just pop in and out of each gully and each gully is as beautiful as the next. And it’s just amazing. - Olivia

The strong reference to objective properties of marine life suggests that these animals are objectively beautiful and might be recognised as so by most people. In other words, this place meaning has high commonality. Tangibility, emotional interest and commonality indicate an aesthetic place meaning.

7.1.2.2 Symbolic & Expressive Encounters with Marine Life

‘Encounters with Marine Life’ also have meaning within divers’ socio-cultural context as benchmarks of achievement. The word ‘pelagic’, defined in the Oxford English Dictionary as ‘relating to the open sea’, has become a buzzword amongst divers and has evolved into a reference purely to encounters with big marine creatures such as sharks, manta rays, dolphins, whales and barracudas (Jackson 2006). Sightings of pelagic species are considered to count as ‘notches on the belt’ and such achievements are actively pursued. This aspect of ‘Encounters with Marine Life’ is less about objective properties of the marine life itself and more to do with it means to have had them, indicating intangibility of meaning. Divers appear to invest these encounters with considerable
importance and assign a moderate depth of emotionality to them. Here, Ben and Fiona describe their first encounters with manta rays:

There's the one in the Philippines where we saw a manta ray just sort of like...it was one of the earliest dives I did in the Philippines you know. We saw this manta ray and then we were just swimming after this manta ray you know 'voom' Gone! Into the distance! And then we're just looking for it, you know, just scenes, this big sort of pelagic fish, pretty impressive! It was pretty close, but then, you know, it got spooked by us and off it went into the distance. - Ben

There were things that I got really excited about, like seeing the rays for the first time...It blew my head off! I was literally going right past the boat; remember seeing this dark shadow – ‘What is that?’ It was moving so quickly – the boat was there, we were there and the ray was coming like that, I was like oh my god, literally, screaming! (...) And I remember fining as hard as I possibly could to get to the end of this boat, and it had gone. I mean they just fly; they literally fly through the water. (...) And it was just absolutely amazing. And I remember talking about it for ages afterwards [laughs]...ray, ray, ray, ray, ray! - Fiona

That 'Encounters with Marine Life' symbolise success in the dive community is further demonstrated by Jack, who describes his feelings when these encounters are frustrated:

a feeling of deflation when people come out and say, 'Oh, by the way, did you see...’ Now, I said earlier, when we went to Osprey Reef, they've got hammerhead sharks swimming by... I was with a group of about ten people and nine of them saw of shoal of hammerhead sharks and I didn't see them. And I came up and I felt so deflated! Why didn't I see these things, you know? I just wasn't looking at the right time, you know. And you could see everybody underwater doing this [makes shark signal] and I thought, 'what the hell are they looking at'.

The danger is you liken it to train-spotting you know, that what you're doing is ticking things off. But actually, what you do want to do is get the experience and I just sort of felt a bit of a failure I have to say you know? That you've got this ...not once in a lifetime...but you don't see everyday...you don't see hammerhead shark floating by...and I didn't see them at all. - Jack

By representing success in the dive community, 'Encounters with Marine Life' also serve to symbolise a kind of specialist belonging that non-divers do not share:
I just feel really happy and like, we talk about what we saw and ‘I didn’t see this last time’ and have a joke with some people who (…) just didn’t see what we saw and someone else saw a conger eel and you didn’t. It’s just…with a group of friends…we’ll just chat about it and have a laugh about what we just did. And it’s just something that you’ll never see…everything underwater is what you’ll never see above water. All the people that aren’t divers don’t know what’s under there…really. They can snorkel, they can see a little bit underwater, but you can’t see what’s really deeper down. - Kieran

The valuing of marine life encounters is common amongst divers as a group but is arguably not prevalent amongst the general population, giving it a low level of commonality. This combination of intangibility, emotional bond and low commonality indicates a symbolic place meaning.

There is also an even more individual variant in the commonality of ‘Encounters with Marine Life’ where personal associations, aside from accepted group values, are important and indicate an expressive type of meaning. In this next example, Pam describes one of her first ‘amazing’ encounters with a turtle, notably she spoke of how wonderful it was to be accepted in ‘their’ world:

And a turtle swam past us…(…) That was an amazing, kind of, encounter. Well, I was just, I was completely amazed (…) it was just, to me, fantastic to be in the same element. Because I mean you see turtles, all you see are the heads, if you are in tropical waters. You don’t see how it comes, you can hear them pumping…I just find it amazing to be kind of accepted …to be part of their life. You know, which I think is wonderful. - Pam

On a more poignant note, personalised meanings were implicit in healing encounters with marine life, as described here by Olivia:

We dropped of a reef slightly, and there was a small, sort of ledge, cavern type thing, and there was a massive turtle sat in there. And he had just a big black eye and I had… I’d been through a really awful time and I just sat there looking at him, and he was looking at me. And I was like, this is okay actually and I really like it. And I…it suddenly occurred to me that I was in the water, and I had no stress and no worry … -Olivia
Another aspect of scuba diving that contributes to the personalised nature of expressive meanings is these encounters take place in the wild; within the animal’s habitat. Here the physical barriers between divers and animals are minimal or absent and there is close proximity at the discretion of the animal. Such encounters are deemed ‘authentic’ as opposed to ‘staged encounters’ through a glass wall in marine aquaria (Bulbeck 2005). These authentic encounters served to become benchmarks which contribute to knowledge and memories of place through an accumulation of knowledge (Gustafson 2001a; Manzo 2003; 2005; Brooks et al. 2006). In Section 5.2.2, participants described dolphins as ‘inquisitive’; manta rays as ‘graceful’; and seals were ‘playful’. Participants confer human qualities to marine life, and then become attached to these meanings; seeking to relive them each time the journey to the reef. First, this suggests that such meanings are human interpretations of place which are constructed through experience (Greider and Garkovich 1994; Brandenburg and Carroll 1995; Stedman 2003a). In fact, the marine creature is probably investigating the diver to see if s/he is predator or prey. Secondly, such bestowed qualities affirm the charismatic nature of marine life. Encounters with sea creatures are said to evoke a sense of human frailty induced by power, grace, and the elegance of a charismatic species (Bulbeck 2005; Curtin 2006). This charisma is bestowed upon wild marine creatures that are personified with human qualities. Through shared conversations amongst the group, participants continue to adopt and extend these human qualities, and the desire for human-animal interaction.

7.1.3 Adventure

‘Adventure’ reflects participants’ accounts of engaging with the marine environment as an arena to explore and enjoy varied types of diving: for example, wreck diving, night diving, drift dives, diving at dawn, deep dives, and cave diving, illuminating the extended scope of experiences available underwater. There are objective physical conditions involved in allowing these activities to take place but participants’ place meanings associated with ‘Adventure’ seemed primarily symbolic.

7.1.3.1 Symbolic Adventure

‘Adventure’ represented the potential for mystery, exploration and connecting to underwater heritage. These kind of meanings are less about experiencing objective
properties of the varying modes of diving and more to do with what it means to have done them, indicating intangibility of meaning. Divers appear to invest these adventures with a medium level of emotional attachment, often describing them as 'special' and a 'privilege'. In this example, Diane describes being part of an expedition:

One of the most amazing ones that I dived which was actually out of Tunisia - the HMS Manchester. (...) that was an amazing wreck because it was about, sort of, 80 metres to the bottom. But you've got this big battleship you know, it was sunk during a very famous campaign in World War Two, when they were trying to get stuff through to Malta. (...) And also the other thing that was very special about that was we had some of the veterans who'd been on the ship when it sank...were on the liveaboard dive boat with us.

So we would go down and shoot the video footage and take photos, and stuff and then come back from the dive and sit down with them and show them. (...) And they had their own stories to tell. So, like the more you talk to them, the more they would talk about what'd happened. (...) It was quite a privilege really- that's what it felt like. (...) it is really, special thing, to be able to do. – Diane

Describing experiences as special and a privilege is evident amongst some recreationists but arguably not in the general population, and are considered here to be of low commonality. This combination of intangibility, emotional attachment and low commonality indicates a symbolic type of place meaning.

Evidence has shown that attachment is strongly related to mode of experience: individuals who focused on the physical setting of national parks exhibited higher levels of attachment, than those who displayed user orientations (focused only on activity or social relationships) (Williams et. al. 1992). Acts of observing or discovering special or unique attributes during recreation are examples of physically interactive behaviours (Gustafson 2001a). The literature notes that accumulated recreation experiences, conceptualised as a person's history of visiting a place, or the frequency of trips may indicate place dependence and eventually lead to place identity (Moore and Graefe 1994; Moore and Scott 2003; Hammitt, et. al. 2004). According to Brooks et. al. (citing Sarbin 1983) "acts directed towards locating oneself in the geographical ecology are the means
by which people construct place identity (2006:343). During the interview, Diane explained: *It’s almost as if I’m looking for something, more, than just scenery. So even though I’m a tourist, I want to do something – It’s almost like I want to do something useful!* Such descriptions are examples of the Symbolic ‘Adventure’ dimension.

### 7.1.4 Discovery and Learning

‘Discovery and Learning’ reflected divers’ enjoyment at the acquisition of knowledge through first-hand learning. Indeed, the desire to return to or to seek new dive destinations was based on familiarity with a place or the desire to gain further knowledge about the marine world. This theme was found to be meaningful symbolically and expressively.

#### 7.1.4.1 Symbolic & Expressive Discovery and Learning

The accumulation of knowledge of the various aspects of the sub-aquatic environment was understood as an achievement that symbolised membership to the dive community. As such it is intangible, being more about the achievement than the actual physical actions involved in it. Being able to learn in this way also means a lot and reflects a deeper and more lasting level of emotionality than mere excitement. For example, Jack’s experience of learning in the company of marine biologists prompted strong feelings of achievement:

This last summer just gone we went with Undersea Explorer which is like a marine biology expedition that takes paying customers. They do research whilst they’re on the boat and so they’re tagging sharks, they do research into nautiluses. And you become part of that, you help them gather their data but you get some wonderful dives. The second thing is that the way that they’ve run this dive holiday is very much based on marine biology and certain amount of research. All of the dive instructors or whoever are actually marine biologists and they talk about their research.

I find that really appealing that you know, you can talk to someone. There’s a guy there, the captain of the boat is the world expert on nautiluses – you know, these huge red shells that have been around you know, since the dinosaurs – he’s the world expert on it. You know, he goes tags them, catches them, you know his research methods are just like epidemiological research.
methods, you know! And so, it’s absolutely fascinating to talk to people that are experts and know about that. - Jack

By definition, certification grants membership to a selective community and though the number of divers is growing, this meaning is still uncommon. Intangibility, deep emotionality and selective commonality all indicate a symbolic aspect to ‘Discovery and Learning’.

Aside from meanings arising from within a community, there was also a more individual level of commonality where highly personal meanings were developed. The sub-aquatic environment offers the opportunity to discover and learn about a wealth of marine biodiversity, and divers understood this as a personal challenge and accomplishment, indicating an expressive level of meaning too. Here, Pam explains:

> It is so interesting and so many different forms of life, things that you would look at and think – ‘that’s a plant’ but it’s an animal. And I think it just shows you how little you know of your world. Every time you dive, and you can probably dive forever, and every time you dive, you’ll come back and think, ‘what was that thing’? Was it a coral or wasn’t it? I just love that kind of... it’s completely different to being on land! - Pam

> So there’s a sense of being in a different place, you know, this is not like the real...this is not like the terrestrial world, this is a different world, a different space here. (...) And you feel you have this insight, or this window on a, you know, huge part of the planet that you don’t normally have access to. So I think that’s...You know, it’s privileged. - Lee

Place relationships are dynamic and evolve. Visitors gain knowledge and experience through return visits and over time fear, ignorance, or lack of preparedness are replaced with familiarity, intimacy, and preparedness (Brooks et. al. 2006). Such learning experiences become the focus of meaning, and place is used to regulate one’s self development and contributes to an affiliation with the recreation setting. Recreation places are recollected in terms of the opportunities for personal growth and self-development through participation in recreational pursuits (Bricker and Kerstetter 2002). For example, in their study on whitewater recreationists, Bricker and Kerstetter (2002)
discuss a ‘challenge-growth’ category which referred to aspects of self-development. Therefore, recreationists may develop a sense of familiarity, displayed through a strong place identity; they feel connected to place through the learning which either has taken occurred (achievement memories), or may occur in the future (Roberts 1999).

7.1.5 Overcoming Physical Limitations

Focussing on the opportunity to breathe underwater and to be free from the confines of gravity, ‘Overcoming Physical Limitations’ reflected participants’ connection to a sense of freedom and a unique grace of movement not possible on land. This theme displayed an instrumental aspect in the basic sensory pleasure of being weightless and also symbolic and expressive aspects representing a kind of liberation from physical norms.

7.1.5.1 Instrumental Overcoming Physical Limitations

Being weightless and being capable of moving as desired in three dimensions was experienced at an immediate level as playful enjoyment and was described in terms of tangible physical sensation. This was accompanied by an emotional response best described as ‘having fun’ rather than as an event of profound emotional significance:

I think I’m diving for that whole feeling of weightlessness and just being in the water. Even if I don’t really see anything that good, but haven’t been diving for six months, I just feel really happy to be doing it again. And just be underwater... [pauses] and playing with peoples’ bubbles and [both laugh] all that kind off messing about. -Gina

That...I really enjoy...I really enjoy having that freedom in the water...Just like that...you feel weightless so...it’s actually very relaxing (...) you have this weightlessness so it’s very freeing. - Olivia

Even just being in the water, and the feeling of weightlessness – I personally enjoy. - Ethan

The commonality of this experience must, due to the specialist nature of diving, be quite low but it is considered here to be best described as an instrumental meaning. Weightlessness was pinpointed as a key feature of the sub-aquatic experience and one
which is appealing in itself. Evidence from this study indicates that the experience of weightlessness itself acts as a motivator to descend into the sub-aquatic. Participants used words such as ‘wonderful’, ‘fantastic’, ‘amazing’ and expressed feelings of contentment and relaxation based on the experience of weightlessness. Although there is documented evidence of the significance of neutral buoyancy for divers within contemporary literature (for example, Harrigan 1992; Ecott 2001; Kittrell et. al. 2002), there is no mention of it within dive tourism literature which deserves further investigation.

7.1.5.2 Symbolic & Expressive Overcoming Physical Limitations

These same physical aspects of the weightlessness in the sub-aquatic environment were also found to go beyond basic enjoyment to represent psychological freedom and more individual meanings. This intangible aspect of ‘Overcoming Physical Limitations’ relied on mental association and was experienced with a medium level of emotionality, as described here by Pam and Ben:

it’s like complete freedom to me...because you’re in the water but you’re completely weightless, hopefully! And you can go up, down, sideways and the world’s like all around you. You’re not kind of rooted to the grounded. Here, you’re stuck in the ground and can only move in one direction. But under the water, I think it’s just an amazing sense of freedom. And if you’re in blue water, I think it’s just so beautiful and it’s... (...) It just seems so open and so sensuous and I think that’s it. - Pam

You know, because you can go up and down and sideways, so you’re totally free in the water to go anyway really. And look at things from lots of different angles. This wonderful feeling of the freedom underwater because you can move in all directions. - Lee

Again, the commonality of this experience must be quite low due to the specialist nature of diving and this combination of intangibility, medium emotionality and low commonality is indicative of a symbolic place meaning. This finding supports the suggestion by Maccarthy et. al. (2006) that there are intangible elements of the dive experience which are used by divers to derive satisfaction. As suggested by Ecott
(2001:104), “underwater there is freedom from everything terrestrial...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”.

There were also indications of an expressive aspect to ‘Overcoming Physical Limitations’ where participants discussed individual interpretations associations with the same physical experience:

if it’s with blokes then one of the, one of the easiest things is, cause most blokes when they were kids, you know dreamed of being a spaceman kind of thing, you know. And the weightlessness and all that kind of stuff...and it’s the closest you can get to it, you know? It’s just phenomenal, you know? In terms of....like with night dives... I don’t do night dives really for any of the marine life or anything like that you see, you know. When I do a night dive, I’ll drop down and you’re not very deep, maybe 15, 20 metres and I’ll turn my torch off, total blackness and just sit there, you know. And just, you get your perfect buoyancy and you just float, you know, and it’s kind of, like, it must be like being in space. - Alex

I think it’s like being able to fly. You know when you’re a kid and you dream that you can fly or you dream that you can, you know, do things that are impossible – that’s how it feels because you’re weightless. And also you can look down upon things without having to be on them. You know, so you can swim over a wreck and you can see the sight right away but you don’t have to go down there just because it’s there. You can look...you can decide where you want to be in 3D. And I don’t think there’s anything else that really gives you that kind of freedom. It’s totally different. - Diane

7.1.6 Remoteness

‘Remoteness’ is an aspect of ‘Splendid Isolation’ referring to geographical distance, as well as the time and cost needed to reach a destination. An important component of ‘Remoteness’ is the absence of a crowd and the presence of a more dedicated and experienced group of divers. This theme was found to be primarily symbolic.
In one sense, 'Remoteness' is an objective condition but participants' descriptions seemed most strongly concerned with intangible associations of selectiveness and unspoilt territory. This meaning was held with substantial emotionality, both as a preference for the best dive locations and also as a deep felt personal reaction against environmental damage from unskilled and careless divers:

Fortunately, or unfortunately the hidden secrets are often the ones that are not talked about a lot. So I've changed, from when I first started diving, I used to do my utmost to get to dive destinations that were recognized and well traversed. Whereas now I'm more of the opinion that I'd rather go somewhere that's different, that's secluded, that's out of the way, that's untouched! Because it breaks my heart to see things destroyed and that sort of thing. So I'd rather go to places that are not over-dived. Sometimes end up being a bit more expensive! - Celia

What I don't like about some of the Red Sea stuff is that it's a bit over dived. I think there's an increasing problem with things being dived too much. (...) And a lot of the sites are getting a bit over dived and some of them are damaged because people take stuff away. Like on the Thistlegorm, you find that all the badges on the trucks are gone, people have taken them off. And things are gone basically. When you dive something that's less dived, it kind of feels like it's more untouched. - Kieran

So, underwater, totally unspoilt, very few divers and an awful lot of...cause it's in that Papua New Guinea area, an awful lot of wrecks and the wrecks totally been untouched. It's also, for me, what I like about it is... it's a real... many of the islands don't have anybody on them... so you really get that sort of isolation and getting away from it, it's all very unstressful. It's just so different to anywhere in the UK or anywhere in Europe. Because it's not busy and it's not commercial and it's more diving with your friends. It's a difficult place to get to, therefore only dedicated people go there and that just makes it a better mix of divers. And the other thing I find is, it's not very commercial, it's interesting, it's totally unspoilt, and it has a real mixture of the wrecks with the marine life as well. - Gina

These kinds of meanings are, in their environmental specifics, common only to scuba divers, although similar kinds of selectivity and protectiveness may be found in other recreationists. That 'Remoteness' is intangible, emotionally significant and common to
divers indicates that it is best understood as a symbolic type of place meaning. Can this be explained? Urry (1990) discusses this view through the notion of ‘the tourist gaze’ which provides an integrative view of how tourists approach social and environmental encounters. To this, he adds the ‘romantic gaze’, for those visitors whose goals are largely to appreciate settings alone, or with a very small number of like-minded companions. The romantic gaze refers to the Romantic movement of the 1800’s, a group of individuals who sought comfort and recuperation in nature. It seems reasonable to suggest that the romantic gaze has some relation to the symbolic aspect of ‘Remoteness’. In outdoor recreation, research involving wilderness, solitude, and privacy (Hammitt 2000) has shown intimacy (the sharing of communal relationships among select individuals and places) to have important meaning for recreation experiences. So, even though meanings point to a desire for solitude, sharing that solitude with select individuals is deemed acceptable. Symbolic ‘Remoteness’ links in with notions of the romantic gaze and intimacy, with participants relying on cost and distance to dive in the presence of a small group of like-minded divers, as well as the quality of the experience and satisfaction.

7.1.7 Serenity
The theme of ‘Serenity’ reflected the sub-aquatic environment as a sanctuary: ‘therapeutic’, ‘totally engaging’, ‘peaceful’, but most of all ‘relaxing’. ‘Serenity’ was a mode of quietness, providing peace of mind and allowing distance from daily life. Symbolic meanings were most prominent here.

7.1.7.1 Symbolic Serenity
There is tangible physical relaxation associated with ‘Serenity’ but what appeared to be most meaningful were intangible mental associations of sanctuary or release. Being able to obtain relief from everyday stresses and routines was found to be quite deeply emotional; instead of ephemeral excitement, a profound stillness was described:

so you know it's sort of this feeling of weightlessness and sort of, almost freedom and... I mean I find it incredibly relaxing... (...) freedom from, you know, the rest of your life, and you know, all the sort of worries and whatever. You can have an hour you know of just thinking about whatever
you like, or just looking at things or just not thinking! And just sort of having the experience you know. - Ben

...it's a whole body experience. It's like you're using your whole body and your mind as well. So it's very all engaging. There's nothing of you that's left behind when you go diving. Know what I mean? [laughs]? -Diane

Most people have certain methods of relaxation, but these particular associations are intimately tied to the sub-aquatic environment, and are therefore quite uncommon. The combination of intangibility, profound emotionality and low commonality indicates that 'Serenity' is experienced primarily as a symbolic place meaning.

Indeed, the psychological benefits of recreational travel are said to emanate from the interplay of two forces: escaping of routine and stressful environments and seeking of recreational opportunities for certain psychological rewards (Mannell and Iso-Ahola 1987). In this study, there was strong evidence of the positive transaction between the sub-aquatic environment and scuba diver: participants spoke of being underwater as 'peaceful', 'therapeutic' and most of all 'relaxing'. Such positive transactions between recreationists and wilderness environments have shown to produce therapeutic benefits (Schroeder 1996; 2004; Smaldone et. al. 2005; Brooks et. al. 2006); as well as spiritual inspiration (Roberts 1999; Fredrickson and Anderson 1999; Williams and Harvey 2001). In general, dive tourism literature focuses on motivations linked to a desire for a wilderness experience; interest in marine ecology; the image of the sport as different; an interest in particular underwater features or marine life; the pursuit of hobbies such as underwater photography or an adventure with some risk (Davis and Tisdell 1995). This study supports the notion that there are also therapeutic benefits related to scuba diving which are discussed in Section 7.2.

7.1.8 Sharing the Experience

'Sharing the Experience' is a theme reflecting social interactions among divers in the water which are reinforced through shared conversations outside of it. Underwater, each diver has a buddy and each member of the pair is responsible for the other. Diving is
almost always done in groups, each with frameworks of social rules (Nevo and Breitstein 1999). Such norms were evident in how sub-aquatic experiences were shared through conversations held on the dive boat after a dive, as a chance to share news of what was seen, what was missed and to expand knowledge about how to interact with the setting. Place meanings for ‘Sharing the Experience’ were found to be primarily expressive.

7.1.8.1 Expressive Sharing the Experience

When discussing ‘Sharing the Experience’, participants seemed most concerned with intangible social rules and not physical aspects of the dive experience. These ties between dive buddies were also held with considerable depth of emotionality as a mirror for one’s own experience:

If I’m away overseas, it’s generally that you’ve been lucky enough to see something...so almost before you’ve spat your regulator out of your mouth, you’re talking to the people next to you about what you’ve just seen, you know...they’ll be something that you’ve seen on that dive that you’ve probably never seen before. You know, you might have seen those types of fish before but they might have been eating on something or... I’ve seen a pair of octopus mating, and you see sharks that are down there...you see all of this stuff. So normally when you come up, you’re just buzzing with something that you’ve seen. - Alex

Similarly, Ethan and Lee describe the desire to share the experience through conversations immediately after a dive:

I think it’s probably the same as everybody else. The first thing you want to do is just discuss with everybody else what you’ve just seen. And then there’s always a disappointment that somebody saw something slightly better than you [laughs]. They’ve obviously seen the shark that you missed. But no, I think it’s just the excitement of once you’re back on board, you want to share your experiences and talk about what you saw or seen. People with cameras, you’ll want to see the photos they’ve taken, of what’s down there. -Ethan

You go back up on the boat and everyone starts to talk and you’re still quite exhilarated. And then you go off and do a second dive, you know, you’re more relaxed and you come up and you feel good again. And it normally adds to the list of stories you can then impart...part of the history of your diving, and stories to share. Go back and tell the others what you saw, this is what we did, there was a shark there, or it was fantastic going into a wreck, you know. -Lee
Interactive experiences in places with reference to dive buddies were also linked to notions of comradeship:

Generally, I will not by choice go on holiday on my own. I’d much rather go with somebody else. I’ve done both. I found it more enjoyable to have a buddy. Not for the underwater point of view because I could dive with anybody, or on my own, I don’t really mind that. From the sort of companionship, someone to travel with, you know, I would just feel more comfortable that way. Talking about it...I’m happier in company. - Ian

‘Sharing the Experience’ with a long-term or regular dive buddy also represented safety, which allowed for a more relaxing and enjoyable dive:

One of the reasons me and Rick dive so well together is because, because of the level we dive to in the UK...we’re huge believers in self-sufficiency. So, we’d often be 10, 15, 20 metres apart, we take redundant air sources, all that kind of stuff so we don’t need always to be within arms reach of each other. You know? As long as you’re within 20 metres, you’ve got totally redundant air, you can always find each other. - Alex

Place meanings shared by small groups of individuals, sometimes even pairs, are much specialised and have low commonality. Together with intangibility and considerable emotionality, this suggests that ‘Sharing the Experience’ is best classed as an expressive place meaning. As a social activity, the desire to belong to a group of divers is one of the strongest motivators for a diver. As Bachrach (1978 cited Nevo and Breitstein 1999:161) suggests, “few sports enthusiasts are as club-oriented as are sport divers. The pleasure of sharing the experience of diving and the conversation that accompany the divers are major rewards for sport divers. Identification with groups is a paramount consideration”.

7.1.9 Strengthening Bonds

‘Strengthening Bonds’ captures how relationships to place are also grounded in social interactions outside the water. Participants spoke of the importance of ‘Strengthening Bonds’ with dive buddies, who are either friends or family and the literature strongly
suggests that places become associated with memories of positive interactions with a participant’s significant others (Riley 1992; Fredrickson and Anderson 1999; Gustafson 2001a; Kyle and Chick 2002; Kyle and Chick 2004). Social or familial aspects of place meanings have been noted in previous research in resource-based recreation (Bricker and Kerstetter 2002; Smaldone et. al. 2005; Brooks et. al. 2006). In this study, participants described the importance of fellow divers as catalysts: they reinforced the sub-aquatic experience, both during a dive, and on land. An evaluation of participants’ descriptions showed that ‘Strengthening Bonds’ is primarily composed of expressive meanings.

7.1.9.1 Expressive Strengthening Bonds

Memorable social interactions may have originated around certain physical events but it is their association in the memory of their participants that appears to matter most, making ‘Strengthening Bonds’ intangible. As might be expected when significant others are involved, emotionality is deep and interactions of lasting significance can take place while diving together:

(... do you talk to your kids or what do you talk to your kids about. And I mean, when they are talking about their culture, and about films or groups, pop groups you know... I, it's not shared experience, you know, because I don't like what they like, and they don't like what I like, you know? But, this...is a common interest, and it's very interesting that you can talk about these things, so, I thought that was really good. - Jack

Other participants spoke of creating lasting friendships, and a sense of community with fellow divers. In this next example, Gina describes the rapport she developed with her first instructor:

I guess for me, the social side but even the social side of, it's not just the people you dive with...I mean, my first instructor, my instructor is one of my best friends, I can count on him even though he lives in Australia. (...) Even though we've only seen each other three or four times in the last five years, you can make really, really lasting friends through diving. - Gina
It became evident that participants had assimilated their self-identity with place, and used it to consolidate friendships. Here, Gina explains how her association with scuba diving has help develop community spirit at work with fellow divers:

In BP, loads of people scuba dive [laughs]. (...) everybody knows I'm a scuba diver. I think it's something that really creates, it's created a bit of a community at work. (...) there's a couple of us who tag them onto business trips...there's four or five divers. And so, often we'd be talking to each other and swapping stories and everything else. So really, even though we haven't...none of us have dived together, we find ourselves talking about it a lot, and also swapping stories about locations and everything else.

This sense of camaraderie which serves to reinforce friendships was especially evident amongst participants who were active club divers.

And I think the other thing about going there is also the experience of being with a club because that was a club trip. So that's a big part of it, you know, you socialise with them in the evenings, we took turns to do the cooking, and there's a lot more camaraderie (...) With the club, it's very different, you're up in the evening, you're having a good laugh, quite a bit of alcohol involved as well usually. Yeah! It's really good fun! -Marie

Place meanings shared by small groups of friends or family are highly individualised and have low commonality. This commonality coupled with their intangibility and deep emotionality suggests that 'Strengthening Bonds' is best classed as an expressive place meaning.

Research into the dive consumption experience suggests that "friendships legitimised by shared experience and lifestyle" contribute to a "community spirit and common bond that encourages this sense of communitas" (Maccarthy et. al. 2006:538). 'Communitas' is a term used extensively in anthropology to mean a relational quality of full, unmediated communication, even communion, between people of definite and determinate identity, which arises spontaneously in all kinds of groups, situations and circumstances (Turner 1974). Findings in this study support the existence of communitas, where expressive 'Strengthening Bonds' with its positive connotation of fellow divers provides a contrast

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to ‘Remoteness’. As noted by Nevo and Breitstein (1999:162), there is an “interesting contradiction that exists between diving for isolation and diving for social contact”. Based on the two contrasts found in this study, there is opportunity for further investigation on the social aspects of diving.

