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Adult attachment theory and attachment to place: Exploring relationships
between people and places.

Thesis submitted by
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in December 2010
for the degree of Doctor of Philosophy
in the School of Psychology
James Cook University

Statement on the contribution of others

I wish to acknowledge the assistance of my supervisor Dr Peter Raggatt during the conceptual stages of the study, the collection, analysis and interpretation of data and editorial advice. He has also contributed to research publications which have come from this thesis.

I acknowledge the advice of Dr Jenny Promnitz during the early conceptual stages of the study and for her editorial advice during the early stages of the thesis.

I also wish to acknowledge the assistance of Toulia Gordillo, Kirstyanne Magarry and Kimberley Dodds for their assistance with the data collection in Study 2 of this research.

Declaration on Ethics

The research presented and reported in this thesis was conducted within the guidelines for research ethics outlined in the National Statement on Ethics Conduct in research Involving Humans (1999), the Joint NHMRC/AVCC Statement and Guidelines on Research Practice (1997), the James Cook University Policy on Experimentation Ethics, Standard Practices and Guidelines (2001), and the James Cook University Statement and Guidelines on Research Practice (2001). The proposed research methodology received clearance from the James Cook University Experimentation Ethics Review Committee (approval numbers H1526 and H1832).

Acknowledgements.

There are a number of people that I would like to acknowledge for their tireless support throughout the duration of this thesis. To my supervisor, Dr Peter Raggatt, I thank you for your patience, academic advice, and the many words of wisdom shared over what seems to have been a lifetime. I really enjoyed the many colourful conversations we had along the way; I would never have made this journey without you.

To my devoted and ever loving husband, a more incredible partner in life I could never have asked for – I thank you for sharing your life with me. You are always my raft in a sea of troubled waters, the cocktails on the beach during fine weather, and the shadow that is always by my side. I can not thank you enough for your unwavering support and your constant belief in my ability to succeed.

To my daughter Kristin (who knows the stress of this degree better than anyone) I thank you for your support and encouragement, the shoulder to cry on, and the laughter in times of crisis. I am so proud of you and your achievements and I cherish our very special friendship. To Liam, the never ending supply of humour and encouragement has been truly appreciated, as has one of your greatest contributions to my life - Jacob. Jacob, you are the most beautiful person and I can not tell you how much I love your presence in my life - you gave me back the balance my life was missing. Lisa and Rebecca, I thank you both for sharing this experience with me, there have been so many good times along the way. To the rest of my family and friends, I thank you for being so understanding over the years. I promise to get reacquainted with all of you in the very near future.

I must also mention two very special people who shared the good times and weathered the bad. Aileen Sorohan – the best roomie a girl could ever have asked for. We have had the most amazing times, and I thank you for the incredible friendship and many words of encouragement. Rochelle Doherty, you have been such a big part of my academic journey. I have known you now for 14 years and in that time you have become one of my most cherished colleagues and a treasured friend, thank you for keeping me sane.

Abstract

First proposed by Bowlby in 1969, attachment theory was developed to conceptualise the universal human need to form close affectional bonds. According to Bowlby, infant attachment behaviour is regulated by an innate behavioural system, designed through natural selection to promote safety and survival. This is achieved by seeking and maintaining proximity to a caregiver. When attachment needs are fulfilled the infant is able to explore the environment, secure with the knowledge of the availability and responsiveness of the caregiver (Bowlby, 1969). In 1987, Hazen and Shaver demonstrated the ability of the theory to predict variations in the way that adults experience romantic love. Their study triggered a surge in research ultimately designed to measure the complexity and continuity of the attachment process across the life span.

Over the past three decades there has also been emerging interest in relation to the broad topic of *place attachment*. Research has indicated that the concept incorporates: strong emotional bonds to place; memories and other cognitive interpretations that provide meaning to the experience of place; and anxiety or concern associated with separation or removal from a particular place (Low & Altman, 1992). Although scientific investigation of interpersonal attachment theory and its environmental analogue, attachment to place, were being conducted simultaneously, researchers tended to overlook the prospect of a conjoint working model or the extension of the attachment behavioural system to examine core environmental relationships.

The primary goal of this thesis was to apply an interpersonal attachment model to place attachment. Four broad research questions were addressed,

the first of which concerned links between place and interpersonal attachment. The second was to identify attachment style differences in the experience of childhood places and the current home. The third research question examined whether the bonds that we form with place can in fact be classified as attachment bonds, with characteristics similar to those that we form with people. The final research question focused on the composition and structure of the network of places in which people live, and how they relate to those places. The research was conducted across two studies, using a questionnaire battery which contained a combination of new and published, qualitative and quantitative measures.

The first study, using a sample of 99 undergraduate students (age 17-55), investigated the relationship between interpersonal and place attachment and examined attachment style differences in the experience of place using favourite childhood places, the present home, and personal possessions as the primary objects of attachment. The results provided evidence of the predicted associations between interpersonal and place attachment styles, but failed to support an association between place and possession attachment. The study also illustrated both place and interpersonal attachment style differences in the experience of childhood places and current homes. Secure place and interpersonal attachment were associated with time spent with others and higher levels of positive affect, whereas insecure place and interpersonal attachment were associated with higher levels of negative affect, and the recall of negative memories of childhood places.

The second study, with a sample of 105 adults (age 18-79), examined the structure of the network of places in which people live and how they relate

to those places and the network of people that they interact with. It also investigated place and interpersonal attachment, and personality style differences in the composition of those attachment networks and examined whether or not relationships with place can be classified as 'attachment bonds'.

The results provided evidence of the predicted associations between interpersonal and place attachment styles, but failed to support an association with the Big Five personality traits. Relationships with several types of place were confirmed as attachment bonds based on the use of these places for a range of attachment functions (e.g. using the place as a safe haven and secure base; evidence of hypothetical sense of loss). Attachment style differences in the interaction between people and the places listed in their attachment network were also illustrated. Those who were securely attached to place valourised their current home whereas those who were insecurely attached valourised previous homes, leisure environments and holiday destinations.

Overall the current research suggests empirical support for the proposed theoretical links between interpersonal and place attachment. It also supports the proposition that our relationships with place are attachment bonds with similar characteristics to those identified for interpersonal attachment. Theoretical implications as well as future directions for research are outlined in relation to the findings.

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Introduction

Over the past three decades within the discipline of psychology, the concept of 'attachment' has been most fully explored in relation to infant behaviour. First proposed by Bowlby in 1969, attachment theory was developed to conceptualise the universal human need to form close affectional bonds. According to Bowlby, infant attachment behaviour is regulated by an innate motivational system known as the attachment behavioural system, and is designed through natural selection to promote safety and survival (Bowlby, 1969).

The theory suggests that children seek proximity to attachment figures in order to find both security and protection. In 1978, Ainsworth, Blehar, Waters, & Wall tested the theory by systematically observing the primary caregiver's response to an infant's signals, during the first year of life. The research suggested a link between this interactive process and the infants' development of one of three attachment styles: secure; avoidant; and anxious ambivalent.

In 1987, a study conducted by Hazen and Shaver suggested that although attachment theory was postulated with infants in mind, the theory offered a valuable perspective on adult romantic love. The study introduced a three category measure of adult attachment as an adult analog of Mary Ainsworth's classification of infants. The results of the study indicated that the relative prevalence of adult attachment styles mirrored that of infancy, and that adults categorised according to the three types (secure, avoidant, anxious/ambivalent) differed predictably in the way that they experienced romantic love. This study triggered a surge in research ultimately designed to

measure the complexity and continuity of the attachment process across the life span.

Over the past three decades there has also been some emerging interest in relation to the broad topic of *place attachment*. Scholars from a wide variety of disciplines have examined the concept using a number of philosophical and theoretical perspectives, in a range of environments including cities, public meeting places and wilderness areas (Low & Altman, 1992; Giuliani & Feldman, 1993; Milligan, 1998). Research has indicated that the concept incorporates: strong emotional bonds to place; memories and other cognitive interpretations that provide meaning to the experience of place; and a sense of anxiety associated with potential removal from a particular place (Low & Altman, 1992). Notably the home environment and our personal possessions have been the focus of a number of studies in relation to the concept of *place attachment*.

Although scientific investigation of interpersonal attachment theory and its environmental analogue, attachment to place, were being conducted simultaneously, researchers tended to overlook the prospect of a conjoint working model or the extension of the attachment behavioural system to examine core environmental relationships.

In 2003, however Giuliani reviewed the literature surrounding affective bonds to the places in which people are born, live and act, and the people that share those spaces. Giuliani acknowledges that Bowlby (1973) considered the attachment relationship with the caregiver to be part of a much greater set of systems that impact upon the maintenance of a stable relationship with the familiar environment. Although the article compared the developments in research across both interpersonal and environmental attachment it stopped

short of implying a correlation between an individual's attachment patterns and the type of bond formed with place. The review revealed both similarities and differences in the research and provided a good foundation for the further exploration of the links between the two.

In 2004, Kleine and Baker published an integrative review of the literature surrounding our attachments to material possessions which suggested links between the research conducted on place attachment, possession attachment, and 'experience attachment' defined as *"a personal, psychological bond to situations that deliver sought after symbolic benefit"* (p.23).

Using what they refer to as characteristics that portray attachment the article set about defining commonalities in the three research areas: attachments form with specific people, objects and places; objects of attachment must be psychologically appropriated; there must be a transactional history between the object of attachment and the person; objects of attachments become decommodified and singularised; attachments can be defined according to strength; attachments are multi faceted, and emotionally complex; attachments evolve over time as the meaning of self changes, and are a form of self extension(Klein & Baker, 2004).

Noteworthy were the similarities that were apparent between these characteristics and the research conducted in relation to interpersonal attachments, hence these characteristics will be explored in the literature review that follows. Further evidence of the possibility of place attachment as a parallel system to interpersonal attachment was found in the exploratory research conducted by Morgan (2010). This research made valuable links between the childhood formation and development of attachments to place and interpersonal

attachment relationships.

The current research, premised upon these foundations, has been designed to investigate the dynamic relationship between people, places and possessions, and the possibility of place attachment as a parallel system to interpersonal attachment. The research was conducted across two studies, the first of which examined interpersonal and place attachment based interactions with the home and possessions. The second study further investigated those interactions, examining the composition and structure of the network of places in which people live and how they relate to those places. It also investigated whether the bonds that we form with place can be classified as attachment bonds with similar characteristics to those identified for interpersonal attachment, and examined the influence of personality traits on place attachment.

Organisation of the thesis

Chapter one will begin with a review of the place attachment literature with particular attention given to the home environment and possessions, highlighting the attachment characteristics as specified by Kleine and Baker (2004) in relation to place and possession attachment. Chapter two will introduce the concept and evolution of interpersonal attachment. Commencing with an overview of the inception of the theory it will briefly trace the major trajectories of research conducted to date. Chapter 3 will primarily tie the two major research areas together to refine and reinforce the links that are evident. The final part of this chapter will isolate the research aims and objectives of the current study.

Chapter 4 details the rationale and methods for the first study conducted

while chapter 5 reports the results and discussion. Chapter 6 details the rationale and methods for the second study and chapter 7 reports the results and discussion. The final chapter (chapter 8) presents an overview and concluding discussion of the results of the research conducted and includes suggestions for further research.

Chapter 1 Place attachment, home and possessions

The concept of place is considered a core element in environmental psychology as it represents the intersection of people and their physical setting. People experience place in a variety of ways, attaching affective evaluations to specific locations and settings that have acquired some form of special meaning. These affective evaluations are very much 'place centred' and are the result of accumulated interactions between an individual, the setting and the participants within that setting. While the experience of place is considered to be personally unique among individuals, place attachment is a process that may also be observed within couples, groups, communities, towns, cities, and countries (Bell, Greene, Fisher &, Baume 1996; Gifford, 2002).

Historically, the concept of attachment to place has been the concern of scholars from a variety of disciplines (including architecture, family and consumer studies, human geography, urban planning, sociology and psychology). While this eclectic blending of theoretical and methodological perspectives has provided the concept with a diverse research history, it has done little to provide a standardised conceptual framework from which a firm working definition of place attachment can be suggested.

Throughout the literature there appears to be a fundamental consensus that place attachment is a complex phenomenon that comprises a number of interrelated elements, however, scholarly debate continues to struggle with the development of clear, tightly bounded definitions of the elements themselves and the concept as a whole. One of the main reasons for this inadequacy is the lack of systematic empirical research and the evolution of so many terms to encompass the concept. Hidalgo and Hernandez (2001) noted that there are a

number of similar terms to be found throughout the literature, thus making it difficult to know if researchers are talking about the same concept. This is compounded by the fact that the literature spans almost four decades of cross disciplinary research and a multitude of environments.

Although words may be the best means we have to distinguish how people feel, the meanings attributed to words vary for each individual, across cultures and time. The complexities of human emotion and behaviour are shaped by a myriad of cultural, biological and psychological influences. What each of us see and understand is influenced by our present perceptions and thousands of subtle distortions.

According to Tuan (1977) space and place are both familiar words that are essentially taken-for-granted components of our world. However, these words also possess distinct tangible and intangible characteristics that help us distinguish between them. A place is a part of space, yet we become attached to the security of a familiar place and long for the freedom associated with space. A space can become a place through interaction with engineers, architects and human inhabitants. We all exist in place, and therefore our lives are grounded in place. We come from a place, we create places, and we live in places which we preserve and protect. A baby's place is in its crib, yet it is equally in place in its mother's arms. Place can be as small as the corner of a room or as large as the globe (Tuan, 1996).

Tuan (1996) suggested that in ordinary usage, the word 'place' connotes two different yet complimentary meanings: a person's position in society along with their characteristic lifestyle; and a spatial location. While 'lifestyle' may be regarded as a general term covering such things as the clothes that people

wear, the restaurants they dine at, and the places in which they live and work, place is somewhat more than a location or spatial index of socio-economic status. Places are intimately entwined in our sense of self and our sense of 'being' in the world. Who we are and where we are in the world are inseparable. Personal identity, community identity and national identity are firmly embedded in place and our attachment to it (Tuan, 1996).

Tuan also suggested that the essence of the meaning of place lies in the expressions people choose when trying to convey to others a sense of the emotional charge evoked through interaction with a specific place as opposed to a general location. A sense of place may be witnessed when people apply both moral and aesthetic discernment to a site or location, and is perhaps most easily observed when a person is homesick. We can appreciate a sense of place using visual or aesthetic abilities as well as our sense of hearing, touch, smell, and taste, but we can also appreciate sense of place subconsciously through memories. A profound sense of place may develop over time; hence our attachment to a place is often only recognised when distance separates us from it (Tuan, 1996).

According to Low and Altman (1992), while the word attachment emphasises affect, the word 'place' in the context of place attachment, directs attention to environmental settings to which people have attributed meaning. Attachment has also been defined as an affective relationship between people and the landscape which is beyond cognition, preference or judgement (Riley, 1992).

During the 1970s a number of researchers proposed three part models of place and our attachments to it. In 1976, Relph identified three components of

place – the physical setting, activities and meanings. Relph suggested that although the meaning of place was the most difficult to test, it was also the most vital to the understanding of attachment. In 1977 Canter suggested that psychological and behavioural processes that occur in relation to place are the result of the interplay between actions (activities), conceptions (cognitions) and the physical attributes of a place. In Canter's opinion the physical attributes of a place are influential in determining one's psychological and behavioural response in any given setting. Hence, it is the mental models or the notions that we have of the places we experience that should form the basis of our enquiry.

Agnew (1987) found three major elements common to discussions of place: the locale or the setting where social relations take place, the location (geographical area which encompasses the settings for social interactions), and sense of place (structure of feeling about a place). Although a single element is often emphasised in each study, Agnew argues that they should be seen as complimentary and assessed in relation to each other. This is a point of view shared by Massey (1994) who suggests that place is the intersection of the intrinsic quality of the place and the outside or 'global' world as opposed to the concept of place in isolation. According to this view place is a dynamic concept whereby place meanings are continually produced and reproduced as a result of constant interactions over time. Thus place is regarded as a process and as such will take on different meanings for individuals and groups.