7.1.10 Place Identity in Scuba Divers

In the previous section, I have classified place meanings using the Williams and Patterson (1999) framework. Any predominance of particular kinds of place meanings can now be ascertained. Summarised in Table 9 are the place meanings for all themes in my SAM framework:

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<th>Central Themes</th>
<th>Sub-Themes</th>
<th>Place Meanings</th>
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<td>Sub-Aquatic Meanings</td>
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<td>Being in a Different World</td>
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<td>Splendid Isolation</td>
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Table 9: Summary of ‘Williams and Patterson’ Place Meanings for SAM Framework

It is evident that sense of place amongst participants towards the sub-aquatic environment is an amalgamation of complex meanings, which confirms and supports the literature on sense of place (Relph 1976; Fishwick and Vining 1992; Low and Altman 1992; Williams and Patterson 1999; McCool 2001; Stedman 2003a; Williams 2004). As summarised in Table 9, it is also evident that symbolic and expressive, not aesthetic and instrumental, place meanings are dominant. This emphasis on individual level processes and the personalised meanings bestowed upon place suggest that \textit{sense of place amongst the}
Scuba divers in this study can best be considered as place identity and not place dependence (Proshanky, et. al. 1983; Korpela 1989; Williams 2004). Further direct evidence of a strong sense of place identity, where the self and sub-aquatic environment are inseparable, can be seen in the following extract from Olivia's interview:

Everything I do is about spending time underwater. So, everything I do is geared up to earning the money to go on the next trip, or trying to organise my diary so I can go on the next trip. I don't like to take time off unless it's to go diving. I don't 'do' sitting at home relaxing; if I've got a day off, I want to be diving. I'll send an email around saying, 'I've got Monday off, does anyone want to go diving'? You know, that's where I want to be - underwater. I get a lot more out of being underwater than I do being on the surface. I get quite seasick, so I am the first in the water, and the last out because as soon as I hit the water, I feel great. I am much happier in the water- Olivia

Olivia's description explains that any free time she has is devoted to being away, in the sub-aquatic environment. On a more implicit note, Alex explains his attachment to the sub-aquatic world:

I mean, I've probably dived in the Red Sea six or seven times I guess. For weeks at a time, doing liveaboards. I view the Red Sea as being very different from Egypt. Mainly because I'm on a liveaboard. So you fly into either Hurghada or Dahab or Sharm - I've been to all those, and then within an hour of landing, you pretty much get onto your boat and you sail off into the Red Sea and you don't hit land again for a week. So, it's kind of like I've been to Egypt about seven times or six times and I've never seen a Pyramid in my life which is something I must rectify at some point! [laughs] - Alex

Participants also described being attached to the sub-aquatic environment and expressing respect towards the ocean as is evident in this next example from Celia's interview:

I've always been attached to the sea. I just have great respect for it - I think it's an incredible force that obviously needs to be respected. But I've spent so much time either on the sea or under the sea, that it's sort of a second home to me. I've very comfortable in water, always have been...I hate being landlocked... I've been in London for five years. ...sometimes I'll just drive down to Brighton on the weekend, just to be...so I can smell the salt...to be closer. – Celia
Symbolic and expressive meanings are formed through the interaction amongst divers as well as the phenomenological experience of participants with the reefscape. In a discussion on place identity, Farnum et al. suggest that “although the unique nature of personal experience makes generalizations difficult, this category is especially important, as it is here where other components of place are amalgamated, blended into an individual’s particular cognitive and affective experience, and portrayed as a part of the self” (2005:41). The implications of place identity in scuba divers for the dive tourism industry will be discussed in Chapter 8. The dominance of symbolic and expressive meanings found in the SAM framework suggests that scuba divers have high levels of place identity: that is, their self image is intimately tied up with the sub-aquatic environment. But why do divers develop these kinds of intensely personal attachments? Does the sub-aquatic environment possess particular properties that might explain them?

7.2 Restoration: Explaining Scuba Divers' Sense of Place?

Restoration, “the process of renewing or recovering physical, psychological and social capacities that have become depleted in meeting ordinary adaptational demands” (Hartig and Staats 2005:281), is a beneficial experiential outcome afforded to individuals by certain natural settings known as restorative environments. Within sense of place literature, it has been suggested that the experience of restoration generates positive affect, which over time and interactions, can account for the development of positive attachments to natural places (Kyle et al. 2004b; Farnum et al. 2005). The strongest form of attachment is place identity, the formation of which Korpela et al. (2001: 573) claim can be understood as the result of restorative experiences:

Restorative experience is an inherent potential in emotion and self-regulation. Following negative antecedents such as stress and attentional fatigue, restorative experiences may involve positive mood change, renewal of directed attention capacity, contemplation on one’s self, and the like. Places that a person can rely on for restorative experiences are thus more likely to be places for which attachments develop over time and that in turn come to figure in place identity. In short, place identity, place attachment and restorative experiences can be viewed as nested and reciprocally influential in self and emotion regulation.

1 Place attachment is Korpela et al’s term for sense of place.
Knowing that restoration occurs in the sub-aquatic environment might help explain scuba divers' place identity suggested by my earlier analysis. But are divers restored by their experience? Other natural environments have been tested as restorative (Kaplan and Talbot 1983; Kaplan and Kaplan 1989; Hartig, Mang and Evans 1991; Hartig, Korpela, Evans and Gärling 1997; Herzog, Black, Fountaine and Knotts 1997; Korpela et. al. 2001) but as yet, no one has determined whether the sub-aquatic environment is restorative and this is the question considered here.

Establishing that an environment is restorative may be achieved by directly measuring the occurrence of restoration (Herzog, Chen and Primeau 2002; Herzog, Maguire and Nebel 2003; Hartig, Evans, Jamner, Davis and Gärling 2003), or, indirectly, one may consider whether an environment possesses certain restorative properties. By generalising across natural environments already known to provide restoration, Kaplan and Talbot (1983) derived a set of four properties that are considered sufficient to constitute a restorative environment: being away, extent, fascination and compatibility. Being away refers to the environment's capacity to allow an individual to leave their normal physical setting and mental routines. Extent describes the environment's scope for mental stimulation. Fascination is provided when the environment allows attention to be directed effortlessly and Compatibility is present when the environment allows an individual to function as they desire. To provide restoration, an environment must possess one or more of these four properties (Kaplan and Talbot 1983). Building on these properties, Kaplan and Kaplan (1989) gave an account of the antecedent psychological conditions that require restoration. Attention Restoration Theory (ART) is built on the premise that 'directed attention' can be fatigued by overuse (Kaplan 1995) and that certain natural environments offer individuals an opportunity to be restored from 'attentional fatigue' (Herzog et. al. 1997).

In what follows, I will use ART to explore whether the descriptions of scuba divers' experience of place collected in my study, and the SAM framework derived from them, provide any evidence to support the claim that the sub-aquatic environment is a restorative environment. In doing so, I will consider how my particular findings might...
affect the conceptualisation of ART itself since my thematic framework suggests that
sense of place in scuba divers has both social and physical elements but, so far, ART is
described exclusively in physical terms. Before moving on, a more detailed description
of ART will be given.

7.2.1 Attention Restoration Theory

Attention Restoration Theory (ART) is based on the notion that many of the daily
activities in contemporary society demand two kinds of attention, delineated by the effort
involved in their use. Involuntary attention requires no effort at all, for example when
something interesting happens and we want to know about it. However, when we force
ourselves to pay attention to something that is not particularly interesting, it requires
effort and is known as directed attention. The effort required to concentrate on a task
may be lost if there exist extra demands which leads to the loss of directed attention,
leading to mental fatigue. Mental fatigue leads to irritability, an inability to plan, a
reduced sensitivity to interpersonal cues and increased likelihood of errors in
performance. ART confirms that the reduction of mental fatigue is a central factor in
restoration (Kaplan and Kaplan 1989; Kaplan 1995). Recovery from this mental fatigue
is enabled by a restorative environment. A restorative environment refers to the
opportunities afforded by a place for reducing the fatigue of directed attention (Kaplan
and Kaplan 1989). This includes clearing away mental noise, recovery of directed
attention capacity and enhanced ability to reflect on issues of importance. In ART, an
environment provides restoration if it possesses four properties: being away, extent,
fascination and compatibility.

7.2.1.1 Being Away

'Being away' frees a person from the mental activity requiring directed attention. Two
different types of being away are identified: being away physically in a different
geographical location, and being away psychologically or a conceptual shift (Kaplan
1995). A restorative environment should offer the opportunity and qualities to be in a
different location, away from the everyday routines and tasks of one's life. Secondly,
Kaplan explains, "a different environment is not as essential as much as a change in the
direction of one's gaze" (Kaplan 1995: 173). Indeed, where one is being away to is
every bit as important as to where one is being away from. For example, Kaplan (1995) stresses that travelling to a different environment alone is not restorative, if daily routines and tasks are accessible whilst being away. An example of this is expressed by De Botton (2002) on the first morning of his much anticipated holiday to Barbados; he walks out to the beach and takes in the beauty of the resort with its beach, coconut trees, turquoise sea. He acknowledges,

I may have noticed a few birds careering through the air in matinal excitement, but my awareness of them was weakened by a number of other, incongruous and unrelated elements, among these, a sore throat that I had developed during the flight, a worry at not having informed a colleague that I would be away, a pressure across both temples and a rising need to visit the bathroom. A momentous but until then overlooked fact was making its first appearance: that I had inadvertently brought myself with me to the island.

(De Botton 2002: 20)

‘Being away’ needs to be supported by additional properties of an environment: ‘extent’, ‘fascination’ and ‘compatibility’, which are presented next.

7.2.1.2 Extent

The everyday environment in which we function can become quite familiar and limited in scope of new information to process, or, quite demanding in terms of uninteresting information to process. Kaplan and Talbot (1983) explain that a restorative environment must have extent, offering elements of being away to new worlds of mental exploration; it should be rich enough, and coherent enough to constitute ‘a whole other world’ that is of sufficient scope to sustain exploration and interpretation. ‘Extent’ refers to the sense that the immediate setting is part of some larger place or whole. ‘Extent’ can be defined by the presence of two sub-components: connectedness and scope which again refer either to the physical environment or to psychological processes (Kaplan and Kaplan 1989). Connectedness is expressed by a series of relationships between environmental features. Scope refers to breadth and indicates there is more than the immediate environment available, either physically just out of sight or even within the imagination that suggest that further information is available upon exploration (Hartig et. al. 1991).
7.2.1.3 Fascination

'Fascination' refers to an environment's potential for eliciting involuntary attention. Involuntary attention requires little or no effort, is likely to be resistant to fatigue, and kicks into motion when out of interest, or curiosity, the contents and processes in the surroundings capture and hold one's attention. 'Fascination' is important for two reasons. First, "it attracts people and keeps them from getting bored, and secondly it allows them to function without having to use directed attention" (Kaplan and Kaplan 1989:184). When involuntary attention is engaged, the demands on directed attention diminish and restoration becomes possible. Experiencing this form of 'fascination' is a pause in time; a moment to rejoice, to be truly alive. There are a range of sources and types of fascination, some derived from content or 'soft fascination' and others from process, or 'hard fascination'. 'Fascination' is derived along a continuum of a 'soft-hard' dimension based on the elements of the stimuli, or content. Soft fascination, characteristic of certain natural settings has a special advantage in terms of providing an opportunity for reflection, which can further enhance the benefits of recovering from directed attention fatigue (Kaplan 1995). Soft fascination would include elements of nature such as sunsets and waterfalls, caves and fires (Kaplan and Kaplan 1989), leaves moving in a breeze and cloud formations (Kaplan 1995). Hard fascination involves dramatic attention grabbing stimuli such as watching auto racing (Kaplan 1995) and staring at giant trees and vast waterfalls (Herzog et. al. 1997).

7.2.1.4 Compatibility

Compatibility refers to the agreement between how one wants to function, both mentally and physically, within an environment and how that environment affords the opportunity to function as desired (Hartig et. al. 1991). For an environment to be restorative, it must not only support the specific activities, but also any inclinations of the individual. Therefore, compatibility is a function of environmental dictates and personal intentions (Hartig et. al. 1991). If the environment or elements of the environment are not, or are perceived to be not supportive of specific activities proposed, then the environment is not compatible (Kaplan 1995).
7.2.2 Social Aspects of Restoration: Extending ART?

My SAM framework demonstrates that there are both physical and social aspects to scuba divers' sense of place. However, ART currently addresses only the physical, environmental aspects of restoration and it is unclear what role (if any) other people have to play. In the extreme cases, another's presence might be an essential component of, or fatal obstacle to, restoration or instead leave it unaffected. Or, other people might merely enhance or degrade an environment's restorative potential.

The only known research to even recognise the absence of knowledge about social aspects of restoration is by Staats and Hartig (2004) who criticise this shortcoming and provide some ideas on how other people might factor into restoration. Their study of 106 participants suggests that the presence of other people does influence restoration in natural environments and may have two positive, enabling effects. The first is to provide an element of safety as it might be hard to relax and mentally recover if one fears injury (or worse) in a natural, uncontrolled environment. Here, "company enables restoration by providing safety" (Staats and Hartig 2004:209). However, it should be noted that "when safety is not a concern, restoration is enhanced by the absence of company" (Staats and Hartig 2004:209), and this is a point that will become significant later. The second effect of company on restoration is to provide someone to help guide attention to aspects of the immediate experience: "independent of safe access, another person might enhance the restorative quality of the environment by providing welcome observations that feed one's curiosity about the environment" (Hartig 2004:3). Staats and Hartig's research is a promising start but, as they freely admit, it may not exhaust the social aspects of restoration.

An important question, which Staats and Hartig do not address, is whether the existing definition of a restorative environment, in terms of being away, extent, fascination and compatibility can accommodate the effect of other people's presence or whether this definition requires extension to include that effect. In other words, does ART require the addition of other, exclusively social, properties to the definition of a restorative environment or are people implicitly included in the existing four? More specifically, can
Staats and Hartig's 'safety' and 'attentional guidance' be understood in terms of being away, extent, fascination and compatibility?

It is my contention that no new properties are currently required and that 'safety' and 'attentional guidance' are consistent with 'compatibility' and 'fascination' respectively. As 'compatibility' is the environmental property of meeting an individual's inclinations for activity, it seems reasonable to suggest that when companions make an environment safe for the individual they are also making it compatible. Some recreationists do participate in activities to explicitly experience risk but thus far, no recreational settings providing an overt element of danger have been found to be restorative. As 'fascination' is the environmental property of eliciting effortless attention, the 'attentional guidance' provided by companions can be seen as reducing the effort an individual must make in perceiving and attending to their surroundings. It seems reasonable to imagine that when a companion points out interesting aspects of the environment, they are making those aspects more readily available to involuntary, rather than directed attention and therefore enhancing 'fascination'. With this in mind, the following analysis will proceed on the assumption that 'safety' and 'attentional guidance' can explain the social aspects of divers' experience, and, that these can both be accommodated by existing ART.

7.2.3 The Sub-Aquatic Environment as a Restorative Environment

To explore whether my study provides evidence to support the claim that the sub-aquatic environment is a restorative environment, I will consider both my interview data and the SAM framework derived from it. First, I consider whether there is direct evidence of restoration occurring in divers' description of their experiences and then I ask if there is evidence that the sub-aquatic environment possesses Kaplan's four defining properties of a restorative environment.

7.2.3.1 Do Divers Describe Restoration?

Within the accounts presented in this study, specifically under Sense of Wonderment, Being in a Different World, and Splendid Isolation; participants frequently referred to notions of relaxation, enjoyment and forgetting worries. Following are some examples from the interview transcripts where participants describe being relaxed in the sub-
aquatic environment, as well as the outcome of having been under the waves. Marie describes being relaxed observing life on the reef and Pam describes the effect of sensory stimuli as uplifting:

I feel relaxed! It's another world - I just love the idea that this is some other life going on there. And we're all getting to experience and be part of it, just for that time and just watching what's going on. - Marie

Yes, there's quite a lot of sound. People think it's going to be quiet but it isn't. There's a lot of sound which is interesting. But for me, it's the vision, it's the colour and the activity. Well, it makes me feel quite happy, excited, in a very good mood. It's very uplifting. UK diving isn't because it's all basically dark green, most of it you know! It's kind of depressing you know. Whereas blue water diving is wonderful. - Pam

Additionally, participants described being relaxed after a dive, and their feelings of elation and rejuvenation:

if you've seen something that's absolutely fantastic, you know, you feel absolutely brilliant! And so, you know, you've seen a giant turtle or whatever swimming by or you enter this...you got into the wreck and you've seen the cargo or the captain's cabin or whatever. So there's the feeling of elation - you're coming out and you're saying, 'Oh! Did you see this? Did you see that? I saw 3 stonefish'! - Jack

After a good dive, just I think partly there's a feeling of relief being back safely. But there's that really nice feeling ...When you've done a really hard run and you get home and you stand under the shower and you've just got that feeling, kind of like 'Yeah!' - Relaxation! Really kind of, you feel good, everything's pumping around your body, you feel really alive! But relaxed, you know what I mean? - Diane

Probably euphoric. If it's been a really good dive, I just, I suppose it's like getting off a roller coaster...(...) I really feel good after a dive. I might feel tired a bit but an hour afterwards but it's just a wipe your slate clean and start again feeling. Just an opportunity to leave everything behind! Put everything in perspective and carry on! - Celia
The verbatim extracts of relaxation and rejuvenation above suggest that restoration occurs within the sub-aquatic environment. The next section examines participants’ descriptions of their experience for evidence of Kaplan’s four defining properties of a restorative environment. Verbatim extracts from participants’ sub-theme directories are used for illustration and relevant SAM sub-themes are shown in brackets after an extract.

7.2.3.2 Does the Sub-Aquatic Environment provide Being Away?

For the sub-aquatic environment to allow divers to ‘be away’, it must provide both physical and psychological distance from their everyday settings and routines. Since most participants travelled away to dive destinations, there is definite geographical distance but it is still possible that they remain psychologically ‘at home’. For example, going to a hotel in a foreign country where there are still roads, shops, cars and crowds might provide geographical distance but not enough difference in setting or environmental interaction to allow individuals to psychologically break with normalcy. However, the physical properties of the sub-aquatic environment are so vastly different from daily life that being away psychologically seems to be an overwhelming consequence of them.

The act of sinking beneath the waves is a clear symbol of leaving the everyday terrestrial realm of people and things to enter a different world entirely: free from daily life, engaged in the moment and leaving worries behind, as depicted here by Fiona and Alex:

It just seemed so natural --it just seemed literally like --you know, you’re the man walking from there, and just making your way into the ocean, getting down there, and you just get deeper and deeper and you just see...you’ve just got more of a sense of this is the shore, and now it’s becoming the sea. Even when I was down at 20 metres I was like looking down and I was like 'oh my God'! I could see all this stuff really far down, 30 – 40 metres and it just kind of, literally, a whole new world opening up. – Fiona (‘Discovery and Learning’)

And we just went in off this beach... and so we waded out from this beach and there’s all these people playing out on the beach as they do and swimming in the sea and all that. We waded out, stuck our diving gear on, we were probably about, I don’t know, 15 metres away from the edge of the water and we dropped down and probably didn’t go down more than 3 or 4 metres, maybe 5 metres and I remember seeing all this stuff, all these fish and everything. (...) Just the amount of
stuff you can see you'll never have seen before and most people are totally oblivious to and it's just all there, you know? – Alex ('Beauty')

In this different world, the relationship between one's body and the environment is drastically altered. Weightlessness and the potential for three-dimensional movement are evidence of 'being away' from normalcy.

You can go up, down, sideways and the world's like all around you. You're not kind of rooted to the ground. Here, you're stuck in the ground and can only move in one direction. But under the water, I think it's just an amazing sense of freedom. – Pam ('Overcoming Physical Limitations')

In the sub-aquatic world, there exist environmental features and inhabitants that are never witnessed on the surface:

There's this feeling of being in another world really, another scenery... And I guess, the colours surprise you because they're you know, they're bright, they're translucent or they're vivid. You know, they're more... more vivid than the colours on the land. – Lee ('Beauty')

Animals underwater are really, really spectacular and you don't expect them to be. It's amazing that... like nudibranches, you know... the little sea slugs are far more beautiful underwater than the slugs we have on land. – Olivia ('Beauty')

When you do a dive and something chooses to investigate you (...) a seal is interested in you or if you're abroad and a big ray comes over to investigate you or to play in your bubbles, or the dolphins all play with you or things like that. (...) when you do a dive, and something chooses to investigate you or spend time with you; it's really... you feel really special and it's quite magical because they've come to you. – Olivia ('Encounters with Marine Life')

There also exists the potential for activities that could never be part of everyday routines:

I just think there's this opportunity to see so much, there is so much to see and there's relatively few people who actually do see it. So, it's kind of this experience that can't be replicated. You can't go to the cinema and see it or there's nothing you can do on land that quite compares with it. – Ethan ('Discovery and Learning')
I mean I think just the reef type environment and the things you see...to actually experience it through diving is a lot more fun than seeing it through a glass bottom boat, or seeing it in an aquarium. You know, you can't get the same experience of actually being in there. And I think part of that is the breathing, the bubbles coming up [laughs], I mean the feeling of being in there, under the water, actually there with the stuff, is...you know, this is what hands on experience is...- Lee (‘Discovery and Learning’)

Participants also described more directly how being underwater equated to being away psychologically:

And it’s almost like when you’re diving, you forget about, you know, I never worry about work or worry about arguments with people or anything like that. When I’m underwater, that is like totally engaging, that’s everything, just completely fills...fills you up with being in the present moment.
– Diane (‘Serenity’)

Personally, it is... when I’m underwater, it gives me an opportunity to completely clear my head. Nobody can talk to me, nobody can interrupt me, do anything! And it’s just a universe that’s so completely removed from reality. Um...it’s definitely a release, it’s therapeutic I think. – Celia (‘Serenity’)

The narrative accounts above have shown that participants do experience ‘being away’ whilst in the sub-aquatic environment. But does it provide ‘extent’?

7.2.3.3 Does the Sub-Aquatic Environment provide Extent?

The sub-aquatic environment would provide ‘extent’ if it gave divers scope for the exploration of a whole new world and the sense that what they experience is part of some larger, connected system. As in ‘being away’, the vast physical differences between the sub-aquatic environment and everyday terrestrial settings provide ample scope for exploration.

It is so interesting and so many different forms of life, things that you would look at and think – ‘oh! That’s a plant’ but it’s an animal. And it just shows you, I think, how little you know of your whole world. (...) Every time you dive, and you can probably dive forever, and every time you dive, you’ll come back and think, ‘what was that thing’? Was it a coral or wasn’t it? I just love that kind of...it’s completely different to being on land! – Pam (‘Discovery and Learning’)

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I'm a fish lover so I identify fish (...) the thing I like best is the feeling that you might see something new. I think almost every time I've dived I get to see a type of fish I haven't seen before. That's what keeps me coming back, you know. – Harry (‘Encounters with Marine Life’)

All the beautiful sights you see, all the amazing coral formations and the beautiful fish which, if they don't appeal to you then you know, you can go swim with sharks. If that doesn't appeal to you, you can go and explore wrecks, there's just so many different forms of it. I really think you can find something that appeals to virtually anybody – Ethan (‘Beauty’)

And that was the most beautiful diving: crystal clear water, beautiful colours and lots of different types of coral. Very nice coloured, well-protected, (...) Lots of sea-life too. Sort of, sea snakes, lobsters, rays... you know, a whole range of stuff. – Fiona (‘Beauty’)

However, extreme differences in environmental properties alone are not sufficient to provide extent; if the setting is not also obviously coherent and connected then it becomes much harder to understand and may actually fatigue attention instead of restore it. The complex ecosystem of the sub-aquatic environment is known by marine biologists to be connected and coherent, but is this obvious to divers during their recreational experiences? In this example, Jack describes observing the symbiotic relationship between a shrimp and gobi:

A shrimp gobi, you can't see the shrimp – but you know, this idea that you've got a shrimp that digs out a hole and you've got the gobi that can't do anything but lives in the hole with it. But the gobi keeps watch; the shrimp is very, very short sighted, so keeps digging. But when the gobi gets worried because there's a predator coming, the shrimp goes into the hole as does the gobi – and so you've got this sort of, wonderful symbiotic relationship. – Jack (‘Discovery and Learning’)

I mean, even down to things like a clownfish or whatever, an anemone fish, you know, going in and out of their anemone, I mean, you've got a real ecosystem and the beauty of it is that you can see that as well. – Jack (‘Discovery and Learning’)

Evidence of ‘extent’ in the sub-aquatic environment also may be found in literary accounts of the connectedness of the coral reef environment. In her book ‘Reefscape’, Love (2001:13) tells us that
divers can see for themselves the interdependencies, once they know what to look for. For instance, at the fish cleaning stations, cleaner fishes nibble the parasites from the gills and mouths of fishes much larger than they are. The anemone fish shelters within the waving fronds of the anemone host, enticing other small fishes into the anemone’s trap.

If ‘extent’ provides features to explore, the next aspect, ‘fascination’ allows for those features to be reflected upon using involuntary attention.

7.2.3.4 Does the Sub-Aquatic Environment provide Fascination?

‘Fascination’ would be a property of the sub-aquatic environment if it easily elicited involuntary attention. In other words, is the sub-aquatic environment effortlessly attractive or absorbing? These first few descriptions are examples of ‘soft fascination’ from content of the sub-aquatic environment:

Just like looking at the small fish — rather than looking at a whole bit of coral reef and taking the bigger picture. Just looking at a little selection of fish and watching them, what do they do for a little while — Marie (‘Discovery and Learning’)

And one of the most impressive dives I’ve ever done there was under a man-made structure called Busselton Jetty which is the longest jetty in the Southern Hemisphere. And the pilings of the jetty are one solid mass of multi-coloured encrusting lichen. Most of which I’ve never seen before. Blue; green; orange; reds and sea-squirts; sponges [chuckles] I’m not sure what some of them were! A variety of fish and I...they have been...I think they’ve been books published. I saw photographs and it’s just almost too much too much to take in. And it’s all at the depth of 8 metres, so you can spend about an hour, an hour and a half underwater, swimming about you know. — Neil (‘Beauty’)

Night diving is, I find incredibly relaxing. Because, well...you know, rather than looking around at everything around you as a lot of people do when they’re diving during the day...you’ve got to concentrate on this sort of bit of light which is you know only a foot across on the coral wall. And you just sort of get really close you know and just look at that bit. You can’t look over you know to your left or your right or up or down [makes hand signs] you’ve just got to look at that bit...and then look at that bit, and then look at that bit. And that’s all you do...and you can, I can spend you
Participants spoke of being amazed, delighted, and relaxed in the presence of such splendour; and exploration can also be equated with fascination which based on sensory stimuli inherent in the setting, resulted in affective meanings being ascribed to the subaquatic environment.

In line with Staats and Hartig's (2004) findings about the social aspects of restoration, dive companions were found to aid 'soft fascination' by guiding an individual's attention to interesting aspects of the environment:

And it's really nice if you can get the right dive buddy, and there's been a few times, like a few times when I've dived with an instructor or something, and you're just so in tune with each other and what you're looking at. And they see something and they point it out to you and you had almost already seen it. You're exactly the same level and everything. (...) So sometimes when I've really got on with the buddy, you just feel really good. Makes you feel really good and really satisfied. You know, you feel like you've got to give the other person a real hug. - Gina ("Sharing the Experience")

If you experience the underwater, normally when you come up, you talk about it, obviously. And that, kind of, I suppose reinforces the experience down under because down there, you're not always sure that somebody's seen what you've shown them. Because...especially, like a new diver and there's an octopus on a rock, they can't actually see what you're showing them, particularly that kind of thing. - Pam ("Sharing the Experience")

Especially if it's a new diver and it's the first time they've seen a seal or.... You know, their reaction to it is always really great. And you get a lot of fun from that because it makes you feel good because it's partly down to you that they experienced that because you've helped train them, (...) You saw a bit of slime from a turtle who'd just been eating soft coral, followed the slime and found the turtle. You know, your bit of knowledge helped them have that experience. - Olivia ("Discovery and Learning")
'Hard fascination' involves dramatic attention-grabbing stimuli and within the sub-aquatic environment, encounters with certain pelagic creatures are examples of this. In the next three examples, participants describe such attention grabbing moments:

I remember being on the Brothers one time, in the Red Sea again, down in the South of the Red Sea and there’s a shoal of fish (...) you probably get two or three thousand of these fish in the shoal and I was doing a safety stop of 3 metres, myself and this other guy you know...and this shoal was just spinning around, they just created a dome around us you know, and they’re just swimming around...And it’s just incredible! (...) And I’ve been to the Brothers twice and had that same experience with those fish you know, and it’s just phenomenal. –Alex ('Encounters with Marine Life')

We’re diving on this sort of rocky outcrop, looking at grey nurse sharks. And that’s not very nice and then, but there was this school of baitfish which are sort of like big sardines I guess. Probably, you know 30 centimetres long in the school above us, and they were going mad, you know. And we saw a marlin going into them; it was sort of on the surface. And then they went a bit more mad, and we’re like ‘what’s going on here?’ And this six foot great white shark just sort of cruised by which was pretty impressive! –Ben ('Encounters with Marine Life')

So I’d never done sea night dives. So it was the first night dive we did, we jumped off the boat and I mean, I always, look down straightaway to see what’s there...And I looked down and the shark was that way...it was only a black tip reef shark (...) I was like, ‘Oh! My God! here’s a shark! (...) I mean that was amazing – that was even more unreal! –Pam ('Adventure')

To remain in a state of ‘fascination’, however, depends on an individual’s ‘compatibility’ with the purpose of entering the environment.

### 7.2.3.5 Does the Sub-Aquatic Environment provide Compatibility?

The sub-aquatic environment would provide ‘compatibility’ if it afforded divers the opportunity to carry out their desired activities without effort or struggle, thus creating the potential for restoration. There are clearly a range of special activities associated with diving which have provided evidence of ‘being away’, ‘extent’ and ‘fascination’. ‘Compatibility’ is concerned less with what the activities are and more with whether they can be pursued without obstruction in a given setting. Unless specifically asked for,
evidence for 'compatibility' would be implicit in divers' descriptions of successfully carrying out their activities and might only become explicit when this is violated.

Some direct evidence for effortless opportunity to pursue one's own activities comes from participants' descriptions of freedom underwater:

It's pure weightlessness and total kind of freedom from everything, you know. And then you combine that in through the day when you can get away from other divers with the marine life and the colours and it's just incredible. Just in terms of experiences with other people you know...it's kind of you've got the freedom that you can get with the night dives and the weightlessness and if you do it through the day, you've got all this incredible beauty with it, you know? - Alex ('Overcoming Physical Limitations')

The somatic freedom of weightlessness, which was identified as an important experience in its own right, is also evidence of compatibility. The ability to glide effortlessly, in three dimensions is a unique feature of the marine environment and was described by some participants as the main reason they dived:

I think I'm diving for that whole feeling of weightlessness and just being in the water. Even if I don't really see anything that good, but haven't been diving for six months, I just feel really happy to be doing it again. - Gina ('Overcoming Physical Limitations')

I suppose it's when you're diving, there's a three dimension experience, I find. You know, because you can go up and down and sideways, so you're totally free in the water to go any way really. And look at things from lots of different angles. This wonderful, feeling of the freedom underwater because you can move in all directions. - Lee ('Overcoming Physical Limitations')

That 'compatibility' is normally present in the sub-aquatic environment is more clearly shown when that normalcy is disrupted and the central factor influencing this seems to be the presence of other people. It appears that sub-aquatic 'compatibility' requires a delicate balance between company and solitude, and here, as for 'fascination', Staats and Hartig's (2004) findings on the social aspects of restoration are supported. Safety was described by participants as an important function of company:
But underwater, you can't say, 'well, I wonder what that is', 'move there', or 'do that' or 'go over there' or 'let's look at this'. It's all...has to be done by hand waving. So in a way, if you dive with somebody very regularly, you're much more likely to develop a rapport and understand what the other person might be getting at. And if there's a problem, you're more likely to understand it.
– Neil (‘Strengthening Bonds’) 

I think it's because we learnt together and you kind of see...when you see people learning, and doing all the drills and practising... And just that...you know someone well enough, you know, we've been together ten years or whatever and you know someone well enough that you know what their instincts are... - Marie (‘Strengthening Bonds’) 

And it's one of the difficulties you have if you're diving with you know, a stranger. You're not sure what's going on. I remember diving once with somebody in Cornwall I'd never dived with. And he seemed a bit odd throughout the dive – (...) But at the end of it, he was violently sick, (...) And then he told me he'd had a dreadful hangover because he'd been drinking the night before. (...) But I wish he'd said something before we went in though. – Neil (‘Sharing the Experience’)

But, as also found in Staats and Hartig's work, when safety is no longer an issue, the fewer people present, the better. Many participants expressed this balance in terms of only wanting to dive with small numbers of experienced divers, groups of novices or large groups were undesirable:

I mean for me, the beauty of it is that if you're there and you pick it right, you're the only boat there. And so you know, you don't have this ...where the sea is swamped by divers going up and down. You tend to get fairly experienced divers as well so that makes life a lot easier. You're not always looking over your shoulder to see if someone's about to drown or bump into you. – Jack (‘Remoteness’) 

I like it because, the first thing it's remote. Okay? I hate diving in big groups you know? Four, six, maximum! I don't like diving in big groups. – Gina (‘Remoteness’) 

'I don't like diving in large groups. (...) some of the best diving I'd ever had – absolutely terrific! And there were only six people there, when we were there. Three French, one Dutchman and my wife, and I!' – Neil (‘Remoteness’)
7.2.3.6 Is the Sub-Aquatic Environment Restorative?

The preceding analysis has provided compelling evidence to support the claim that the sub-aquatic environment is a restorative environment. Divers frequently described experiences that could reasonably be interpreted as restoration and evidence for all of Kaplan's four defining properties of a restorative environment was found. Although the evidence revealed by my analysis is compelling, it must strictly be considered indirect since my work did not seek to study restoration directly. To reach a definitive conclusion about the restorative properties of the sub-aquatic environment, a study specifically designed to measure restoration in scuba divers must be conducted. My work highlights the need for such a study and my findings strongly suggest that it would indeed find the sub-aquatic environment to be a restorative environment. Assuming this to be so, the preceding analysis has gone beyond description of divers' experience of place to an account of why they experience place as they do. If, as Korpela and colleagues (1996; 2001) claim, restoration explains why people develop place identity then this may have further implications for dive tourism, which will be discussed in Chapter 8. Next, I consider how the thematic structure of SAM relates to restoration.

7.2.3.7 SAM and Restorative Environments

The themes within the SAM framework emerged from a coding of interview data to reflect clusters of meaning relating to divers' sense of place. The preceding ART analysis using Kaplan's restorative properties could be considered as an alternative interpretation for the same data which allocated interview extracts to a pre-existing set of four themes. It is interesting to ask whether there is any similarity between the divisions in the data emerging from my interpretation and those 'imposed' by Kaplan's properties. Strong similarities might suggest that SAM has implicitly captured themes of restoration even though these were never explicitly asked about. To help explore this question, Table 10 overleaf shows which themes in SAM provide evidence for each of Kaplan's restorative properties.
Sub-Aquatic Meanings

<table>
<thead>
<tr>
<th>Central Themes</th>
<th>Sub-Themes</th>
<th>Being Away</th>
<th>Extent</th>
<th>Fascination</th>
<th>Compatibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sense Of Wonderment</td>
<td>Beauty</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Encounters with Marine Life</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adventure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being in a Different World</td>
<td>Discovery &amp; Learning</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overcoming Physical Limitations</td>
<td>*</td>
<td></td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Splendid Isolation</td>
<td>Remoteness</td>
<td></td>
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<td></td>
<td>Serenity</td>
<td></td>
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<td>*</td>
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<tr>
<td>Fellowship</td>
<td>Sharing the Experience</td>
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<tr>
<td></td>
<td>Strengthening Bonds</td>
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</tr>
</tbody>
</table>

Table 10: Summary of Restorative Properties in SAM Framework

By using Staats and Hartig’s extension of ART, and my interpretation of it in Kaplan’s terms, social as well as physical themes in SAM could be examined and in doing so, all 9 sub-themes display some evidence for supporting restoration. However, they do appear to vary in importance for restoration. For example, ‘Adventure’ contributes only to ‘fascination’ and ‘Strengthening Bonds’ only to ‘compatibility’, whereas ‘Beauty’, ‘Encounters with Marine Life’ and ‘Discovery and Learning’ all contribute to the restorative properties of ‘being away’, ‘extent’ and ‘fascination’. The divisions in the data that SAM and ART impose are not identical but the clear distinction between physical and social themes in SAM is reflected in the restorative properties they relate to. Physical themes contribute most to the actual content of restoration (‘being away’, ‘extent’, ‘fascination’) whereas social themes appear to contribute most to ‘compatibility’, which is concerned with the ease of accessing that content.

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Social Themes and Extending ART

What does the preceding say about the little-known social aspect of restoration? My analysis supports Staats and Hartig's findings that companions can provide both 'safety' and 'attentional guidance' that enable and enhance restoration for an individual. Staats and Hartig claim that when safety in an environment is an issue, company aids restoration but when it is not, people prefer solitude. My findings seem to confirm both tendencies simultaneously. As the sub-aquatic environment is a natural, uncontrolled setting with a very real potential for injury or death, the safety provided by dive buddies was evident in participant's interviews. However, the common desire to dive in small, select groups suggests that divers require just enough company to provide safety and no more. An overabundance of people, especially inexperienced or reckless people, upset this delicate balance by not allowing divers to relax and surrender their attention to the non-human properties of the sub-aquatic environment. Attentional guidance was also evident in divers' experience, where other divers would point out interesting aspects of the immediate setting, enhancing restoration but not necessarily enabling it, as for safety. My research also addresses a shortcoming of Staats and Hartig's work by indicating that at least some of the social aspects of restoration can be incorporated into existing ART. There is potential for future work in this area, to address further the social aspects of restoration.

Conclusion

This chapter focused on the third level of interpretation within an IPA study: findings have been compared to the extant literature and produced two theoretical claims to knowledge. In doing so, this chapter has addressed the third objective of this research by asking how scuba divers benefit from the sub-aquatic experience. The SAM framework has been interrogated against the Williams and Patterson (1999) framework for mapping place meanings. A predominance of symbolic and expressive meanings within the SAM framework suggests that sense of place amongst the scuba divers in this study can best be considered as place identity. The work of Korpela and colleagues (1996; 2001) suggests that place identity can be understood as the result of restorative experiences. To understand and explain why divers develop these intensely personal attachments, the
discussion turned to Attention Restoration Theory (ART) which focuses on the contribution of physical properties in an environment to restoration. A comparison of interview data and the SAM framework to Kaplan’s four properties of ‘being away’, ‘extent’, ‘fascination’ and ‘compatibility’ showed the sub-aquatic environment to be a restorative environment. However, to incorporate both the physical and social themes within SAM, I relied on Staats and Hartig (2004) who suggest two social aspects which contribute to restoration: safety and attentional guidance, but do not discuss these in terms of ART. I extend their work by showing that social aspects within SAM under ‘Fellowship’ can be incorporated within ART under ‘fascination’ which provides attentional guidance, and ‘compatibility’ which offers safety.
Chapter Eight: Conclusion

8.0 Revisiting Research Questions and Objectives
This exploratory study was guided by one key research question: how do scuba divers perceive and describe their experience of place? The premise to conduct this study was based on a gap in knowledge within dive tourism literature, which focuses mainly on issues related to impacts and conservation. Given that scuba diving depends on a particular type of physical setting, place is an important aspect of the recreation experience. Scuba diving as a form of recreation focuses on being underwater, or, in a sub-aquatic environment. As delineated in Chapter 1, the purpose of this exploratory study was to describe and interpret the meaning of place for scuba divers in order to understand how they experience and benefit from the sub-aquatic environment. Three research objectives were set out: what kinds of experiences make place meaningful for scuba divers; how do these experiences relate to existing sense of place literature; and how do scuba divers benefit from the sub-aquatic experience?

As discussed in Chapter 2, the study of ‘place’ has its origins in phenomenological worldviews which were highly subjective. A growing body of literature within resource-based recreation has collated knowledge on how people experience and benefit from contact with natural environments through recreation, or the study of sense of place. Within this literature, recreation places are viewed as resources that people create bonds with, and as such become meaningful places. This body of literature approaches place through the discipline of environmental psychology, which assumes a transactional world view that phenomena should be viewed holistically, and are composed of mutually defining aspects, instead of distinct and separate parts (Altman and Rogoff 1987). “Environmental psychology is the study of transactions between individuals and their physical settings. In these transactions, individuals change the environment, and their behaviour and experiences are changed by the environment” (Gifford 2002:1). Sense of place literature has thus far focused on measuring the strengths and weaknesses of recreationists’ attachment to place or ‘how much’ it means (Williams et. al. 1992; Moore
and Scott 2003; Kyle et al. 2003b; Kyle et al. 2004a; Hammitt et al. 2004). Limited work has been conducting on understanding ‘what’ makes place meaningful: to understand the types of experiences which contribute to the formation of sense of place (Schroeder 1996; 2004; Bricker and Kerstetter 2002; Stedman 2003a; Andereck et al. 2006). “Place meanings characterise reasons that an environment is valued and describe the uniqueness of a locale” (Stewart 2006:405). Drawing on this meanings-based approach (Borrie and Birzell 2001), mapping place meanings provides managers with valuable indicators for land-use planning for different interest groups. Increasingly there are calls to incorporate sense of place within the recreation and tourism industry in order to provide quality recreation experiences (Kaltenborn and Williams 2002; Andereck et al. 2006).

To conduct this exploratory study, the study of place was approached through an interpretive inquiry paradigm and the use of qualitative methodology. Methodological assumptions were clarified in Chapter 3 including the ontological, epistemological, axiological and rhetorical positions related to conducting a study on lived experiences. The theoretical and epistemological underpinnings of the chosen methodology were also clarified in Chapter 3. Chapter 4 introduced the method for Interpretative Phenomenological Analysis (IPA) which stipulates the need for analysis to occur at three stages: idiographic, inductive, and finally, at interrogative level (making links between findings and extant literature). Throughout the study, a clear audit trail of all the steps taken to both collect and analyse data was presented, and the techniques incorporated to enhance the trustworthiness of this study were also presented in Chapter 4. As this study draws to a conclusion, it is useful to identify how the three key research objectives were accomplished in this phenomenological study.

First, to understand what kinds of experiences make place meaningful for scuba divers, I conducted interviews with a group of scuba divers who were selected based on purposive sampling. The idea was to interview participants who were passionate about scuba diving, and were willing to share experiences of a favourite or memorable dive destination. Through the use of in-depth, semi-structured interviews, sixteen British-
based scuba divers (7 female and 9 males) were asked to share stories about their dive experiences. Interview transcripts were transcribed verbatim, and analysed to extract a range of central and sub-themes which constitute those aspects of the experience which make place meaningful. Thick descriptions of their experiences were interpreted using IPA which at inductive level produced the Sub-Aquatic Meanings (SAM) framework. The sub-aquatic environment was depicted as a meaningful place for participants based on the following common themes: Sense of Wonderment (‘Beauty’, ‘Encounters with Marine Life’, ‘Adventure’); Being in a Different World (‘Discovery and Learning’, ‘Overcoming Physical Limitations’); Splendid Isolation (‘Remoteness’, ‘Serenity’) and Fellowship (‘Sharing the Experience’, ‘Strengthening Bonds’). Chapters 5 and 6 presented narrative accounts for each of these themes. Although the framework was useful to depict the hierarchical relationships between themes, within the presentation of results, it was made clear that meanings were interconnected and complex (as noted by Bricker and Kerstetter 2002). Findings also support the view that places are not commodities, but resources with personalised meanings for recreationists (Williams et al. 1992; Williams and Vaske 2003; Hammitt et al. 2006).

Secondly, to understand how these experiences relate to the existing literature on sense of place in resource-based recreation, themes within SAM framework were examined using the Williams and Patterson (1999) framework on place meanings. Findings showed that sub-aquatic experiences were composed of aesthetic, instrumental, symbolic and expressive meanings confirming the notion that sense of place consists of an amalgamation of different ‘meanings’ (Williams and Patterson 1999). Sub-aquatic meanings encompass the characteristics of the physical environment; human use and experience of the environment; and the social, psychological, constructed meanings of people-place interactions (Tuan 1974; Relph 1976; Shumaker and Taylor 1983; Low and Altman 1992; Greider and Garkovich 1994; Brandenburg and Carroll 1995; Stedman 2003a; Hammitt, et al. 2006). Notably, this analysis showed that symbolic and expressive meanings were prevalent amongst participants, concluding that sense of place amongst scuba divers is of the strong form, place identity.
Thirdly, this study aimed to understand how scuba divers benefit from the sub-aquatic experience. To produce an understanding of how scuba divers benefit from their sub-aquatic experiences, I compared my data to Kaplan's (1995) Attention Restoration Theory (ART) which focuses exclusively on the contribution of the physical properties of an environment to restoration. However, to incorporate both the physical and social themes within SAM, I relied on Staats and Hartig (2004) who suggest two social aspects which contribute to restoration: safety and attentional guidance, but do not discuss these in terms of ART. I extend their work by showing that social aspects within SAM under ‘Fellowship’ can be incorporated within ART under ‘fascination’ which provides attentional guidance, and ‘compatibility’ which offers safety. Findings showed the sub-aquatic environment to be a restorative environment which explains an important antecedent to the formation of place identity. Research has shown that individuals create ties to places which fulfil their emotional needs; specifically the experiential qualities of favourite places frequently relate to a person’s emotional well-being and self experience (Korpela 1989; Korpela and Hartig 1996; Korpela, et. al. 2001). The restoration experience explains how scuba divers benefit from their experiences.

The next section presents a discussion on contributions to knowledge, where three key contributions are claimed for this study on ‘Sub-Aquatic Meanings: A Study of Scuba Divers’ Experience of Place’.

8.1 Contribution to Knowledge
The primary contribution to knowledge of this study is the development of the Sub-Aquatic Meanings (SAM) framework which qualitatively describes the place meanings embedded in stories of scuba divers’ lived experience. Place meanings for the sixteen participants interviewed were interpreted into four central themes and found to consist of both physical and social components. ‘Sense of Wonderment’ and ‘Being in a Different World’ primarily concern features of the physical environment and ‘Splendid Isolation’ and ‘Fellowship’ focus on the social aspects of sub-aquatic experiences. Nine sub-themes describing finer distinctions of place experience also emerged during the process of interpretation. This study also provides evidence of how the interpretative approach to research can develop an understanding of how interactions with a recreation setting lead
to the formation of sense of place. Since sense of place is a prominent concept for exploring the relationship between humans and the environment, and little is known of scuba divers beyond quantitative environmental impacts, SAM addresses an important gap in qualitative knowledge of this increasingly important sector of marine tourism. Strictly, as with any qualitative research, any conclusions are specific to the study sample and generalising beyond this group is to be taken tentatively (Smith & Osborn 2003). Further research is required to confirm my exploratory study.

I also provide empirical and theoretical evidence for two claims to knowledge which, if the SAM framework is confirmed as generally-applicable, broaden our understanding of scuba divers' sense of place, and the desirable properties of the sub-aquatic environment itself. Both findings may be significant for dive tourism operators. Using the SAM framework to interrogate the literature on sense of place, I was able to find clear conceptual links between my findings and existing theory. By drawing on the 'Place Meanings' framework of Williams and Patterson (1999), my first assertion is that sense of place in scuba divers is of the strong form known as place identity. The present study may also be seen as adding new data to the growing body of knowledge about sense of place within resource-based recreation. Secondly, by comparing my data to Kaplan's (1995) Attention Restoration Theory, I assert that the sub-aquatic environment can be considered a restorative environment and that this explains why divers develop such strong ties to place and how they benefit from their experiences. The implications of these claims for dive tourism practice will be discussed in detail in the next section. My work also supports new and much-needed developments in the theory of restorative environments by Staats and Hartig (2004) to extend ART to include social aspects of restoration. My study confirms their finding that safety and attentional guidance are important roles for companions in a restorative environment.

By studying scuba divers and the sub-aquatic environment, this study is original in its choice of subject group and context but it is also novel in terms of methodology and the extant literature which was used to illuminate the findings. The SAM framework was derived from interviews with participants conducted using the qualitative method of
Interpretative Phenomenological Analysis (IPA) which is prevalent in health and social psychology but is methodologically novel in tourism research. Its use here provides encouragement that the important qualitative and subjective aspects of tourists' experience may be captured using this method. Within tourism research, the study of 'place' has so far been approached mainly as a geographical construct but this research has highlighted the potential of studying place through the literature of environmental psychology. In this study, at the interrogative level of interpretation, both sources of extant literature were drawn from the field of environmental psychology: sense of place and Attention Restoration Theory.

8.2 Implications for Dive Tourism
This section considers the implications of the findings of this study. The Sub-Aquatic Meanings (SAM) framework has mapped a range of place meanings which scuba divers associate with the sub-aquatic experience. Sense of place is an applied meanings-based approach which shows what aspects within an experience provide a 'quality' tourism experience (Borrie and Birzell 2001; Andereck et. al. 2006). As noted by Borrie and Birzell (2001), managers need to understand the full range of meanings attached to recreation settings to help identify the activities, benefits and experiences that managers should aim to provide. The SAM framework provides a description of such meanings and this information could be used to develop marketing strategies. Also, the SAM framework could be used as an educational tool to enlighten non-divers about the range of sub-aquatic experiences.

The early part of Chapter 7 has shown that sense of place amongst the scuba divers in this study can best be considered as place identity and not place dependence. Be that as it may, why would place identity be important for the dive tourism industry? First and foremost, place identity may be intricately related to visitation: scuba divers may return repeatedly to a special place. However, as they journey across the dive atlas and discover a new site, one which better exemplifies their place identity, they may become attached to it, and choose to return over time. Yet, sense of place is a dynamic phenomenon and one which may evolve as a location receives increased visitation. If, for example, a location
no longer retains 'Remoteness' and 'Serenity', divers might be reluctant to return to their once special places, as their place identity has been violated. Therefore, properties of the sub-aquatic environment which enhance place identity or make place meaningful as described in the SAM framework should be preserved to ensure repeat visits from these types of divers.

Secondly, research has shown that sense of place is related to attitudes towards user fees. Kyle et. al. (2003a) found that place identity, not place dependence moderated support toward fees. Findings showed that individuals with a strong place identity were particularly supportive of environmental protection initiatives that would be funded by a fee program. Although this is a positive response, managers also need to consider how place identity might influence visitor behaviour, response to management decisions, as well as how managerial actions may impact visitors' experiences and lives (Farnum et. al. 2005). This is especially pertinent for places that evoke strong emotional responses. For example, management action to indirectly discourage use by raising fees may not succeed in deterring divers with strong place identity (Farnum et. al. 2005).

Thirdly, managers could use place identity to understand scuba divers perceptions and reactions to environmental impacts. In their study of Appalachian Trail hikers, Kyle, et. al. found “as place identity increased, participants were more inclined to indicate that the social and environmental conditions encountered along the trail was a problem” (2004b:12). One explanation for this is the correspondence of high recreation specialisation and sense of place. Highly specialised recreationists are said to be more attuned toward impacts, and if the same individuals also display a strong place identity, they might be more perceptive, and critical, of recreational impacts (Vaske and Kobrin 2003; Farnum et. al. 2005). There was some evidence in this study that showed strong feelings of stewardship towards the reefscape. Strong emotions of care and responsibility were evident as participants described how they would clear litter, or, be protective of the reef. This concern to protect the reefscape and noticing other divers who were less concerned is evidence of how an individual actively constructs and affirms a sense of self though affiliations with places, or place identity (Haggard and Williams 1991; Williams
Therefore, dive tour operators could gain important insights by understanding the role of place identity, and attempting to identify shared and contested meanings and values assigned to a particular place by different groups of recreationists. This information could be used to implement strategic marketing targeted at select groups.

The implications of restoration for dive tourism considered here are based around Kaplan's four restorative properties. I will consider how 'Being away', 'Extent', 'Fascination' and 'Compatibility' might each be preserved for existing divers and marketed to new ones. Some aspects of 'Being away' in the sub-aquatic environment should be straightforward to preserve because they are so inherently different to everyone's normal routines, both physically and psychologically. The symbolic break with the terrestrial as one descends below the surface and the bodily freedom of weightlessness are simple consequences of being underwater. However, the presence of unusual scenery and life-forms cannot be taken for granted since coral and fish are both vulnerable to damage and extinction. Measures to maintain 'being away' might be seen as part of more general marine conservation action. 'Extent' and 'Fascination' also depend on the presence of unique sub-aquatic scenery and inhabitants; both must be safeguarded to maintain restoration. Marine diversity and richness will need to be maintained to preserve scope of extent and the connectedness apparent in marine ecosystems will be a consequence of this. On-site facilities to educate divers about the scope and connectedness of their environment might be useful to enrich the restorative dive experience, although it was apparent that dedicated divers cover this as 'homework' anyway.

Although the natural content of the marine environment is inherently 'fascinating', conservation may need to be supplemented with measures that better manage people to preserve 'Compatibility'. Inexperienced divers were said to ruin the experience by not allowing participants to relax and feel safe and additionally they are more likely to damage the delicate corals and fish. The dislike of crowds that was frequently mentioned sets interesting constraints on the resources of dive sites and may affect their potential for
business growth. There is also potential for more direct marketing strategies based around the restorative properties of the sub-aquatic environment. ‘Being away’ could be marketed more directly as a break from normal routines. In contrast to ‘hedonistic holidays’, ‘Extent’ could be marketed directly as ‘an opportunity for learning’. The scope and connectedness aspects of ‘Extent’ may appeal to ‘new age’ sectors of the market for whom the intricate connectedness of marine ecosystems may resonate with the commonly held ‘Gaia hypothesis’ that the earth can be considered as one giant organism (Lovelock 2000). And, ‘Compatibility’ may be marketed as effortless freedom to pursue one’s own desires. Finally, there is opportunity to create dive packages designed to encourage restoration, a focus on the therapeutic benefits of the sub-aquatic environment.

8.2 Critical Reflection and Limitations
Epistemological reflexivity necessitates a reflection on the assumptions made during the course of research; and, encourages us to think about the implications of these assumptions for the research and its findings (Willig 2001). To demonstrate truth value, applicability, consistency (Lincoln and Guba 1985), as well as the centrality of researcher subjectivity (Willig 2001), this study incorporated a range of techniques available for establishing trustworthiness (Section 4.1.3) or to judge the credibility, transferability, dependability of this study and provide evidence of reflexivity in an IPA study.

In order to demonstrate truth value, a researcher must “carry out the inquiry in such a way that the probability that the findings will be found to be credible is enhanced” (Lincoln and Guba 1985:296). To enhance credibility, the research design incorporated four techniques: ‘prolonged engagement’, peer debriefing, member checks, and unique cases. In this project, I was both the researcher and a certified diver with knowledge of the experience I was investigating. This provided easier access to the ‘language’ of the group I was studying and was useful to enlist participants as well as during field work. The choice of method, IPA, accepts the impossibility of gaining direct access to research participants’ experiences (Smith and Osborn 2003) and explicitly recognises researcher subjectivity. My experiences provided a filter through which I accessed the participants’ descriptions and also posed an interesting challenge: how could I ensure findings were credible in terms of criteria used to judge trustworthiness?
During the data analysis stage, findings were presented to peers for review and constructive criticism. The coding of transcripts and the development of themes were subjected to debate and discussion. At another level, a member check exercise was conducted to gather participant feedback on findings. Results from this exercise were presented in Section 6.5 and show overwhelming support from participants and agreement for the findings, both at idiographic level and inductive level (SAM framework). This feedback enhances the credibility of the findings, as the emergent themes have been confirmed by the participants themselves. Additionally, to enhance transparency, unique themes were also presented as part of the findings in Chapter 6 to show data which did not fit into the framework.

To enable judgment to be made about transferability to other settings because of shared characteristics, this research design incorporated the use of homogenous, purposive sampling, and was composed of thick description, where both participants (diver biographies) and the data was described extensively. In presenting detailed description about participants, it is hoped that in future work, other researchers will obtain data from a group of scuba divers whose experiences have not been represented here, with the aim of building up an increasingly complete picture of the sub-aquatic experience (Smith and Osborn 2003). Ultimately, the results of an individual IPA study must be considered contextual and cannot be generalized beyond the sixteen participants in this study: findings are culturally bound, historically contingent and situated for one specific group of participants. Place meanings within this study are temporal: with the passing of time and as participants gain more life experiences and logged dives, their perception of place is bound to change. According to Willig (2001), IPA studies affirm a contextual constructionist epistemology, which argues all knowledge is necessarily contextual and standpoint-dependent. Different perspectives will generate different insights into the same phenomenon; such research is concerned with completeness rather than accuracy of representations (Willig 2001).
Dependability refers to how well mapped the study is so that other researchers following the same procedures can reach similar results (Lincoln and Guba 1985). To ensure the dependability of this study, the research design incorporated a clear audit trail on data collection and data analysis as presented in Chapter 4. Extracts from the reflexive diary were included to explain methodological decisions during data collection. The analytic strategy or coding was clearly presented with examples from the process itself, and the use of the reflexive diary in the analysis process was also addressed. An independent researcher was invited to review this audit trail to ensure findings were dependable, that the data analysis process had been adhered to and results were not idiosyncratic.

Each method has its strengths and limits and it is necessary here to consider any limitations which might have influenced this study. Within IPA, the researcher relies on obtaining retrospective descriptions from participants, or recollections as raw data. A number of issues arise here, including the possibility of error (memory or perception of original situation), or deceit on the part of the participants (Giorgi and Giorgi 2003). However, phenomenology acknowledges that the descriptions obtained are subjectively dependent ones, not objective reports. “The interest is in how the participant experienced situations even if these appear through memorial modes, because the manner in which situations stand out in memory is also psychologically revealing” (Giorgi and Giorgi 2003:46). The subject matter in this study was not controversial, participants were asked to share stories about their favourite or memorable dive destinations, and I had no reason to believe any participant was deceitful. However, in hindsight, it could be deduced that the descriptions produced were in part influenced by the design of the study. The selection criteria for participants stipulated the requirement to discuss experiences related to a ‘favourite dive destination’ which immediately brings to mind positive memories and accounts for the fact that few cases of negative experiences were shared within the interview. However, this prerequisite was chosen in light of the purpose statement: “to understand how participants benefit from the sub-aquatic environment”. It might be possible to use a more general line of questioning in future to enable the recollection of negative experiences as well, to see what, if any, impact these have on the experience of place.
Data was collected using semi-structured interviews as is the norm in IPA studies. Therefore, language was the means by which participants communicated their experiences to the researcher. Once interviews were transcribed, the text was considered an insight into participants’ perception of the experience. IPA relies upon the representation validity of language, in that participants use language as a tool to capture their experience (Willig 2001). However, Willig (2001) argues that language constructs, rather than describes, reality. This line of argument proposes that an interview transcript produces data related to “the ways in which an individual talks about a particular experience within a particular context, than about the experience itself” (Willig 2001:63). Therefore, there is opportunity to examine further IPA’s conceptualization of language in terms of its constitutive role (Willig 2001).

Perhaps the most challenging part of this project has been my own role as a researcher who identifies with the participants, as a fellow diver. My research journey began on a very clear note: I had an existing connection with the phenomenon I set out to investigate. Whether my prior knowledge was a positive or negative influence depends on the extent to which this knowledge deepened an understanding of the sub-aquatic experience, or unduly influenced interpretations. ‘Reflexivity’ or being clear about my axiological assumptions, the value-laden nature of this study and my potential influence was essential to an IPA study. To this extent, I looked into my own motives for choosing this topic, and spent much time in deep reflection during this project. After all, the narrative account within the results chapters is the version I have composed, and in doing so, I inadvertently silenced some participants’ voices. However, my role was to present accounts based on the richness with which an experience could depict the sub-aquatic at the inductive level. Therefore, my responsibility was to illuminate the findings of this exploratory study, hence, ‘persuasiveness of text’ was intrinsic to the presentation of the narrative. In this sense, my role as a diver was useful in constructing a convincing account of the sub-aquatic experience based on interview data. Other techniques to ensure idiosyncratic interpretations were avoided have been discussed earlier under trustworthiness.
8.4 Future Work

This exploratory study has mapped a general description of sub-aquatic meanings and the resultant SAM framework provides an understanding of the phenomenology of the sub-aquatic recreation place. As my theoretical claims rely on SAM being a generalisable description of place meanings for scuba divers, the most important avenue for future work will be to confirm it as such. Aside from a basic increase of sample size, there are a number of variations in the divers and dive locations found in future samples that may turn out to confirm or contest the results found here. These are all avenues for future work.

Some standard dimensions of sample variation are nationality, gender and economic background and if significant variation was discovered, a typology describing it could be developed. SAM describes a specific group of British-based scuba divers but future studies should investigate whether scuba divers of different nationalities broadly agree on sub-aquatic meanings. My study examined both male and female divers and found little variation in place meanings across gender. Future work should investigate this further since some recreational activities are strongly favoured by one gender or the other. Economic background is an important but difficult characteristic to vary because scuba diving requires at least a moderate level of income to participate in. It might be possible to study possible variation between mid and high-earning divers.