Genereux, Ward, and Russell (1995) suggested that the internal representation of a place, or place meaning can be conveniently thought of as involving three distinct sorts of knowledge: knowledge of the objective attributes

of place, knowledge about the affective quality of place, and knowledge of the behaviours that occur there. Further research conducted by Canter in 1997 led to the articulation of a four-facet approach to place, incorporating functional differentiation (activities conducted in place), place objectives (individual, social and cultural aspects of place experience), scale of interaction (environmental scale) and aspects of design (physical characteristics of place).

Gustafson (2001) also undertook research designed to elaborate our understanding of what makes places meaningful. Using a semi structured interview, the researcher focused on identifying the places participants had lived, places they considered important in their lives, their level of attachment to five spatial levels (local community, city, home country, Sweden, and Europe) and the reasons for that attachment. Three broad themes of self, others, and environment were identified for classifying the results, however, it was noted that responses generally encompassed the relationships between the three categories as opposed to a singular category. Thus, the author suggested a three-pole triangular model of place.

This integrative framework provided a useful way of conceptualizing the role of space and place for people in the multitude of environments in which they live, but Gustafson also noted the presence of four underlying dimensions of meaning, distinction, valuation, and continuity / change. *Distinction* refers to the identification of a place as a distinguishable unit incorporating similarities and differences (e.g., here as opposed to there, at home or away) that become evident through the process of comparison. *Valuation* (positive or negative, strong or weak) is part of the process of distinguishing places and in some cases also relates to the inhabitants of those places. *Continuity* and *change*

provide a temporal dimension as we become connected to places as a result of origin, length of residence, life events, proximity and frequent visits (Gustafson, 2001).

Not surprisingly, given the variety of models suggested to explain our attachments to place, definitions and characterisations of the concept have been equally varied. There are however some familiar themes that emerge. There is a very strong sense of the human - place bonding that develops across time and interaction. We know that the places we attach to vary in shape, size, scope, tangibility and the levels of experience we have with them, yet at the same time we bond to specific locations as opposed to categories of place. Research has also pointed to the value of the processes of choice, personalisation, singularisation and decommodification of place, and the importance of place in forming self identity. The following sections will review the research surrounding the attachment characteristics as specified by Kleine and Baker (2004) in relation to place, the home environment and possessions.

1.1 A multifaceted approach to attachment to place

It has generally been agreed throughout the literature that attachments to place are multifaceted, involving behaviour, cognition and affect. The process of becoming attached to place often involves celebrations, routines, personalisation and the creation of environments in an attempt to forge our individual or collective identity. Emotional or affective bonds to place may be positive or negative in nature. Positive bonds are generally developed when the place in question provides us with security, familiarity, self esteem, a sense of belonging and facilitates functioning, while negative bonds typically accompany boredom with routine, feelings of detachment and alienation (Low & Altman,

1992; Brown & Perkins, 1992). This would appear to be theoretically similar to interpersonal attachment where bonds that engage feelings of security and facilitate functioning are deemed secure (low anxiety and low avoidance) and those that encourage feelings of detachment, and alienation could be framed within the dimensions of fearful (high anxiety and high avoidance) and dismissing (low anxiety and high avoidance).

There is consensus that attachment is a multidimensional concept. Some researchers suggest place attachments reflect the dimensions of individuation (differentiation of the self), integration (maintenance of the self) and temporal orientation (stability of the self) (Belk, 1988; Csikszentmihalyi & Rochberg-Halton, 1981; Myers, 1985; Schultz, Kleine, & Kernan, 1989; Wallendorf & Arnould, 1988). Others suggest the dimensions of place dependence and place identity (Proshansky, Fabian, & Kaminoff, 1983; Williams, Anderson, McDonald, & Patterson, 1995; Williams & Roggenbuck, 1989), and Bricker and Kerstetter (2000) argue for the inclusion of a lifestyle dimension, which consisted of items that were specific to the place itself and that reflected the participant's lifestyle.

Low and Altman (1992) suggest that "place attachment has many inseparable, integral, and mutually defining features, qualities, or properties; it is not composed of separate or independent parts, components, dimensions or factors" (p.4). Further they suggest that when place attachment is viewed as an integrating concept it consists of patterns of attachments (affect, cognition and practice), places varying in scale, specificity and tangibility, actors and social relationships within the setting (individuals, groups, cultures), and the temporal aspects of place (linear and cyclical). They also consider that the formation of

place attachments and the roles and purposes of place attachment are multifaceted in nature.

Commonalities throughout the literature suggest that the formation and maintenance of place attachments rely upon four processes, biological, environmental, psychological and socio-cultural. The role and purpose of place attachments however are a little more complex. Place attachments contribute to the formation, maintenance and preservation of self, group and cultural identity, self esteem and self pride. Our place attachments provide a sense of security and stimulation as the places and objects of our attachments allow predictability, routine and a sense of mastery or control. They provide links between people and in some cases form a symbolic bond between our early lives and those we shared that time with (Low & Altman, 1992).

The multifaceted, multidimensional nature of place is possibly best articulated in the literature in relation to the home and neighbourhood environment. The home environment represents the integration of the characteristics of a setting along with the behaviour, perceptions, emotions and memories an individual associates with it.

1.1.1 Multifaceted attachment to the home and possessions

In 1978 Hayward suggested that the concept of home has evolved as the result of a myriad of facets including the childhood home, family, social relationships, self identity, privacy, the personalisation of space, continuity, the dwelling itself and the behaviours exhibited there. Lawrence (1987a, 1987b) has proposed that home incorporates socio-demographic, cultural, social, and psychological dimensions, and has both a public aspect and a private realm related in terms of behavioural variables and architectural features.

Tognoli (1987) argues that there are five general differences between a house and a home: 'a home' affords self expression, personal identity, social relationships, and provides centrality and continuity. Similarly Smith (1994) found that continuity, privacy, self expression, personal identity, social relationships, warmth and a suitable physical structure represented the difference between what is regarded as a home and not a home.

Dovey (1985) suggests that a house as a dwelling is an object or part of our environment while a home is a relationship or an experienced meaning gained through time, activity, familiarity and ritual. Moreover, a home is a symbol of group cohesion and collective efforts, a reflection of permanence and a commitment to the future, a centre of security, shelter and warmth, and a site that provides a sense of identity. But Dovey also points out that there is no precise point at which a house becomes a home, and suggests that while we may find the same repetitive themes from research, the individual manifestations will be specific. Hence, home is the result of dwelling activities and the appropriation of space and is more than a physical structure.

Similar themes also appear in the literature in relation to possession attachment. Possessions are far more than a nostalgic reflection. They are evident from infancy throughout the lifespan as a dynamic source of deeply felt personal meaning, and signifiers of an individual's growth (Myers, 1985). Furbey and Wilke (1982) found that 70% of children six months of age show evidence of favourite objects, and the elderly tend to take cherished objects with them when they make the transition from their own homes to nursing homes.

In possessions we find both visual and narrative traces of our existence. They are symbols of what we are, what we have been and what we want to be.

They connect us symbolically to others, to a shared past and a shared future and in some cases differentiate us from others (Hill, 1991; Richins, 1994; Solomon, 1983; Wallendorf, 1988). Commonalities in the literature point to the following dimensions of meaning in relation to possessions: their utilitarian value, the enjoyment people derive from them and their links to identity, self expression, and the representation of interpersonal ties (Belk, 1990 and 1992; Csikszentmihalyi & Rochberg Halton, 1981; Dittmar, 1991; Kamptner, 1991; Richens, 1994).

1.2 Attachment to specific places and possessions

Empirical research about place and our attachments to it has focused on a wide range of environments. Generally speaking, research suggests that we attach to specific places as opposed to categories or groups of places (such as all rainforests, all beaches, or all amusement parks), and that as individuals, families, neighbourhoods and communities we become attached to a variety of specific places such as home, neighbourhood, and country (Belk, 1988). Much of the focus of the empirical research has surrounded the concept of home and the neighbourhood so that is where my discussion will begin.

People in almost every society have some type of residence, which although it may vary in permanence and form, would be considered one of the most important places in their lives, so a home is generally considered a universal human experience (Cooper Marcus, 1974; Dovey, 1978; Smith, 1994). Housing satisfies basic needs such as shelter, security and privacy and is generally recognised throughout the world as a basic human right. The adequacy or inadequacy of housing impacts strongly on individual and family wellbeing, self evaluation and self esteem (Ladd, 1978).

The house or dwelling as a visible physical artefact is central to our daily lives and is the concern of individual families, groups, and governments. Moreover, it is a source of immense psychological importance as it forms an integral part of our definition of a desirable quality of life and social status (Bourne, 1981). It forms an intricate part of the development of our identity as well as providing a storehouse of the memories that development evokes. People generally develop strong sentimental and emotional attachments to their homes.

Sixsmith (1986) conducted a phenomenological investigation into types of places people call home and the meanings that people attribute to them. In a sample of 22 young adults (age range: 22 to 29), her findings suggested a wide range of places that constitute home (some of which may be transitory in nature), and three distinct categories of the experience of home: personal, social and physical. The personal home refers to relationships between places and the attributes and processes of the self, which encapsulates feelings of security, happiness, and belonging. The home is often seen as an extension of the self, a profound centre of meaning and a central emotional and physical reference point in a person's life.

The social aspect of home encompasses the presence of a social system within the home and relationships with other people that contribute to the place being recognised as home. Home is not only a place shared with others but also a place that facilitates entertainment and enjoyment of other people's company. Thus, familiarity with other people, their habits, emotions, and actions creates an atmosphere of social understanding where a person's opinions, actions, and moods are generally accepted. The physical entity is the

focus of a person's daily activities, memories and experiences and as such it includes the architectural design, useable space, and the services and facilities that contribute to the place (such as warmth, telephone, electricity and other conveniences).

Research in relation to the home environment was also conducted by Smith (1994) who interviewed 23 people (university students and their partners) about attributes of homes and non homes. Using the three categories previously identified by Sixsmith (1986), Smith found 15 recurrent themes, 10 of which dealt with personal aspects of the experience of home. Descriptions of the atmosphere or the psychological climate of the home, evaluations of the home, and feelings of comfort found within the home, personal freedom, privacy and the control of space within the home all fell into this category. Approximately half the sample described their home in terms of the ability to express aspects of themselves, and over a third described the way they had altered the existing environment to suit themselves.

Approximately one-third of responses contained information relating to the financial value of the house and the idea of home as refuge. Some respondents also described their home in terms of it being regarded as a place for relaxation. Within the physical entity category, over 80% of respondents mentioned physical features of the home, approximately one third of the sample commented on the aesthetics of the home and approximately one third also mentioned the location of their home. Males were more likely to report aspects of the location of the home and females were more likely to report the atmosphere of the home.

In relation to the social entity of home, approximately half the sample

indicated the role of social relationships within the home (such as 'a reasonably happy home') and a slightly smaller group commented on external social relationships (such as 'an ideal place for family visits').

Not all research has focused on the positive aspects of home, however. For some, the concept of home as sanctuary, a place of safety and security is not a viable one (Moore, 1984; Loyd, 1981; Barrett & McIntosh, 1982). For those that are homebound (such as the elderly) the home may be considered more a confine than a retreat (Sixsmith, 1992). Those that work at home may experience home as an island of isolation (Ahrentzen, 1992). For some, comparisons with treasured environments of the past can lead to sadness and dissatisfaction in the present and for others recollections of home may represent a reminder of difficult family relations and an intimidating physical environment (Cooper Marcus, 1992).

Our memories of place also show evidence of our attachment to specific places. Remembered childhood places generally focus on purpose built spaces that children reassign as their own; hiding places and places constructed specifically for their use. These environments are an important part of childhood appropriation of space and in most cases provide the child with a sense of privacy, an expression of creativity and achievement which is often accompanied by a sense of pride; and a chance to test out adult ideas and roles (Cooper Marcus, 1992).

Cooper Marcus (1979) constructed a semi structured interview to enable people to look back through the environments of their childhood. She termed this measure an '*Environmental Autobiography*', suggesting that just as our emotional state can be partially interpreted as a result of looking back at our

past relationships, our environmental preferences would also be better understood if assessed in conjunction with an interpretation of the influential places of our past.

Using a set of prompts Cooper Marcus guided participants through a process of envisaging themselves as a child walking back through the environments they enjoyed during that period of their lives. She then had them sketch that environment and write objectively and subjectively about it, incorporating details of where it was, how old they were, who was with them, and what emotions and memories they could recall. The measure was completed with a sketch and analysis of what they considered to be their ideal environment.

Cooper Marcus (1979) noted that more than 80% of people recalled outdoor areas of their childhood which she suggests is quite normal given that during the period of five to ten years of age children generally engage in the exploration and manipulation of their environment. They choose to spend a lot of time outdoors beyond parental supervision and control. Although no statistical information was provided, Cooper Marcus also noted an association between the environments described in childhood and the ideal homes of adulthood. The continued influence of childhood environments was often reflected in the choice (as adults) of dwelling location and form, interior decoration, and garden design. An adapted version of this measure will be used in the present study.

Cooper Marcus (1992) notes that for many people the most powerful memories revolve around places and particularly the houses they grew up in, the neighbourhoods where they built their first home and raised their children,

the summer houses they visit in the holidays and the gardens they nurtured along the way. Three categories of childhood places tend to be prolific in our recollections: purpose built adult spaces (e.g. closets, or verandas taken over by children); hiding places which are melded from the natural environment (such as nests or lairs), and places specifically constructed for play (tree houses and cubby houses).

For some, the memory of these places are so strong they continue to influence (subconsciously and consciously) current choices of dwelling, garden design and interior decoration in adulthood. In some cases there is evidence of the reproduction of elements of special places of childhood, and in others there is a stark contrast to those places (Cooper Marcus, 1992).

1.2.1 Attachment to specific possessions

Our possessions provide us with stability and familiarity and are often intentionally retained or acquired to remember special or momentous times in our life journey. Photographs and home movies provide us with a visual reminder of that journey and tend to be regularly listed as a favourite or cherished possession. Other possessions such as favourite furniture, favourite clothing and those items we interact with daily tend to reflect stability and provide a sense of comfort, warmth, familiarity and routine (Belk, 1990).

Research conducted by Csikszentmihalyi and Rochberg-Halton (1981) suggests that gifts rate highly as a category of favourite possessions because they become a mnemonic device to help us remember loved ones. Souvenirs and mementoes often achieve sacred significance in our lives as a direct result of the proximity of the object to a special time, place, event or person in our lives. In all, Csikszentmihalyi and Rochberg-Halton identified 41 categories of

objects (1694 objects from 315 participants) which were grouped into two broad classes of action objects (those that involve some physical handling, interaction or movement) and contemplation objects (those that are generally associated with reflection or contemplation).

Myers (1985) suggested that attachment to possessions is a dynamic process involving the object, the individual, and the interaction between the two which waxes and wanes in importance over time. She noted that in childhood we traditionally begin to attach to singular objects, however as adults we are able to simultaneously form attachments to numerous objects. This is conceptually similar to the notion of the hierarchical structure of interpersonal attachments which will be discussed in chapter two.

Emotionally significant possessions are both a sign of, and a participant in our life journey, as they play an important role in personal and developmental changes across our lifespan. They reflect developmentally sequential regularities and individual maturational uniqueness. From around six months to six years of age special possessions are looked upon as a source of comfort, security and warmth and are most likely to include blankets, stuffed toys, and dolls. During the elementary school years we form multiple attachments with multiple meanings. During adolescence special possessions are chosen to reflect a search for and commitment to another, autonomy, self reliance and self confidence, and for adults there are a higher proportion of possessions of emotional significance (Myers, 1985).

1.3 Psychological appropriation of space and possessions

The recurrent theme of the place attachment literature is that an emotional transaction takes place between people and place. Much of the

literature has focused on the personalisation and mastery of space which leads to perceptions of the place being “mine” or “ours”.

As children we learn to appropriate space. While some childhood places are constructed for the purpose of play within the visual range of parents, others involve the temporary possession of an adult space (often secretly) with the view to reformulating that space for their own specific purpose. Both are evidence of places where children have taken control of an environment and made it their own for a period of time. These secret places are often given special names and evoke a specific code of conduct on entrance. The appropriation of space at this age is generally a representation of a need for privacy, a reflection of creativity and the desire to practice adult roles (Cooper Marcus, 1992).