Aside from generic variations, there are also variations in sample that are specific to diving, such as training background that may be addressed in future to investigate SAM’s generalisability. First, there may be variation in place meanings between recreational divers and dive instructors; and, the influence of earning one’s living in a place versus enjoying for recreation may emerge. It also became evident during this study that there exists a strong ‘culture’ amongst divers, which differs according to the dive certification held by a group. I interviewed both BSAC and PADI certified divers, and there were some indications of different ways of approaching dive experiences. Future research could focus on exploring sense of place amongst members of the same dive club, especially in the United Kingdom, with the availability of the large BSAC network.
Exposure to overseas dive destinations depends on dive travel plans for the club, which are often subsidised and focused on a few main destinations. The lure of Egypt as a popular destination for British based divers could also be investigated in light of this. Future work could also map dive site-specific place meanings and could investigate whether sense of place varies between specific sub-aquatic environments (tropical, temperate, in-land), and between specific dive destinations (Red Sea, Great Barrier Reef, Sipadan Island, Malaysia, etcetera), perhaps producing a typology of meanings if significant variation was found.

Confirmation of SAM is the main direction for future work, primarily because it underpins my theoretical claims of place identity and restoration in divers. However, these claims can also be investigated directly in dedicated studies. Place identity in divers can be studied directly using quantitative methods (Shamai 1991; Williams et. al. 1992; Warzecha and Lime 2001) that may compliment the qualitative investigation performed here. A direct study of restoration using established measurements of attentional fatigue (Hartig et. al. 1991; Korpela et. al. 2001) can also be performed to directly confirm my claim. Scuba divers and the sub-aquatic environment have so far not received this kind of attention and I feel it is long overdue.

It is also clear that scuba divers are not the only community who interact with the ocean and the sub-aquatic environment. Future work could conduct a comparative study of place meanings among different sub-aquatic users: marine biologists, fisher-folk, scientists, for example. By identifying the shared and contested meanings assigned to marine locations by different user groups, those locations may be better managed and any conflicts of interest minimised.

Lastly, there are some observations made during this study which I feel deserve further investigation. Weightlessness was pinpointed as a key feature of their sub-aquatic experience (Overcoming Physical Limitations) which is appealing in itself, yet there is no mention of its importance within dive tourism literature. Perhaps, if weightlessness in itself is the primary motive for diving, then the provision of artificial reefs may have a
role to play in reducing the pressure on the reef environment. Also, this study provided an interesting insight into an apparent paradox between diving for isolation and diving for social contact (Splendid Isolation and Fellowship), which provides opportunity for further investigation on the social aspects of diving; to delineate and cater for the differing needs of divers.

8.5 Final Thoughts
In a discourse on swimming, Deakin observes, “apart from the proboscis monkey of Borneo, we are the only primate that regularly takes to the water for the sheer joy of it” (2000:147). He also points out that “the joys of swimming are sometimes those of silence and solitude, sometimes of communion with nature, and sometimes the more friends who join you, the merrier” (2000:115). Scuba diving is no less different; the sub-aquatic environment offers similar joys. Although no written description can ever quite match the experience itself, it is hoped that some of the joys of scuba diving have come through in this dissertation.


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Todd, S. L., Cooper, T. and Graefe, A. R. (2001). SCUBA diving and Underwater Cultural Resources: Differences in Environmental Beliefs, Ascriptions of Responsibility,


Appendix A – Pilot Study

Pilot Study: An Overview of Learning Points

In order to ascertain the appropriateness of the research design based on descriptive phenomenology (Moustakas 1994; Hycner 1999), a pilot study was embarked upon as a trial run. In particular, this was an opportunity to check the suitability of the Interview Guide and to confirm the utility of the proposed method in addressing the central research question. This discussion of the pilot study is based on one interview, conducted with the first participant, Alex. Specifically, this discussion focuses on the learning outcomes from this pilot study which included the redesigning of a flyer to advertise for participants; an alteration in how I interpreted participant criteria, and, a change in direction in research design, specifically, a change in the analysis process: moving away from transcendental phenomenology (Moustakas 1994) to use Interpretive Phenomenological Analysis (Smith and Osborn 2003) instead. Each of these matters will be briefly addressed next.

Flyer Design

In line with using a purposive, homogenous sample, I set out specific criteria to screen participants: British-based divers, who were passionate about diving, certified for at least 3 years and dived internationally at least once a year. A flyer (black and white, no pictures) was designed with this information and distributed via e-mail to potential participants through friends who knew of someone I could interview. Within a two week period, interesting feedback came in with regards to the flyer. It needed colour and images to attract attention, and slight rewording of text. Therefore, a new flyer (Appendix B) was designed using colourful images of marine life and an enhanced layout which highlighted the research focus. Overall, the new flyer was more eye-catching and attractive. I had overlooked the importance of flyer design at the initial stage and this was an important learning outcome of the pilot study.

Criteria for Selection of Participants

Secondly, through the pilot study, I realised that a participant’s dive experiences could not be dictated by number of years. ‘Alex’ had been diving since 1996 and accumulated 480 logged dives that were confined to a select range of destinations (as noted in Appendix C). PADI (Australia) estimates that on average, divers remain ‘active’ for a period of 21 months (Davis and Tisdell 1996). Based on the assumption that someone who is still diving after three years can be considered an active, passionate diver, I kept this criterion on the flyer, but did not reject a potential participant purely on this basis. Being passionate about diving remained the most important aspect of homogeneity within the group. The next section outlines the final learning point from the pilot study, which served to alter the methodology for this study.

‘Doing’ Phenomenology

When I initially embarked on this research journey and the study of lived experiences, I referred to key texts in the field (Stewart and Mickunas 1990; Moustakas 1994; Van Manen 1997; Moran 2000) in attempt to grasp an understanding of how I could ‘do’ phenomenology. As noted by Sanders “one difficulty in adopting phenomenological approaches is related to the ‘tribal’ language of phenomenology. The phenomenologist’s vocabulary is a torturous list of technical and sometimes Latin or Greek terms: intentionality, epoche, eidos, eidetic reduction, noesis, noema, apodictic. Every field of scholarship has its share of technical or indigenous terms, and phenomenology is no exception. If its method is to be mastered, its language must be learned” (1982:353). The theoretical underpinnings for some of these terms have been presented in Chapter 3. In order to conduct a study using descriptive phenomenology, knowledge of its basic tenets is essential. Moreover, caution is advised for phenomenology has evolved into a diverse field encompassing distinct strands, which differ in their methodological assumptions (Moran 2000).

In a wider sense however, “phenomenology does not contain a tradition of techniques; there is no one correct way of doing phenomenology” (Seamon 1982:119). Seeking out an accessible methodology, I discovered a range of potential paths. Within these strands, procedures of ‘how to do’ phenomenology are available, for example: in the field of psychology, empirical phenomenological (Giorgi 1985); hermeneutical-phenomenological (van Manen 1990); transcendental-phenomenological (Moustakas 1994);
and Interpretative Phenomenological Analysis (IPA) Smith (1996). Within these, I compared a number of
models available for the phenomenological explication of interview data, for example Moustakas (1994);
Hycner (1999) and Giorgi and Giorgi (2003). Data explication for this pilot study was based on the steps
suggested by Hycner (1999) outlined in Table I.

<table>
<thead>
<tr>
<th>Step</th>
<th>Phenomenological Analysis of Interview Data</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Transcription</td>
</tr>
<tr>
<td>2</td>
<td>Bracketing and the phenomenological reduction</td>
</tr>
<tr>
<td>3</td>
<td>Listening to the Interview for a sense of the whole</td>
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<tr>
<td>4</td>
<td>Delineating units of general meaning</td>
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<tr>
<td>5</td>
<td>Delineating units of meaning relevant to the research question</td>
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<tr>
<td>6</td>
<td>Training Independent judges to verify the units of relevant meaning</td>
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<tr>
<td>7</td>
<td>Eliminating Redundancies</td>
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<tr>
<td>8</td>
<td>Clustering units of relevant meaning</td>
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<tr>
<td>9</td>
<td>Determining the themes from clusters of meanings</td>
</tr>
<tr>
<td>10</td>
<td>Writing a summary for each individual interview</td>
</tr>
<tr>
<td>11</td>
<td>Return to the participant with the summary and themes</td>
</tr>
<tr>
<td>12</td>
<td>Modifying themes and summary</td>
</tr>
<tr>
<td>13</td>
<td>Identifying general and unique themes for all the interviews</td>
</tr>
<tr>
<td>14</td>
<td>Contextualisation of themes</td>
</tr>
<tr>
<td>15</td>
<td>Composite summary</td>
</tr>
</tbody>
</table>

Table I: Phenomenological Analysis of Interview Data (after Hycner 1999)

However, these methods and procedures are meant only to “function as general guidelines or outlines and
researchers are expected to develop plans of study especially suited to understanding the particular
experiential phenomenon” (Polkinghorne 1989:44). Indeed, Hycner (1999) suggests the availability of
procedures is meant “to sensitise the researcher to a number of issues that need to be addressed in
phenomenologically analyzing interview data” (Hycner 1999: 279). Although he warns that
phenomenology cannot be reduced to a cookbook set of instructions, at the same time, he acknowledges
that most researchers do not have “enough philosophical background”. Therefore these guidelines aim to
address the need to understand the philosophical tenets of phenomenology, when conducting a
phenomenological analysis of interview data (Hycner 1999).

The key learning outcome from the data analysis process within the pilot study was the difficulty of
addressing step two, ‘bracketing and phenomenological reduction’. Bracketing and reduction are essential
aspects of phenomenology advocated by Husserl: reduction entails concentrating on the phenomenon,
becoming absorbed in it, and through bracketing, ‘return to the things themselves’. Therefore, a researcher
must attempt to mentally bracket out all personal presuppositions (biases, prejudices, theories,
philosophies). This act denotes placing presuppositions out of question for the present, while the larger
context is being investigated. However, the later strands of phenomenology (following Heidegger and
Merleau-Ponty) do not subscribe to these notions as discussed in Chapter 3. Humans are considered to be
‘beings-in-the-world’ and unable to complete the task of bracketing presuppositions (Ashworth 1999;
LeVasseur 2003). Although I attempted to ‘bracket’ my presuppositions by creating a description of my
dive experiences, presuppositions are not that easy to pinpoint. Moreover, how could I hold back all
presuppositions about the experience in order to interpret the experience as new? Additionally, the focus is
on ‘description’ and there is an absence of ‘interpretation,’ for “at the core of phenomenology is the very
deep respect for the uniqueness of human experience” (Hycner 1999: 161). For example, as outlined in
Table I, the end result consists of a composite summary of participants’ experiences, and no attempt is
made to link findings to theory.

Based on the foregoing and the inability to justify the process and produce evidence of ‘bracketing’, I
returned to the literature on phenomenology and discovered a more recently developed form of
phenomenology: Interpretive Phenomenological Analysis (Smith and Osborn 2003), or IPA. As explained
in Chapter Three, IPA is phenomenological in that it is interested in the participant’s subjective experiences
from his/her own perspective. At the same time, IPA acknowledges the reflexive role of the researcher in
conducting an interpretation of the participant's experiences. There is no requirement to conduct the 'bracketing and phenomenological reduction' (Hycner 1999), but the researcher grounds the interpretations within data from participants (interview transcripts). The end result of an IPA is to relate the findings back to extant literature and theory in order to illuminate these lived experiences. Finally, in contrast to many other qualitative methodologies, IPA is highly accessible, uses comprehensible language and straightforward guidelines (Brocki and Wearden (2006). In conclusion, the pilot study was useful in confirming the utility of the interview guide; it was a good opportunity to put the research design into practice (interview procedures; transcription; analysis). The pilot study improved aspects related to the flyer, participant criteria and guided the research design to a more accessible methodology, IPA. The interview transcript for Alex was examined twice, once for the pilot study and again using the procedures advocated for an IPA study. As such, findings are included in the main study.
DIVE TOURISM:
EXPERIENCING DIVE DESTINATIONS

Passionate about SCUBA diving?
Are you a British-based SCUBA diver certified for at least 3 years? Do you dive internationally at least once a year? Would you be willing to share your experiences of the sub-aquatic environment with a PhD student who is also passionate about diving?

I am interested in how you experience your favourite dive destinations - how you feel and think about these places and how you describe them. I am looking for divers of all ages to take part in interviews to explore these issues.

If you would like to participate, please contact me:

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Fax: 01483 686346
Mobile: 07799 051 442
E-mail: B.Kler@surrey.ac.uk
Appendix C - Diver Biographies

ALEX

Age: Mid-thirties
Education: Undergraduate Degree
Occupation: Database Manager (Magazine Company)
Nationality: British
Diving since: 1996
Dive Certification: PADI Assistant Instructor & IANTD qualifications
Logged Dives: 480+
Dive Holidays Overseas: Three to four times a year
Dives in the British Isles: Yes (Regularly)
Dive Destinations (Been There): Southern Ireland, Spain, Norway, Cyprus, Greece, Egypt (Red Sea),
Thailand, Australia, USA
Dive Destinations (Wishlist): South East Asia (Philippines, Borneo, return to Australia)
Regular Dive Buddy: Yes
Favourite Place: Red Sea (current favourite liable to change)

History: Alex first tried a Discover SCUBA in Greece whilst on a student inter-railing holiday. He
returned from the holiday adamant to take up diving but, unfortunately, his university did not have a sub-
aqua club, and learning to dive at a PADI centre was beyond his student budget. Alex trained for his dive
certification once he was employed. He did his PADI Advanced Open Water during a Red Sea trip and still
keeps in regular contact and dives with six others from that trip. His regular dive buddy is a former
instructor turned friend due to their shared interests in technical diving. He is a keen wreck diver, owns a
rebreather and dives regularly around the UK and overseas. His Australian fiancée is also a diver. When
asked how he would describe the experience of diving to someone who has never dived, he replied:
"Mainly through my enthusiasm because I enjoy it so much". He laments: "I've been to Egypt about seven
times or six times and I've never seen a Pyramid in my life which is something I must rectify at some
point!". Alex admits to having an affinity for wrecks.

BEN

Age: Early-thirties
Education: Postgraduate Degree
Occupation: Doctor (Radiologist)
Nationality: British
Diving since: 1991
Dive Certification: PADI Rescue Diver; PADI Divemaster and IANTD qualifications (Nitrox)
Logged Dives: 240+
Dive Holidays Overseas: Once or twice a year
Dives in the British Isles Regularly: No
Dive Destinations (Been There): Australia, Philippines, Israel, Egypt, Key West, Antigua
Dive Destinations (Wishlist): Maldives, Galapagos, Antartica, Scapa Flow (Scotland)
Regular Dive Buddy: No
Favourite Place: Coral Sea, Australia

History: Now in his early-thirties, Ben has been diving since he was 18 years old. Scuba diving was
something he always wanted to do and after his ‘A’ levels, he travelled out to Australia to gain his PADI
Open Water certification: “that to me, was sort of the place to learn". Ben has been a volunteer (medic)
with Coral Cay Conservation, and spent three and a half months diving in the Philippines on an expedition.
Although he has tried diving in the British Isles, he sees diving as an activity for holidays abroad. Because
his fiancée "can dive but doesn't dive", their choice of holiday destinations are based on fitting in
snorkelling or sailing with diving. He does not have a regular dive buddy, and ends up paired with the
other lone diver on the boat. Ben spoke at great length on how the quality of the dive experience was based
on the luck of being paired up with an experienced or inexperienced dive buddy. Ben and his fiancée are
leaving for Australia (later part of 2006) to work out there for a while. He is looking forward to returning to
the Coral Sea.
CEILIA
Age: Late twenties
Education: Professional Qualifications
Occupation: Accountant
Nationality: South African
Diving since: 1990
Dive Certification: PADI Instructor-Trainer & NAUI SCUBA Instructor & IANTD qualifications
Logged Dives: 1800+
Dive Holidays Overseas: Twice a year
Dives in the British Isles Regularly: No (dived off coast of Southampton once)
Dive Destinations (Been There): Caribbean (19 islands) including Saba; Canary Islands; Mediterranean (off Greece); Spain; Red Sea; Maldives; Mauritius; Solomon Islands; Java; Sumatra (Indonesia); Phuket and Phi-Phi Island (Thailand); Chile; Canada (British Columbia); South Africa.
Dive Destinations (Wishlist): Borneo; return to Red Sea and Saba (two hours from St. Maartens)
Regular Dive Buddy: Entire family dives (mom, dad, sister)
Favourite Place: Sodhwana Bay, South Africa (“Where I’ve grown up; where I’ve lived; and dived”)

History: Celia did her NAUI Open Water One when she was 12 years old, off Aliwal Shoal, in Durban, South Africa. She continued to upgrade her qualifications and qualified as a NAUI SCUBA Instructor when she was 18. She has cross trained and holds PADI and BSAC qualifications as well. Celia ran her own dive business between 1997-2000, and happily spent 5 hours (in total) a day underwater, everyday. A fish aficionado, she also teaches people to identify fish/invertebrates); professes an affinity to the sea; and to being more comfortable underwater than on land. A self-proclaimed adrenalin-junkie who has also dabbled in sky diving, white water rafting, bungee jumping, raced motorbikes, and has dived almost all over the world. As an Instructor, she informed me: “And I’m, fortunately or unfortunately very protective of the reef and quite an intolerant dive leader! I can’t tolerate people crashing into the reef!”

DIANE
Age: Late thirties
Education: Undergraduate Degree (Law)
Occupation: Manager (Communications)
Nationality: British
Diving since: 1995
Dive Certification: BSAC Open Water Instructor; IANTD qualifications (Nitrox; Trimix; Rebreather); NACD Cave Diver
Logged Dives: 1000+
Dive Holidays Overseas: Three or four times a year
Dives in the British Isles Regularly: Yes
Dive Destinations (Been There): All around the British Isles; South of France; Italy; Turkey (Black Sea); Ukraine (Black Sea);Colombia; Galapagos Islands; Mexico; Pemba and Zanzibar
Dive Destinations (Wishlist): New Zealand; Australia
Regular Dive Buddy: Yes (Partner)
Favourite Place: Too many; settles on the Farne Islands (UK) & Dahab, Egyptian Red Sea

History: Intrigued by the idea of diving with dolphins off Plymouth, Diane took up scuba diving over ten years ago. Though she hated training in the swimming pool, she became hooked once she dived in the sea. She learnt to dive with her partner, going through all the courses together; diving is a shared passion. An active member of her local club, her love of diving is driven by a quest for exploration and adventure. She declared: “It’s almost as if I’m looking for something, more, than just scenery. So even though I’m a tourist, I want to do something – It’s almost like I want to do something useful!” In England, she dives mainly for the wrecks, and explained that the experience of a wreck dive is enhanced by knowledge of the wreck’s history. Her love for underwater heritage is visible through her involvements with a number of expeditions.
ETHAN

Age: Late-twenties
Education: Undergraduate Degree & Professional Qualifications
Occupation: Financial Controller
Nationality: British
Diving since: 1998
Dive Certification: PADI Advanced Open Water
Logged Dives: 66+
Dive Holidays Overseas: Once or twice a year
Dives in the British Isles Regularly: No
Dive Destinations (Been There): Australia; Egypt (Hurghada); Florida Keys; Canary Islands; Grand Cayman; Thailand
Dive Destinations (Wishlist): Tobago; Antigua
Regular Dive Buddy: No
Favourite Place: Grand Cayman

History: Ethan described how he’d always liked being in the water, and enjoyed water sports, so diving was a natural progression for him. He also admits to being fascinated by sharks. Ethan took up diving while travelling in Australia during his gap year (before university). He trained for his PADI Open Water license off Magnetic Island (Great Barrier Reef) and the first dive trip after certification took him to the Coral Sea (Cod Hole) on a liveaboard tour with a few friends. “It was absolutely stunning! And we were kind of spoilt because diving couldn’t get much better than that!” He is trying to entice his current girlfriend to take up diving, and is at present, torn between playing rugby and scuba diving.

FIONA

Age: Mid-thirties
Education: Undergraduate degree
Occupation: Implementation Manager (Human Resources)
Nationality: British
Diving since: September 2005
Dive Certification: BSAC Sports Diver
Logged Dives: 13+
Dive Holidays Overseas: Once or twice a year
Dives in the British Isles Regularly: Yes
Dive Destinations (Been There): Lanzarote
Dive Destinations (Wishlist): Mexico; Thailand; Egypt
Regular Dive Buddy: No
Favourite Place: Lanzarote (location of first dive overseas)

History: Sue has always loved swimming and used to swim at country level in junior school. Along with her love for wildlife and nature, diving felt like a natural progression because she wanted to see marine life “in their natural habitat”. Her journey to the sub-aquatic environment was described as: “Oh my God, I am in the middle of things I see on the telly”. She had an interesting range of dive trips planned over the course of the coming year: Valencia over Easter; diving every weekend around the South coast of England (Littlehampton; Swanage; Wittering; Weymouth); Dahab (September); Spain (November), and intends to increase her logged dives and “swim with the fishes”. She was oozing with enthusiasm for this new found hobby and also actively recruiting new divers for her local dive club.
GINA

Age: Mid-thirties
Education: Postgraduate Degrees
Occupation: Engineer
Nationality: British
Diving since: 1999
Dive Certification: SSI Masterdiver
Logged Dives: 150+
Dive Holidays Overseas: Once or twice a year
Dives in the British Isles Regularly: No
Dive Destinations (Been There): Solomon Islands; Thailand; Vietnam; Red Sea; Bahamas; Tobago; Australia; Fiji; Gulf of Mexico; Maldives
Dive Destinations (Wishlist): Truk Lagoon; Galapagos; Antarctic or Artic; Scapa Flow (Scotland)
Regular Dive Buddy: No
Favourite Place: Solomon Islands.

History: Learning to scuba dive was on her list of ‘Things To Do Before You’re 30’ which she achieved, gaining an Scuba Schools International (SSI) certification at the Solomon Islands. She considers herself an active person who also enjoys skiing and climbing. Gina travels regularly for work and often tags dive trips to her international business travel. She finds scuba diving useful for someone who travels alone because it’s very social. Gina returns to the Solomon Islands at least once a year because she has yet to find any dive destination that rivals it. She spoke of the lasting friendships that can flourish amongst fellow divers, including a sense of community at work amongst those who share a love for the sub-aquatic environment.

HARRY

Age: Early Thirties
Education: Undergraduate Degree & Professional Qualifications
Occupation: Banker
Nationality: British
Diving since: 1997
Dive Certification: BSAC Sports Diver & PADI Advanced Open Water
Logged Dives: 80+
Dive Holidays Overseas: Once a year
Dives in the British Isles Regularly: No
Dive Destinations (Been There): Red Sea (Sharm el Sheikh), Madagascar; Galapagos; South Africa; Thailand; Indonesia (Flores); Barbados
Dive Destinations (Wishlist): Maldives; Borneo; Micronesia
Regular Dive Buddy: No
Favourite Place: Madagascar

History: Harry lived out in Madagascar for three months as part of a voluntary scientific research project organised by Frontier UK. Subsequently, all other dives are compared to Madagascar, where the dive sites were teeming with marine life and visibility was excellent. He met some wonderful people during this time, and keeps in touch with some, who like him, share a love for the ocean world. He described how “close encounters with marine life is something you just can’t appreciate in the same way from your armchair”. He enjoys scuba diving for “the unnatural feeling of being able to breathe and float underwater”, and “the possibility of seeing sharks within an arm’s length”. In his spare time, Harry is a volunteer with Shark Trust UK.
IAN

Age: Late forties
Education: Undergraduate Degree (Law)
Occupation: Computer Consultant
Nationality: British
Diving since: 1990
Dive Certification: BSAC National Instructor; BSAC First Class Diver; BSAC Nitrox Instructor IANTD qualifications (Technical Nitrox Diver; Rebreather Diver)
Logged Dives: 1400+
Dive Holidays Overseas: Twice a year
Dives in the British Isles Regularly: Yes
Dive Destinations (Been There): Red Sea (Hurghada, Dahab, Sharm, Safaga) Ibiza; Cyprus; Gozo; Malta; Menorca; Maldives; Thailand; Indonesia (Sulawesi); St. Lucia; Bonaire
Dive Destinations (Wishlist): Bikini Atoll; Cocos Island; Galapagos; Indonesia; Thailand; Borneo; Australia
Regular Dive Buddy: Yes (lots of regular dive buddies from the dive club)
Favourite Place: “I don’t think I have any”

History: Ian took a Discover SCUBA course whilst on holiday in St. Lucia, and upon his return joined a BSAC club to train as a scuba diver. He insists that the magnetism for wrecks has yet to hit him, and enjoys diving to view the reef and its marine life. He is an accomplished underwater photographer, which along with scuba diving are joint hobbies. Ian’s holiday travel is designed around scuba diving because he believes he hasn’t exhausted dive holidays yet. He carefully plans his destinations based on what he wants to photograph: “As a photographer, you’ve got to have in your mind’s eye, the sort of photograph that you want; it’s picking a subject, knowing where you want to photograph and going to the place to do it”. He also explains: “a bad day’s diving is always better than a good day’s work”.

JACK

Age: Late-Forties
Education: Postgraduate Degree
Occupation: Lecturer
Nationality: British
Diving since: 2003
Dive Certification: PADI Advanced Open Water & Rescue Diver & IANTD certified (Nitrox)
Logged Dives: 101+
Dive Holidays Overseas: Once or Twice a year
Dives in the British Isles: Yes
Dive Destinations (Been There): Australia; Egyptian Red Sea
Dive Destinations (Wishlist): Belize; Borneo; Maldives; Caribbean; Micronesia; Scapa Flow (Scotland)
Regular Dive Buddy: Yes (Wife when diving overseas)
Favourite Place: Osprey Reef, Coral Sea (Australia) (current favourite, subject to change: “when you look at things like the diving atlas of the world, there are many other places to go and have a look at”)

History: Jack and his wife have always enjoyed swimming, nature and being outdoors. A normal family holiday would consist of renting a cottage and going on walks, treks, and swimming with their two sons. But as their sons grew into teenagers (aged 15 and 12) and expressed boredom with family holidays, Jack and his wife decided a change of scenery might help keep the family holidays together. The family travelled out to Cairns to learn to scuba dive and the ‘plan’ was an immense success. The marine world has had a notable impact in their lives. Jack’s family (sons are now 17 and 14) have continued to go on dive holidays together. And his eldest son intends to study marine biology at university, fuelled by an interest that was sparked off through diving holidays with his family.
KIERAN

Age: Early twenties
Education: Undergraduate Degree
Occupation: Student
Nationality: British
Diving since: 2002
Dive Certification: PADI Open Water; BSAC Sports Diver & BSAC Instructor Foundation Course
Logged Dives: 130+
Dive Holidays Overseas: Once or Twice a year
Dives in the British Isles Regularly: Yes
Dive Destinations (Been There): Great Barrier Reef (Australia); Red Sea (Egypt); Spain
Dive Destinations (Wishlist): Return to the Red Sea; Maldives; Bikini Atolls
Regular Dive Buddy: Yes (Other members of the dive club)
Favourite Place: Weymouth (UK) for the wrecks

History: Whilst on a family holiday in Australia, Kieran’s brother who was already a certified diver encouraged him to train for his PADI Open Water. Kieran enjoyed the experience tremendously, and at university, he became an active member of the sub-aqua club. Most of his diving trips have been with the university dive club (weekend dive trips around the British isles). He is a keen wreck diver who enjoys reading up on the history of a wreck beforehand as it enhances the experience during the dive.

LEE

Age: Late forties
Education: Postgraduate Degree
Occupation: Training Consultant
Nationality: British
Diving since: 2003
Dive Certification: PADI Advanced Open Water
Logged Dives: 19+
Dive Holidays Overseas: Once or Twice a year
Dives in the British Isles: No
Dive Destinations (Been There): Caribbean (St. Lucia/Bahamas); Florida Keys; South Africa
Dive Destinations (Wishlist): Return trip to Grenada; Bali; Red Sea; Sri Lanka; Great Barrier Reef (trip in July 2006)
Regular Dive Buddy: No
Favourite Place: Bahamas

History: Lee had always been a keen swimmer, and in 1996 enjoyed a reef-walking (Snuba) experience with his children in Florida. Later, while based in South Africa (Cape Town) for work, he decided to take up scuba diving as something to do at the weekends as his family were back in the UK. Upon his return to the UK, the next family holiday was to the Caribbean where his children (son aged 14 and daughter aged 12) took up their PADI Open Water certificates. His wife has tried snorkelling, but is not confident in the water, and will not be taking up scuba diving. Both his children have always been strong swimmers and he is glad that they’ve learnt to dive. They consider it a great family activity to enjoy during their summer holidays. He affirms: “the reef type environment and the things you see...to actually experience it through diving is a lot more fun than seeing it through a glass bottom boat, or seeing it in an aquarium”.

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MARIE

Age: Mid-thirties
Education: Postgraduate Degree
Occupation: Doctor (GP)
Nationality: British
Diving since: 1998
Dive Certification: BSAC Advanced Diver
Logged Dives: 200+
Dive Holidays Overseas: Once or Twice a year
Dives in the British Isles: Yes (4-5 weekends)
Dive Destinations (Been There): Jordan (Red Sea); Vanuatu; Florida; Thailand; Tobago; Florida
Dive Destinations (Wishlist): Solomon Islands; Australia; Tanzania; Zanzibar (Pemba); Galapagos
Regular Dive Buddy: Yes (Husband)
Favourite Place: Similan Islands (Thailand) & Scotland ("I think I'll probably have to give you two extremes - so a warm water destination and a cold water")

History: Marie took up diving whilst at university with her boyfriend (now husband) through their university dive club in London. They learnt to dive to have a hobby, and "something we did together, friends that we met together". Both share a passion for scuba diving, and are active members of their local dive club; her husband remains her regular dive buddy. Marie was due to give birth to their first child a month after the interview, and as a responsible parents, she wasn't sure when they’d both be back in the water together.

NEIL

Age: Late-fifties
Education: Postgraduate Degree
Occupation: Doctor (GP)
Nationality: British
Diving since: 1965 (since the age of 14)
Dive Certification: 'Tadpole' (British Underwater Centre); BSAC Sports Diver (1980s); NACD
Logged Dives: 1000+ (excluding some he has not logged)
Dive Holidays Overseas: Once or twice a year.
Dives in the British Isles: Yes (Regularly)
Dive Destinations (Been There): Bahamas, Bonaire, Egypt, Turkey, Cyprus, Australia
Dive Destinations (Wishlist): Sulawesi, Borneo, return to Australia
Regular Dive Buddy: His wife; three other regular dive buddies
Favourite Place: Lots of memorable places: "a favourite site... maybe somewhere I haven’t visited yet"

History: Neil has been diving for 40 years. In the 1950s, his father trained to be a scuba diver at the first diving school in Dartmouth (UK) which was run by Captain Trevor Hampton (British Pioneer Diver 1912-2002). At the age of fourteen, encouraged by his father, Neil trained with the same instructor and became a scuba diver. "I did the basic diving course there, which was very different to the training now, because it was all done immediately in the open water and no wet-suit. Just a hood on your head and a woolly jumper and it was then twin-hose demand valves, beaufort life jackets". He has dived every year since 1965 and is very passionate about scuba diving. In the early 1980s, his wife took up diving and has become his best dive buddy. His daughters dive as well. He also enjoys underwater photography as a hobby. In his spare time, Neil gives talks on marine life, conservation, and on underwater photography to interested organisations and groups.
OLIVIA

Age: Late twenties
Education: Postgraduate
Occupation: Human Resource Manager
Nationality: British
Diving since: 2002
Dive Certification: BSAC Dive Leader & BSAC Instructor Foundation Course
Logged Dives: 125+
Dive Holidays Overseas: Once or twice a year
Dives in the British Isles: Yes (regularly)
Dive Destinations (Been There): Mexico, the Red Sea, Malta, Lanzarote and Tenerife.
Dive Destinations (Wishlist): Galapagos Islands, Red Sea, Thailand
Regular Dive Buddy: Yes (other divers at dive club)
Favourite Place: Cancun, Mexico

History: Olivia only learnt to swim at the age of twenty. Therefore, learning to scuba dive was a further attempt to move out of her comfort zone, “to try something adventurous”. Although she initially trained for a PADI Open Water certificate, she later decided to switch to BSAC for its club-based atmosphere as she had just moved back home, having lived away for eight years. Joining the local BSAC club was a way to make new friends with other people who shared a common interest. She fondly recalls how welcoming and helpful everyone was at the local dive club, and that the new member experience was critical to her subsequent dive history. She is an avid diver, who spends most weekends diving, and informed me with a smile on her face: “like some people go to the pub, and I go to sit in the sea”.

PAM

Age: Late-forties
Education: Professional Qualifications
Occupation: Goldsmith
Nationality: South African
Diving since: 1984 (stopped for a number of years and restarted 2002)
Dive Certification: South African Underwater Union (2 Star Quarter Diver in 1984); PADI Advanced Open Water
Logged Dives: 84+
Dive Holidays Overseas: Once or twice a year
Dives in the British Isles: Yes (regularly)
Dive Destinations (Been There): South Africa, Australia, Red Sea, Italy, St.Lucia (Caribbean)
Dive Destinations (Wishlist): Southern Australia, Maldives, Seychelles, Turkey, Mediterranean
Regular Dive Buddy: No
Favourite Place: Sodhwana Bay, South Africa

History: Pam grew up by the coast in South Africa, and has always been comfortable with the sea. She fondly recalls snorkelling as a child, and learning to scuba dive in her early twenties brought her one step closer: “I wanted to swim in this water with the fishes and the sea-life”. However, she stopped diving once she gave birth to her son, had less disposable income, and subsequently moved to the United Kingdom “where diving was expensive and the water cold”. For the first ten years here, she did not contemplate diving at all, until a chance encounter with some divers at a seaside resort brought back those old memories of the diving. Since 2002, Pam has returned to diving regularly with her local dive club, and has also taken up sailing. Currently, she divides her time between these two hobbies, both of which focus on the sea.
Appendix D – Interview Paperwork

Dear [NAME],

RESEARCH ON DIVE TOURISM: EXPERIENCING DIVE DESTINATIONS

Thank you for your interest in my Ph.D research on dive tourism at the University of Surrey. As a certified diver, I am inviting you to participate in this study exploring SCUBA divers' experiences of the marine environment.

I am conducting interviews with British-based divers of all ages, and the only criteria is that (a) you are British, or living in the UK; (b) you are a certified diver (c) you dive internationally at least once a year. I am interested in comprehensive portrayals about your experiences of a favourite dive destination. You are welcomed to share any memorabilia such as photographs, souvenirs or log book entries (if available) of the dive holiday that may help you relive the sojourn.

Please note I need to conduct face to face interviews which will be recorded for analysis. I assure you of confidentiality in your responses throughout the interview, and that results will be used only for the purposes of my Ph.D research and for future academic publications. Attached herewith is a confidentiality agreement which elaborates these details for you to sign and date.

I look forward to the interview on [DATE]

Yours sincerely,

BALVINDER K. KLER

[DATE]
CONFIDENTIALITY AGREEMENT FOR PARTICIPANTS

I agree to participate in the Ph.D research project “Dive Tourism: Experiencing Dive Destinations”. I understand the purpose and nature of this study, and I am participating voluntarily. I grant permission for interview data to be used in the process of completing a Ph.D degree, including a thesis and any other future publications. I understand, to ensure confidentiality, my name, and the names of others who I may mention in the interview, will not be referred to in whole within the text of the thesis. I consent to the interview being recorded with the understanding that I may at any time, ask for the recording to be turned off.

Name of Participant: ____________________________
Signature of Participant: ________________________
Date: ____________________________
Thank you for agreeing to participate in my research project. I am conducting this interview as part of my PhD research exploring how scuba divers experience their favourite dive destination.

**General Questions**

1. How did you become involved in SCUBA diving?
   - [probes: Introduced by whom]
   - [probes: Where? Here in UK/on holiday abroad]
2. Dive certification held:
   
   (BSAC; PADI; NAUI; SSI; CMAS)
3. What was it about SCUBA diving that appealed to you?
4. How long (years) have you been a certified diver?
5. How many dives have you logged?
6. Do you own your own equipment?
7. Do you have a regular dive buddy?

**Dive Holidays**

1. How often do you go on dive holidays overseas?
2. Whom do you go on dive holidays with normally?
3. Can you list some of the international dive destinations you’ve been to on a dive holiday?
4. Can you list some of the dive destinations you hope to visit in the future?

**Favourite Dive Destinations**

For the next part of the interview, I would like to ask you about your favourite dive destinations.

1. Is there a place that you consider your favourite dive destination? (probe: perhaps more than one?) Please describe it to me.
2. Can you please describe what this place means to you?
3. What thoughts, feelings, memories and people connected with dive holidays in ________ (repeat name of place) stand out for you?

[Probes: means a lot; think a lot about diving here; wish to spend more time; special place; says a lot about me:]
Appendix D

The Experience of Scuba Diving
1. How would you describe the experience of diving to someone who has never attempted SCUBA?
2. In general, how would you describe your feelings at the end of a dive? What thoughts stand out for you?

Closing
This is the end of the interview. Is there anything you would like to add about your favourite dive destination?

Diver Profile: Demographic Information

1. Your age group?
   - 21-24
   - 25-29
   - 30-34
   - 35-39
   - 40-44
   - 45-49
   - 50-54
   - 55-59
   - Over 60

2. Gender
   - Male
   - Female

3. Your highest level of education: _______________________

4. Current occupation: _______________________

Snowball
Do you know of a diver who might be interested in participating in my study?
Participant recommends talking to _______________________

Interview ended: _______________________
Participant details: _______________________
Address: _______________________
Email: _______________________
Phone: _______________________

Thank you ☺️
<table>
<thead>
<tr>
<th>Participant</th>
<th>Date</th>
<th>Time</th>
<th>Location</th>
<th>Recording Length (Olympus Digital Voice Recorder model VN240PC)</th>
<th>Length of Transcript (pages, single spaced, font 12)</th>
<th>Comments</th>
<th>Introduced By and &quot;Snowballed&quot;</th>
</tr>
</thead>
<tbody>
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<td>15th November 2005</td>
<td>7:12 p.m.</td>
<td>Home</td>
<td>34mins 32secs</td>
<td>16</td>
<td>Shared and referred to logbooks</td>
<td>JG</td>
</tr>
<tr>
<td>Ben</td>
<td>5th December 2005</td>
<td>4:27 p.m.</td>
<td>Office</td>
<td>33mins 46secs</td>
<td>15</td>
<td></td>
<td>FW</td>
</tr>
<tr>
<td>Celia</td>
<td>7th December 2005</td>
<td>4:40 p.m.</td>
<td>Office</td>
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<td>Diane</td>
<td>14th December 2005</td>
<td>7:02 p.m.</td>
<td>Gym</td>
<td>30mins 32secs</td>
<td>11</td>
<td>Continued speaking for 20 minutes after recorder was switched off about negative image of divers.</td>
<td>Invited</td>
</tr>
<tr>
<td>Ethan</td>
<td>17th March 2006</td>
<td>4:31 p.m.</td>
<td>Office</td>
<td>27mins 46secs</td>
<td>10</td>
<td>Shared and referred to logbooks</td>
<td>Celia</td>
</tr>
<tr>
<td>Fiona</td>
<td>5th April 2006</td>
<td>6:14 p.m.</td>
<td>Gym</td>
<td>23min 56secs</td>
<td>9</td>
<td>20 minute chat at LIDS. Shared a 7000 word published article on her experiences of diving</td>
<td>Met at LIDS</td>
</tr>
<tr>
<td>Gina</td>
<td>7th April 2006</td>
<td>4:18 p.m.</td>
<td>Café</td>
<td>30mins 58secs</td>
<td>12</td>
<td></td>
<td>KT</td>
</tr>
<tr>
<td>Harry</td>
<td>18th April 2006</td>
<td>7:10 p.m.</td>
<td>Café</td>
<td>22mins 15secs</td>
<td>9</td>
<td>15 minute chat at LIDS. Shared extra thoughts through email</td>
<td>Met at LIDS</td>
</tr>
<tr>
<td>Ian</td>
<td>13th April 2006</td>
<td>7:06 p.m.</td>
<td>Home</td>
<td>1hr 21mins 14secs</td>
<td>22</td>
<td>Referred to framed photographs during interview and sent me a two page email the next day to share thoughts on how to manage diver expectations</td>
<td>Invited</td>
</tr>
<tr>
<td>Jack</td>
<td>24th May 2006</td>
<td>8:58 a.m.</td>
<td>Office</td>
<td>56mins 53secs</td>
<td>15</td>
<td>Shared photographs of family dive holidays</td>
<td>CS</td>
</tr>
<tr>
<td>Kieran</td>
<td>21st June 2006</td>
<td>7:15 p.m.</td>
<td>Office</td>
<td>31mins 18secs</td>
<td>14</td>
<td></td>
<td>Invited</td>
</tr>
<tr>
<td>Lee</td>
<td>29th June 2006</td>
<td>2:33 p.m.</td>
<td>Office</td>
<td>43min 58secs</td>
<td>13</td>
<td>Shared and referred to logbooks</td>
<td>CR</td>
</tr>
<tr>
<td>Marie</td>
<td>2nd August 2006</td>
<td>9:08 a.m.</td>
<td>Café</td>
<td>35min 38secs</td>
<td>14</td>
<td></td>
<td>FW</td>
</tr>
<tr>
<td>Neil</td>
<td>4th August 2006</td>
<td>6:51 p.m.</td>
<td>Home</td>
<td>44min 44secs</td>
<td>14</td>
<td>Shared and referred to logbooks &amp; photographs</td>
<td>Marie</td>
</tr>
<tr>
<td>Olivia</td>
<td>11th August 2006</td>
<td>9:52 a.m.</td>
<td>Café</td>
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<td>Marie</td>
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<td>Pam</td>
<td>5th September 2006</td>
<td>6:49 p.m.</td>
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<td>47min 08secs</td>
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<td>Marie</td>
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</tbody>
</table>

**Appendix E - Audit Trail**

**Notes: 'Introduced By and Snowballed'**

LIDS: London International Dive Show

JG, FW, KT, CS, CR: Initials for friends who introduced divers to me.
22nd April 2007

Dear [Name],

Happy Earth Day 2007!

Further to my email in March, I am pleased to inform you that the lucky draw was conducted earlier today. You have won a copy of the coffee-table book on Sipadan, Mabul, Kapalai: Sabah's Underwater Treasure / Malaysia Diving Guide / orang utan soft toy / Sabah Marine Life series bandana.

Once again, my heartfelt thanks for taking time out to be interviewed for my study on sub-aquatic experiences. I also look forward to welcoming you, someday, to the shores of Sabah on your dive holiday to Borneo, Malaysia.

Yours truly,

Balvinder K. Kler
Appendix F

Lucky Draw Prizes: Promotional Items courtesy of Sabah Tourism Board

Consolation Prizes: Sabah Marine motive bandanas courtesy of private donor
Could you tell me something about how you became involved in Scuba diving please?

Yes, it was quite interesting I suppose. Different from probably the way a lot of people got introduced to it, in that my father took it up in the early 1950's. He had gone to see the Jacque Cousteau’s film, The Silent World in the cinema and then wanted to go diving. Of course, at that time, it was very much different to what it is now in terms of diving schools. But he searched around and he went to Captain Trevor Hampton, who ran... I think it must have been one of the first diving schools in the country, in Dartmouth. He was the first person to use the breathing apparatus there.

Trevor Hampton had set up a diving school and he trained people to be...I think he called them Merman or Mermaids or Adults...

Or Tadpoles?

Or Tadpoles – you’ve heard this [smiles®]. Then you could go on and become a Master Diver and train and use oxygen. You know, do oxygen re-breathing and standard diving gear. My father actually did his Master Diver course as well back then. But when I was young, he used to take me, he’d joined a diving club locally in Taunton and he used to go along and he used to take me. And I think the first time I used breathing apparatus I was probably about 11. I can remember being lowered into the water, off a rock in an estuary in Devon and just breathing in and out and [laughs] watching the bubbles arising around me with cold water.

So that when I got to 14, he asked if I wanted to learn with Trevor Hampton. So when we were on summer holiday, I did the basic diving course there which was very different to the training now because it was all done immediately in the open water and no wet-suit.

Okay.

Just a hood on your head and a woolly jumper and it was then twin-hose demand valves, beaufort life jackets. In other words the only thing you could do with those was inflate them on the surface if you were in difficulties. And I don’t know why I stuck with it! [laughs heartily] Because the early days...it was cold, the water was very cold.

So what was it, about Scuba diving that appealed to you then?

I think it was just the excitement of being down there. And I think at that age, you’re a natural...if you enjoy the water, and I always had. Taking to using breathing apparatus was very easy. I don’t remember having any difficulties from the word 'go' at all – doing anything really. The thing I can remember most is being cold.

And the first...really, I suppose eventful dive I can remember was when I was 16 and I dived on a wreck at Lyme Regis called the Bay Gitano which I have dived on many times since. In fact, next year will be the 40th year, I’m still diving [chuckles].

Wonderful!
And I can still remember that till this day because I remember sitting down there and seeing all these huge schools of fish swimming around and around this wreck. And at that time, we had quite small diving cylinders and I couldn’t have been down there for more than 20 minutes but then it was twin-hose but I remember it, you know, vividly. [laughs] And I remember also that we made...I made a wet suit. We bought an old wet-suit and adapted it from somebody else. So that helped in keeping me warm.

And gradually I increased the range of my diving. I did it all with my father in the first few years...my diving anyway. So a lot of it was quite shallow and a lot of it was done in South Devon.

And then the next memorable dive I can remember doing was... we’d been diving in depths of no more than probably 12 metres, swimming around a lot of seaweed and seeing the odd fish. It was okay. But one day, we’d decided we’d go deeper. We’d sort of go in, right out, further out to sea, into the wild, blue yonder. We dived into sort of, more like 25 metres and he hadn’t done anything of that before either really, you know, to any great degree.

And it was amazing! The visibility was very good, for that part of the world. We got down there and there was this rugged seabed with sea-urchins wandering around and big yellow sponges and you know, all sorts of encrusting organisms. I’ll never forget that – it was an absolute revelation. I mean, I’ve dived there since and of course, anything like that doesn’t seem quite the same now when you’ve travelled around. But at that time, it was just fantastic! You know, this was what it was all about! And I remember, one of those dives, we found an enormous ship’s anchor, which is still out there. I don’t know where it is but, situated on the seabed. We found crayfish on one of the dives – God knows! [5. "28 m"

And that, from then on, of course as I got older, I got the opportunity to do more diving and I joined...[pauses] I didn’t really, I suppose I did...I dived every year since 1965 but at times I might only have done a few. You know, when I was a medical student, without the time. But gradually, as time goes on, you join clubs and then as you can afford to start to travel.

Which clubs do you belong to?
Well, I’m in the British Sub Aqua Club. I’ve been in the British Sub Aqua Club intermittently since the 1960s. But there have been long periods where I haven’t been a member. I recently re-joined. The current diving club I’m in is called the Phoenix Sub Aqua Club which happens to meet in Chard now which is very convenient for me.

And what qualification do you hold from BSAC?
Oh! Well, that’s quite funny really because I’ve got a very basic...well, I mean, once you’ve learnt to dive and you build up the experience, you’re not a... I remember when I was a student, I joined the United Hospitals Diving Club and I went to a few of those meetings. But by that time, I’d been diving for a few years and done quite a lot of dives. And they wanted me to start from scratch and do all the pool training. And I wasn’t...I don’t think I ever properly went through that.

And then, in the early 1980’s when my wife learnt to dive, I decided I need to have some kind of qualification [chuckles] if I wanted to travel, that somebody would recognise rather than being a ‘Tadpole’ from 1965. [Both laugh]

So we joined the Taunton branch of the British Sub Aqua Club and I became...I did the 3rd class...what was then the 3rd class diver exam. It’s not now, I’ve forgotten what they call the grades – I think Sports or something.

First class diver is the highest one now I think.

3rd class was the basic entry level. And that...I just wanted that, you know, that’s all I needed.

[Jack Russell can be heard whining 7:33mins]
I did join... I go caving and I did join the cave-diving group and I have got, I am a qualified ...

[the Jack Russell is lead away to the kitchen, but returns within minutes]

Where was I? Oh yeah! The cave-diving group.

Cave-diving – so that’s your speciality?

Well, it was ...the training was done with the cave-diving group in places like Wookey Hole but that was done in the early 1980’s as well. And I actually qualified as a cave-diver but I haven’t done a huge amount of cave-diving. I mean, I have dived in places like Wookey Hole, and I have dived in one or two caves abroad and I have discovered stuff. But I haven’t done any serious cave diving for years.

Do you know, ‘Neil’, how many dives you’ve done over the years?

I’ve logged at least... a thousand dives – I’ve actually got listed.

That you’ve logged and then you’ve done, obviously more than that?

I think I have probably done more than that, but I know I’ve got those logged. In fact, up until 1985, there was a gap when I wasn’t really logging them very well. And then I decided to get one of the newer diving logs that people have got. I think I brought it in just now. [looks around for it]

You did, in your hand.

I don’t know what I did with it now. [laughs] I started... I got interested in logging them again, both from my, you know, observing marine life and just conditions. And I found them just actually invaluable, although there’s so many of them now, if somebody asks me something, it takes me ages to find it [chuckles].

And then I got interested in underwater photography, in about 1982. I had a very old Nikonos underwater camera I bought from somebody. And I didn’t take, I didn’t get very good pictures with it. And then I got a flashgun with it which fired flash bulbs. And then gradually, I got a better one, and then a better one, and a better one, and the photographs started to improve. And I went over to digital underwater photography in about 2 or 3 years ago. [10:10mins]

But I’m quite proud because this picture is one of mine, [showing me the book] on the dive guide² to Dorset and a number of the other photographs inside as well. So I reckon I reached a reasonable degree of competence with it. That’s one of my daughters there.

Oh! Right! Okay! I was going to ask you... one of my next questions is this thing about... do you have a regular dive buddy? I know your wife dives, and you’ve now mentioned your daughter, and your father – so tell me something about dive buddies please?

Aaaahhh! Dive buddies! That’s a very good... very interesting question actually. And it’s a slightly unorthodox answer. [pauses] I’ve done a lot of my diving on my own. When I was trained to dive, in fact, Trevor Hampton tended to encourage divers to be self sufficient because he’s belief was that in British waters, the visibility was so bad that if you relied on a buddy, you know, you were in trouble. It was all very well if you were in the Mediterranean, you could see everybody a long way off. And I must say, all the most serious incidents that have ever happened to me during dives, have been when I was with somebody else and they’ve had a problem.

Okay! Yeah!

² Dive Guide to Dorset
You know? It's always been due to the fact that I was with somebody else, that something has gone wrong. Because I tend to be very cautious when I am on my own, very aware of my surroundings, if anything, tend to back out of any situation that I think is potentially dangerous. I mean I will go into situations that other people won't like, but I also know when not to, sort of, push it.

Having said all that – my best buddy is my wife [name omitted] [laughs] because she...when you come to photography, she has perfect buoyancy control and she knows now, how to pose for photographs. [Both laugh]

So, if I want to dive with anybody, I'd prefer her. The other person I dive with, I've got another doctor who I dive with is called [name omitted] who lives over at Seaton and he's been diving for about 30 years. And he's a very good diver. I know when I dive with him, I'm alright. And there's another chap who lives in Chard, he's quite a bit older than me – he's been diving for a number of years. He's an ex-fireman who's very relaxed underwater, and again, if I dive with him, I don't worry because he's quite happy if we split up and if something happens, he will just...you know, take care of himself and you know, I'll take care of myself.

But diving...I don't like diving in large groups. We used to get a lot of holiday diving where everybody's led around by a divemaster, and I just hate it [laughs]. You know, just hate it.

Why do you say that? What does it...does it change the atmosphere for you or is there...

Yes! Well, there are a number of reasons. One the person who is leading the dive doesn't know my level of experience so if I do something he considers a bit strange or odd, he's liable to come after me. If I stopped to take photographs, there's normally somebody pursuing me – [laughs] 'What's going on?'

Okay! Yeah!

They get in the way when you taking a nice picture of a diver, and the fin gets in the way. And also, if you see some problem somebody else is having, it's a bit of a worry because you don't quite know what to do. You know, the responsibility element as much as anything else because you feel you have a responsibility to the person who's leading the dive to sort of, behave as they want. And sometimes, if you've got half a dozen people milling all over the seabed at various levels of experience, it's quite a worry, you know.

So whenever I can, I try and dive in small groups and that's why...well, we'll come on to some of my favourite places and explain why.

Yeah! Yeah! Yeah! So I was just going to ask you, how often do you go on holidays, whether it's in the British Isles or overseas?

That...that's increased over the years, I mean, that's partly when you can afford to do it – if you've got family and small children... So, as the years have gone by, in the last, I suppose ten or fifteen years, we've done a lot more travelling with diving holidays abroad. Done little in the way of holiday diving in the UK, I tend to go away and if I have an opportunity to go diving, I will do it. If you see what I mean? It's an add-on!

But abroad, we've been specifically to places to dive and nothing else.

Can you name some of these places for me please?

Well, the main place... the two main places that I've gone for a purely diving holiday are Bonaire, and the Red Sea. And with the Red Sea, it's always been the Southern Red Sea, in other words South of Hurghada.

And the reason for that was that we were... when we were first considering going to the Red Sea, one of my partners in the practice who died said, 'Oh! I've heard that the Red Sea diving safaris are really good –
you camp in the desert and you drive off to dive sites’. So this sounded really good you know, get away from it all, no hotels, nothing like that, just tents. So we booked one of these holidays and it was great, you know. We got completely away from it all, for about nine days. We could just walk into the water, it was house reef, beautiful coral, very remote. And so, we’ve kept going back with the same outfit. And they’ve had to move further south because of the encroachment of development.

But we went to ...what was it called...Marsa al-Ahmed? I think it is actually, which is down near a place called Ras Banas which is right in the Southern Red Sea at the beginning of this year. And that was some of the best diving I’d ever had – absolutely terrific! And there were only six people there, when we were there. Three French, one Dutchman and my wife, and I. And it was the diving I liked because although we had a dive leader, he would say, ‘You can follow me or you needn’t. This is what I’m going to do’. You know? And we would follow him around and then he says, second dive – off you go! And so, you know, you could do what you liked within reason and that’s – that was my diving. Excellent! Beautiful underwater scenery. So yes, we had some of the best dives I’ve ever had when I think about it. [16:40secs]

Yeah? Are there some places, overseas other places that you’re planning to go to?

Well, the area that I’ve never been to is the Far East where you come from...one my practice team, also dives...lots of people dive [laughs] and his wife is Malaysian I think and he goes out to Manado ...is it the Lembeh Straits.

Lembeh Straits – Manado, Sulawesi I think.

Yeah! Around there and he’s done a lot of diving there and I’d like to visit that because I’ve never been to that part of the world. And the other place that I want to visit is Australia again, on the West Coast though, not the East Coast. The West Coast and Ningaloo Reef which I’d like to dive and I’d like to dive it when the whale sharks are there [chuckles]

Preferably!

Preferably! I think I’ve arranged my holiday so we did go there then...But we went to Australia about 3 years ago – we did all sorts of things on the West side. We dived South of Perth, which is very interesting diving there. It’s a mixture of temperate water diving and tropical diving because they have this warm water current that brings water down from the tropics. So you get tropical fish, kelp and coral all mixed up together [chuckles].

And one of the most impressive dives I’ve ever done there was under a man-made structure called Busselton Jetty which is the longest jetty in the Southern Hemisphere. And the pilings of the jetty are one solid mass of multi-coloured encrusting lichen. Most of which I’ve never seen before.

Wow!

Blue; green; orange; reds and sea-squirts; sponges [chuckles] I’m not sure what some of them were! A variety of fish and I...they have been...I think they’ve been books published. I saw photographs and it’s just almost too much too much to take in. And it’s all at the depth of 8 metres, so you can spend about an hour, an hour and a half underwater, swimming about you know. But people came up and said, ‘did you see this?’ I said, ‘no! no! no!’ Did you see this? Did you see that? Just everything...because again, it’s one of these locations where, of course, it sticks out into basically, a flat sandy seabed, so it’s an artificial reef, so everything congregates on it. That was stunning! That was stunning! But people don’t often think of man-made structures as being sort of...I mean you might think of a wreck, but a jetty doesn’t sort of seem a place to dive [chuckles] [19:48mins]

Excellent! Okay, so for the next part of the interview, I would like to ask you if you have a favourite dive destination or if you think of many places as your favourite place. Could you tell me something about them? What sort of memories and feelings come into your mind please?
I think that is...it's a very difficult question, to say, have you got a favourite site. That maybe somewhere I haven't visited yet [laughs] but I want to...

At the moment...?

There are memorable places that I've been to that are memorable perhaps for a feature or what happened rather than necessarily somewhere I would race back to. Somewhere I haven't mentioned was I went on an expedition to the Blue Holes of the Bahamas. Andros Island about 20 years ago.

Okay!

And we dived several sites there, one or two of them have become quite well-known. One of them is Stargate which is a...an inland Blue Hole which is about 19 metres of water depth. But it's freshwater to start with but you go into the shaft and you drop down. When you get to the halo-cline where the freshwater lies with the salt and suddenly you're in this void and you're looking down this gigantic passage with stalactites hanging on it, and I remember that!

And I remember another site that was a new discovery when we were there. Just looked like a crevice in a rock you know, it was a pool. And the expedition leader, called Rob Palmer said we want to have a look at this and he did...he went in first — yeah, he went in and did a short dive and found a lot of human remains which were Arowak burials so they were quite old.

And then I went down with him and we swam along this passage and nobody's been down before and we swam around a corner — there was this stalagmite which was about — 10 feet high on a ledge, this was about 30 metres down. Beautiful clear water, we were looking into this void. And I remember coming back and sort of, looking at all these bones, and I knew that we were the only two people who'd ever seen these and that really was very exciting and very memorable. So that was one location that sticks in my mind.

Memorable...?

Yeah, it is! It's just the feeling. At another site where we'd dived which looked like a rather peat-stained pond which again nobody had been in before and I went in with him. And again, you start to drop through this water which gets very, very dark. Very dark indeed! And you go through this halo-cline where you go through a sulphur layer and the water tastes strange. And that was what I call an Alice in Wonderland experience because you're in...you go in and you're in sub-tropical conditions, flat-pavement, blazing sun, a brown pond. You pop out, and you had a very powerful light and you're in a sort of bell-shaped void. The depth's about 50 metres and you can see for 50 metres, and it was a blue hole. But the top was like that [makes sign] and the whole thing spread out like a gigantic cone and you were just suspended in space and looking into this diver disappearing into the void because I just stayed at about 38 metres. He just disappeared into the depth.

I wasn't scared, I was just — it was awe-inspiring really. You know, to look out at this, and also, the contrast between what it looked like on the surface which was nothing. And there was this huge void underwater beneath! And I'll never forget that! I think again, it was because it was something that I'd heard about and knew about but had never actually experienced. And there it was, in front of me.

But it's not a place you went back to again? [24mins]

No! No! You wouldn't go back to it! Whereas there are places that obviously one does go back to time and again...

For example?

For example, well...a place that I have been to at least...well, 2 or 3 times is actually in the Red Sea and I would go there again tomorrow. I can spend all day there if I can get there were again some caves, but it wasn't just a cave site. And it's Dolphin House reef which has got quite famous ...I think it's called
Sharb...I can never remember what the reef’s are called – it’s Samedi anyway, it’s name! But it’s an off-shore reef in the Southern Red Sea which has got a colony of spinner dolphins in it.

Okay!

And in fact, recently there’s been so many visitors to the site that the Egyptian government started charging everybody a fee. And they put a sort of swimming pool barrier around half the atoll you know, to stop people going in it. But it’s not that specifically. There was some nice diving there. On one side of it, there was this marvellous network of caves, where the light flooded in through the roofs –it had these beautiful skylights, the sunlight streaming through. And you could swim through the caves, weave in and out, go in another entrance, come around and come back and just spend hours. And the divers would be there suspended in clear water with the light...the dappling of the light coming through – beautiful. I could spend all day there. Pity it’s miles off-shore [laughs] It’s something I’d like near the beach!

Simply...I think in those places, it’s the...it’s the experience of light and shade that you get...in underwater caves like that. The way the daylight comes down and shines, it’s almost like being in a cathedral you know...like looking through a stained-glassed window.

You say a cathedral, what does that make you feel ...