Rubinstein and Parmelee (1992) regard possessions or highly regarded belongings as playing a vital role in the quest for people to ‘make a place’. They note that the ordering of the home environment varies according to individual interpretations of socio-cultural rules and collective norms about home space and includes such things as room function, type and location of furniture, interior and exterior decoration, along with the display of personal possessions. These aspects reveal an expression of appropriated space and of territoriality.

From a transactional perspective, attachments involve the interplay of people, processes and places which arise in the context of day to day experience. However we must also note that people do engage in a rational cost benefit analysis of bonds to places in order to identify the trade offs between them. One such example of this form of analysis is the choice of home environments.

Both house and home are located in space (not necessarily fixed or permanent space), which can vary in size. A house is generally a fixed, solid building as opposed to a home which can be a caravan, tent, boat or in some cases a cardboard box or door stoop. A home evolves as a result of some level of exerted control, the regular appearance and reappearance of its fixtures and furnishings (Douglas, 1993).

A home is structured in time with the aesthetic and moral dimensions afforded by its inhabitants. House and home incorporate a gambit of emotions – it is possible to be happy, sad or elated in both. While a house has the capacity to provide shelter, a home is generally a place of safety and security (though it can be a place of anger and fear), a constantly evolving series of memories, constructed daily and recalled regularly. Thus, the basic difference between a house and a home revolves around the appropriation of the space (Douglas, 1993).

When people view a home with the intent to purchase or rent, generally they go through a process of elaboration whereby they weigh the type of house or dwelling in relation to themselves, their lifestyle, their needs, their goals and aspirations - does this environment fit with who they are, what they are, and where they want to be? Once a decision is made the initial process of moving in incorporates the appropriation of space. The making of a home assumes a period of time spent decorating and arranging possessions to personalise the space and in so doing, reflections of the residents' personality begin to emerge.

Belk (1992) asserts that to be emotionally attached to items within our surroundings is to make them a part of our extended self. There are a number of ways that an object may become part of the self, a notion introduced by

William James (1890). Sartre (1943) suggested that when we master or control an object we perceive the object as part of us. The creation or purchase of an object may also lead to the incorporation of the object and self (Sartre, 1943). Saile (1985) noted that both creation and control play an important part in the ritual establishment, cleaning and redecorating of the home. These ritualistic expressions give us a sense of ownership, a sense of control or mastery and provide a visual display of our extended self (Saile, 1985).

1.4 Place, identity and self extension

It has been suggested that 'place identity' is a personal construction which grows from experience with, and is influenced by, a host of person / environment interactions. While strong affective ties to house, home, neighbourhood and community help individuals to define themselves, these physical world definitions of self are neither necessary nor sufficient components of self identity (Proshansky, Fabian, & Kaminoff, 1983).

Proshansky et al. (1983) argued that the development of self identity extends beyond distinctions between oneself and significant others to include objects and things and the spaces and places in which they are found. Moreover it is logical to assume that if self identity is informed by the relationships with those who nurture and care for us, then the objects that we interact with and the physical settings that we interact in, must also form part of that construction (Proshansky et al., 1993).

Accordingly, place identity may be regarded as a sub-structure of self identity which consists of cognitions of the physical world in which we live. This incorporates memories and ideas, but also feelings, attitudes, beliefs, values, preferences, meanings and conceptions of behaviour and experience of our

daily interactions with places and spaces. These physical settings (past, present and anticipated) vary in their ability to shape and satisfy our desires, goals and needs and invariably involve interactions with other people. Hence, our experience of place and therefore the formation and maintenance of place identity is inevitably influenced to some degree by the opinions of those that we interact with, along with gender, age, social class, and personality. Moreover, place identity, although enduring, is malleable across the lifespan (Proshansky et al., 1993).

Place identity provides us with an environmental past which in turn influences what we see, think and feel in our transactions with the physical environment. Extreme variations in the physical environment tend to suggest that the stability of our self identity is under threat. The ramifications of this may be found in many studies that have looked at the forced relocation of people from cherished homes and neighbourhoods (Fried & Gleicher, 1961; Fried, 1963). The growth and stabilisation of self identity depends upon the development of a stable and meaningful place identity, so where there is a lack of consistency and continuity in the home environment the integration of self identity will also be threatened (Proshansky et al., 1983).

Noteworthy here are similarities in theory to the development of secure interpersonal attachments which depend largely upon the development of a mental representation of self as being worthy of love and support and others as reliable and trustworthy. As children we develop a series of expectations in relation to the self, caregivers and other secondary attachment figures and the environment. Children who are confident and secure in the reliability and responsiveness of their attachment figures become more sociable and

adventurous in relation to their environment, whereas those who regard their attachment figures as unreliable and often inaccessible are more anxious and defensive and generally less confident with regard to the exploration of their environment.

Place identity serves an expressive function as well, when a setting does not match our preferences we engage in the practice of the personalisation of space in order to satisfy our tastes and preferences. In so doing we reaffirm our self identity. Evidence of the development of this moulding of physical spaces is found in childhood as we learn to move a chair or climb upon it to reach something that is out of reach; over time we learn skills that enable us to both construct and alter our physical environment. Once our environmental past has taken shape, we have a good knowledge of not only our preferences and requirements in a given setting but also the behaviours that are necessary, and the tools and skills for changing it (Proshansky et al., 1983).

In some cases we depend on others to help enact that change and in other cases it is the presence of people that impels us to make the change. We are driven to mediate and change any place identity – environment discrepancies in much the same way as we are driven to mediate and alter discrepancies occurring in relation to self identity (Proshansky et al., 1983).

This appears to be evidence for the development of working models of place and the behavioural tendencies that allow for the implementation and attainment of set goals and needs. Behavioural patterns evolve as a result of the interactional history of the person and the setting, and the expanding knowledge base that is accumulated as a result of that history. It could be assumed that these patterns are subject to change through the processes of

accommodation and assimilation. This perspective will be addressed in more detail in Chapter 3 in the discussion of working models for place attachment.

One noted limitation of the model of self and place identity suggested by Proshansky et al. (1983) is an inability to explain the processes that guide the developmental formation of identity and how or why places become so intricately entwined in it (Korpela, 1989). Korpela suggests that there are three principles which could be involved: the need to maintain a coherent conceptual system; the need to maintain a favourable level of self esteem: and the need to maximise the psychic balance of pleasure and pain.

From Korpela's (1989) perspective place identity is a product of active environmental self regulation whereby a person actively uses the environment as a strategy in creating and maintaining one's self identity. Moreover, the environment is seen as not only a mediator in the regulation of social interactions, it also plays an important role in and of itself for the individual. Hence, he opts for a definition of place identity which consists of cognitions of physical settings and environments which afford the individual conscious or unconscious regulation of their experience of maintaining their sense of self. As such the physical environment, and the objects and places within it regulate the pleasure pain balance, the maintenance of self esteem and characteristic coherent sense of self (Korpela, 1989).

1.4.1 Emerging self identity and childhood places

Many authors have noted the importance of place in not only remembering one's life course but also for organising and legitimising it (Stokols & Shumaker, 1981; Rubinstein & Parmelee, 1992). Rubinstein and Parmelee (1992) suggest that although attachment and attachment behaviours have

traditionally been linked to early childhood experiences, place attachment is deeply connected to the experiences of the lifespan and the development of self identity that spans across it. Although attachment to place exists in the present, the past, and in anticipation, it is the events of the life course, the personal interpretation thereof and the need to maintain a coherent sense of self over time that frame and contextualise that attachment. In essence the feelings gleaned from experience with key places whether present or past provide us with a way of remembering our life course and providing that recollection with an organisational structure.

A significant form of self expression and the emerging identity is found in childhood creation of place (Cooper Marcus, 1992). It is repeated in adulthood with the buying or renovating of a house, shifting of furniture, decorating an office space etc. According to Cooper Marcus (1992), childhood is the time that we develop a consciousness of the self, we begin to see ourselves as unique entities and as such it is often regarded as an almost sacred period of our lives. Most of our memories of this time tend to be tied through memories to the places that we inhabited. Our memories of those places are often regarded as a psychic anchor reminding us of life's journey with all its twists and turns.

As infants we begin our lives relating primarily to our mother or primary caregiver and we remain dependent on them for food, care, nurturance, protection and love. Our sensory explorations of the environment begin as we emerge into early childhood and develop the skills associated with locomotion. As our confidence increases so does our range of exploration and our independence. We learn about the world, and we learn to act within it. From our early days of creating secret spaces within adult-created safe spaces, we

progress to constructing a place of our own. What remains is the legacy of childhood places and it is not uncommon for us to revisit those themes in adulthood (Cooper Marcus, 1992; Rubinstein & Parmelee, 1992).

1.4.2 Self identity and possessions

Our possessions play a major role in the communication of identity and status. Significant people in our lives are often perceived as extensions of the self, and objects associated with these people are especially meaningful. They provide a connection to others and in providing shared meaning, allow us to engage in a process of self cultivation (Schultz et. al., 1989., Csikszentmihalyi & Rochberg–Halton, 1981). Pictures, furniture, posters, ornaments and other gifts which remind us of these significant people, places, phases, experiences and values constantly instruct us in who we are and what we aspire to; they provide a visual continuity with our past and as such the extent of attachment to the home environment may be influenced by those objects (Cooper Marcus, 1995).

1.5. The decommodification and singularisation of place and possessions

Traditionally, place attachments are formed with spaces that we perceive as having little substitutability or ability to be replaced. This is perhaps most evident when we look to the process of building a home environment. Dovey (1985) suggests that a 'house' represents a substantial economic commitment, an investment of economic resources that may be used and discarded, and is a necessary tool in the process of building the experience of a 'home'. Conversely a home represents a commitment of time and emotion, an investment of dreams, and hopes. It is not a commodity which can be bought or sold; it is a relationship that is created and evolves over time.

Decorating is one key way in which a home can be personalised,

evidence of which is apparent in the process of establishing and maintaining a home. Research conducted by Smith (1994) suggested that roughly a third of participants said they had altered their home environment to suit themselves and reflect some aspect of their personality, and approximately half the sample listed this as a feature of a home environment. The personalisation of space and the inclusion of their possessions were listed as a positive feature of a home environment by two thirds of the sample, and the lack of ability to personalise a space was suggested as an element of a non home environment by about a third of the sample. Thus it would appear that the personalisation of space is an important aspect of what it is that makes a home and the inability to do so results in a lack of attachment to and identification with a home environment.

The process of individuation or the differentiation of self from others and the integration of self with others are two common themes in the literature surrounding possessions (Csikszentmihalyi & Rochberg Halton, 1981; Myers, 1985). McClelland (1951) suggested that possessions become viewed as part of self when we are able to exercise power or control over them; the greater the control we exercise, the more closely allied with self they become. Moreover, possessions allow us to feel as though we have some control over our environment (Cooper Marcus, 1992; Schultz et al., 1989). We not only take meanings from our possessions, we also give meaning to them and in the process we lay claim to those objects as 'mine' or 'ours'.

According to Belk (1992), possessions are things that we refer to as 'ours' regardless of legal ownership, temporary control, or our identification with the object. Possessions may be individual or collective, tangible or non-

tangible. As individuals we become attached to tangible things such as our clothing, vehicles, books, jewellery, family heirlooms and gifts from loved ones; and to intangible objects such as our names, beliefs, values, feelings, and childhood memories. Collective possessions would include such things as local, regional and national historic sites and structures (tangible possessions). Collective memories would include the experiences of each generation, family vacations and shared family experiences (intangible possessions). Our attachment to things and the experiences they represent are mutually supported and reinforced by these tangible and intangible objects (Belk, 1992).

In order for possessions to become decommodified or singularised, however, a history must be established between a person and the object. This process is affected over time and repeated interactions with an object usually as a result of a series of possession rituals such as the display and maintenance of the object, talking with others about the object, and comparing its worth with others (Belk, 1988)

1.6 Interactional history with place and possessions

A common theme throughout the literature is that of continuity with not only important environments in our lives but also the people that we share these environments with. The prolonged association between a person and a place has been well documented (Low & Altman, 1992; Williams et al., 1992) and has been succinctly captured in the definition of place attachment proposed by Milligan (1998), “the emotional bond formed by an individual to a physical site due to the meaning given to the site through interactional processes” (p. 2).

Tuan (1974) suggests that geographical space is experienced as place as a direct result of involvement or interaction. Attachments formed with place

provide us with familiarity, stability and routine, and as such must be regarded as dynamic – they change as people, processes and activities associated with them change. Fried (1963) suggested that forced relocation from place represents a disruption in the sense of continuity a person experiences and as such often leads to a sense of fragmentation and grief. He also noted that some residents who were forced to move from their homes exhibited strong positive psychological attachments long after their relocation.

The expression of preferences is a vital component of people's interaction with all environments. Rather than viewing the interaction of the person and the environment as one in which people find themselves not only immersed within an environment, but effected by it, Rapoport (1985) suggests that the main effect of the environment on people is through their place preference or habitat selection. People tend to self select countries, regions, towns and in most cases, home environments. Thus 'places' not only offer choice, they are the result of choice as a result of the process of selection and constant modifications.

Rapoport (1985) noted that the notion of choice or the expression of preference is a central component of people's interactions with home environments. Theoretically we could argue that if a dwelling is not chosen as a home then it is unlikely to be regarded as home. However an imposed "home" environment may become home through the process of modification and increasing levels of congruence with needs or preferences. Brown and Perkins (1992) noted that transformations of place attachment occur over time as changes are detected in people, places and the psychological processes surrounding the relationship between them. If a discrepancy between the self

and the environment remains after transformations or adaptations have been made the strength of attachment is likely to erode (Harris, Brown & Werner, 1996; Milligan, 1998). Brown and Perkins also suggest that while changes to the home often reflect a need for growth they could also signify a reaffirmation of our attachment.

Similar to interpersonal attachments, attachments to place tend to be hierarchical; the strongest place attachments though are generally those we form with our homes, from childhood through the lifespan (Cooper Marcus, 1992; Brown & Perkins, 1992; Hay, 1998; Hidalgo & Hernandez, 2001; Hummon, 1992; McAndrew, 1998). Cooper Marcus (1992) suggests that our homes are a blank canvas upon which we can reproduce those environments that we become attached to and memorialise those people that we associated with them. She refers to this process as anchoring ourselves to people and places.

1.6.1 Interactional history and possessions

Interactional history is one of the strongest themes in the possession attachment literature. Mostly, ordinary objects become special through repeated interactions with that object. When an object means something to someone, either consciously or unconsciously, it is interpreted in the context of past experience in the form of habit. By its continuous presence in our lives an object becomes part of our history and life experience (Belk, 1992; Csikszentmihalyi & Rochberg-Halton, 1981).

Myers (1985) notes that the process of attachment involves the individual and their life experience, the object, and the interaction of the two which is the investment an individual makes in the object and their shared future. Given the

dynamic nature of the relationship, shifts in the intensity of the interaction are also noted, commencing with the initial heightened importance of the object followed by the fading or changing of the intensity according to personal and developmental changes in the individual.

Similar to the hierarchical nature of interpersonal attachments, Myers (1985) found that attachments to possessions commence with basic and singular attachments in childhood. The network then expands to multiple attachments throughout adolescence and adulthood. Those items remaining with the individual across the lifespan tend to be those that signify special relationships and significant life experiences.

1.7 The evolution and strength of attachment to place

For most people, the strongest memories that they recount are deeply rooted in place. Kleine and Baker (2004) suggest that attachment to places and possessions have a degree of strength which ranges from strong to weak. Research suggests that people usually develop strong sentimental and emotional ties to their homes and places associated with their childhood (McAndrew, 1998; Cooper Marcus, 1992; Hummon, 1992). For example research has suggested that older people, children and those whose mobility is restricted tend to have stronger attachments to their homes (Rubinstein & Parmelee, 1992; Belk, 1988; Saegert, 1985). Similarly, childhood places tend to be associated with strong emotional experiences of our growth and as such are generally seen as environments where strong attachments are formed (Cooper Marcus, 1992., Brown & Perkins, 1992).

Giuliani (1991) found that individuals with strong attachments to their homes and neighbourhoods were more likely to be strongly attached to a

greater number of people, objects and places. Moreover, the more varied the relations between the person and the environment the more salient the place becomes and the greater the intensity of the attachment. Shumaker and Taylor (1983) suggested that there are a number of factors that lead to the strengthening of the attachment bond a person develops with a place. These include the physical and social amenities of the environment which meet the needs of the person, and the development of local social networks as those who have positive social relations within their residential settings, also develop stronger attachment bonds. This is important from the perspective of the current research as both of these findings provide evidence of links between place and interpersonal attachment. Moreover, the current study will investigate links between place and social attachment networks.