Well, I don’t know...it’s just that [pauses] it’s very difficult...it just feels...it just feels very ...I think it’s very...I find quite...it’s calming I suppose! It feels very tranquil! But beautiful... [pauses] Caves aren’t a place you can swim through rapidly. You have to go through slowly anyway and I suppose that induces it. But there’s that sense of mystery you get as well because you can’t see any further than the next corner. So, there’s this feeling ‘what is around the next corner?’ And then you’ll see the light streaming in through the roof and some fish and some coral, and somebody suspended. So you see these beautiful images as well.

As a photographer you know, you’re always looking I suppose for things that are clearly pleasing to the eye. You see these wonderful sort of, veins, the cave walls, the frames of the cave entrances. And there’s something also quite magical about it – if you go caving, you’re crawling along, on your hands and knees, and you’re climbing up and down. And there you are, floating you know, weightlessly through these things. You know, not touching walls or roof which again, I suppose you could say is a magical experience. It’s something that you can’t experience anywhere else. So that feeling weightlessness there I think is very...is accentuated.

The other time that you get...I find, that you get these strong sensations that you...you know, you’re in an environment where you can do sort of do anything... is if you dive a really good steep sheer wall in very clear water. I’ve done that both in Turkey and in Crete. Where you’ve got 50 metre water and you get a number of divers who are spread out – you feel as though you could be sky-diving but without any of the fear of falling.

[Dog’s whining is getting more frequent again, from about 5 minutes ago]

I did it in Crete a few years ago and I’ve never felt quite...it was wonderful. You know, drop anywhere. I did...some people get agrophobia actually. I’ve heard of divers getting quite anxious when they can see that far. But no, that didn’t bother me [chuckles]

No? Is there...when you think of places, your favourite places, are there people connected to those dives that come to mind?

Sometimes. I mean, the people I dived with in the Bahamas, when I did the Blue Holes trip... I mean sadly, Rob Palmer’s died so...but he is inextricably linked with that because he did a lot of exploration there. And all the Red Sea diving, I’ve done with [wife’s name omitted] which you know– we’ve had some really great times there.

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How did it feel for you that your dive buddy is your wife as well?

I love it. I’m trying to get her to do more diving again in the UK but she’s got spoilt now. [laughs] Too much bother putting on all the gear here. She posed for one of these lovely pictures here [shows me in dive guide].

It’s lovely… it’s really nice that we’ve got something to share you know – I think that’s the thing about it. And I think, the thing about, because you talk about the dive afterwards…I find the only problem with diving is you cannot talk underwater because I’m a great talker anyway! And when you go into a cave, you’re continually chatting and moving around which is my other hobby, or you’re walking. But underwater, you can’t say, ‘well, I wonder what that is’, ‘move there’, or ‘do that’ or ‘go over there’ or ‘let’s look at this’. It’s all…has to be done by hand waving.

So in a way, if you dive with somebody very regularly, you’re much more likely to develop a rapport and understand what the other person might be getting at. And if there’s a problem, you’re more likely to understand it. And it’s one of the difficulties you have if you’re diving with you know, a stranger. You’re not sure what’s going on. I remember diving once with somebody in Cornwall I’d never dived with. And he seemed a bit odd throughout the dive – it might’ve been that he didn’t want to posing for my pictures. But at the end of it, he was violently sick, you know he came up… And then he told me he’d had a dreadful hangover because he’d been drinking the night before. And I sort of thought, well yeah I thought there was something strange about you [laughs]. But I wish he’d said something before we went in though. I’d never met him before, it was one of those…you go out on a boat and sort of you know…

‘Nell’, when you were telling me all these experiences, you’ve not mentioned any big animals or small marine life or anything. Are they not that important for you?

Oh! Yes! Well, that’s a whole different ball game that we’re getting into. I mean I’m very interested in marine life and behaviour. And I do sea… well I’ve got a marine aquarium over there (in living room) and most of those…well, in fact, everything there came out of the sea. Locally! Well, it all came out of the sea locally – some of it I got diving, from rock pools!

You haven’t brought Nemo home, have you?

No! No! No! [smiles] It’s not tropical – it’s all cold water! [Both laugh]

Yes…no… I find… it takes me a while to sort of observe things if you like – I mean I do see a lot, but I’m not as good as say, biologists who go down there and study fish behaviour. But I think a lot of it is training your self to do it. I remember the first time, a few years ago, I saw a corkwing wrasse making its nest. And I must have seen them before but I just happened to be on a dive – it was partly because I was bored because I was swimming around and I couldn’t see anything to photograph. There was some weed and I saw this fish go past, and it suddenly ripped a piece of seaweed off you know, and swim off with it. I thought, what’s going on? I’ve never seen a fish doing that you see. So I followed it and realised it dived down, it came out and swim off and came back with another piece of weed. And it was building its nest. And what’s more, these pieces of…these clumps of weed I thought were just washed in or something I’d found over the years were in fact the nests of these wrasse. And I’d suddenly… actually seeing and learnt about fish behaviour.

And other times I’ve seen, you know, sitting and watching say, cuttlefish is fascinating, watching the colours past over them. So I think a lot of time… a lot of divers miss things because they’re swimming around at high speed. Sometimes, you know, you’ve got to try and just sit down and you know, look. [laughs] And wait!

Yeah! Just look! [33mins]

I think one of the exciting things we did – we’d actually been diving, when afterwards we were on the Cornish coast – and this is only about 2 or 3 years ago – and we were looking at basking sharks. We
actually got the opportunity to go and snorkel when the sharks were coming around but they move a lot faster [laughs]...tried to get photographs of basking sharks, unless they come straight at you is quite difficult!

But there was something quite impressive about seeing these huge, you know, 6 metre fish go past. Years ago, I'd have probably been quite anxious but I think what I have learnt is ...when you know about something then you know it's not going to harm you, then you're relaxed about it. And I wasn't anxious about being in the water with something that size because I knew it wasn't going to do me any harm.

I have got anxious when I've been in the water with a seal because they can get [chuckles] boisterous, you know. I was diving into a cave in Cornwall and there was a seal about. And we said, 'oh! We haven't seen the seal'. And it popped up beside us [laughs] and swam right the way through the cave.

Yes...I mean there's usually something to see but if I go on a dive and the marine life is a bit sparse, it's not ...it gets not very interesting. I mean some divers go down and they want to just get as much food as they like and if it doesn't look as though it's food, they don't like it as far as I can see [laughs]

Right! Okay!

I mean, I do like my seafood but ...[laughs]

I'm moving on to another section now, where I would like to ask you how would you describe the experience of diving to someone who's never Scuba dived before? How would you describe scuba-diving [34:55min]

It...I think it...I think the first thing you have to do is to ... when you're learning is to be able to breathe naturally when you're immersed in the water. So you've got to get past that and I think some people have a difficulty with that but there is some...once you're there – there is something utterly marvellous about sinking below the surface, seeing a different world there and breathing normally. And being...you know, relaxed! But you got to reach that stage of relaxation. A lot of people take a while to get there, but it's worth getting to that point where you can just drop in, and feel, sort of, at one with it.

And then, you've got these wonderful feelings of weightlessness and freedom from all the heavy gear as well – that's the other thing about diving.

How would you describe weightlessness – that feeling to someone who’s never dived?

Well, if you go to a swimming pool, you're supported. And if you ever dived below the water and you felt, 'it'll be nice to stay down here all day' - diving gives you the opportunity to just float around there. So it's rather like being able to go to the bottom of...or if you've snorkelled or swum beneath the water, normally when you open your eyes underwater, of course it's all a blur. With the diving mask and breathing apparatus, you can then just stay down there, relax and see what's down there [pauses] and experience it.

Weightlessness...I mean, I'd describe it as just being rather like the experience you get in the swimming pool when you dive under. Somebody who's ever done ...I've never done it, so I don't know [laughs] - it's like sky-diving and all that...it's the same feeling. I used to go hand-gliding which gives you the same sort of buzz really, in a way, you've got that same feeling – just floating. But a bit more dangerous, definitely more dangerous...

Yeah! I think what I say to somebody about diving is, not only does it give you... the sensation, particularly if you get clear water, but it's an opportunity to see creatures that you'll just never see normally– the most extraordinary ...animal behaviour as well and learn something about what they look like underwater. Seeing lobsters as being red when sitting on your plate [both laugh]

And people go diving for different reasons. I think my photography keeps me going – I tend to not...the trouble is at the moment is that if I'm with...I've been diving with my daughter recently, keeping an eye on
her. So I tend to go down and not take one picture because I'm too busy looking at the other diver [laughs].

This is why I have the tide tables out because I'm hoping I might go out this weekend. Somewhere nice and shallow and just sit down with the camera for a while.

**Tell me, 'Nell', how would you describe your feelings at the end of a dive?**

Well, it depends really – if it's been a really good dive, I wish I could stay down longer. I mean this is the problem sometimes – if you're having a really good dive, you know you've got demands of decompression and you have to come up. They've been plenty of occasions when I've just, sort of, regret. Sometimes at the end of a dive, you're glad to come up; if you're freezing cold and something else.

But I often come out of a dive that's been really good feeling quite exhilarated and enthusiastic and people know that.

I shall never forget going into the pub at Charles Quay a few years ago – in Scotland and you can dive right in front of a hotel, on the ferry slip. And it's a really nice diving site, a lot of marine life. So you come out, literally change in front of the bar, as we go in. And I remember I was sort of telling everybody about it, and they said 'gosh! It sounds really wonderful'. I was so enthusiastic - 'I wish you could see it'. So one year, I took my laptop, I took my photographs, downloaded them and there was hardly anybody in the bar on that occasion [laughs]. I thought this will be great, 'That was down there twenty minutes ago' you know...then take it out. I've often thought that a webcam there would be rather good ...take them underwater.

So sometimes you know, you feel quite exhilarated. Sometimes you might feel you know, just disappointed about it. But I usually feel, you know – that's great, it's another dive. Sometimes you can feel really exhilarated...buzzing!

**There's a quote on your website where you say, 'these are places that most people will never see'. Is that a message that you try and pass on to people?**

Yes. I've done a lot of talks on marine life, and I do a talk on marine life locally to wildlife groups. And that is one of the things that I'd like and try to communicate – 'what is down there'. I think for a number of different reasons. One - it's just nice to tell people about things, show you photographs. But people are generally interested and there are all sorts of different angles that you can introduce. I mean from my medical point of view, some interesting medical aspects to it. And you know, a lot of people talking to you aren't going to have the opportunity to that, and you're opening their eyes to it.

And there's a conservation angle because I mean, the sea, most people go down there and look at it. But they don't really know what's down there and if you don't know what's down there, they're less likely to...they're more likely to treat it badly or not think about the issues that might be involved when you start to dumping sewage or rubbish or anything else in it. So if you go down, and you see things...I mean there's a site at Torquay which very few people dive [chuckles] which is the site of one of their sewage outlets. They're not diving in the sewage but it's nearby. But it's a very popular angling site but the trouble with that is anglers don't realise what a mess they leave underwater. The seabed is covered in fishing line, there are led-weights everywhere, broken fishing rods and you find crabs tangled up in it...I've found creatures that've been caught in fishing line underwater.

And yet, the fishermen...they lose their weights – 'oh! dear' – but they don't realise, you know, what a mess they're creating. You know, a real hazard! There's a place in Plymouth actually where they've now got a sign, which is an angling spot and a diving site – the notice post has a diver cutting a crab out of a ball of fishing line. So, there're lots of aspects to it.

Certainly about the colour because I think a lot of people think that in Britain, you know, coral reefs haven't got the colour – there's nothing else... anywhere else, which is complete rubbish. It's all on a
different scale – I mean those bright pink gorgonians there [points to aquarium] sea-fans – they’re a type of soft coral. I haven’t ripped those off the seabed – they been damaged by probably something like scarping. Once they’ve been… they grow like a tree, so once they’ve been torn off, if I find them, I bring them back to put in the aquarium because they’ve going to expire anyway. It’s a good way of telling people about them.

[I thank him again for taking time out to share his experiences of the sub-aquatic environment with me. I hand him the Sabah Dive brochure and invite him to visit me during his dive holiday to Malaysian Borneo someday] [Interview ends: 44mins 44 secs]

(14 pages if font 12)
### Central Theme: Sense of Wonderment

#### Sub-Theme or Cluster 1: Beauty

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#### Sub-Theme or Cluster 2: Encounters with Marine Life

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<tr>
<td><strong>(Bahamas)</strong></td>
<td>'suddenly you’re in this void and you’re looking down this gigantic passage with stalactites hanging on it’</td>
<td>8.3</td>
</tr>
</tbody>
</table>

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3 Note: Final column denotes location of extract within interview transcript e.g. 2.25 = Page 2, line 25.
Cave Diving: Ancient Burial Grounds
‘...found a lot of human remains which were Arowak burials so they were quite old’. ‘I knew that we were the only two people who’d ever seen these and that really was very exciting and very memorable.’

Cave Diving: ‘Alice in Wonderland’
‘you start to drop through this water which gets very, very dark. Very dark indeed! And you go through this halo-cline’ ‘you go in and you’re in sub-tropical conditions, flat-pavement, blazing sun, a brown pond. You pop out, and you had a very powerful light and you’re in a sort of bell-shaped void’. ‘I wasn’t scared, I was just – it was awe-inspiring really’.

Central Theme: Being in a Different World

Sub-theme or Cluster 4: Discovery and Learning

Basking Sharks
‘I think one of the exciting things we did’ ‘Years ago, I’d have probably been quite anxious but I think what I have learnt is ...when you know about something then you know it’s not going to harm you, then you’re relaxed about it.’

Learning: Patience and Observation I (Corkwing wrasse)
‘I’m very interested in marine life and behaviour’ ‘I think a lot of it is training your self to do it.’ ‘I saw this fish go past, and it suddenly ripped a piece of seaweed off you know, and swirl off with it.’ ‘it came out and swirl off and came back with another piece of weed. And it was building its nest.’ ‘these clumps of weed I thought were just washed in or something I’d found over the years were in fact the nests of these wrasse.’

Learning: Patience and Observation II (Cuttlefish)
‘sitting and watching say, cuttlefish is fascinating, watching the colours past over them.’ ‘a lot of divers miss things because they’re swimming around at high speed. Sometimes, you know, you’ve got to try and just sit down and you know, look. And wait!’

Chance to Learn
‘an opportunity to see creatures that you’ll just never see normally– the most extraordinary ...animal behaviour as well and learn something’

Sub-Theme or Cluster 5: Overcoming Physical Limitations

Weightlessness: Magical
‘You see these wonderful sort of, veins, the cave walls, the frames of the cave entrances.’ ‘there you are, floating you know, weightlessly through these things. I suppose you could say is a magical experience.’ ‘It’s something that you can’t experience anywhere else. So that feeling weightlessness there I think is very...is accentuated.’

Weightlessness: Wall-Diving
‘you get these strong sensations that you...you know, you’re in an environment where you can do sort of do anything...is if you dive a really good steep sheer wall in very clear water’ ‘you’ve got 50 metre water and you get a number of divers who are spread out – you feel as though you could be sky-diving but without any of the fear of falling.’ ‘I’ve never felt quite...it was wonderful. You know, drop anywhere.’

Central Theme: Splendid Isolation

Sub-Theme or Cluster 6: Remoteness

Camping in Desert to access ‘get away from it all, no hotels, nothing like that, just tents...”

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<table>
<thead>
<tr>
<th>Remote Dive Site</th>
<th>We could just walk into the water, it was house reef, beautiful coral, very remote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anonymity of Diving in Large Groups</td>
<td>'I don’t like diving in large groups. We used to get a lot of holiday diving where everybody’s led around by a divemaster, and I just hate it.'</td>
</tr>
<tr>
<td></td>
<td>'the person who is leading the dive doesn’t know my level of experience so if I do something he considers a bit strange or odd, he’s liable to come after me.'</td>
</tr>
<tr>
<td></td>
<td>‘you feel you have a responsibility to the person who’s leading the dive to sort of, behave as they want.’</td>
</tr>
<tr>
<td></td>
<td>‘if you’ve got half a dozen people milling all over the seabed at various levels of experience, it’s quite a worry.’</td>
</tr>
<tr>
<td>Diving in Small Groups</td>
<td>‘some of the best diving I’d ever had – absolutely terrific! And there were only six people there, when we were there. Three French, one Dutchman and my wife, and I!’</td>
</tr>
<tr>
<td></td>
<td>‘it was the diving I liked … So yes, we had some of the best dives I’ve ever had when I think about it.’</td>
</tr>
</tbody>
</table>

**Sub-Theme or Cluster 7: Serenity**

| Immersion: Weightlessness: Relaxation                                            | 'there is something utterly marvellous about sinking below the surface, seeing a different world there and breathing normally. And being… you know, relaxed!' |
|                                                                                  | 'you’ve got these wonderful feelings of weightlessness and freedom from all the heavy gear as well' |
|                                                                                  | 'With the diving mask and breathing apparatus, you can then just stay down there, relax and see what’s down there and experience it.' |

**Central Theme: Fellowship**

| Dive Buddy: Wife                                                                  | 'My best buddy is my wife… she has perfect buoyancy control and she knows now, how to pose for photographs.' |
|                                                                                  | 'if I want to dive with anybody, I’d prefer her.' |
|                                                                                  | 'It’s lovely…it’s really nice that we’ve got something to share' |
| Dive Buddy: Father                                                               | 'I did it all with my father in the first few years… my diving…' |
| Dive Buddy: The Regulars                                                         | 'another doctor who I dive with ... he’s been diving for about 30 years. And he’s a very good diver. I know when I dive with him, I’m alright.' |
|                                                                                  | ‘there’s another chap who lives in Chard, he’s quite a bit older than me – he’s been diving for a number of years.’ |
|                                                                                  | ‘He’s an ex-fireman who’s very relaxed underwater, and again, if I dive with him, I don’t worry’ |
| Diving with Strangers (Negative)                                                  | “And it’s one of the difficulties you have if you’re diving with you know, a stranger. You’re not sure what’s going on”. |
|                                                                                  | “But at the end of it, he was violently sick, you know he came up… And then he told me he’d had a dreadful hangover because he’d been drinking the night before.” |
|                                                                                  | “But I wish he’d said something before we went in though.” |

**Sub-Theme or Cluster 9: Strengthening Bonds**

| Regular Dive Buddy: Rapport                                                        | ‘…underwater, you can’t say, ‘well, I wonder what that is’, ‘move there’, or ‘do that’ or ‘go over there’ or ‘let’s look at this’. It’s all…has to be done by hand waving.’ |
|                                                                                  | ‘if you dive with somebody very regularly, you’re much more likely to develop a rapport and understand what the other |

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person might be getting at. And if there's a problem, you're more likely to understand it.'

<table>
<thead>
<tr>
<th>Responsibility: Father-Daughter</th>
<th>‘I've been diving with my daughter recently, keeping an eye on her. So I tend to go down and not take one picture because I'm too busy looking at the other diver.’</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UNIQUE THEMES FOR NEIL</strong></td>
<td></td>
</tr>
</tbody>
</table>
| **Underwater Photography**       | then I got interested in underwater photography, in about 1982. I had a very old Nikonos underwater camera I bought from somebody. And I didn’t take, I didn’t get very good pictures with it. And then I got a flashgun with it which fired flash blubs. And then gradually, I got a better one, and then a better one, and then a better one, and the photographs started to improve. And I went over to digital underwater photography in about 2 or 3 years ago. 

But I'm quite proud because this picture is one of mine, on the dive guide to Dorset and a number of the other photos inside as well. So I reckon I reached a reasonable degree of competence with it. That's one of my daughters there. |
| **Desire to Share the Experience I** | I shall never forget going into the pub at Charles Quay a few years ago – in Scotland and you can dive right in front of a hotel, on the ferry slip. And it's a really nice diving site, a lot of marine life. So you come out, literally change in front of the bar, as we go in. And I remember I was sort of telling everybody about it, and they said 'gosh! It sounds really wonderful'. I was so enthusiastic – 'I wish you could see it'.

So one year, I took my laptop, I took my photographs, downloaded them and there was hardly anybody in the bar on that occasion [laughs]. So I thought this will be great, 'That was down there twenty minutes ago' you know...then take it out. I've often thought that a webcam there would be rather good...take them underwater.

So, sometimes you know, you feel quite exhilarated. Sometimes you might feel you know, just disappointed about it. But I usually feel, you know – that's great, it's another dive. Sometimes you can feel really exhilarated...buzzing! |
| **Desire to Share the Experience II** | Certainly about the colour because I think a lot of people think that in Britain, you know, coral reefs haven’t got the colour – there’s nothing else... anywhere else, which is complete rubbish. It’s all on a different scale – I mean those bright pink gorgonians there [points to aquarium] sea-fans – they’re a type of soft coral.

I haven’t ripped those off the seabed – they were damaged by probably something like scarping. Once they’ve been... they grow like a tree, so once they’ve been torn off, if I find them, I bring them back to put in the aquarium because they’re going to expire anyway. It’s a good way of telling people about them. |
### Appendix 1 - Inductive Analysis: Master Table of Shared Themes

<table>
<thead>
<tr>
<th></th>
<th>Sense of Wonderment</th>
<th>Being in a Different World</th>
<th>Splendid Isolation</th>
<th>Fellowship</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beauty</td>
<td>Encounters With Marine Life</td>
<td>Adventure</td>
<td>Discovery And Learning</td>
</tr>
<tr>
<td>Alex</td>
<td>6.25, 12.7, 12.11, 12.14,</td>
<td>7.23, 15.32, 15.35,</td>
<td>6.32, 6.43,</td>
<td>13.16, 13.20</td>
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<td>Celia</td>
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<td>Diane</td>
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<td>4.42, 4.45, 5.1, 5.26,</td>
<td>5.17, 5.35, 5.40, 6.7, 6.22, 6.39,</td>
<td>7.34, 8.0, 8.5, 8.11, 8.23, 9.16, 9.24,</td>
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<tr>
<td>Ethan</td>
<td>4.15, 4.22, 4.24, 7.8, 7.11,</td>
<td>4.10, 4.16, 5.9,</td>
<td>2.10, 4.30, 6.35, 6.44, 8.30,</td>
<td>7.34, 7.45, 8.3, 8.6,</td>
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<td>Gina</td>
<td>5.21, 10.36, 10.37</td>
<td>3.43, 8.18, 8.26, 8.35,</td>
<td>4.17, 4.26, 8.14,</td>
<td>8.30, 8.33, 5.19, 6.8,</td>
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</table>

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<table>
<thead>
<tr>
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<td>Encounters With Marine Life</td>
<td>Adventure</td>
<td>Discovery And Learning</td>
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<tr>
<td>Harry</td>
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<td>3.23, 4.3, 6.9, 6.20, 6.21, 5.4, 5.16</td>
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<td>Jack</td>
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<td>14.25, 14.31, 9.21, 9.25, 9.33, 9.33, 1.42, 1.19, 1.43</td>
<td>6.8, 8.4, 8.10, 14.6, 14.40, 1.43, 2.1</td>
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<td>Kieran</td>
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<td>1.43, 5.34, 10.25, 9.16,</td>
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<td>Lee</td>
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<td>Marie</td>
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<tr>
<td></td>
<td>Sense of Wonderment</td>
<td>Being in a Different World</td>
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<td>Fellowship</td>
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</tr>
<tr>
<td></td>
<td>Beauty</td>
<td>Encounters With Marine Life</td>
<td>Adventure</td>
<td>Discovery And Learning</td>
</tr>
<tr>
<td>Neil</td>
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<td>6.18, 5.20, 5.27, 5.37, 5.38, 6.27, 6.29, 12.28, 12.33, 12.43</td>
</tr>
<tr>
<td>Olivia</td>
<td>6.24, 6.37, 6.40, 7.3</td>
<td>7.14, 7.23</td>
<td>6.41, 8.37, 8.43, 8.9, 7.40, 7.44, 9.7, 6.41, ---, 5.10, 5.33, 10.2, 10.14, 4.22, 2.14, 2.11, 2.28</td>
<td>5.10, 5.33, 10.2, 10.14, 4.22, 2.14, 2.11, 2.28</td>
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<tr>
<td>Pam</td>
<td>7.8, 8.25, 8.28, 6.7, 6.14, 11.9, 1.6, 1.26, 2.4, 3.5, 3.6</td>
<td>10.25, 6.8, 6.17, 10.25, 6.8, 6.17, 7.2</td>
<td>8.40, 8.42, 4.33, 4.41, 7.15, 8.13, 8.18, 9.39, 7.4, 7.16, 7.12, 7.17, 8.14, 9.23, 10.42, 8.1, 7.33, 7.37, 10.32, 10.34, 11.27, 7.40, 7.45, 6.33, 6.41, 8.13, 8.33, 9.43, 9.48, 7.44, 8.4, 9.21, 9.43, 9.48, 9.27, 9.32,</td>
<td></td>
</tr>
</tbody>
</table>

Note: 6.25 denotes Page 6, Line 25. Dashed Line denotes not represented by participant.
Appendix J – Member Check Report (Jack)

SUB-AQUATIC MEANINGS:
A STUDY OF SCUBA DIVERS’ EXPERIENCE OF PLACE

Dear Jack,

One of the major objectives of my research was to produce a description of scuba divers’ subjective experience of the sub-aquatic environment. This was achieved by analysing the interviews that I conducted with 16 divers and the result was a set of common themes that were most commonly found in the transcripts. I have also created a personal ‘directory’ which shows how your experiences contributed to the overall Sub-Aquatic Meanings (SAM) framework.

The purpose of this exercise is to establish the credibility of my findings. I would like to ascertain how well the themes fit your experiences of the sub-aquatic environment as discussed at the interview, and how well you think themes fit the experience of sub-aquatic environment in general. I will give a short summary of these themes and also show how sections of your particular interview gave rise to and are assigned to them. These common themes are intended as a summary of all 16 participants’ experiences so there may be some themes that are not part of your own experience but were actually meaningful for other people. There may also be some parts of your own experience that were described only by you and are therefore not part of a common theme. I call these unique themes.

I would like you to do 4 things for me:

i) Read the summary of common themes and the way I assigned sections of your interview to common and unique themes. This is found in sections 1) and 2) below. The summaries are purposefully short and can be better understood with reference to your own interview.

ii) Comment on whether you feel that I’ve captured the essence of your experience by assigning your words to the common themes. Have I captured something useful or have I missed the point entirely?

iii) Comment on whether the common themes that were not found in your interview still resonate with your own experience. For example, did you not talk about them simply because they were not part of the way you experience the sub-aquatic environment or because they are less important to you?

iv) Comment on the fact that your unique themes were not generally found in other people’s experience. For example, are your unique themes actually more important to you than the common themes?

Any other comments on the above, or on anything else, are most welcome.

Thankyou once again for your time, effort and participation.

Kindest regards,
Balvinder
Section 1: Summary of Common Themes

Here are the four common themes ‘A Sense of Wonderment’, ‘Being in a Different World’, ‘Splendid Isolation’ and ‘Fellowship’, along with their more specific sub-themes as depicted in the Table below. Examples from the interview transcripts of the experiences these themes represent are given for the purposes of illustration. All participant names have been changed.

<table>
<thead>
<tr>
<th>Final Table of Themes: Sub-Aquatic Meanings (SAM) Framework</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sense of Wonderment</td>
</tr>
<tr>
<td>d. Beauty</td>
</tr>
<tr>
<td>e. Encounters with Marine Life</td>
</tr>
<tr>
<td>f. Adventure</td>
</tr>
<tr>
<td>2. Being in a Different World</td>
</tr>
<tr>
<td>c. Discovery and Learning</td>
</tr>
<tr>
<td>d. Overcoming Physical Limitations</td>
</tr>
<tr>
<td>3. Splendid Isolation</td>
</tr>
<tr>
<td>c. Remoteness</td>
</tr>
<tr>
<td>d. Serenity</td>
</tr>
<tr>
<td>4. Fellowship</td>
</tr>
<tr>
<td>c. Sharing the Experience</td>
</tr>
<tr>
<td>d. Strengthening Bonds</td>
</tr>
</tbody>
</table>

1. A Sense of Wonderment

‘Sense of Wonderment’ embraces feelings of admiration, amazement and fascination aroused when encountering familiar, strange, or surprising features of, and inhabitants within, the living reef. In their experience of place, participants consistently mentioned an awed admiration and appreciation for nature, as well as respect, and the desire to care and protect. This theme illustrates a shared emotion amongst participants: regardless of the number of accumulated logged dives, the element of wonderment emerged within their descriptions. ‘Sense of Wonderment’ is comprised of three sub-themes: ‘Beauty’, ‘Encounters with Marine Life’, and ‘Adventure’.

(a) ‘Beauty’ refers not only to the sensual appreciation of the colours, shapes and sizes of the reefscape, but also a feeling of oneness with nature. Participants’ experiences of ‘Beauty’ also extend towards the intangible and transcendent aspects of place. Examples of such experience include:

... the colours surprise you because they’re you know, they’re bright, they’re translucent or they’re vivid...more vivid than the colours on the land. (Lee)

And there’re just hundreds of anemones. And they’re bright orange, and yellow and white and there’re hundreds of them and they are gorgeous. It’s just like a massive garden. It’s just one of the most beautiful things I’ve ever seen. (Olivia)

But also, sometimes you can be in, hanging there in the middle... so you’re hanging underneath this archway and there’s nothing below you, that’s what it feels like. But you can see the blue sea and quite often big tuna and things like that will come in underneath you. So you can see, you get this feeling of how tiny you are. (Diane)

(b) ‘Encounters with Marine Life’ describes the nature of physical interactions with marine life. Participants spoke of ‘memorable’, ‘incredible’, ‘fantastic’, ‘magical’ or ‘impressive’ encounters not only with charismatic pelagic species like manta rays, seals, dolphins, and sharks, but also with micro life such as seahorses and nudibranches. Hidden behind each encounter was an engagement that provided
enjoyment and inspiration; as well as an achievement that boosted self-confidence and improved self-
knowledge. Participants' accounts depicted the wonderment of first time, repeat, and educational marine
encounters all of which are tied to participants' experience of place.

"Where I first swam with dolphins! Oh! It's just, because it's just one of those things that
everybody always wants to have done; swim with dolphins. And they're wild dolphins as well.
And they all kind of swim around a little bit: they're quite inquisitive. (Gina)

...and it's the only time I've ever seen a manta ray. I've got some photos where you could almost
reach out and touch it, you know. And that, probably that ten minutes, is probably one of the most
incredible ten minutes I've ever had, when I've been diving. It's just phenomenal. Never
experienced anything like it! (Alex)

(c) 'Adventure' includes participants' accounts of engaging with the marine environment as an arena to
explore and enjoy varied types of diving, for example, wreck diving; night diving; drift dives; deep dives,
cave diving, and even the joy of diving at dawn illuminating the extended scope of experiences available
underwater.

I guess it's the sense of exploring, of going inside something: ... gives you a feeling of ... you
want to know what's inside, bit of mystery, bit of exploration, you discover things you know. You
go in the old wheelhouse, or where the captain used to stand or you know going in and out of the
windows and doors and things. It's just fun...it's fun and it's a little bit more interesting than just
a normal dive – (Lee)

The one that is most memorable to me was the night dive that we did around the wreck. It's the
one with just walls of barracuda just following you around. It was all quite eerie. - (Ethan)

2. Being In a Different World
Participants' accounts contained numerous descriptions related to the unique qualities of the sub-aquatic
environment which was experienced, quite literally, as a different world.
In this world, participants could acquire knowledge and experience unavailable anywhere else, and to
interact with the environment with more freedom.

(a) In 'Discovery and Learning', most participants expressed their delight in the acquisition of knowledge
through first hand learning. Indeed, the desire to return or to seek new dive destinations was based on
familiarity with a place or the desire to gain further knowledge about the marine world. This act of learning
was akin to the desire to own the beauty experienced underwater.

It is so interesting and so many different forms of life, things that you would look at and think –
'oh! That's a plant' but it's an animal. And it just shows you, I think, how little you know of your
whole world. (...) Every time you dive, and you can probably dive forever, and every time you
dive, you'll come back and think, 'what was that thing'? Was it a coral or wasn't it? I just love
that kind of...it's completely different to being on land! - (Pam)

And sort of thinking about the dive, you know, what you've seen, the things you've seen different
before. And spend some time actually looking at books, you know...learning...sort of learning
what you saw before, so you can name it rather than say, 'oh, there's that blue fish again' to
actually know what it is rather than not knowing. (...) because in the Philippines, we had to know
like 250 fish, and then all the corals, and all the invertebrates, (...) to know them all off by
heart...cause you were ticking them off on a list, you know. So, a lot of that I've forgotten now,
so it's trying to re-learn it again: 'Yeah! I did know the name of this fish'. And that sort of
relearning...that is good! – (Ben)

(b) 'Overcoming Physical Limitations' focused on the experience of being in water, which presents the
opportunity to breathe underwater, as well as to be free from the confines of gravity, to experience
weightlessness. Participants connected it to achieving a sense of freedom, and a unique grace of movement that is not possible on land.

There’s a sense of weightlessness and there’s a sense of freedom. A sense of something you’ve never done before, completely different from anything you could imagine. - (Fiona)

I think I’m diving for that whole feeling of weightlessness and just being in the water. Even if I don’t really see anything that good, but haven’t been diving for six months, I just feel really happy to be doing it again. - (Gina)

Like being an astronaut, closest thing to being an astronaut! I’ll never be an astronaut; I’ll never go to the moon. But I don’t want to go to the moon because under the ocean is much prettier. It is! - (Olivia)

3. Splendid Isolation

‘Splendid Isolation’ is a common theme which describes the sub-aquatic world as a location to be away, both geographically and psychologically. ‘Splendid’ in the phrase refers to the degree of contentment, satisfaction and rejuvenation derived from sharing a certain location, with like-minded others. It is not a call for complete solitude, merely a preference to share place with other divers, who have a similar level of dive experience and interests. Descriptions are explored under two sub-themes labelled as ‘Remoteness’ and ‘Serenity’.

(a) ‘Remoteness’ is an aspect of ‘Splendid Isolation’ referring to geographical distance and the time, and cost needed to reach a destination. However, on a deeper level ‘Remoteness’ signifies the absence of a crowd and the presence of a more dedicated and experienced group of divers. It is also linked to the provision of opportunities to dive in unspoilt, untouched marine environments with greater visibility, and a better chance of viewing pelagic species.

You keep going out to the Coral Sea where there you know, it’s just, people can’t get there, day trippers just can’t get there. So, all the inexperienced divers, who have sort of, trashed quite a lot of the Barrier Reef just sort of can’t get there...because they are not going to pay to do all that sort of diving. So, it’s much, much more empty and it’s just sort of untouched. - (Ben)

I like it because, the first thing it’s remote. Okay? I hate diving in big groups you know? Four, six, maximum! I don’t like diving in big groups. So, it’s quite exclusive, but small. It’s quite adventurous, (...) it takes a certain kind of diver to go there, as in they really want, they really want to be diving. So you don’t get lots of people who don’t know what they’re doing, which I don’t like! - (Gina)

(b) ‘Serenity’ emerged as an important aspect of ‘Splendid Isolation’: being underwater was depicted as ‘therapeutic’, ‘totally engaging’, ‘peaceful’, but most of all ‘relaxing’: a sanctuary. ‘Serenity’ made the experience meaningful: it was a mode of quietness; provided peace of mind, relaxation and a feeling of contentment. Time seems to slow down and place transforms into a base for repose by allowing distance from daily life, or a ‘Splendid Isolation.

And it’s almost like when you’re diving, you forget about, you know, I never worry about work or worry about arguments with people or anything like that. When I’m underwater, that is like totally engaging, that’s everything, just completely fills...fills you up with being in the present moment. - (Diane)

The Sea...I don’t know...it’s just such a mystical environment from the everyday world. I suppose a bit of escapism. You know, it’s just so different from normal, everyday life. So a complete, get away from everyday life. You know, when you diving or you’ve had a dive, all your normal everyday problems or whatever are just gone. You don’t even think about them; you just ...you know it’s a total unwind. – (Pam)
I like to be able to potter around at my own speed. You know, it's a big relaxation. The most relaxing part about diving is the dive itself. All the rest is hard work: lugging cylinders, weight belts, bouncing up and down in boats. – (Ian)

4. Fellowship

For a majority of the participants, dive companions feature prominently in the experience of place. Scuba diving as a recreation activity was seen to facilitate the formation of lasting bonds and a culture of camaraderie manifested in shared conversations at the end of a dive. Two sub-themes depict how these aspects of social relations contribute to strengthening place experiences and are labelled ‘Sharing the Experience’ and ‘Strengthening Bonds’.

(a) ‘Sharing the Experience’ describes the social interactions related to both friends and family. The dive buddy system has evolved into an inherent social aspect of diving, with some people confirming that regular dive buddies enhanced their consumption of the dive experience; and formed the basis of building life-long friendships.

Everyone talks a lot when you come up, it doesn't matter who you've dived with, everyone talks quite animatedly. (...) With diving, (...) partly it's that you've done this special activity together, you know. You 'buddy' with somebody, so essentially you've had a bit of risk with them; you've seen some things that other people hadn't seen. You go back up on the boat and everyone starts to talk and still quite exhilarated. And then you go off and do a second dive, you know, you're more relaxed and you come up and you feel good again. – (Lee)

If I went diving without him, I'd be apprehensive about who my dive buddy was because we just know each other's kit, we know each other's...the way we dive. I know if I can't see him next to me, I know that he'll be behind me, or where to look for him and stuff like that. So from that point of view, it's really good. - (Marie)

(b) ‘Strengthening Bonds’ illustrates how relationships to place are grounded in social interactions with significant others, as well as family history. Through the shared activity of scuba diving and experiencing the reefscape, relationships became stronger providing a special sense of ‘Fellowship’, specifically amongst members of the same family. Elements of responsibility while diving, between father and son, or father and daughter surfaced within the descriptions and elucidate a different perspective.

When I'm diving with the younger one (his son), it's you know, almost nervous and very protective and, he's a perfectly competent diver. Sometimes when they buddy each other and I buddy my wife, I'm actually more worried about you know, having two teenage boys and so in a way, you're always keeping an eye on them rather than keeping an eye on your buddy. So there is that, and I mean you do get slightly anxious, particularly if you're buddying someone who's a relation. – (Jack)

...And people go diving for different reasons. I think my photography keeps me going – I tend to not...the trouble is at the moment is that if I'm with...I've been diving with my daughter recently, keeping an eye on her. So I tend to go down and not take one picture because I'm too busy looking at the other diver [laughs] – (Neil)

Now I will show how parts of your interview gave rise to and fit in with these themes. As mentioned earlier, your experiences may not match all the themes.
### Encounters with Marine Life

| **Feeling:** Elation versus Deflation | **One is you’ve got the elation:** if you’ve seen something that’s absolutely fantastic, you know, you feel absolutely brilliant! And so, you know, you’ve seen a giant turtle or whatever swimming by or you enter this... you got into the wreck and you’ve seen the cargo or the captain’s cabin or whatever. So there’s the feeling of elation – you’re coming out and you’re saying, ‘Oh! Did you see this? Did you see that? I saw 3 stonefish!’

The other is a feeling of deflation when people come out and say, ‘Oh, by the way, did you see...’ Now, I said earlier, when we went to Osprey Reef, they’ve got hammerhead sharks swimming by... [quick pause] I was with a group of about ten people and nine of them saw shoal of hammerhead sharks and I didn’t see them. And I came up and I felt so deflated! Why didn’t I see these things, you know? I just wasn’t looking at the right time, you know. And you could see everybody underwater doing this [makes shark signal] and I thought, ‘what the hell are they looking at’.

The danger is you liken it to train-spotting you know, that what you’re doing is ticking things off. But actually, what you do want to do is get the experience and I just sort of felt a bit of a failure I have to say you know? That you’ve got this... not once in a lifetime... but you don’t see everyday... you don’t see hammerhead shark floating by... and I didn’t see them at all. So you sometimes get that as well, so I think it depends on the dive. So elation and sometimes deflation! |
| --- | --- |

| **Friendly Turtle** | **There’s two other things I’ll tell you, one is... this was 6 o’clock in the morning, it was a dive that very few people went on, my wife and I went on it, she got a camera, and the light was absolutely beautiful, something about that early morning light and the sun coming out and shining on the reef, and then there was this turtle, this very, very friendly turtle.**

(…) he’s just waking up, that’s right! So he was going up, because he’d been sleeping during the night, and he’d been in his cave or whatever, and then going up to get his air, and then coming down again. And very, very friendly, and this [refers to photo] was an example of just hovering there, and relaxing and that’s it. And that was fantastic! | 14.25 |

### Combined Adventure + Encounters with Marine Life + Beauty

| **Night Dive into a Cave (‘Adventure’)** | **When we were out there, we did a series of night dives, and there is a little cave. And what they’ve got in these caves are these wonderful fluorescent fish. And so is what you do is you...** | 9.21 |

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4 Note: Final column denotes location of extract within interview transcript e.g. 9.21 = Page 9, line 21.
go into the cave, so you swim in with your torch. You go into the cave and there’s four or five of you...it’s really just hollow in the reef. It’s about...I don’t know, about 15 metres down, something like that.

**Anthias Anthias**

*(Fairy Basslet)*

*(‘Encounters with Marine Life’)*

Then what you do is arrange yourself, just in a semi-circle, switch the lights off. And then you’ve got these fluorescent fish that...actually it’s not their eyes that are shining but they’ve got two fluorescent patches above their eyes. And one by one, what happens is you get pairs of light start switching on all around. And their only about this big [finger length], so they’re only about you know...I don’t know 38 mil maximum long. But they’re ...it’s absolutely fascinating!

**Anxiety**

Overshadowed by Brilliance

*(‘Beauty’)*

Why is it memorable? One is that...it’s actually pretty damn scary! You swim into a cave, at night, you know, you’ve got to get your buoyancy right. There’s sediment in the bottom there and if you stir it up, not only you know, can you not see anything, but the lights are off...you put the lights off, that’s pretty awful; if you go up, you bash your head.

But then suddenly, there’s this beauty of seeing you know, these wonderful, sort of lights switching on, one by one. And of course, if you then switch a light on them, they switch off completely! So they all go out, switch your torch off again and then they come on, one, by one, by one...that for me, that’s one of the most memorable things that I’d seen. So the sort of, the slight fear that you’re wrestling with – you’re in a cave, at night, underwater, you’ve got to navigate your way out, but then the beauty of seeing these things.

**Being in a Different World**

**Discovery and Learning**

**Type of Dive Operator**

*(Enhances Learning)*

This last summer just gone we went with Undersea Explorer which is like a marine biology expedition that takes paying customers. They do research whilst they’re on the boat and so they’re tagging sharks, they do research into nautiluses. And you become part of that, you help them gather their data but you get some wonderful dives.

... the way that they’ve run this dive holiday is very much based on marine biology and certain amount of research. All of the dive instructors or whoever are actually marine biologists and they talk about their research. Rather than show the latest, whatever, Bruce Willis movie in the evening, what they do is do presentations on their research

I find that really appealing that you know, you can talk to someone. There’s a guy there, the captain of the boat is the world expert on nautiluses – you know, these huge red shells that have been around you know, since the dinosaurs – he’s the world expert on it. You know, he goes tags them, catches them, you know his research methods are just like epidemiological research methods, you know! And so, it’s
<table>
<thead>
<tr>
<th>Witnessing Learning (Intricacies of Clownfish Biology)</th>
<th>Absolutely fascinating to talk to people that are experts and know about that.</th>
<th>14.6</th>
</tr>
</thead>
<tbody>
<tr>
<td>It was the time when Finding Nemo came out, so the younger spent all of his time taking pictures of 'Nemo', you know? And he loves it. But the other thing is that they say, well Nemo's mother died and so the father took over. And he said, &quot;well that's rubbish of course because you know with clownfish, the female is the dominant one and they change sex, so if the female dies, then Nemo's father would have become his mother&quot;.</td>
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<tr>
<td>Symbiotic Relationship</td>
<td>A shrimp gobi, you can’t see the shrimp — but you know, this idea that you've got a shrimp that digs out a hole and you've got the gobi that can’t do anything but lives in the hole with it. But the gobi keeps watch; the shrimp is very, very short sighted, so keeps digging. But when the gobi gets worried because they's a predator coming, the shrimp goes into the hole as does the gobi — and so you've got this sort of, wonderful symbiotic relationship.</td>
<td>14.40</td>
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<tr>
<td>Splendid Isolation</td>
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<tr>
<td>Remoteness</td>
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<tr>
<td>Breathing Space</td>
<td>I really, really enjoyed Osprey Reef and going there with the Undersea Explorer people. It’s in the Coral Sea so you’ve got almost a day’s sailing from the Great Barrier Reef and it’s slightly to the North and East of the Great Barrier Reef. There’s a series of reefs out in the Coral Sea and Osprey Reef is the Northern One.</td>
<td>7.12</td>
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<td>I think, I mean for me, the beauty of it is that if you’re there and you pick it right, you’re the only boat there. And so you know, you don’t have this ...where the sea is swamped by divers going up and down.</td>
<td>7.32</td>
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<td></td>
<td>You tend to get fairly experienced divers as well so that makes life a lot easier. You’re not always looking over your shoulder to see if someone’s about to drown or bump into you.</td>
<td>7.35</td>
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<td></td>
<td>I think one is isolation...and you are isolated. Chanced for seeing nature, as close to nature without man’s interference which is really quite important.</td>
<td>8.2</td>
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<tr>
<td>Marine Diversity</td>
<td>You’ve got a mixture of obviously, fairly shallow reefs and sort of fish life that you’d see on shallow reefs.</td>
<td>7.20</td>
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<td></td>
<td>But also, because it’s so... isolated, you get a lot of the large pelagics there. And so, they've got a range off, unin...grey, whaler, sharks and a range of the reef sharks there. You see hammerhead sharks coming in, and what you also do is you get things like the potato cods, you get napoleon wrasse, those sorts of things. So there’s a complete range of fish come in. Chances that you’re see things like minke whales and stuff like that, although we didn’t see them.</td>
<td>7.21</td>
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</table>
I think one is isolation...and you are isolated. Chanced for *seeing nature, as close to nature* without man’s interference which is really quite important.

<table>
<thead>
<tr>
<th>Serenity</th>
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<tbody>
<tr>
<td><strong>The Experience of Diving:</strong> Mixture of High-Adrenalin and Relaxation</td>
</tr>
<tr>
<td>It’s this wonderful mixture of high-adrenalin and relaxation which sounds really strange.</td>
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<tr>
<td>But there are certain times, when you know, there are challenges, so you might see, you know, a huge great shark or something like that you know. And even though you think I’m pretty safe, you know, I may not be. There are times, say when you’ve got to do a drift dive and you’re all kitted up and you’ve got to jump off the back of the boat at the same time, you know. There are times when you’re in a very strong current or maybe you’re trying to control your nerves if you do a penetration into a wreck, and you think, ‘oh! Goodness, if this goes wrong...’ So that’s sort of high adrenalin and you know that you can’t let it take over, you know that you ...because you just use your air so quickly.</td>
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<td>And the other times of course, you know, you’re sitting there thinking, well actually ...there’s a turtle floating by, you know, I’m at 5 metres, it’s beautifully blue, there’s the sun coming through, you know? You just have to look at the reef, it’s multi-coloured and that is so relaxing, you don’t use any energy, you’re just hovering there. And so, you’ve got these complete contrasts, and I think that probably, for me, any how, sums it up. So there is the relaxation. There’s the thing about seeing bits of the world that you wouldn’t normally see, you get to see things and interact with nature, that you wouldn’t normally do. So I really like that as well.</td>
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<tr>
<th>Fellowship</th>
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<tr>
<td><strong>Sharing the Experience</strong></td>
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<tr>
<td><strong>Kindred Spirits</strong></td>
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<tr>
<td>What you tend to do is get kindred spirits as well on there. So the people that you are diving with are kindred spirits; they’ve got an interest in it. They’re not the sort of macho divers, ‘let’s go down to 60 metres and you know, see how long we can hold our breath’. What they’re interested in is the same sort of thing as we are, which is you know, the marine life.</td>
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<td>I think...divers do this a lot, but you’ve got your shared experiences and so what they do...is what we’re doing now, is that you talk about where you’ve been and what you’ve done. You talk about the good dives, you talk about the bad dives.</td>
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<td>You talk about equipment, and kit and cameras and stuff like that...So, you get tips about, you know, if you’ve got your shutter on this speed or whatever...or if you were doing that, or if you want to see this, then you know, go there. What you’ve got is a very supporting group that have common interests: So, I think you’re part of that as well.</td>
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<p>| Social Aspects of | The other beauty of it is that of course, you’re either in a hotel |</p>
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Diving with people of a similar outlook or you’re on a liveaboard. So they create their social life and we have our social lives. Our last holiday to the Red Sea, we were on a boat where there was a couple who had four teenage daughters. So, my sons were in absolute seventh heaven as you can imagine! There is something about meeting people of a similar outlook and that, I think the kids thought was certainly more attractive than sitting in a cottage or a chalet with us and being forced to go on 20 mile hikes.

Strengthening Bonds

- Responsibility: (Father-Son) When I’m diving with the younger one, it’s you know, almost nervous and very protective and, he’s a perfectly competent diver. Sometimes when they buddy each other and I buddy my wife, I’m actually more worried about you know, having two teenage boys and so in a way, you’re always keeping an eye on them rather than keeping an eye on your buddy. So there is that and I mean you do get slightly anxious, particularly if you’re buddying someone who’s a relation.

- Keeping the Family Holiday Intact We’d decided we’d go to Cairns to learn to dive and then to go out on a dive boat on the Great Barrier Reef. The other thing, the other reason...you have to know this is that our kids had got to the age, so you know, sort of 15...they were 15 and 12. They’d got to the age where they were bored with family holidays. What could we do, you know, as a family that would address all of this. This is where diving came in, so the idea that it’s actually something they can participate in. It’s actually not too strenuous in a way, it’s challenging...mentally challenging...you’re studying to get your various badges you’ve got to think of what you’re doing. There’s a little bit of adrenalin for them as well. They agreed that this would be a really good way to spend a holiday. It was a last attempt to keep our family holidays together.

The other interesting thing is the boys, you know now my lads are 17 and 14. But they’re still interested in family holidays, they still want to come diving, you know. The point in a way is, that that was what our hope was, that diving would do this. But suddenly, yes it has!

UNIQUE THEMES FOR JACK

Challenge of Certification-Learning The other thing is it’s a challenge. You know, that’s what I’ve always tried to do is that you know, we got our Open Water certificate, then we did our Advanced, then we did our Rescue Diver, you know. And at some stage, what I want to do is...we did Nitrox, you know. Then at some stage what I want to do is as I said, is to do some Technical Diving. And I actually like the studying, I like the academic...the science behind it, you know and those sorts of things; and I find that also quite a challenge.

Dive Atlas Beckons I’d like to go back there again...I don’t know whether I would...I mean I’ve always asked myself wouldn’t it be nice to be one of these researchers that goes out there on a weekly...
basis, you know and dive this... I think it would loose its magic in that respect. So, yeah, it’s beautiful, I’d like to go back there again, but actually when you look at you know, things like the diving atlas of the world, there are many other places to go and have a look at so... So in terms of an attachment, probably not, no, no!

<table>
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<tr>
<th>Different Places: Different Expectations</th>
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| Different places have different challenges and there are different things I think that you look for. So if you’re abroad, say on the Great Barrier Reef or in the Red Sea, in a way the conditions are a lot easier, and so in a way, your expectations of the dive is much greater. So that what you would do, is you know, you would look for good reefs, you would look for good underwater life, you know, things like that. You know, hope that you would see the cuttlefish or the giant turtle or whatever it is.

When I’ve dived in the UK, I always think actually, you don’t expect to see a huge amount because the conditions are pretty awful. If you have a dive where you feel comfortable and you don’t feel cold and you might have seen a crab [pauses] – that is absolutely fantastic. And so, you know, your expectations tend to get shaped by where you are.

And also by the challenge you face. So even though...having dived with [name omitted] at Horsea Island a number of times, you know. You dive in a dry suit, because it’s cold but you still get cold. You know...they’ve got 2 or 3 sunken wrecks: they’ve got a helicopter there and an old pleasure boat and there’s a land rover ambulance that they’ve sunk there. You might see two or three shrimps, you know there. There are a couple of crabs and there are some eels and there’s a little... a few sea bass there that swim about. If you see that, you’re absolutely elated and you know, if you manage to get through all the slit, even though it’s only sort of 6 or 5 metres down, you know, that’s a brilliant dive. You come out and you’re really, really happy.

If I saw all that at, you know the Great Barrier Reef, I’ll think, ‘oh my goodness, what a disappointment! So it’s where you are and what you’ve got to do and the challenge and what takes up your mind I think also has a major impact as well. I mean I’m sure you can see wonderful things in the UK but I’ve always struggled to see anything, you know, that’s decent.

Path to the Future

The other thing is that [name omitted], the older one you know...I mean he was at a loss what he wanted to study at university; he just didn’t know. But he’s very, very keen now to study marine biology. So in terms of also, kids education and shaping the future, you know, diving has helped an awful lot. Because I think he’s found something that (i) he’s interested in; (ii) that’s challenging. But also, that it’s you know, a balance between...I think he would hate management, sitting down and reading economics textbook. That he wouldn’t like.
<table>
<thead>
<tr>
<th>Living out a Childhood Dream</th>
<th>There's an element of the gadget ...toys for boys in me as well. I do like the gadgets, the watch and all of those sorts of things, down to having your little dive knife strapped to your leg. I was brought up on James Bond and you know, whatever it was...the...Thunderball you know, the movie when they were fighting underwater and things like that. So there is an element of that in it as well. So it's another excuse for another gadget, you know.</th>
<th>11.7</th>
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<td></td>
<td>But you know, yeah, you ask him about the different members of the wrasse family, he knows all of that, but only because you know, he's dived, and he's seen them and he's interacted with them as well. So diving is sort of, you know, been somewhat of a wonderful solution to a parent's problem as well. So I don't know if anybody's ever framed it like that. But that's certainly our frame on it.</td>
<td>13.36</td>
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</table>
## Appendix K: Audit Trail For Member Check Exercise

<table>
<thead>
<tr>
<th>Participant</th>
<th>Date</th>
<th>Time</th>
<th>Location</th>
<th>Recording Length (Olympus Digital Voice Recorder model VN240PC)</th>
<th>Length of Transcript in Pages (single spaced, font 12)</th>
<th>Feedback on My Interpretations of their Experiences and SAM Framework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jack</td>
<td>17th July 2007</td>
<td>10 a.m.</td>
<td>Office</td>
<td>45 mins 02secs</td>
<td>12 pages</td>
<td>Agree</td>
</tr>
<tr>
<td>Marie</td>
<td>17th July 2007</td>
<td>2:30 p.m.</td>
<td>Café</td>
<td>32 mins 26secs</td>
<td>8 pages</td>
<td>Agree</td>
</tr>
<tr>
<td>Harry</td>
<td>29th July 2007</td>
<td>3:15 p.m.</td>
<td>Café</td>
<td>36 mins 13secs</td>
<td>10 pages</td>
<td>Agree</td>
</tr>
<tr>
<td>Fiona</td>
<td>5th August 2007</td>
<td>5 p.m.</td>
<td>Café</td>
<td>33 mins 47secs</td>
<td>9 pages</td>
<td>Agree</td>
</tr>
<tr>
<td>Pam</td>
<td>9th August 2007</td>
<td>9 p.m.</td>
<td>Pool/Gym</td>
<td>34 mins 11 secs</td>
<td>10 pages</td>
<td>Agree</td>
</tr>
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</table>

### Email Response on Member Check Report

<table>
<thead>
<tr>
<th>Participant</th>
<th>Date</th>
<th>Feedback Method</th>
<th>Feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ben</td>
<td>12th August 2007</td>
<td>Written Feedback via email</td>
<td>Agree</td>
</tr>
<tr>
<td>Gina</td>
<td>16th August 2007</td>
<td>Written Feedback via email</td>
<td>Agree</td>
</tr>
<tr>
<td>Olivia</td>
<td>23rd August 2007</td>
<td>Written Feedback via email</td>
<td>Agree</td>
</tr>
<tr>
<td>Ethan</td>
<td>28th August 2007</td>
<td>Written Feedback via email</td>
<td>Agree</td>
</tr>
<tr>
<td>Neil</td>
<td>4th September 2007</td>
<td>Written Feedback via email</td>
<td>Agree</td>
</tr>
<tr>
<td>Lee</td>
<td>14th September 2007</td>
<td>Written Feedback via email</td>
<td>Agree</td>
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Appendix L-Interview Transcript for Member Check (Jack)

Interview with ‘Jack’ for Member Check Exercise
10 a.m. 17th July 2007, (Office)

[I present the lucky draw prize (coffee table book) and thank Jack for agreeing to meet up once again for an interview. He is pleased, and looks through the book immediately]

So, I think first of all, well, you’ve got four things you wanted me to do...so in terms of your summary of common themes, and the way that you’ve assigned themes, I looked through and I [pauses]...first of all, I think your themes are right... so they seem to resonate – so this notion of a Sense of Wonderment – I mean you do get that, don’t you! And I think things like, Encounters with things like Marine Life – absolutely! And, not only, large, pelagics, but also small ones, you know...I mean, just looking at this book [Sipadan-Mabul-Kapalai lucky draw prize] here...it just takes me back to diving again, the notion of cleaner shrimps coming out, and that sort of thing, or you know... I mean, anything really, any small...

Seahorses, or nudibranches?

Yeah! You name it – those sorts of things, and those are fascinating! I mean, particular my kids, they go nudibranch hunting!

Oh! Right, Okay.

I mean, they look...only for the colour, and they look for it...I can never really tell whether or not, they’re a worm, or a nudibranch or whatever. But they can spot them; and they look for bits of red coral with you know...

That camouflage thing...

That camouflage ...or where you’ve got – they’re not optically well camouflaged for some reason...they’re obviously in the wrong place. You’ve got these yellow and black worms or nudibranches or whatever, and they find those absolutely fascinating. And you know that...one is that you get that sense that you’re really lucky because you’re seeing things – that you might see in a book, but actually, you’re seeing them first hand. And you wouldn’t see them anywhere else. That’s the other thing. You couldn’t go out for a walk and see them. So, that...that’s really, really special.

Okay!

And I have to say, I was just looking at some of your themes here, about people saying about swimming with dolphins, or swimming with manta rays...I mean, personally, yeah, it’s nice to see them, it’s nice to see sharks, but actually, I’m much more interested in some of the smaller [smiles] creatures. I find those are the fascinating ones. Or actually seeing that, sort of ....marine life interacting – that’s the other thing. So, you see, a gobi and a shrimp, and I think, those are absolutely fascinating. So you’ve actually got a bit of life going on there, and it’s not that you’ve just got this huge pelagic swimming by, but there’s something really going on there. I mean, even down to things like a clownfish or whatever, an anemone fish, you know, going in and out of their anemone, I mean, you’ve got a real ecosystem and one of the beauty is that you can see that as well. So that, sort of Encounters with Marine Life, I think, that’s terrific.

The Adventure thing, yeah, there is a bit of that. It’s funny, but I don’t [pauses]...I don’t know ...

I welcome your opinion on that...

Yeah, well... I can identify it with people that I’ve dived with, and I think, if you talked to me, maybe, three or four years ago, I would have said, “yeah, that’s great”. But...maybe I’m getting older, and a bit spooked out by these things [laughs] and of course, you hear of people dying off the South Coast of England, diving on subs and things like that. And you think to yourself, yes there is... you
know...Adventure is a theme there, and people like to do it, and they do take risks, but I'm not sure that's something that motivated or resonated with me.

Alright! Okay!

A little bit maybe, but not too much. The other thing we had...we spent the last summer. I think you interviewed me about a year ago.

Yeah! It was June last year.

Yes, that's right. And we spent last summer, we did two weeks in the Red Sea out of Marsa-Alam. And then, you start to hear some stories, of people taking risks, and people dying, and we then came back and then, there were a couple of cases off Elphinstone, and you think to yourself, these people are overstepping the mark. And there is something about, even though you know that you've listened to the briefing, you've not taken risks, you've dived within your capability. The fact that someone doing the same dive site, had then either died or got into trouble or had serious health problems, you know, decompression sickness - it all sort of taints it a little bit.

And I was thinking about it the other day, I don't know, maybe it's just that you've become aware of the risks a little bit more. I mean I think you're absolutely right in terms of Adventure. Having said that, things like diving at dawn, and the light and things like that, you can get your Adventure in different ways there. So I thought that was right.