Manzo (2005) suggests that our relationships with place can take many forms representing a range of emotions such as love and contentment, fear, hatred, and in many cases ambivalence (Harris, Brown & Werner, 1996). Throughout the literature attachments to place and possessions are generally defined in positive terms, however, strong negatively valenced bonds may develop. There may be times where comparisons with places and possessions of our past create levels of dissatisfaction and sadness with present environments or where a childhood place or possession is recognised as significant even though unhappy or traumatic experiences are associated with them (Cooper Marcus, 1992; Manzo, 2005).

The strength of attachment to possessions is reflected in the thoughts, feelings and behaviours of an individual or group. Possessions linked closely to the development or cultivation of self identity are more likely to be invested with

a greater degree of emotion than objects we regard as having a purely utilitarian value. While common or utilitarian objects we habitually use tend to pale into insignificance with daily use, our most cherished possessions are kept long after their material and in some cases their functional value has passed (Belk, 1998; Schultz, Kleine, & Kernan, 1989; Tuan, 1980).

Myers (1985) suggested that the degree of attachment to specific objects can change over time as new attachments are developed and yet others are disposed of. This process takes place as the self develops and evolves with stronger attachments reflecting a 'becoming self' and decreasing strength reflecting detachment from past selves.

Research conducted by Schultz, Kleine, and Kernan (1989) suggests that there are different emotions present for strong versus weak attachment items. They found little overlap in a list of emotions reported by participants for strong and weak attachment objects. Although it is possible for people to attach to objects because of strong negative affect, the results of this study showed emotions for strong attachment items were generally positive, while negative or neutral feelings were more readily associated with the weak attachment items.

1.8. Emotional complexity of the bond between people, places and possessions

The various definitions attributed to place attachment provide an indication of the importance of the emotional bonds we form with place. Relph (1976) suggests that in order to give significance to our existence we must form a deep relationship with place, and Low (1992) believes that our attachments to place represent strong cognitive and emotional connections to a setting. Similarly, Hidalgo and Hernandez (2001) argue for "a positive affective bond between an individual and a specific place, the main characteristic of which is a

tendency of the individual to maintain closeness to such a place” (p274).

Hay (1992) suggested that people who develop strong emotional bonds with place show a good deal of territoriality and local knowledge which strengthens with time, whereas those who exhibit weak emotional bonds or those that develop none at all, tend to show evidence of increased levels of mobility. Those that have a rational and perhaps detached relationship with place tend to be those who have lived in an area for a short period of time and who are still uncertain of how long they will settle. Hay notes the high level of mobility witnessed in America, with an average of 14 moves per lifetime. This leads to difficulty in forming attachments.

Our possessions are also imbued with emotional complexity. Belk (1989) suggested that objects of attachment become self extensions only when the attachment is emotional as opposed to functional in nature. In fulfilling any of the following six criteria a possession may be regarded as an attachment: unwillingness to sell the item; willingness to buy with little or no regard to price; item can not be substituted; unwillingness to discard the item; personification of the item; and feelings of elation or depression in regard to the object.

Evidence of the feelings experienced upon the loss of attachment objects is also testament to the complexity of emotions surrounding them. People who have been the victim of theft often report feelings of an invasion of the self not dissimilar to rape victims (Korosec-Serfaty, 1984). The loss of special possessions is often followed by a period of mourning and grief similar to the loss of a loved one (Rosenblatt, Walsh & Jackson, 1976). Brown (1982) also noted that victims of theft exhibit a lower sense of community and have less pride in their homes; there is often a loss of perceived control as well. Similar

feelings have been reported by victims of natural disasters (Belk 1988).

This chapter has provided a brief overview of the literature surrounding place attachment, and more specifically the home environment and possessions. The review was structured according to the characteristics set forth by Kleine and Baker (2004) as integral components of attachments between people, objects and places, and has suggested links between place attachment and interpersonal attachment. The next chapter provides an overview of interpersonal attachment tracing the development of the theory and its research trajectories.

Chapter 2 Interpersonal attachment

Few psychological theories could lay claim to successfully spanning almost seven decades of empirical research debate - attachment theory is one such theory. In this chapter I will address the concept and evolution of attachment theory and the empirical research it has generated. In an attempt to orient the reader, I will commence with a brief historical overview of the development of the theory. I will then move on to discuss the underpinnings of the theory (the concepts of the attachment behavioural system, and mental representations of self, other and environment), before discussing the research that has taken the theory beyond infancy and into the realm of adult relationships. In Chapter 3 the links between interpersonal attachment and place attachment will be articulated.

John Bowlby's first formal statements of attachment theory were presented to the British Psychoanalytic Society in London in three classic papers. The first "The Nature of the Child's tie to His Mother'" (1958), reviewed and rejected contemporary psychoanalytic explanations for the child's libidinal tie to the mother in which need satisfaction was seen as primary and attachment as secondary or derived.

The second paper "Separation Anxiety" was published in 1961 and detailed the inadequacies of traditional theory with regard to explanations of both the intense attachment young children form with the mother figure and their dramatic responses to separation from the mother figure.

In the third paper "Grief and mourning in infancy and early childhood", which was presented in 1960, Bowlby proposed that grief and mourning appear whenever attachment behaviours are activated and the mother continues to be

unavailable. This proposition challenged the prevailing view that infantile narcissism is an obstacle to the experience of grief upon loss of a love object (Bretherton, 1992; Cassidy, 1999).

Initially developed to explain three things: why mere separation would lead to anxiety; the similarities that were noted between child and adult mourning; and the defensive processes evident in the activation of attachment behaviours, Bowlby's theory emerged as the result of a convergence of a number of trends in the biological and social sciences of the day. A psychoanalytic orientation was merged with ethology, psychobiology, control systems theory, and Piaget's structural approach to the development of cognition. The theory represented a total shift of perspective for developmental psychology as Bowlby sought to replace Freud's drive theory and the image of a needy, dependent infant motivated by drive reduction, with a competence motivated infant using its primary caregiver as a haven of safety, a source of comfort and a secure base from which to explore (Ainsworth, Blehar, Waters & Wall, 1978; Waters & Cummings, 2000).

Although attachment theory was essentially the result of John Bowlby's revolutionary ideas about the nature of infant / caregiver bonds and the impact of the disruption of these bonds due to deprivation, separation and bereavement, it was Bowlby's collaboration with Mary Ainsworth that enabled empirical testing of the theory and a greater understanding of the attachment behavioural system.

In 1954, Ainsworth accepted a position as a research psychologist with the East African Institute of Social Research in Uganda and it was here that she was able to obtain funding (for herself and the services of an interpreter) to

carry out short term, longitudinal and naturalistic studies of mother infant interactions in Uganda. Hence the first empirical study of attachment commenced (Ainsworth, 1983; Bretherton, 1992).

Ainsworth's observations in Uganda provided insight into individual differences in the quality of mother infant interactions, and her interview data provided a detailed evaluation of maternal sensitivity to infant signals. Ainsworth noted that mothers who were excellent informants, and provided spontaneous details of infant behaviours, were highly sensitive to the child's needs, whereas, those who appeared to be imperceptive to infant behaviour were not (Bretherton, 1992).

In addition, Ainsworth observed three attachment patterns: infants who cried a little but were content to explore the surrounding environment while the mother was present; infants who cried frequently even when their mothers held them and were not content to explore their surroundings; and infants who showed no differential behaviour to the mother. These patterns were referred to as securely attached; insecurely attached; and not yet attached. Ainsworth also noted that babies of sensitive mothers were generally classified as securely attached and babies of mothers who were less sensitive tended to be classified as insecurely attached (Bretherton, 1992).

In 1958 Ainsworth received a pre-print of Bowlby's "The Nature of the Child's Tie to his Mother". The close intellectual collaboration that followed was reflected in the analysis of Ainsworth's data from Uganda (Bretherton, 1992). In 1962, Ainsworth launched a major short term longitudinal study into the development of infant mother attachment. The research combined direct naturalistic observations and a specifically designed laboratory situation which

became known as the 'Strange Situation' (Ainsworth, 1983; Bretherton, 1992).

Ainsworth's research was essentially an investigation into the individual differences and normative components of attachment development. The experience gained during the Uganda research, along with Bowlby's theoretical influence led to the development of a behavioural coding system for assessing the quality and type of attachment system exhibited by infants (Ainsworth et. al., 1978; Ainsworth, 1983).

On the basis of studies conducted in Uganda, Baltimore and Maryland, Ainsworth and colleagues identified three distinct types of infant-mother attachments which reflect the mother's level of sensitivity and responsiveness to the infants needs and the level of interaction between them. The first type are referred to as 'secure' – children classified in this category tend to be active in exploration and while they are upset at separations from the mother they are generally positive in response to her return. Mothers of infants in this category are seen as being responsive and available to the needs of the child. These children are able to acknowledge distress, and turn to others for comfort and support.

Children of the second category are termed 'avoidant' as they tend to display behaviours which suggest detachment from and avoidance of the caregiver. Mothers of this group of children typically preferred to avoid contact, and were often regarded as hostile and rejecting. These children are often seen as being unable to acknowledge distress and seek support.

The third type are 'anxious ambivalent'. While these children exhibit distress and engage in protest behaviours when separated from the mother, they show levels of anger and definite ambivalence on her return. Mothers of

children in this group are largely insensitive and inconsistent in their levels of responsiveness to the child's needs. Children of this category would be regarded as hypersensitive to negative affect and prone to heightened expressions of distress (Ainsworth et al., 1978; Feeney & Noller, 1996).

2.1 The Attachment Behavioural System

Arguably, the most important component of Bowlby's attachment theory is the concept of a behavioural system. According to Bowlby (1958, 1969), the human species is equipped with a number of species specific behavioural systems that have evolved due to their contribution to species survival. One of the most enduring of these is the behavioural system that underlies reproduction and the care and protection of the young (Ainsworth et al., 1978; Waters & Cummings, 2000).

It has been suggested that the behavioural system that underlies attachment behaviour is a fundamental part of many species. Manifested in behaviour directed at keeping the individual in proximity to one or a few significant others, attachment behaviour is believed to have evolved through natural selection as it increased the chances of an infant being protected by those to whom he or she kept in proximity, hence providing a survival advantage (Ainsworth, 1991; Bowlby, 1958, 1969).

Bowlby proposed that the attachment behavioural system employs a number of discrete yet observable signalling behaviours such as smiling, crying, approaching and clinging, and is aided by feedback mechanisms, which allow the individual to alter behaviours that deter one's progress from attaining their desired goal. Ultimately these signalling behaviours are used to increase proximity to caregivers. Eventually these signals become increasingly directed

to those people who engage the infant in social interaction and are responsive to the proximity related behaviours. Once the infant develops locomotor skills they are able to use the attachment figure as a secure base from which to explore the environment around them and a haven of safety to which they can return when fear is exhibited and reassurance is required (Ainsworth et al., 1978; Bowlby, 1969; Feeney & Noller, 1996; Waters & Cummings, 2000).

Bowlby (1969) proposes three types of stimuli that would be perceived as threats which stimulate distress and the activation of attachment behaviours: internal states such as hunger and fatigue; culturally defined and acquired understanding of dangerous environmental cues which elicit fear; and caregiver behaviours that are considered to be aversive (the rejection of the child or the absence of the caregiver). Once a threat is perceived, the child is motivated to seek a dynamic balance between stress reducing behaviours (maintaining proximity to attachment figures and home sites that are perceived to protect them, or retreat from situations considered strange) and their desire to seek out new information or explore new frontiers. Separation from the figure of attachment is mostly seen as a threat to homeostasis, so where possible children will remain within the range of protection offered by that figure (Bowlby, 1969; Bretherton, 1992; Feeney & Noller, 1996).

From Bowlby's perspective the child's tie to its mother is a reflection of the operating characteristics of the underlying homeostatic behavioural control system collating information about the infant's state of being, the state of the current environment and mental representations of access to the caregiver. The organisation of these cognitive components or mental representations, whereby the child incorporates expectations regarding the caregiver's

accessibility and responsiveness (in a variety of circumstances) into a representational model, are consolidated and elaborated through experience (Ainsworth et al., 1978; Bowlby, 1969, 1973; Cassidy, 1999; Waters & Cummings, 2000).

The inner organisation of the behavioural system is subject to developmental change through genetic guidance and is sensitive to environmental influences. However, as the inner organisation changes, the observable manifestations also change. Examination of the data from Ainsworth's Baltimore study revealed a number of characteristic mother - infant interactions across the first year of life. Ainsworth suggested that at birth, an infant is equipped with a repertoire of species specific characteristic behaviours which are used to promote proximity to a caregiver (Ainsworth, 1989).

These behaviours are initially undirected though gradually the infant begins to discriminate between people, at which time attachment behaviours are apportioned differentially (Ainsworth, 1989). It is the attachment behavioural system that enables an individual to respond flexibly to environmental changes while attempting to maintain their set goal of proximity to a caregiver. Thus an infant is capable of considering changes in the caregiver's location and behaviour, along with changes in environmental circumstances while attempting to maintain proximity (Ainsworth et al., 1978; Bowlby, 1969; Cassidy, 1999; Waters & Cummings, 2000).

When the goal of proximity is set widely, the child is able to venture quite a distance from the attachment figure before the set goal is exceeded, attachment behaviour is activated and the desired degree of proximity is restored. The degree of proximity to the attachment figure that is required by the

child differs depending on the circumstances and degree of intensity of the event that triggers it. If the attachment system is activated with a high intensity the degree and type of proximity required may alter rapidly (Ainsworth et al., 1978; Bowlby, 1969; Cassidy, 1999; Waters & Cummings, 2000).

In Bowlby's opinion the three defining features and functions of attachment relationships are proximity seeking behaviours, secure base, and safe haven use. The exploratory behaviours exhibited by the child are influenced by the child's perception of not only the availability but also the responsiveness of the object of attachment. Thus a child who is confident and secure in regards to expectations of the attachment figure tends to be more sociable, and more likely to engage in exploratory behaviour than those who feel insecure with regards to the attachment figure. Those who are insecure show either elevated levels of fear and anxiety in relationships (crying and clinging) or elements of defensiveness (avoidance of close contact) (Ainsworth et al., 1978; Bowlby, 1969; Feeney & Noller, 1996).

Moreover, an infant builds expectations of regularities or routines during their first year of life. While these routines may be considered somewhat primitive initially, the infant's daily activities become adapted to care giving routines and at some stage the infant begins to organise expectations internally into what is often referred to as 'working models' of: (i) the self; (ii) the physical environment; and (iii) attachment figures (Ainsworth, 1989; Feeney & Noller, 1996). It is the working models that are thought to persist relatively unchanged across the lifespan.

2.2 Working models of self, environment and attachment figures.

Bowlby (1969) proposed that the organisation of the attachment

behavioural system involves cognitive components which he referred to as internal working models (mental representations of the self, attachment figures and the environment). These models are hypothetical structures that provide a framework for organising our past experiences, guiding our understanding of new experiences and structuring our social interactions. In the context of the attachment behavioural system, the behavioural tendencies that are observed are those that are the result of the motivational elements of goals and needs which have evolved as a direct result of the history of the experiences of that system, along with an expanding knowledge of self and others that results from those experiences (Baldwin, 1992; Collins & Read, 1994; Feeney & Noller, 1996).