I mean Being in A Different World...absolutely spot on! And Discovery and Learning!

Overcoming Physical Limitations... [lowers voice] I've never really thought of it like that, quite frankly. So, I know...I mean, I can see that as a theme. I just think back to doing my pool bits on the PADI Open Water Dive, after about two minutes of having my head underwater with the regulator in, that was fine.

You became fish?

You became a fish [smiles] Yeah! And you don't think about it! And so you know, you jump off the back of a boat – so I don't see it as a physical limitation.

Okay! Interesting!

But I can understand that ...I mean, I think I probably told you, my wife, who was an international swimmer, and... she still needs to have a reality check. Every time she goes diving, even though she's at home in the water, when she puts her head under and has to breathe through a regulator. So I can see how this works...

Maybe for some people, and not for others?

Not for others, I think that's exactly right!

Participants were talking about neutral buoyancy – how do you feel about that? Do you feel it's important to you?

None the least! No! I don't at all!

Okay!

It's funny, I just don't think about it. I mean, I think about when I have problems with my buoyancy, but touch wood, I don't have that too often. Just occasionally, you know, when you've rented a piece of kit that just isn't yours or for some reason, you've weighted yourself wrong or whatever – usually, it's the first dive of a trip... But, no...I don't think about that, I don't get you know, this feeling that I'm floating or whatever, it just doesn't go through my mind.

Alright! Okay!
But I can see that... particularly, people say that... I don’t know! I mean, as a sport, I find it very interesting. In that a lot of the other sports that I do are very physically demanding in terms of running a marathon or long distance walking or cycling or whatever it might be... or even swimming. But actually, diving is completely the opposite because what you’re trying to do is to avoid using oxygen. And so, you know... I mean for me the purpose of diving is to do nothing... rather than to do something physically.

Ah! Okay!

So... which I find fascinating as a sport... it’s actually, you’re trying to do the opposite to what you would normally do, which in itself is interesting.

The Isolation thing... I mean, yeah, I think that’s exactly right! Remoteness – I was thinking about this... I mean, you’ve got my quote here from the Coral Sea... and keeping out of the way... I think that’s right! I mean, there’s another interesting thing though, because there was that group of divers that got marooned at Elphinstone. You know, you hear these stories about – one guy decided to leave them and just swam and he made it, five miles back to the shore in the Red Sea. The others all perished. You suddenly think to yourself, “Goodness! This isolation is good, but actually, it’s also risky”. You’re depending aren’t you, an awful lot on the professionalism and the competence of the boat that you’re with. You also know then, if you’ve got strong current or if the surface conditions are not particular good, again that you’re very vulnerable. And so, there’s a notion of vulnerability that I thought about.

The tour company?

Yeah! That’s right. I mean in a way, you don’t get isolation without paying for it, if you see what I mean.

Yes!

I think that’s quite important.

But would you agree that you seek out this Remoteness? Or to a level?

I think so! I was just thinking about this – would I go do day boats out of Hurghada or something like that, and the chances are I wouldn’t do that. You can see why people are promoting scuba diving as an activity, because it’s a very good way of bringing money in. But it actually comes back to the discussions about, do you develop places like Borneo, Malaysia. Yes, you need to do that, but what impact does it have, and I think that applies similarly to diving, is that... yeah, you’re going to attract lots and lots of divers, but actually what you’re doing is ruining this special nature. And so, then of course, what you’re doing is seeking more and more remote, isolated places.

Going further out!

Yeah! That’s exactly right! And then, of course, there’s a number of costs associated with that. One is the sort of riskiness if something goes wrong, they can’t fly you back, you know. So you have to know that – so your isolation... I mean, I think the other side of it is of course, the physical time and energy needed to get there. So you know, you’ve got to get on one of these small boats, and they go up and down, up and down, you know. You’re in, sort of, shipping lanes and things like that, and getting there can be a challenge.

I was talking to someone on a trip a while ago, about going to Micronesia or Polynesia, one of these places. And they were saying, fantastic diving, but, it doesn’t half take a long while to get there [laughs]. And so that was that! Yes, you can get Splendid Isolation, but it’s same with a lot of tourist places, is that once people get to hear about it... We’ve booked at Christmas to go and dive at Djibouti.

In Africa? Sudan?
Yeah! So if you go down the Red Sea, it's near... and it's beyond that really. So, it's near the Gulf of Eden, so what you do is you do down, and there's a knobbly bit at the bottom of the Red Sea, and that's where that is. But again, if you look at the journey... I mean it's fabulous diving, apparently. Everything's 3 or 4 degrees higher... temperature wise... higher, than up in the North of the Red Sea. So they say, the fish are bigger, the fish are more colourful, you know, the reefs are better, they're untouched, you've got all of that. But, the quid pro quo is you know, you've got a heck of a journey to go there. I'm actually not quite sure about the political stability of Djibouti, so that might be worth thinking about as well.

But you're willing to pay more money, to go where it's more isolated, to get that experience?

Yeah! Yeah! That's exactly right, yes! And that's what we're doing. I suppose the thing is if you could go scuba diving, and you want to go somewhere exotic, you're prepared... and what we're prepared to do is to pay a little bit more to get a better experience. Now that's not available to everybody, and I guess, what you'll do is get a segmentation of the market, I'm sure people do that. And so, you've got your very, very, cheap, cut price divers, who get to go diving, but they don't see much. And you've got the problems, of all the... people who want to drink all night and behave badly.

The social culture?

Yeah! Which actually doesn't fit with what we're looking at... and we had some... – I don't know if you're interested, we took a Tony Backhurst dive, actually to Hurghada and then went to... touching on the Southern Red Sea. And we tried to dive with like-minded people. And everytime, we've done dives on liveaboards, we've been lucky. This time, we were unlucky!

A small group... but a group of divers who wanted to party, wanted to be up all night, and were pretty unpleasant about it if anybody said, “hold on a moment, it's 3 o'clock in the morning and we're trying to get some sleep”. And we found five days on a boat, with people like that, even though the diving was good, actually, you suddenly realised, you're cooped up, and that wasn't much fun. I mean, that was a one-off, I guess, out of I don't know how many liveaboards we've done. Maybe, if we've done 10 or 12, something like that... and that was one out of that. It's just that, there's this sense of yes, you're going to somewhere remote, yes, you're paying quite a lot to go and see this, and there's all the wonderment, but actually, it still relies on the people that you do diving with and they can make it... they can make it a really good holiday.

They can make it neutral, you know, you don't interact much. Or they can make it a thoroughly miserable experience. You know, even down to when you're kitting up in the morning on the dive deck. If you've got someone that you've had a row with three hours beforehand because they wouldn't let you sleep, and they're massively hungover... I mean, this is absolutely true – and they won't talk to you, or they're being rude, or whatever, you know that can ruin it as well. So you realize that actually, there are a lot of things that go together to make it... so that really, in a way comes to the Fellowship as well, which I thought was a good theme.

Can I ask you to go back and look at ... under Splendid Isolation, I had Remoteness and Serenity. What do you think about ‘Serenity’?

Do you know it's funny, I've never, ever, felt peace... when I'm diving, I don't feel peace, and the reason is that I think... You're checking on your buddy, you're checking on your air, you're checking on the current, you're looking for things to see. And I feel diving is an active thing – this is me, and it might link to my personality... and ability to chill out, or whatever. But when you're doing something, I mean, I do this when I'm walking, when I'm running or whatever, is that I'm monitoring things, I'm thinking about things, and I don't think I've ever dived where I felt, you know, this is absolutely fantastic.

After a dive, you know... sitting in the sun, up on the lounger, thinking back on it, then you've got serenity, I can think of particular moments of that – you know, I can think, we took our Rescue Diver course on the Great Barrier Reef, out of Cairns, I mean, that was absolutely fantastic. Gone through that... and you know, the big test at the end, where they give you a scenario, and you have to go and rescue someone, and you come out, and the guy says, “yes, you've passed”! Now, I can think of Serenity then, sitting on a sundeck, listening to music playing, and feeling that I've done something,
you look around, and you think – absolutely fantastic! That was serene! But not while I was diving!!

[Both laugh]

Not while diving!

I know, that’s exactly right! So... I think it’s a personality thing.

To each his own?

Yes, that’s exactly right. But I can understand that – and you can see people, completely... I was going to say, away with the fairies, underwater...and completely relaxed, you know. And I guess, if a manta ray swam by, they might be so chilled out that they wouldn’t see it. But that’s not me.

Alright! Okay!

The Fellowship one, I actually agree with you, but I think the thing that’s changed is that if you also have a bad experience... what you can find is that, you know, that has a very, very negative effect on that. And certainly, Strengthening Bonds, absolutely right! I mean the family that we met three years ago...

I think you spoke about them [previous interview], the one with the three daughters?

Four daughters! Absolutely fantastic! Right, we’re going to Djibouti with them. So, my sons went off to the states with one of their daughters on work experience; my lads are meeting up with the daughters on Thursday at the end of school; we went to one’s 18 birthday party; we’re going to [name omitted]... the mother, 50th birthday. I mean, they are close family friends.

Now...since that dive trip yeah?

Now! And this happens all the time. We met a guy, [name omitted] who set up his own website, he does journalism. My wife was interested in some of the medical aspects... what’s in a first aid kit, you know, training for dive guides on boats, things like that. So she’s been in contact with this guy [name omitted], and you know, you’ve established a network there. And another guy I met at Christmas, you know, on this awful trip, it was an awful trip! And he lives in Guildford and he wants to do an MBA, and he wanted to talk to me about various aspects... he’s not doing the MBA here though. I’ve been in contact with him, and so we share emails.

So, certainly, that notion of Strengthening Bonds, you know, a commonality. I don’t think this is specific though just to scuba diving. I was thinking about it, and there are a lot of other sports, and so... One of my other interests is rugby... I think it’s a phenomenon that you find in rugby, and that you find across a lot of... long distance running is the other thing, and I find that... I did the marathon this year, albeit, very slowly in London.

Okay!

And at 21 or 22 miles, you go pass the Tower of London heading back. And I just looked to my right hand side, and there was a guy who I used to do long distance races with, that I hadn’t seen since... [pauses] 1991, something like that! We recognized each other and we ran for the last 4 miles catching up! And Shared Experiences, so I think that resonates... scuba diving is just another one of... a sport that fits with that – so, I thought that was really good. So, just in terms of your themes, I think you’ve done very well to pull those ones out. Yeah! I think that’s good, they certainly resonated with me.

Okay!

There were some other ones and you’ve highlighted these...

Yes, I put them under ‘Unique Themes’ – would you like to comment on them?
Yeah! I mean I read through and I’m really happy with that, so I think that’s good. [Flicks through report again] Yeah! Looking at them, Strengthening Bonds, that was good…diving with the kids, I rather like this ‘Father-Son’ thing.

That came out with a few other people as well.

[Lowers voice] There’s something about that…I mean, I think I said to you the reason we started diving?

Yes!

Was that, our kids didn’t want to go on holiday with us, but there also is this thing about you know, do you talk to your kids or what do you talk to your kids about. And I mean, when they are talking about their culture, and about films or groups, pop groups you know… I, it’s not shared experience, you know, because I don’t like what they like, and they don’t like what I like, you know?

Okay!

But, this…is a common interest, and it’s very interesting that you can talk about these things, so, I thought that was really good. Certainly, the ‘Challenge’ – yeah! I think that was a really interesting one. That might be me again…and [laughs] this notion of not being able to relax underwater, or sort of, moving on and doing things. I know this might…so this notion of risk-taking and things like that I was saying…you know, that’s one of my worries. But I think the challenge of moving up and doing things step by step, I don’t see that as risky. I mean, I see risky as doing something that you’ve not done before. I see it as you know, taking on things which you’re not capable of doing. Whereas, I think this notion of ‘Certification’, learning and pushing the boundaries, bit by bit by bit, that’s much more…maybe that’s me being cautious. But actually, you can also then see how you’re progressing and things like that and I found that very interesting.

Achievement, right?

Yeah! I think it’s achievement, I think that’s exactly right. So I suppose it’s about setting yourself realistic targets and goals. I mean, it’s a bit like setting objectives at the workplace, those sorts of things. And doing things that you can do, but pushing yourself. It’s actually quite fun to be in that learning environment, that’s the other thing…it’s to realize that you actually don’t know. The other thing, the more I think about this is that…I thought about this a while ago…is it also, it actually ties in with other interests. So, my first degree was in biochemistry, and so, we studied physiology. And I thought to myself, this is really interesting is that then when you’re doing some of the dive courses, I mean I just for insurance wise, had to redo my deep dive because now a PADI Deep Diver is not 30 metres, its 40 metres, and they say, well if you’re going to dive below 30 metres, your insurance doesn’t cover you, unless you’re certified for that. So I thought well, occasionally you do dive to 38 or whatever it is! But then, it was really great fun, to get back and to look at some of the physiology because it’s an area that I’m interested in.

And again, when you’re looking at things like …I mean, it’s been a while since I did the photography course. But actually, just going back and looking at apertures, and shutter speed, things like that…again, it ties in with things that I’m interested in. Even navigation, or whatever it might be, I mean even when you’re doing the basics of looking at how the kit works, and stuff like that you know? I found that really interesting because what you’re doing is, you’re adding a scientific basis if you want to a hobby. And I think that allows you then to enjoy the hobby. If you can understand why you do things, what happens, you know, it’s the background…I suppose it’s the equivalent of what we do as academics which is you know, you see something, and you search for some sort of theoretical framework to explain it. And I think it’s that! It’s that… the academic aspects of diving almost [smiles].

You link it up with what you know, and then it’s familiar and more enjoyable?

Absolutely! And that then makes sense and you understand it. So, I thought that was good, and that’s why ‘Certification-Learning’ I think is going very well. I haven’t done any technical diving, which is
interesting because I said I was going to, and I've not got to that stage. Each time I go back into the
dive shop, and I see that he's offering other things, and I think I might do, I don't know...we shall see.

Certainly, this 'Dive Atlas' thing, and you know, that's why we chose Djibouti. I mean, that...really,
you look at these things and we said, where haven't we been before? And our friends said, "we've
done the Galapagos", and "we've done this, and we've done that". And basically, what we did was, we
narrowed it down. Djibouti looked good. Not been there before, and so that was interesting.

And again, I think absolutely right, 'Different Places: Different Expectations'. I felt you captured this
in a way, very, very well. You know, it's like the thing they teach you in Operations management is
that, when you look at quality, how can McDonalds and the Ritz offer the same level of quality. Well,
of course they do...they're meeting what you're expectations are and I think, that's what it is. How can
this thing of Horsea Island be the same as diving in the Great Barrier Reef? It seems to me that's
exactly right.

You explained it very well [in the main interview excerpt]

Certainly path to the future...it's offered some wonderful things for the kids. I mean I just look in
terms of the pressure put on the kids to come up with careers at school. And update on [name omitted-
his son], well if he gets his A levels, [name omitted] going to Cambridge to study natural sciences.
One, diving formed the basis of his personal statement which they complemented him on...about what
were you interested in, why do you want to do this, why do you what to do the biological aspects of
natural sciences which is what he wants to do. He was able to describe in his personal statement about
how his enthusiasm ...interesting things about well, what research have you been involved in, you
know. And he was able to describe some of the research he did.

On the volunteer expedition? [as discussed in interview]

Yeah! Absolutely! Now, he just said, in one of his 'A' level exams, they'd done no fieldwork at school
for some reason, and one of the questions was, 'describe a piece of fieldwork that you've done as part
of your course'. And he said, well, I haven't done it as part of my course, but actually he described,
you know, capture, recapture techniques to measure the population of nautiluses. You know, he got
that, so that has been absolutely helpful and it's put him along the right route. I mean, he could go into
marine biology but he's not going to earn any money. [Both laugh]

They all do it for the love of the ocean!

I think that's exactly right and he's one of these people, who I don't think is particularly motivated by
money and I think he gets that from me. You know, you do it for stimulation but certainly that's the
thing that has engaged him. I had something about gadgets didn't I?

It's under 'Living Out a Childhood Dream'

Right! This one...and it is a bit like that, yeah that's right. Am I the only person?

No, there's a few others...and part of it's to do with photography and the gadgets that come with it.

Absolutely! That's right! You've got your regulators and BCD...

But I think mainly out of the sixteen, it's just a few... mainly gentlemen.

Yes, I think it's on the Y chromosome isn't it? [Both laugh] A gadget gene there with all the other
things, or not many other things in the Y chromosome. I think that's right, and I think people do that.
And actually all you've got to do, is to go on a dive deck and you can see people like that can't you?
You can see people who have...I recognize this as a trait that I have in myself. My wife points it out
all the time and takes the mickey out of me for it [smiles], but again, it's a motivator.
When I took up diving, it was similar, you’re so excited with all the new learning that’s going on, with the gadgets and underwater. And what you learn, you relearn once you come up, you’re always learning things: that was very nice.

Absolutely! They still come to me, this is the interesting thing. My family still come to me, and ask me to reset their dive watches, so if they’ve got the alarms wrong...

**Gadget Man?**

Yeah! I’m the gadget man you see, that’s the other thing. Or if they want it set to another time zone, something like that, they can’t work out how to do that, so that is my job to do that. It’s my job to get the regulators serviced, and things like that. So I have to do that...so there is part of that as well.

So, I mean, all in all, yeah, I thought you captured that really well.

*[45mins 02secs]*

(Note: 11 pages if in normal font 12)
### Appendix M – Idiographic Analysis or Directory (Jack)

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<tr>
<th><strong>Summary Table of Structured Themes from Member Checks for ‘Jack’</strong></th>
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<tr>
<td><strong>‘Member Check’</strong></td>
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<tr>
<td>Agreement with Own Themes and SAM framework</td>
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<td>'so in terms of your summary of common themes, and the way that you’ve assigned themes, I looked through and I [pauses]...first of all, I think your themes are right... so they seem to resonate'</td>
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<td>2.36</td>
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<td>'The Isolation thing...I mean, yeah, I think that’s exactly right! Remoteness'</td>
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<td>'So, certainly, that notion of Strengthening Bonds, you know, a commonality.'</td>
<td>7.19</td>
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<td>'So, I mean, all in all, yeah, I thought you captured that really well.'</td>
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### Sense of Wonderment

#### Beauty

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<th>Privilege</th>
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<td>'the notion of cleaner shrimps coming out, and that sort of thing, or you know... I mean, anything really, any small...’</td>
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<td>‘You’ve got these yellow and black worms or nudibranches or whatever, and they find those absolutely fascinating.’</td>
<td>1.31</td>
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#### Encounters with Marine Life

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<th>Nudibranches</th>
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<td>'I’m much more interested in some of the smaller [smiles] creatures. I find those are the fascinating ones.’</td>
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^5 Note: Final column denotes location of extract within interview transcript e.g 1.7 – Page 1, line 2

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**Adventure**

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<tr>
<th>Prudence</th>
<th>‘I can identify it with people that I’ve dived with, and I think, if you talked to me, maybe, three or four years ago, I would have said, “yeah, that’s great”.’</th>
<th>2.11</th>
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<td>‘But...maybe I’m getting older, and a bit spooked out by these things [laughs] and of course, you hear of people dying off the South Coast of England, diving on subs and things like that.’</td>
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<td>‘And you think to yourself, yes there is... you know...Adventure is a theme there, and people like to do it, and they do take risks, but I’m not sure that’s something that motivated or resonated with me. A little bit maybe, but not too much.’</td>
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<td>Awareness of Risks</td>
<td>‘we spent last summer, we did two weeks in the Red Sea out of Marsa-Alam. And then, you start to hear some stories, of people taking risks, and people dying, and we then came back and then, there were a couple of cases off Elphinstone, and you think to yourself, these people are overstepping the mark’.</td>
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<td>‘And there is something about, even though you know that you’ve listened to the briefing, you’ve not taken risks, you’ve dived within your capability’.</td>
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<td>‘The fact that someone doing the same dive site, had then either died or got into trouble or had serious health problems, you know, decompression sickness – it all sort of taints it a little bit.’</td>
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<td>‘And I was thinking about it the other day, I don’t know, maybe it’s just that you’ve become aware of the risks a little bit more.’</td>
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**Being in a Different World**

**Discovery and Learning**

| Observation: Symbiotic Relationships | ‘actually seeing that, sort of ...marine life interacting – that’s the other thing. So, you see, a gobi and a shrimp, and I think, those are absolutely fascinating. So you’ve actually got a bit of life going on there, and it’s not that you’ve just got this huge pelagic swimming by, but there’s something really going on there.’ | 1.43 |
|  | ‘I mean, even down to things like a clownfish or whatever, an anemone fish, you know, going in and out of their anemone, I mean, you’ve got a real ecosystem and one of the beauty is that you can see that as well.’ | 2.1 |

**Overcoming Physical Limitations**

| Becoming Fish | ‘I’ve never really thought of it like that, quite frankly. So, I know...I mean, I can see that as a theme.’ | 2.42 |
|  | ‘I just think back to doing my pool bits on the PADI Open Water Dive, after about two minutes of having my head underwater with the regulator in, that was fine.’ | 2.43 |
|  | You became a fish [smiles] Yeah! And you don’t think about it! | 3.3 |
‘But I can understand that … I mean, I think I probably told you, my wife, who was an international swimmer, and … she still needs to have a reality check’

‘Every time she goes diving, even though she’s at home in the water, when she puts her head under and has to breathe through a regulator. So I can see how this works…’

### Splendid Isolation

<table>
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<tr>
<th>Remoteness</th>
<th>‘I mean, there’s another interesting thing though, because there was that group of divers that got marooned at Elphinstone.’</th>
<th>4.1</th>
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<tr>
<td>Safety I (Risk)</td>
<td>‘You know, you hear these stories about – one guy decided to leave them and just swam and he made it, five miles back to the shore in the Red Sea. The others all perished.’</td>
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<td>‘You suddenly think to yourself, “Goodness! This isolation is good, but actually, it’s also risky”.’</td>
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<td>‘You’re depending aren’t you, an awful lot on the professionalism and the competence of the boat that you’re with.’</td>
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<tr>
<td>Safety II (Cost)</td>
<td>‘I mean in a way, you don’t get isolation without paying for it, if you see what I mean.’</td>
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<td>‘what you’re doing is seeking more and more remote, isolated places.’</td>
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<td>‘there’s a number of costs associated with that. One is the sort of riskiness if something goes wrong, they can’t fly you back, you know.’</td>
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<td>Seeking the Untouched</td>
<td>‘We’ve booked at Christmas to go and dive at Djibouti. Yeah! So if you go down the Red Sea, it’s near … and it’s beyond that really.’</td>
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<td>‘I mean it’s fabulous diving, apparently. Everything’s 3 or 4 degrees higher … temperature wise … higher, than up in the North of the Red Sea.’</td>
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<td>‘So they say, the fish are bigger, the fish are more colourful, you know, the reefs are better, they’re untouched, you’ve got all of that.’</td>
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<td>‘But, the quid pro quo is you know, you’ve got a heck of a journey to go there.’</td>
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<td>‘I suppose the thing is if you could go scuba diving, and you want to go somewhere exotic, you’re prepared … and what we’re prepared to do is to pay a little bit more to get a better experience.’</td>
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'when I’m diving, I don’t feel peace, and the reason is that I think... You’re checking on your buddy, you’re checking on your air, you’re checking on the current, you’re looking for things to see.‘

‘And (pauses) I feel diving is an active thing – this is me, and it might link to my personality... and ability to chill out, or whatever.‘

‘After a dive, you know... sitting in the sun, up on the lounger, thinking back on it, then you’ve got serenity, I can think of particular moments of that...‘

‘we took our Rescue Diver course on the Great Barrier Reef, out of Cairns, I mean, that was absolutely fantastic. Now, I can think of Serenity then, sitting on a sundeck, listening to music playing, and feeling that I’ve done something, you look around, and you think – absolutely fantastic! That was serene! But not while I was diving!!‘

‘So... I think it’s a personality thing.‘

‘But I can understand that – and you can see people, completely... I was going to say, away with the fairies, underwater... and completely relaxed, you know. And I guess, if a manta ray swam by, they might be so chilled out that they wouldn’t see it.‘

‘A small group... but a group of divers who wanted to party, wanted to be up all night, and were pretty unpleasant about it if anybody said, “hold on a moment, it’s 3.o clock in the morning and we’re trying to get some sleep”.‘

‘And we found five days on a boat, with people like that, even though the diving was good, actually, you suddenly realised, you’re cooped up, and that wasn’t much fun.’

‘It’s just that, there’s this sense of yes, you’re going to somewhere remote, yes, you’re paying quite a lot to go and see this, and there’s all the wonderment, but actually, it still relies on the people that you do diving with and they can make it... they can make it a really good holiday.‘

‘They can make it neutral, you know, you don’t interact much. Or they can make it a thoroughly miserable experience. You know, even down to when you’re kitting up in the morning on the dive deck.’

‘If you’re got someone that you’ve had a row with three hours beforehand because they wouldn’t let you sleep, and they’re massively hungover... I mean, this is absolutely true – and they won’t talk to you, or they’re being rude, or whatever, you know that can ruin it as well.’

‘So you realize that actually, there are a lot of things that go together to make it... so that really, in a way comes to the Fellowship as well, which I thought was a good theme.’
<table>
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<th>Part of Scuba Diving</th>
<th>‘And Shared Experiences, so I think that resonates ...scuba diving is just another one of...a sport that fits with that – so, I thought that was really good.’</th>
<th>7.31</th>
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| Father-Son          | ‘I rather like this ‘Father-Son’ thing. [Lowers voice] There’s something about that...I mean, I think I said to you the reason we started diving? Was that, our kids didn’t want to go on holiday with us...’  
‘but there also is this thing about you know, do you talk to your kids or what do you talk to your kids about. And I mean, when they are talking about their culture, and about films or groups, pop groups you know... I, it’s not shared experience, you know, because I don’t like what they like, and they don’t like what I like, you know?’  
‘But, this...is a common interest, and it’s very interesting that you can talk about these things, so, I thought that was really good.’ | 8.15 |
| Strengthening Bonds  | ‘Strengthening Bonds, absolutely right! I mean the family that we met three years ago... (...) Right, we’re going to Djibouti with them.’ | 6.43 |
| Close Family Friends | ‘So, my sons went off to the states with one of their daughters on work experience; my lads are meeting up with the daughters on Thursday at the end of school; we went to one’s 18 birthday party; we’re going to [name omitted]...the mother, 50th birthday. I mean, they are close family friends’. | 7.3 |
| Networking I        | ‘We met a guy, [name omitted] who set up his own website, he does journalism. My wife was interested in some of the medical aspects...what’s in a first aid kit, you know, training for dive guides on boats, things like that. So she’s been in contact with this guy [name omitted], and you know, you’ve established a network there.’ | 7.10 |
| Networking I        | And another guy I met at Christmas, you know, on this awful trip, it was an awful trip! And he lives in Guildford and he wants to do an MBA, and he wanted to talk to me about various aspects...he’s not doing the MBA here though. I’ve been in contact with him, and so we share emails. | 7.14 |
Appendix N – Researcher Biography

Age: Mid-thirties
Education: MSc Tourism Management (Surrey 1997) & BA (Hons) Tourism & Hospitality Management (Oxford Brookes 1996)
Occupation: Lecturer
Nationality: Malaysian
Diving since: 2002 (last dive July 2003)
Dive Certification: PADI Open Water
Logged Dives: 30+
Dive Holidays Overseas: None
Dives in the British Isles: No
Dive Destinations (Been There): Sabah, Malaysian Borneo
Dive Destinations (Wishlist): Cuba, Belize, South Africa, Red Sea, Australia
Regular Dive Buddy: Not yet
Favourite Place: Langkayan Island, Sabah

History: My interest in how scuba divers experience the reefscape stems from my entry into the world of diving five years ago. I was born and raised in Sabah, on the island of Borneo, Malaysia. Sabah is home to some of the best diving sites in South East Asia including the islands of Sipadan and Layang-Layang. Dive tourism is on the increase: where once diving was the norm for tourists, more local people are taking up recreational scuba diving. I was one of those locals. Growing up in the capital Kota Kinabalu, whilst snorkelling at the nearby islands, I would reach the drop-off point and turn around, fearing the deep blue that loomed ahead. At those islands, I gazed with envy and awe at scuba divers disappearing beneath the waves. However, at the time, I was afraid of the deep; and scuba diving was beyond my reach: it was an expensive sport and I was still a student.

Once I gained financial independence, it seemed a natural progression to make: most of my friends were already certified divers. Their tales of the wonders of the underwater world continued to entice my curiosity. I was also inspired by the adventures of a female colleague, a marine biologist whose research focuses on sea turtles. Besides, I was opening up to the idea that there was nothing to fear, except fear itself. And that was when I met my dive buddy, one last local female friend yet to hold dive certification. So we took the plunge, signed up at a discounted rate for local divers, enjoyed our training tremendously, and were proudly certified as scuba divers. In Kota Kinabalu, except for the classroom sessions, all dive training takes place on the sandy shores and beyond, of one of the five islands named after our first Prime Minister, Tunku Abdul Rahman National Park, a twenty minute boat ride away. One poignant memory is the moment I looked up from 9 metres below the surface, in time to see a snorkeller reach the drop-off point, and turn back. I'd overcome my fear, and here I was nestled within the deep, gliding past corals and swimming with the fishes.

Learning to scuba dive opened up a whole new world of knowledge which I found immensely satisfying. Early on, there was the joy of reliving ‘O’ level Physics, followed by Biology: learning to recognise marine species, and their behaviour; or the History behind a wreck. Life on land was standard; but life underwater was full of revelations. A growing understanding and concern about the fragility of my new found playground emerged at this point. An awareness, to care and protect this precious world: a sentiment shared amongst most divers. As a social activity, the ease of conversation, endless at times, about the magnificence of the reefscape was also appealing: this sense of camaraderie amongst scuba divers. Through personal experience and these conversations, I became aware that the underwater world had a special character and meaning for divers. I was also proud to be part of the increasing numbers of women taking up scuba diving. Around the same time, I was introduced to the concept of topophilia, or 'love of place'; evident, as I saw it, amongst divers. Such was the inspiration behind the idea for my doctorate. In the words of Saint-Exupery (2000): “One sees clearly only with the heart. Anything essential is invisible to the eyes. People have forgotten this truth...but you mustn’t forget it. You become responsible forever for what you’ve tamed"