It is likely that they are formed as a result of the generalisation of mental representations of events, beliefs, and expectations. Once formed these models may operate at the non conscious level and are activated automatically when attachment related events occur. Although they possess the quality of stability, these models are subject to change when inconsistencies are experienced between the working model and the process and outcome of social interchanges. When inconsistencies are detected the process of accommodation and assimilation is engaged in order to regain a homeostatic level. Behaviour patterns that emerge as a result of the working models are also changeable when levels of satisfaction in a relationship wax and wane (Bretherton, 1985; Feeney & Noller, 1996; Main, Kaplan & Cassidy, 1985)

These working models are based on the experiences of infancy and childhood and depending on the nature of the experience will determine feelings of self worth (positive or negative) and the dependability of others (positive or

negative). Bowlby (1969) suggested that these experience based models guide the creation and nature of new relationships in a number of ways. Firstly, they are thought to be involved with expectations of the availability and responsiveness of others. Secondly they guide individual attributions of the behaviour of others in situations that are ambiguous thus influencing the behavioural response and ultimate evaluation of relationship quality

To demonstrate, let us look at the nature of a working model of a securely attached child. Typically they develop a representation of the self as being competent in eliciting care from responsive others, regulating attention flexibly across a variety of environmental situations. Because they are confident that they will be able to elicit help if necessary, they are able to divert their attention to the exploration of the environment. Conversely, an insecurely attached or avoidant child will divert attention away from stimuli that might activate the attachment system due to the fact that in the past such experiences have been met with rejection from the attachment figure (Ainsworth et al., 1978). Overall, the consistently successful attempts to maintain or gain proximity to the caregiver ensure the development of different working models of relationships to those whose attempts are consistently unsuccessful or vary unpredictably. In the latter case active reorganization of the working model, restriction, and redirection in attention, behaviour, and emotional expression are commonly witnessed (Main et al., 1985).

Furthermore a working model of self as a valued and competent individual would be constructed from a working model of caregivers who are emotionally available and supportive of exploration, while a devalued working model of self would be constructed from a working model of caregivers who are

rejecting and interfere with exploration (Bretherton & Munholland, 1999; Feeney & Noller, 1996).

Collins and Read (1994) have argued that we develop a hierarchy of working models. Beginning with a 'default' or basic working model based upon our general representations of the self and others, the hierarchy flows down through models which apply to particular kinds of relationships (such as parent and child, husband and wife, and friendships) to specific models which are applied to individual people within our lives. For instance it is possible for a person to have one working model which is applied to the mother and another which is applied to the father. Given that the top of the hierarchy is based upon our history of relationships it is safe to assume that each individual level of the hierarchy is linked through its association with the general model from which it evolved (Collins & Read, 1994).

Collins and Read (1994) suggest that working models consist of four interrelated components (our memory of attachment related experiences; beliefs, attitudes and expectations of the self and others in relation to attachment experiences; attachment related goals and needs and the strategies and plans used to achieve them) which vary according to attachment style.

2.2.1 The concepts of secure base and safe haven

According to Bowlby, the exploratory system allows the child to gain valuable information about their immediate environment thus providing a survival advantage. Through exploration the child acquires knowledge about using tools; building structures, obtaining food and negotiating contact with physical objects (Bowlby, 1969).

A central component of the attachment behavioural system and the

exploration system is the concept of a secure base or the preferential use of someone as a secure base from which to explore. When a child is located in a comfortable setting and has an attachment figure close by the opportunity for exploration is enhanced. Alternately if a child makes an assessment of the environment, senses danger and is unable to locate the caregiver, the attachment behavioural system will be activated and exploration will no longer be viewed by the child as a viable option. An attachment is deemed secure if the skilful or successful use of the secure base over time, within the context of the naturalistic setting, along with confidence in a caregiver's availability and responsiveness can be observed (Waters & Cummings, 2000).

2.3 Moving beyond infancy – adult attachment

Despite the fact that Bowlby (1979) proposed that attachment occurred throughout the life span, and within the context of adult relationships, little empirical attention was paid to this component until the research of Hazen and Shaver in 1987. Since that time attachment theory has been acknowledged as one of the major theoretical frameworks for the study of romantic relationships, largely due to its capacity to explain the development, maintenance and dissolution of close relationships (Simpson & Rholes, 1998; Cassidy, 2000; Fraley & Shaver, 2000).

Bartholomew (1990) suggested that the long term effects of an infant's early experience with caregivers are due to the persistence of internal working models of the self applied to close relationships. Hence it could be expected that these working models would influence a person's expectations, emotions, defences and relational behaviours in all close relationships. Thus the effects of childhood attachment relationships could be seen in adulthood within the

domains of parenthood, close peer and romantic relationships (Bartholomew, 1990; Simpson & Rholes, 1998; Weiss, 1991).

Weiss (1991) suggested that the functioning of attachment bonds in close relationships in adulthood mimics that of infant – caregiver relationships in the following ways:

- Proximity-seeking: A desire to be in the company of the attachment figure and remain in close range when a threatening situation is perceived
- Separation protest: Signs of distress are exhibited when emotional or physical separation (actual or implied) is perceived. Attempts to avoid the separation are usually made.
- Secure base: A sense of security and confidence is derived from a relationship which leads to environmental exploration.
- Safe haven: The comfort of the attachment figure is sought in times of stress
- Activation: In times of heightened anxiety attachment behaviours are activated and there is a definite orientation towards the partner
- Specificity: There can be no substitution of the attachment figure even when the quality of care and attention is equivalent
- Persistence: In the event of permanent separation - attachment feelings and separation protest persist. There is no habituation of attachment feelings over time. Attachments tend to persist even when the behaviour of the attachment figure is abusive.

Moreover, it is thought that the attachment experiences we have as children become generalised into our adult relationships across a normative developmental sequence: childhood attachment to parents and caregivers; the replacement of early attachments to parents and caregivers with attachments to romantic partners and friends during the period of adolescence; the selection of a suitable adult attachment figure (Weiss, 1991).

During the 1970's researchers began to use Bowlby's and Ainsworth's ideas as a framework for understanding the nature of adult loneliness and love. It had been noted that many lonely adults reported troubled childhood relationships with parents and distanced or overly obsessive relationships with romantic partners. These insights led to the suggestion that attachment history might influence the frequency and format of adult love and loneliness (Rubenstein & Shaver, 1982; Shaver & Hazen, 1987; Weiss, 1973).

Researchers had also observed a number of differences in the way people approach close relationships and set about developing taxonomies of individual difference to characterise this (Lee, 1973, 1988; Hendrick & Hendrick, 1986; Sternberg, 1986). However, as invigorating as these developments were, there was still no theoretical framework within which to explain the normative components of love or to organize and explain the individual differences that had been observed (Hazan & Shaver, 1994).

In 1987, Hazen and Shaver decided to address this need for a theory, conducting a study in which they conceptualized romantic love, or pair-bonding, as an attachment process that follows the same sequence of formation, and results in the same kinds of individual differences as infant-parent attachment.

In their 1987 study, Hazen and Shaver attempted to assess in adults the

kinds of "attachment styles" identified by Ainsworth et al., (1978) during studies of infant-mother attachment. With a focus on romantic attachment, Hazan & Shaver wrote three type-descriptions, discussed below, that were theoretically based on the three infant categories, but operating in the realm of romantic relationships.

Hazen and Shaver (1987) suggested that the formation, maintenance, and dissolution of affectional bonds in adult romantic relationships can be understood using the same principles that have been outlined with respect to infant attachment processes. The purpose of their study was to create a coherent framework for understanding love, loneliness and grief across the life cycle.

The authors suggested that attachment theory had the potential to explain the underlying dynamics of various forms of love and also to shed some light on the development of individual difference in relationship styles. Moreover, attachment theory had the capacity to explain both positive and negative emotions experienced in relationships and to articulate these forms of love as plausible adaptations to specific social circumstances. It was also hoped that the relationship between love and loneliness could be teased apart using Bowlby's (1969) theories of separation and loss (Hazen & Shaver, 1987).

In order to measure adult attachment styles Hazen and Shaver (1987) developed a self selection, three category measure of adult attachment styles based on theoretical extrapolations of Ainsworth et al.'s (1978) descriptions of infants. Respondents were asked to choose one of three paragraphs that best described how they generally felt in romantic relationships. Based on the compilation of results from previous research of American infant samples (62%

secure, 23% avoidant, and 15% anxious ambivalent for American infant samples), they believed a greater portion of participating adults would classify themselves as secure, with a reasonably even distribution across the remaining categories of anxious/ambivalent and avoidant (Hazen & Shaver, 1987).

In a sample of 620 participants (age range: 14 to 82) they found 56% classified themselves as secure, 25% avoidant and 19% anxious ambivalent. As the results represented similar proportions to those found in infant attachment they suggested it indicated the responses to questions were non random and could have been related to similar processes to underlying infant attachment.

The initial studies conducted by Hazen and Shaver (1987, 1990) documented theoretically meaningful differences between secure, anxious/ambivalent, and avoidant adults in terms of how they approach and experience their romantic relationships and how they engage in the exploration of their environments. Research has also attempted to define factors that contribute to the success or failure of close relationships (Hendrick & Hendrick, 2000; Frei & Shaver, 2002).

Largely due to the ease of administration and the brevity of the Hazen and Shaver (1987) scale, many researchers adopted this method of self report assessment. A number of researchers, however, noted that the categorical nature of the measure assumed that each attachment style was independent of the others, and it did not allow for an assessment of the degree to which each style was characteristic of an individual (Collins & Read, 1990; Hazen & Shaver, 1987; Simpson & Rholes, 1998). In order to address these limitations, continuous rating scales were developed.

Bartholomew (1990) and Bartholomew and Horowitz (1991) argued for a four-style conceptual scheme that included the Hazen and Shaver (1987) styles, but added a second kind of avoidance (dismissing-avoidance, based on a similar category in the Adult Attachment Interview). The Relationship Questionnaire is a single item measure consisting of four short paragraphs describing typical attachment patterns as they apply to close relationships. Participants are required to rate their degree of correspondence to each prototype using a seven-point likert scale.

Underlying the four attachment styles are two dimensions, Model of Self and Model of Other. The two dimensions are derived using linear combinations of the four prototype attachment styles (see Figure 2.1). The Relationship Questionnaire was used in the current study to assess interpersonal attachment; it was also used as a basis for the development of the Home Attachment Scale which will be discussed in Chapter 4.

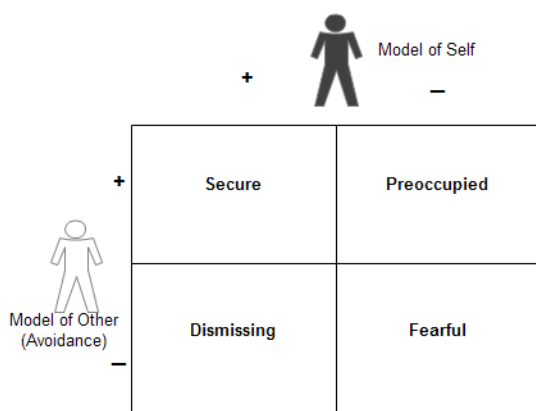


Figure 2.1 Four-category model of adult attachment (Bartholomew & Horowitz, 1991)

Brennan, Clark and Shaver (1998) conducted a large factor-analytic study in which all of the published self-report attachment measures were included in a single analysis. They found twelve surface factors which, when

factored, formed two more global factors referred to as attachment related anxiety and avoidance. People scoring high on attachment related anxiety tend to be concerned about the availability of their partner and how responsive and attentive they are.

Conversely, those scoring lower on attachment related anxiety tend to be more secure in relation to the perceived responsiveness of their partner. In contrast, those scoring higher on attachment related avoidance, generally prefer not to rely upon others and choose not to be open with them, whereas those scoring lower are more comfortable with intimacy, depending upon others and having others depend upon them. The result of this study was the publication of a 36-item measure (including an 18-item scale to measure each of the two major dimensions of anxiety and avoidance) referred to as the Experience in Close Relationships scale (ECR).

In support of Brennan et al's, (1998) two dimensional model, taxonomic research conducted by Fraley and Waller (1998), confirmed that there was no evidence for an attachment typology as the conceptual styles are in fact regions in a two dimensional space. It was recommended that attachment be conceptualised in dimensional terms, as precision is lost whenever typological measures are used instead of the continuous scales. Hence, adult attachment is generally defined using four styles of attachment (secure, preoccupied, fearful and dismissing) and two dimensions of anxiety and avoidance.

Thought to reflect the bipolar positive/negative nature of the individual's model of self, the anxiety dimension is reflective of a person's perceived self worth and acceptance versus rejection, while the avoidance dimension reflects

the positive/negative nature of a person's model of other, and essentially reflects approaches to, or avoidance of, intimacy and interdependence with others (Fraley & Waller, 1998).

Secure adults are conceptualised to be low in both anxiety and avoidance; preoccupied adults are high in anxiety and low in avoidance; dismissing adults are low in anxiety and high in avoidance; and fearful adults are high in anxiety and high in avoidance. Theoretically this equates to secure adults who generally accept that they are valued by others and as such are comfortable with intimacy and the need to rely upon others for support when needed. Fearful adults crave close relationships but tend to avoid them because of their concerns about rejection. Preoccupied adults exhibit an exaggerated desire for closeness and the acceptance of others, and dismissing adults place more emphasis on self reliance and independence than close relationships (Fraley & Waller, 1998).

A further comprehensive analysis of 300 items from previous self report measures of adult romantic attachment was conducted by Fraley, Waller, and Brennan (2000). This analysis led to the development of the Revised Experience in Close Relationships Scale (ECR-R) and further support for the two dimensions of anxiety and avoidance. The ECR-R was used in the current study as the second measure of interpersonal attachment.

With attachment theory providing such a promising approach to the study of close interpersonal relationships, research began to explore links with other variables known to impact upon the formation and maintenance of adult relationships. Given that personality characteristics have been determined to play a significant role in the development, and maintenance of romantic

relationships (Amato & Booth, 2001; Gattis, Berns, Simpson, & Christensen, 2004; Donnellan, Larsen-Rife, & Conger, 2005) links between personality and attachment theory soon became evident.

Early links were suggested in research conducted by Hazen and Shaver (1990) who found that avoidant and anxious ambivalent groups scored higher than secure groups on measures of depression and anxiety. Shortly thereafter, in a study designed to assess predictors of relationship quality and outcomes using the NEO-PI and the Hazen and Shaver three category model of attachment, Shaver and Brennan (1992) reported that participants classified as secure were less neurotic and more extraverted than insecure subjects and more agreeable than those classified as avoidant,.

Further studies have suggested that attachment anxiety is moderately associated with Neuroticism, Agreeableness and Conscientiousness and that attachment avoidance shows moderate negative correlations with Extraversion and Agreeableness (for a review of these studies refer to Nettle and Shaver, 2006).

Using the NEO-PI-R (Costa & McCrae, 1992), the 44 item Big Five Inventory (BFI; John, Donahue, & Kentle, 1991; John & Srivastava, 1999) and the 36 item Experience in Close relationships scale (Brennan, Clark & Shaver, 1998) Nettle and Shaver (2006) found consistent and theoretically meaningful associations between the interpersonal attachment and personality measures. Similar to previous studies they found that both attachment anxiety and avoidance correlated positively with Neuroticism and negatively with Conscientiousness. They also found higher levels of attachment avoidance were associated with low scores on Agreeableness. The current research will

use the BFI and the revised Experience in Close Relationship scale to investigate links between interpersonal attachment, place attachment, personality characteristics and the experience of childhood place and home.

This chapter has provided a brief historical overview of the development of attachment theory, the concepts that are considered to be vital components of that theory (the concepts of the attachment behavioural system, and mental representations of self, other and environment) and the research that has taken the theory beyond infancy and into the realm of adult relationships. The following chapter will discuss the theoretical similarities between interpersonal attachment and place attachment, further elaborating a model of environmental attachment.

Chapter 3 Theoretical position, aims and objectives

The preceding literature review has provided an overview of research covering place attachment, attachment to the home and possessions and interpersonal attachment. This chapter will explore theoretical linkages between attachment to place (focusing on the home environment) and interpersonal attachment. I will begin by examining the qualification of an attachment figure and an attachment place. I will then discuss the key concepts of the attachment behavioural system (proximity seeking, secure base, safe haven, the effects of separation and loss), and working models of self, other and the environment, before considering some of the differences between the two areas of research. The chapter concludes with the elaboration of the theoretical position of the current study and its aims and objectives.

3.1 The qualification of an attachment figure or place.

In 1988 Bowlby asserted the importance of intimate emotional bonds to a particular individual as a basic component of human nature which has a key survival function – protection. Ainsworth (1989) suggested that affectional bonds be seen as different to relationships for a number of reasons. They are relatively long lasting, where relationships are often short term. Affectional bonds involve the internal organisation of the working models of an individual as opposed to relationships which are actually dyadic. Affectional bonds are specific in their definition and purpose whereas relationships are varied in the components that constitute an interactional history, not all of which would constitute an affectional bond. In 1989 Ainsworth defined an affectional bond as follows:

A relatively long enduring tie in which the partner is important as a

unique individual and is interchangeable with none other. In an affectional bond, there is a desire to maintain closeness to the partner. In older children and adults, that closeness may to some extent be sustained over time and distance and during absences, but nevertheless there is at least an intermittent desire to re-establish proximity and interaction, and pleasure - often joy - upon reunion. Inexplicable separation tends to cause distress, and permanent loss would cause grief. (p. 711)

Moreover, she believed there was one further criterion of attachment that is not always present in other affectional bonds. This is the seeking of security and comfort which, if found in the relationship, combined with the ability to confidently move away from the secure base provided by the partner, allows the person to engage in exploration and other activities.

Following from Ainsworth's (1989) definition of what criteria constitutes an affectional bond I suggest the following could be used as a basic definition of an affectional bond to 'place' within the realm of the attachment/exploration system. Place attachment involves a relatively enduring tie in which the 'place' is important as a unique entity, interchangeable with none other. There is the desire to maintain closeness to the 'place' which may to some extent be sustained over time and distance and during absences. There is at least an intermittent desire to re-establish proximity and interaction. The seeking of closeness to this 'place' (if found) results in felt security and a sense of comfort. Pleasure, often joy, is experienced upon reunion with this 'place'. Inexplicable separation would cause distress and permanent loss would cause grief. In other words the dynamics of place and interpersonal attachment are interchangeable.

With this definition in mind can we regard bonds to place as affectional bonds? There are a number of criteria raised in this definition that need to be

explored as they appear as recurring themes throughout the literature on both place and possession attachment.

Evidence of the enduring nature of the relationship between people and place and people and possessions is a widely recognised aspect of the place attachment and possession attachment literature and has also been reinforced in the preceding literature review in the section on the '*Interactional history of place and possessions*' (Belk, 1992; Brown & Perkins, 1992; Csikszentmihalyi & Rochberg-Halton, 1981; Giuliani, 1991, 2003; Hay, 1998; Low & Altman, 1992; McCracken, 1988; Milligan, 1998; Myers, 1985; Relph, 1976; Stokols & Shumaker, 1981; Williams et al., 1992).

The consideration of place and possessions as unique entities interchangeable with no other has also been well articulated through research conducted across the last two decades (Belk, 1992; Cooper Marcus, 1992; Csikszentmihalyi & Rochberg-Halton, 1981; Dovey, 1985; Milligan, 1998) and is the focus of the section on '*Decommodification and Singularisation*' reviewed in chapter one.

The next criterion to be considered is the seeking of closeness, which if found, results in felt security and a sense of comfort. Research has focused on the restorative effects of place (Kaplan & Kaplan, 1989) and the feelings of comfort, security, belonging, self expression, freedom of expression and anchoring that accrue from place attachment (Moore, 2000; Smith, 1994; Tognoli, 1987). Ryan (2005) suggested that natural environments provide a context in which people are able to manage incoming information more effectively thus permitting people to explore in comfort and with confidence. Fried (2000) suggested that people maintain proximity to a place because of the

sense of security it provides. Hay (1998) found that certain behaviours are fostered by the security and comfort that is afforded by attachments to place and the expression of these behaviours differ according to stage of life. Belk (1990) suggested that possessions we see daily tend to reflect stability and provide a sense of comfort, warmth, familiarity and routine (Belk, 1990).

The criterion that incorporates felt distress that is caused as a result of separation and grieving that is experienced with permanent loss has been of interest in the area of place attachment since Fried's (1963) study on the relocation of people from West End Boston. This is perhaps best articulated in this quote:

Any severe loss may represent a disruption in one's relationship to the past, to the present, and to the future. Losses generally bring about fragmentation of routines, of relationships, and of expectations, and frequently imply an alteration in the world of physically available objects and spatially oriented action. It is a disruption in the sense of continuity which is ordinarily a taken for granted framework for functioning in a universe which has temporal, social and spatial dimensions (p. 232).

Furthermore, Fried suggests that "the loss of an important place represents a change in a potentially significant component of the experience of continuity" (p. 232). Further evidence has been reviewed in the section on '*The emotional complexity of the bond between people and place*', in chapter one. In the section below, '*the effects of separation and loss*' are considered.

As the seeking and gaining of proximity and the desire to maintain closeness to a place which is sustained over time and distance plays such an important part in the determination of an affectional bond and the classification of an attachment figure, the following sections have been devoted to the explication of an environmental correlate of this bond.

3.2 Key components of the attachment behavioural system

3.2.1 Proximity seeking

According to Bowlby (1969), attachment behaviour forms part of an organised behavioural system which encompasses a number of behaviours (crying, smiling) designed to establish and maintain proximity to an attachment figure. He refers to the attachment behavioural system as part of a network of interlocking behavioural systems (including exploration, care-giving, and sexual mating) which promote survival and procreation. Attachment to people and places and a fear of the novel and new may be seen as part of this group of interrelated behavioural systems which function to maintain a steady homeostatic state between the person and the environment. The overall goal of the attachment system is to strike a balance between desired levels of exploration and maintaining proximity to an attachment figure, thereby achieving an adequate level of 'felt security'.

In Bowlby's (1969) opinion the behaviours observed when a person encounters threats or stress in an environment (vocalising, clinging, proximity seeking) are due to an innate, functional and goal corrected attachment behavioural system, just as the behaviours exhibited by the caregiver in response to distress signals are due to the care-giving behavioural system. These behavioural systems (which are part of a larger network of systems including exploration, affiliation and sex) govern the choice, activation and termination of behavioural sequences which are aimed at achieving set goals and ultimately improving individual survival and reproduction.

Behavioural sequences are activated when internal mechanisms or environmental conditions signal the presence of a threat which highlights the

possibility that a set goal will be required and deactivated when stimuli are detected that signal the goal has been attained. Hence these systems are activated and deactivated by states of anxiety which may arise from the perceived distance from the caregiver, the loss of control that the child has over the distance from the caregiver or another form of environmental stimuli which causes anxiety. Once anxiety is detected the behavioural system directs behaviour toward the set goal of proximity or contact to the attachment figure, and deactivates once contact is re-established (Bretherton, 1992; Mikulincer & Shaver, 2007).

Evidence of goal directed behaviour has also been found within the literature on place attachment. Stokols and Shumaker (1981) suggested that attachment forms when a place provides the resources required for goal attainment, and the use of those resources is frequent. Williams et al., (1992) found evidence to suggest that place satisfies one's needs and goals, and cannot easily be replaced. Ryan (2005) found that natural settings support human functioning by providing pleasure and satisfaction, hence it is possible that attachment to particular settings may emerge from our interactions with that setting which are driven by a desire to satiate a specific need. Therefore we are drawn to a place with the expectation of fulfilling a specific outcome whether psychological, social or physiological.

Weiss (1991) believed that an object of attachment must be the target of proximity maintenance. We see evidence throughout the lifespan suggesting the desire to visit or revisit cherished places of our childhood (Cooper Marcus, 1992; Brown & Perkins, 1992; Harris, Brown & Werner, 1996). There is evidence of the nostalgia that is felt in adulthood upon the recognition of the

loss of a childhood place (Chawla, 1992), and evidence of places with which we have developed an emotional bond (Williams, Patterson, Roggenbuck & Watson, 1992; Williams, Anderson, McDonald & Patterson, 1995). Our attempts to memorialise these places with souvenirs and memorabilia provide us with tangible, temporal links to a place (Belk, 1992; Csikszentmihalyi & Rochberg-Halton, 1981; Cooper Marcus, 1995; Rubinstein & Parmelee, 1992). Hidalgo and Hernandez (2001) have also noted that one of the main characteristics of the bonds we form with place is a tendency for the individual to maintain closeness to such a place.

Fried (2000) noted that individuals often engage in efforts to remain within the protective range of familiar places, maintaining proximity because it offers protection and a sense of security, which in turn, allows for exploration and confidence. As with interpersonal attachment, when a threat is perceived the range of exploration is reduced, individuals seek to remain close to home and exhibit a kind of clinging behaviour. In the event that the place of attachment is threatened in some way, those who have formed attachments will display evidence of separation protest, actively trying to protect it, or prevent being separated from it. Thus, place attachment is often characterised by evidence of the strong emotional bonds that formulate and maintain this connection.

Moreover, attachment bonds established with place and the attachment behaviour exhibited as a result tend to be more intense among vulnerable populations such as immigrants, and show further similarity to the intensity of interpersonal attachment behaviours among vulnerable individuals such as those who are pregnant or ill (Fried, 2000).

Further support for proximity maintenance behaviour is found in the research of Williams et al., (1982) that indicates higher levels of place attachment lead to a higher frequency of place use, and the work of Hay (1998) which suggests that length of residence is related to feelings of attachment to place.

In 1992 Chawla suggested that object relations theorists have long assumed that a child's feelings for places and objects are a developmental extension of its relationship to its mother, hence leading to uncertainty as to whether place attachments are secondary effects of social attachments or should in fact be considered in the light of an entirely different theory.

Using the somewhat narrow criteria of childhood attachments measured by the degree to which a child seeks to keep a primary caregiver in close proximity, and displays distress on separation from that figure and a sense of joy on their reunion, Chawla argued for the formulation of a basic definition of what attachment to place may be in relation to children. Using this logic an attachment to place involves a display of happiness at being in place, regret or distress when removed from it, and the valuation of that place for its own intrinsic qualities as opposed to the singular appreciation of its physical needs (Chawla, 1992).

As an illustration, Chawla describes a preschool child who is attached to a place where they not only find secure nurturance, but also the facilitation of exploration and appropriation of space and the objects within it. The range of this exploration is limited by family rules and the limited independence which is part and parcel of being a child. Hence they become attached to a succession of expanding places emanating from the home as centre. These environmental

transactions begin with areas close to home. They move from mixed sex play in preschool, to expansive engagements with the local area (neighbourhood and greater social community) with same sex friends in middle childhood. They progress to the formation of mixed sex groups which leads in adulthood to a retreat to the cherished privacy of their own homes in conjunction with the desired and actual use of distant locations (Chawla, 1992).

3.2.2 Safe haven and secure base

Ainsworth (1991) noted that when security and comfort are available from a partner, the individual can move away from the safe base provided by that relationship and engage in other activities. Chawla (1992) and Hay (1998) noted that the same may be said of moves away from a home base or other place of attachment, as research suggests that physical environments satisfy the need for exploration and the need for a secure base. Hay also noted that the development of a sense of security, safety and comfort in relation to place, fosters the expression of behaviours that are expressed differently depending on the stage of life.

For instance, early childhood sense of place is characterised by feelings of security and a range of places which are usually limited to the home and its immediate surrounds and the company of family, friends and schoolmates. As children get older, the range of place is greater as they are allowed to play and roam for greater distances often without the watchful eye of parents. As young adults we seek a partner and a place to settle down and possibly raise children and as we progress through adulthood, attachment to place may be expressed as a desire to become involved with and remain in that community.

According to Schachtel (1959) if a mother's love is secure and

dependable a child will tolerate and embrace challenges and uncertainty in the environment. If the opposite is found to be true the child will seek an unchanging environment as substitute for secure care giving. This suggests that while a place may be valued as a source of familiarity and routine (elements which afford feelings of comfort and contentment), it may also be valued and embraced as a source of excitement and challenge. In reality we oscillate between the two, but in times of insecurity we may cling to the familiar at the expense of the exciting and new (Chawla, 1992).

Searles (1959 as cited in Chawla, 1992) proposed a four-stage sequence of human relations with the physical environment: an initial lack of differentiation between the self and the world; a sense of personal identity as a result of the interactions with the world around us; a period of ambivalence; and the acceptance of human uniqueness which allows a relatedness with the world around us as one becomes openly attentive to that world. This essentially represents the maturing of attachments which culminates in a sense of peace, stability, continuity and certainty or in essence a secure attachment.

3.2.3 The effects of separation and loss

Reactions similar to the loss of a loved one are often felt in relation to objects and places. Whether caused by burglary, conflict, natural disaster or other environmental changes, disruption to the home and other environments which people feel attached to often lead to feelings of grief, loss, despair, and anxiety, and the disruption of established networks of social support (Brown & Perkins, 1992; Fried, 2000).

Fried (1963) noted the presence of a disruptive psychological experience in the sense of loss and grief that resulted from the forced relocation of people.

From a psychodynamic viewpoint he suggested a parallel between the grief responses exhibited with the loss of significant people and the loss of place, such that forced relocation represents a disruption in the sense of continuity that ultimately leads to the disruption of meaning, spatial and group identity. Brown (1982) noted that victims of theft often exhibit a wide range of aversive emotional reactions including a loss of perceived control and a lower sense of community. Belk (1988) noted similar reactions in victims of natural disasters and Korosec-Serfaty (1994) found that victims of theft endure feelings of invasion similar to those reported by rape victims.

Brown and Perkins (1992) suggested that an examination of disruptions in place attachment illustrate the fundamental importance of place in the everyday existence of people. Individuals often struggle to define their losses as attachments to place develop slowly but may be disrupted quickly thus creating a long phase of dealing with the loss and either repairing or recreating that attachment.

The literature on homesickness reveals intense longing for a favourite home and other places left behind, with many detailing the move in terms of emotional resistance. Brown and Perkins (1992) noted that students in the United States indicated that feelings of missing the physical environment of home increased over time and although feelings of identity disruptions and the loss of family and friends peaked in the first semester, they largely decreased in the second semester as ties with the new environment were forged. Furthermore, Riemer (2000) suggested that a person's 'sense of home', fond memories and meaningful social relationships with family and friends, can serve as a stable feature in an unstable environment brought about by a job

relocation. Riemer (2000) also noted that when we are away from home, there are commonly feelings of being adrift, or 'homesick', and there is often a preoccupation with searching for a way back 'home'.

Involuntary relocations which are often sudden can lead to an overwhelming sense of instability. Often involving injury, loss of life and possessions these relocations invariably involve changes to the definition of self and reveal the importance of place in sustaining a rich set of interconnected identities linking people, their homes and their community (Brown & Perkins, 1992). Similarly, Rosenblatt, Walsh and Jackson (1976) talk of the period of mourning and grief experienced upon the loss of special possessions.

Having articulated similarities between place attachment and interpersonal attachment in relation to the key components of the attachment behavioural system, the next section will highlight similarities between working models of self, other and the environment.

3.3 Working models of self, other and environment

The concept of working models or mental representations is central to the theory of interpersonal attachment. As a child grows their mental representations of themselves, the world around them, and the significant others that share that world with them also grows. These mental representations are said to guide attachment cognitions and behaviour across the lifespan, thus influencing the way we explore and interpret the world (Bowlby, 1973; Bretherton, 1985).

Working models or mental representations of attachment are thought to be core aspects of the personality which influence a person's cognitions, emotions and behaviours in an attachment related situation. Differences in

attachment style which we witness in adults and children, are said to represent systematic differences in the underlying models of self as being worthy of love and support and others as reliable and trustworthy. Although these models develop during childhood, they evolve across the lifespan according to experience, exhibiting both the enduring quality of the models and the malleability of our reactions to them (Bowlby, 1969; Bretherton, 1985).

Bowlby (1969) identified two key components of working models, the child's experience of others as being available and responsive to their needs and the child's image of themselves as being worthy of love and protection. These experiences are either positive or negative. Bartholomew (1990) suggested that the positive and negative models of self and other as proposed by Bowlby could be combined to provide prototypical forms of adult attachment conceptualised as the four dimensions of secure (positive model of self and others), preoccupied (positive model of other and negative model of self), dismissing (positive model of self and negative model of other) and fearful (negative model of self and other). The prototypes were then summarised to provide theoretical descriptions of what each would be like.

To apply a similar logic in regard to place attachment would imply a working model that contained positive and negative models of self and relationships to place, as illustrated in Figure 3.1. Hence I would suggest prototypical forms of environmental attachment be conceptualised into the four dimensions of secure (positive model of self and place), preoccupied (positive model of place and negative model of self), dismissing (positive model of self and negative model of place) and fearful (negative model of self and place).

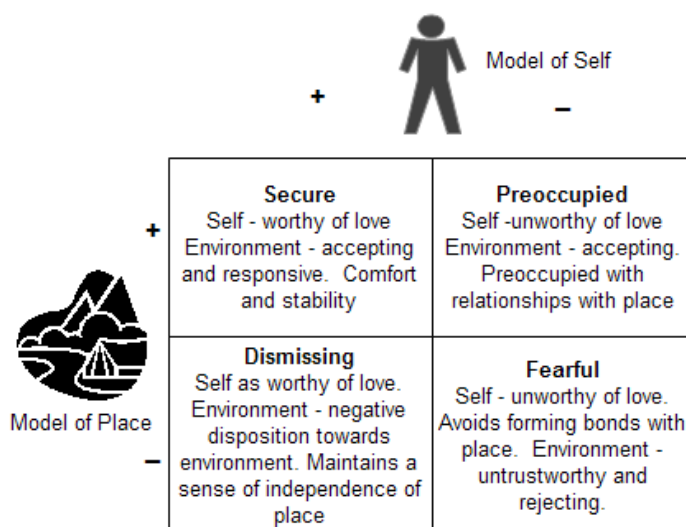


Figure 3.1 Prototype model of place attachment (adapted from Bartholomew and Horowitz, 1991).

Summaries of each prototype in relation to place attachment could then be theorised as follows:

- Secure** An image of place as an environment that is accepting and comforting. There would be an indication of a sense of the stability the place provides and the valuing of that place, the capacity to maintain a close bond to the place without losing an appreciation of the exploration of other environments, and a coherence of thought displayed during discussions involving the place.
- Dismissing** Characterised by the dismissal of the importance of place, the restricted display of emotionality in regards to place, an emphasis on independence and self-reliance in relation to place as opposed to a need for comfort and stability, and a lack of coherent patterns of thought when discussing relationships with place.

- Preoccupied** Overly reliant upon place, exhibiting a dependence on place for a sense of personal well-being, and the tendency to idealise the places identified as favourites. Demonstration of a level of exaggerated emotionality when discussing relationships with those places.
- Fearful** Characterised by an avoidance of the formation of any relationship with place due to a fear of loss, a sense of insecurity in place, or an inability to recognise and appreciate the level of comfort and stability afforded by place.

Having examined a prototypical approach to place attachment as a correlate to interpersonal attachment prototypes I will now examine the literature surrounding the structure of working models in relation to place.

As previously discussed in chapter 2, Collins and Read (1994) believed that working models shape our emotional, cognitive and behavioural responses to others by determining not only how we select, interpret and evaluate other people and our interactions with them, but also the plans we put in place for dealing with them. They suggested that we develop a hierarchy of working models consisting of four interrelated components which vary according to attachment style (memory of attachment related experiences; beliefs, attitudes and expectations of the self and others in relation to attachment experiences; attachment related goals and needs and the strategies and plans used to achieve them). They suggested that the attachment network is structured hierarchically across three levels.

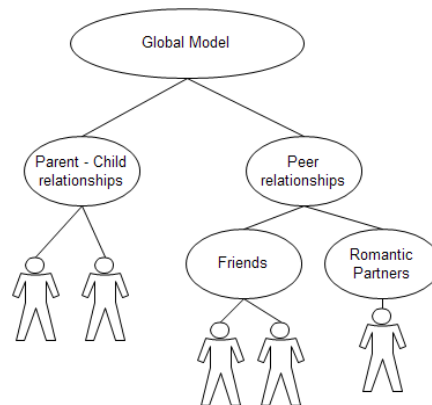


Figure 3.2 Hierarchical structure of working models for interpersonal attachment (adapted from Collins & Read, 1994; Feeney & Noller, 1990).

The most general or global level contains a general representation of relationships across all domains. The mid level contains representations of relationships with particular domains of people (romantic partner, parent, child etc) and the most specific level applies to specific individuals within each of those domains (husband/wife, mother/father etc).

This was substantiated in research conducted by Overall, Fletcher and Friesen in 2003 (see Figure 3.3) which found evidence of the three level hierarchical structure of the network of attachment representations regardless of gender and relationship status.

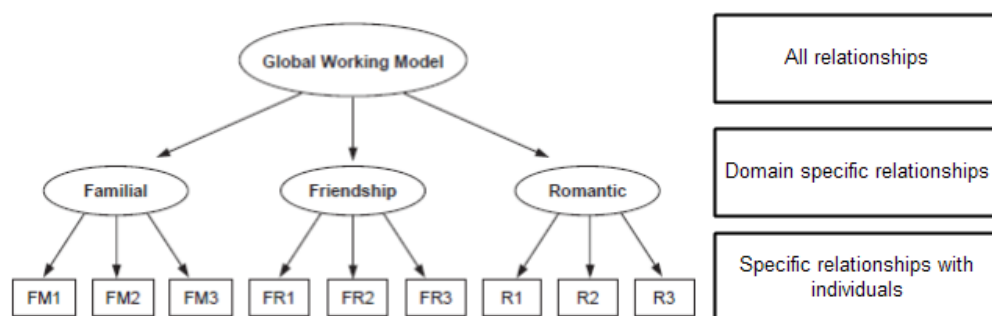


Figure 3.3 The hierarchical nature of attachment representations (Overall, Fletcher & Fiesen, 2003)

It was further supported in research conducted by Sibley and Overall

(2008) which demonstrated domain differentiation of multiple attachment representations. Domain specific representations were strongly associated with attachment ratings of specific relationships within that domain but not with attachment ratings of specific relationships in other domains (Myers, 1985)

Having examined the theoretical linkages between attachment to place and interpersonal attachment, I will now discuss the differences that have emerged.

3.4 Differences between interpersonal and place attachment

Bowlby (1969) regarded the attachment behavioural system as one that has evolved through natural selection and although there are individual differences in the expressions of and reactions to the behavioural system, they are nonetheless considered to be universal in human nature. Chawla (1986) and Morgan (2010) note that unlike interpersonal attachment, place attachment could not be considered universal or a fundamental requirement of human development as there is a much greater range of the quality of attachments to place and their perceived importance in people's lives. Chawla (1986) suggests that it is possible that in a general sense children's developing consciousness of the world is dynamic with only some cases where the experience of place is so intense that the memory of it is indelible. Hence it may be that individual differences in strength of attachment and remembered environmental experiences represent the norm when it comes to place attachments.

Morgan (2010) also suggests that there is no clearly identified attachment figure in place attachment that compares with the deeply attuned relationship that develops within interpersonal attachments. Morgan suggests that place attachments be seen as fields of attachments whereby the field is

seen as arousing the child's fascination, excitement and anxiety as opposed to an attachment figure (or object) who soothes and regulates emotional arousal. Despite this suggestion he notes that four of the participants from his research demonstrate feeling loved and supported by a childhood environment. This is a point of difference that will be challenged with the current research. I believe that individuals and groups do identify clearly with distinct places of attachment and are able to identify specific places which they rely upon for particular attachment functions. This point of view will be discussed later in light of the current study.

Based upon Ainsworth's (1989) definition of affectional bond and the criteria of longevity, felt security, the seeking and maintaining of proximity, distress at separation and uniqueness of the object of attachment, Giuliani (2003) noted some similarities in the identification of aspects typical of affective relationships between people and places, but in her opinion the differences were also marked.

Most notably she cites the evolutionary framework used by Bowlby and the generally sociocultural framework employed in place attachment research. She also cites the lack of specific hypotheses in relation to the relationships between the formation of attachment patterns and environmental experiences as a comparison to the development of affective bonds in interpersonal relationships. Giuliani (2003) suggests that the focus of research in interpersonal attachment is primarily developmental, focusing upon normative development in which the norm is secure attachment. Conversely developmental aspects of attachment to place have been largely ignored (such as the relationships between early experiences with place and the formation

and consequences of attachment patterns).

In recognition of this gap, Morgan (2010) suggested a model in which “a pattern of positively affected experiences of place in childhood are generalised into an unconscious internal working model of place which manifests subjectively as a long term positively affected bond to place known as place attachment” (p.1). In Morgan’s model, just as a working model of the attachment relationship develops as a result of repeated positively affected interactions with an attachment figure, the positively affected exploration in play, mastery and sensory interactions with the environment is internalised into an internal working model of the relationship with place.

This model proposes place attachment as a parallel system to interpersonal attachment whereby the child’s pattern of behaviour oscillates between the two antithetical poles of the physical environment and the attachment figure. Hence, the resulting long term affective bond which is formed (place attachment) is the conscious, subjective manifestation of an internal working model.

In a small exploratory study of seven adults, Morgan (2010) used qualitative accounts of memories of childhood place experience to investigate the process of internalisation and generalisation of positively affected childhood place experiences into internal working models and ultimately, place attachments. Morgan found that childhood place was intricately woven into the broader biographical narrative, as family members, family structure, culture, and the place itself all interacted to create the experience of the childhood place. Although differences were found between the degree of emotional connection to childhood places (weak to strong emotional connections), five common themes

were used to describe place experience (love, grief, pleasure, security and identity).

Morgan's (2010) results suggest not only a common process by which place attachment develops but also many parallels with interpersonal attachment research. He argues that the presence of positive affect derived from childhood experiences with place is evidenced by the emergence of pleasure as the most prominent theme throughout the narratives of his participants. Pleasure was associated with exploration, play and sensory perception as well as feelings of mastery, freedom and adventure. It was also associated with those who reported long term affective bonds to place.

A number of participants made direct links between childhood place experience and adult identity, thus further supporting a parallel link to attachment theory which suggests the central role of the attachment relationship and its resulting working models in the development of self identity. Evidence of a sense of security, familiarity and well being were associated with childhood place for the majority of participants and a sense of grief and anxiety was noted in response to separation. Some participants also made note of using a childhood place as a means of regulating emotional distress.

With reference to Ainsworth's (1989) definition of affectional bonds, Morgan argues that his research has demonstrated evidence for the longevity of relationships with place, for the feelings of pleasure and security that arise from proximity to place, for feelings of distress upon separation from the place and for a felt uniqueness of place. Although the study was limited by its small sample size, it provides a first step towards understanding the development and formation of place attachments. The challenge of elaborating this process will

be taken up in the current study.

3.5 Summary of the current study

In this chapter I have articulated similarities in the key areas of the development of affectional bonds, the key components of the attachment behavioural system (proximity maintenance, secure base and safe haven use, separation protests and goal directed behaviours), and working models of attachment. I have also qualified affectional bonds in relation to place and suggested definitional correlates of interpersonal attachment prototypes, and working models for attachments to place.

Following from the literature review, this study proposes a model of environmental attachment which incorporates the dynamic nature of the relationships between people and place. As illustrated by Figure 3.4, a global working model of attachment to place is formed as a result of the integration of the person (individual or group), the place at a physical level (aspects such as physical attributes and possessions), the place at a social level (relationships), and the process (involving feelings, thoughts and behaviours).

The global working model of attachment to place will incorporate a domain specific level (representing categories or types of places that an individual experiences) and a specific individual level (representing individual places within those domains). The thoughts, feelings and behaviours exhibited in those places are the result of the constant cycling (assimilation and accommodation) of the global working model that results from repeated experience in place. The current study will explore this proposition, analysing the types of places that we form attachments to, and our use of these environments to fulfil a range of attachment related functions. I will focus

specifically on the hierarchical nature of these relationships.

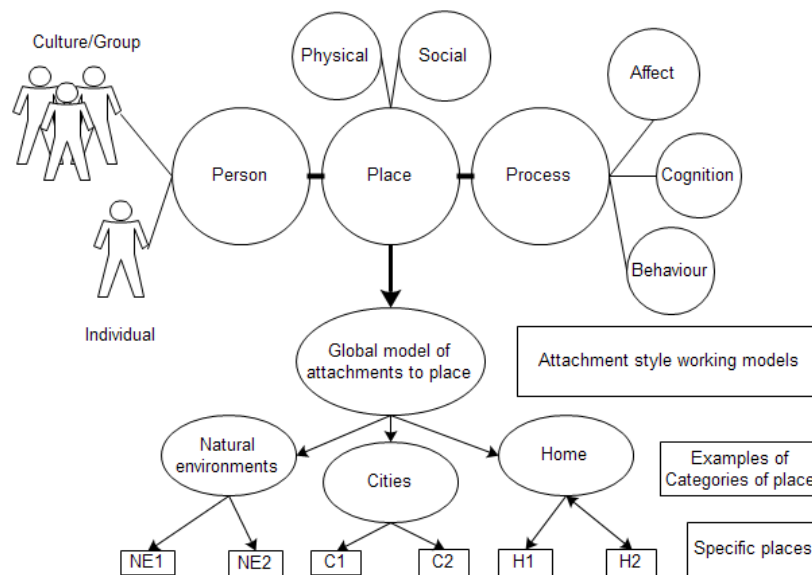


Figure 3.4 Theoretical model of environmental attachment

While many studies have alluded to the fact that similarities appear in both research areas, few have sought to actually test the proposed relationships. Hence, the goal of the current research was formulated to address a number of gaps that emerged from the preceding literature review and to explore the basic premise of a global working model of environmental attachment. The present study was designed to investigate the relationship between place attachment and interpersonal attachment (specifically in relation to the home environment), and to examine the composition and structure of environmental attachment networks.

The current research was divided into two distinct studies. The first study was designed to investigate the relationships between interpersonal and place attachment, using home as the primary object of attachment. The second study was designed to further investigate those relationships along with the proposition of a hierarchical structure of place attachment networks. The

second study also considered the influence of personality traits on the experience of place and the structure of the place attachment network. The following represents the aims and objectives of each study.

3.5.1 Research objectives and hypotheses for Study 1

The research objectives of the first study were as follows:

1. To describe and explore participants experiences and attachment to a favourite childhood place
2. To describe and explore participants experiences and attachments to the place they currently call home
3. To examine links between interpersonal and place attachment
4. To compare the experience of childhood place and current home to place and interpersonal attachment styles

As this research was largely exploratory, a number of broad a priori hypotheses were tested:

1. Patterns of attachment to place would covary with patterns of attachment to people. I expected that each of the HAS attachment styles and the dimensions of anxiety and avoidance would be positively correlated with the corresponding interpersonal attachment style and dimension. Further, I expected secure attachment styles (interpersonal and place) would be negatively correlated with the preoccupied, dismissing and fearful attachment styles and the anxious and avoidant dimensions (interpersonal and place).
2. The detail with which experiences of childhood place and the current home are described (the level of elaboration or content richness) would covary with interpersonal and environmental attachment styles. Based upon the

findings of Bartholomew and Horowitz (1991) I expected that the secure and preoccupied attachment styles would be correlated with high scores for the level of elaboration or content richness, conversely dismissing and fearful attachment styles, anxiety and avoidance dimensions would be correlated with low scores for the level of elaboration or content richness

3. Valency of emotion and affect in the reflections of a childhood place and reflections of a favourite place within the current home would covary with both place attachment and interpersonal attachment. I expected that both secure and preoccupied attachment styles would be reflected in references to positive affect experiences in place. Dismissing and fearful attachment styles, anxiety and avoidance dimensions would be reflected in references to more negative/mixed affect experiences in place.
4. References to safe haven and secure base use in the reflections of a childhood place and expressions of a sense of loss and the desire to maintain or re-establish proximity to the childhood place would covary with place and interpersonal attachment styles. I expected secure and preoccupied attachments would be positively correlated to references of the childhood place as a secure base and safe haven, sense of loss and a desire to maintain proximity. Dismissing and fearful attachment styles, anxiety and avoidance dimensions would be negatively correlated with references to the childhood place as a secure base and safe haven, sense of loss and desire to maintain proximity.
5. The type of things that are missed when a person is away from home would covary with place and interpersonal attachment styles. I expected that the secure attachment styles would positively correlate with personal

and social aspects of the home whereas the insecure attachment styles would be negatively correlated

6. The type of possessions, method of acquisition and personal meaning attributed to possessions would covary with patterns of place attachment and interpersonal attachment. I expected that secure attachment styles would correlate positively with sentimental items, those that were received as gifts and those that were inherited, whereas the insecure attachment styles would negatively correlate. Similarly I expected that items with interpersonal meaning and strong enjoyment value would correlate positively with secure attachment and negatively with insecure attachment styles.
7. Using the prototypical working models of attachment to place theorised in chapter 3 there would be clear attachment style differences in the reflected experiences of place. I expected that each attachment prototype would correlate positively with its corresponding place attachment and interpersonal attachment style. I also expected that the secure prototype would be negatively correlated with the preoccupied, dismissing and fearful attachment styles, and with the anxious and avoidant dimensions. Conversely, I expected that the preoccupied, dismissing, and fearful prototypes will be positively correlated with the anxious and avoidant dimensions.

3.5.2 Research aims and objectives Study 2

The research objectives of the second study were as follows:

1. To examine the structure of participants' environmental and interpersonal attachment networks in relation to interpersonal and place attachment styles

and personality profile.

2. To examine links between interpersonal and place attachment.
3. To examine links between interpersonal and place attachment, and personality.
4. To examine personality, interpersonal and place attachment style differences in the experience of childhood homes, the current home and neighbourhood.

There were a number of a priori hypotheses tested. As little empirical research has been conducted linking the areas of interest, a number of these are broad statements of expectations as opposed to directional hypotheses.

1. There would be interpersonal and place attachment style differences in the structure of environmental attachment networks.
2. There would be interpersonal and place attachment style differences in the structure of interpersonal attachment networks.
3. There would be personality style differences in the structure of environmental attachment networks.
4. There would be personality style differences in the structure of interpersonal attachment networks.
5. Based upon the findings of Shumaker and Taylor (1983), it was hypothesised that stronger place attachment networks would be associated with stronger interpersonal attachment networks.
6. The strength of interpersonal and place attachment networks would vary across attachment styles.
 - Secure interpersonal and place attachment would be associated with higher scores on strength of both interpersonal and place attachment

networks and the reverse would be found for insecure interpersonal and place attachment styles.

7. Patterns of attachment to place would covary with patterns of attachment to people. I expected that the secure place attachment style would be negatively correlated with the anxiety and avoidance dimensions of the interpersonal attachment measure. Further, the preoccupied, dismissing and fearful place attachment styles and anxiety and avoidant dimensions of the place attachment measure would be positively correlated with the interpersonal attachment style dimensions.
8. There would be environmental and interpersonal attachment style differences in the Big Five personality traits. I expected that people who were securely attached to place would score higher on Extraversion, Agreeableness, Openness to Experience and Conscientiousness and lower on Neuroticism. Insecure place attachment styles would record higher scores for Neuroticism and lower scores for, Extraversion, Agreeableness, Openness to Experience and Conscientiousness. Higher levels of interpersonal attachment anxiety and avoidance would be positively correlated to Neuroticism and negatively correlated to Extraversion, Agreeableness, Openness and Conscientiousness.
9. Home ownership would augment secure place attachment and the strength of environmental and interpersonal attachment networks.
10. High residential mobility would be associated with insecure place attachment
11. There would be interpersonal and place attachment style differences in the experience of childhood homes, current homes and immediate neighbourhoods. More specifically:

- The valence of emotion expressed by those who had revisited the childhood home would be positive for those securely attached (place and interpersonal attachment) and negative/mixed for the insecurely attached.
- Secure place attachment, and low levels of interpersonal anxiety and avoidance, would be associated with greater elaboration with descriptions of the childhood home, current home and neighbourhood incorporating personal, social and physical aspects. Insecure place attachment and high levels of interpersonal anxiety and avoidance would be associated with less elaboration with descriptions of the childhood home, the current home and neighbourhood incorporating less personal, social and physical aspects.
- When moving to a new home those who are securely attached (interpersonal and place attachment) would be more likely to engage in rituals of a social nature whereas the insecurely attached (interpersonal and place attachment) would be more inclined to personalise space.
- Secure place and interpersonal attachment would be associated with greater levels of place attachment, place identity, place dependence and security on the Feelings of Home Measure, and the reverse would be true for insecure place and interpersonal attachment.

12. There would be personality, interpersonal and environmental attachment style differences in the perception of neighbourhood range such that secure place and interpersonal attachment styles would record a greater neighbourhood range than insecure styles. Extraversion, Openness to

Experience and Agreeableness would be associated with greater neighbourhood range than Neuroticism and Conscientiousness.

Chapter 4 Study 1 Methods

This study was an exploration of individual differences in attachment styles in relationships to both place and people. I used a combination of quantitative and qualitative methods to examine the experience of place, attachments to place and their links to interpersonal attachment.

4.1 Participants

Participants in this study were first and second year students enrolled in Psychology courses at James Cook University (Townsville campus). These students varied in age and demographic backgrounds and were awarded course credits for their participation in the study. While this was a convenience sample, given that the testing involves reactions to interpersonal and environmental relationships, students were considered appropriate for use.

One-hundred first-year Psychology students (79% female, 21% male) ranging in age from 17 to 55 ($M = 25$, $SD = 9.11$) participated in the first study. Of this sample 69% were single, 23% were married or defacto and 8% separated or divorced.

4.2 Measures

A questionnaire booklet containing a number of new and published measures was utilised for this study.

4.2.1 Environmental Autobiography

To investigate attachment style differences in how people think about places I chose to use a qualitative measure. This measure was an adaptation of a technique used by Clare Cooper Marcus (1979, see also chapter 1, p. 18 for a review of this measure). As an introduction to the study, participants were

asked to imagine that they had been asked to write a book about their personal history focusing on significant places from the past and the present. All participants were asked to specify a pseudonym to be used for the presentation of data throughout the study. Participants were then asked to begin by providing information about their earliest recollection of a favourite childhood place. Using the same logic as Cooper Marcus (1979), a series of guided prompts were provided asking for a description of the place and how it makes them feel when they think about that place now. They were then asked to recall and share a memory of this place.

The next section of the Environmental Autobiography called upon participants to think about the place they currently refer to as home. They were required to draw a visual representation of this home using shape, colour, and words, as needed, to convey the essence of their feelings for this place. Participants were assured that this was not a test of their drawing ability, simply an opportunity to focus and portray something of the uniqueness of the environment to others.

This was followed by a series of prompts asking participants to describe the home to someone who had not seen it, asking if they had a favourite place at home, how they generally feel when they are at the favourite place, and what they miss when they are away from home. To complete this section, participants were asked to share a memory of their current home.

The next section of the autobiography related to possessions. Participants were asked to identify five of their most cherished possessions, those that they “could not live without”. They were then asked how they acquired the item and why the object was important to them.

This was followed by the demographics section, which included questions relating to: age; gender; nationality; marital status; length of time the participant has lived in the current home; the amount of times they have moved house as an adult and as a child, and their financial commitment to the home they live in.

It was expected that there would be attachment style differences in how people remember childhood places and how they relate to and perceive their current homes. The environmental autobiography may be found in Appendix A.

4.2.2 Relationship Questionnaire (Bartholomew & Horowitz, 1991)

The RQ was chosen as a measure of the four adult interpersonal attachment patterns (secure, preoccupied, dismissing, and fearful). Participants were asked to numerically rate their similarity to each of four prototypes using a seven point likert scale ranging from 'not at all like me' to 'very much like me'. This was treated as a score for each attachment style. Participants were then asked to select the one prototype that they considered to be most typical of them. This selection was recorded as their overall categorical attachment style (see Appendix B for examples of the prototype descriptors).

Ratings of attachment anxiety (model of self) and avoidance (model of others) were calculated using the formulae suggested by Griffin & Bartholomew (1994b) whereby model of self (anxiety) = (preoccupied + fearful prototypes) – (secure + dismissing prototypes) and model of others (avoidance) = (dismissing + fearful prototypes) – (secure + preoccupied prototypes). Higher scores equate to higher levels of attachment anxiety and avoidance. The scale has demonstrated strong discriminant validity (Griffin and Bartholomew, 1994a and 1994b). Sibley, Fischer, and Liu (2005) report test-retest correlations in the low

.70s over a 6 week period for the latent indicators of models of self (anxiety) and other (avoidance).

4.2.3 Experiences in Close Relationships – Revised

The second interpersonal attachment measure was the ECR-R (Fraley, Waller, & Brennan, 2000). The ECR-R is a 36-item measure of attachment anxiety and avoidance which is conceptually similar to the two dimensions underlying the RQ (Bartholomew & Horowitz, 1991; Griffin & Bartholomew, 1994). Of the 36 items in the scale half measure attachment related avoidance (“I prefer not to show a partner how I feel deep down”) and half measure attachment related anxiety (“I’m afraid that I will lose my partner’s love”). Scale items were rated on a seven point likert scale ranging from strongly disagree to strongly agree. Participants were instructed to respond to questions in relation to how they generally feel in emotionally close romantic relationships, not just what was happening in a current relationship (see Appendix C). Adequate reliability has been demonstrated for this scale (Sibley & Liu, 2004; Frei & Shaver, 2002) with Cronbach alphas of > 0.90 for each dimension.

4.2.4 HAS – Home Attachment Scale

This scale was purpose designed as an environmental analogue of the Bartholomew and Horowitz (1991) Relationship Questionnaire (RQ). The *HAS* (see Table 4.1) is a single-item measure made up of four short paragraphs describing the four prototypical attachment patterns as they would theoretically apply in relation to the home environment.

As for the RQ, participants were asked to numerically rate their similarity to each prototype on a 7-point likert scale ranging from ‘not at all like me’ to ‘very much like me’. This was then treated as a score for each attachment

style. Participants were also asked to select the one prototype that they considered to be most typical of them. This selection was recorded as their overall 'home' attachment style.

As for the RQ, ratings of attachment anxiety and avoidance were calculated using the Griffin and Bartholomew (1994b) formulae whereby place anxiety = (preoccupied + fearful prototypes) – (secure + dismissing prototypes) and place avoidance = (dismissing + fearful prototypes) – (secure + preoccupied prototypes). Higher scores equate to higher levels of place attachment related anxiety and avoidance.

Table 4.1
Home Attachment Scale (HAS)

Attachment style	Descriptor
Secure	I feel comfortable in this place; it always feels like home to me. I don't worry about having or needing to move.
Dismissing	I am somewhat uncomfortable in this place. I don't really like this place and it rarely feels like home.
Preoccupied	I find it hard to be as comfortable as I would like in this place. I am trying to make my house a home, but don't feel I'm always successful.
Fearful	I really want to feel at home but it is difficult to relax in this place. I don't feel safe in this place and often think of moving.

4.3 Procedure

Participants were asked to read and sign an information and consent sheet. They were then presented with the Questionnaire booklet and drawing materials. They were asked to complete the Questionnaire at home and return within a two week period. The response rate was 90% (110 distributed and 100 returned).

4.4 Coding the Environmental Autobiographies

Each script was coded by two independent coders who were blind to the purpose of the study. A codebook was provided containing the parameters of eligible codes for each question (see Appendix D). A subset of the scripts was used for the purpose of training coders, whereby differences in judgments could be discussed with the primary researcher and resolved. The resolution of differences was accomplished in a consultative forum between the two coders and the researcher. Where agreement could not be reached the code was not scored. Once training was completed coders were instructed to proceed through each question in order until complete.

4.5 Coding Criteria

The prompts used throughout the Environmental Autobiography were designed to assess the participants' characteristic experiences and feelings toward place with a focus on a favourite childhood place and the current home. Each question was treated as a separate data set. Responses provided by participants for each question were read repeatedly by the primary researcher until recurrent themes became apparent (Krippendorff, 1980; Strauss and Corbin, 1990). Some of the developed themes were guided by previous research while others were based upon emergent themes.

In most cases responses were coded for the presence or absence of a theme as opposed to a frequency count. The reason for this was to attenuate for those responses that were repetitive in content as it was felt that these scripts would unduly influence outcomes. The following sections discuss the process of coding used for each question, and provide coding instructions and examples of relevant scripts.

4.5.1 Identification of a childhood place

One of the research objectives for this study was to explore participant's experience of childhood place; hence the first section of the autobiography required participants to identify a favourite childhood place. Places which were identified were coded as being inside, outside, or away from home and those that were experienced alone or with others. Perfect agreement across coders was reached.

4.5.2 Descriptions of a childhood place

Participants were asked to describe their favourite childhood place. Guided by previous research, an initial analysis of the scripts revealed eight themes which were organised into the three codes previously utilised by Sixsmith(1996) and Smith (1994); themes relating to the personal aspects or the experience of place, social relationships and the physical entity of the place were coded. The personal aspects of place included statements relating to the atmosphere of the place, evaluations of the place, personal freedom, privacy and control of space, and the personalisation of space. Social aspects of place related to statements referring to family members, other people and social occasions, and the physical entity of the place included comments detailing the physical appearance of the place and the location.

Coders were provided with a checklist (see Appendix D Section 1) containing coding instructions and asked to allocate a score of one for the presence of each theme and a score of zero for the absence of each theme. Total scores ranged from 0-4 for the personal home, 0-2 for the social home and 0-2 for the physical home. Average scores were computed for each of the three codes. Interrater agreement was calculated for each code and these

were all satisfactory (personal $\kappa = .75$, $p < .01$, social $\kappa = .98$, $p < .01$, physical $\kappa = 1.00$, $p < .01$).

4.5.3 Reflections of a childhood place

Secondly, participants were asked to reflect upon the childhood place and share their feelings. Ittelson (1973) noted that the first and subsequently guiding response to any environment is affective, and while debate throughout the literature has failed to reach consensus on the structure and content of emotions, a number of researchers have noted the regular appearance of positive and negative affect in relation to the experience of emotions (Diener, 1999; Berkowitz, 2000).

For example Laros, and Steenkamp (2005) content-analysed a number of psychological studies on emotions and emotion words and found all emotion words were able to be classified as either positive or negative. They suggest that this approach is advantageous because of its simple structure and the fact that an indication of the person's attitude can be ascertained from the combination of their negative and positive affect.

Research conducted by Shaver, Schwartz and O'Connor (1987), and Storm and Storm (1987) suggested that emotions be grouped into a hierarchy. The model suggested by Laros and Steenkamp (2005) proposes positive and negative affect occur at a superordinate level, underpinned by a basic level of four positive emotions and four negative emotions, and a subordinate level which contains specific positive and negative emotions (see Figure 4.1).

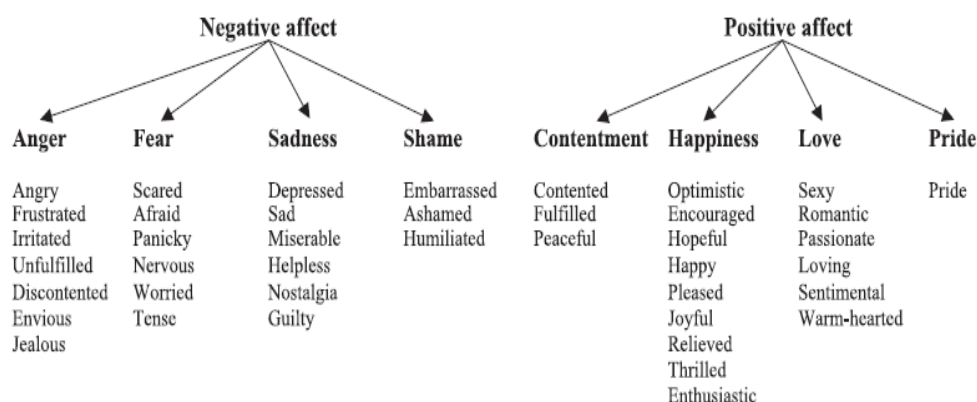


Figure 4.1 Laros and Steenkamp (2005) hierarchical model of affect.

The primary researcher conducted initial coding of the scripts for each relevant question using the list of 41 specific emotions suggested by Laros and Steenkamp (2005). While a large number of the emotions were evident, a number of them (particularly negative emotions) were considered redundant and removed, and some were added based on the content of the scripts. The final list of 34 emotions may be found in Table 4.2.

Table 4.2

Positive and Negative affect checklist

Affect	Basic Emotion	Specific Emotions
Positive	Contentment	Content, fulfilled, peaceful, calm, safe
	Happiness	Optimistic, encouraged, hopeful, happy, pleased, enthusiastic/excited, relieved, thrilled
	Love	Loving, sentimental, passionate
	Pride	Pride
Negative	Anger	Angry, frustrated, discontented, envious, jealous
	Fear	Scared, tense, nervous, worried
	Sadness	Sad, lonely, vulnerable, helpless, nostalgic
	Shame	Embarrassed, ashamed, humiliated

Coders were asked to rate the scripts using the positive and negative affect checklist allocating a score of one for those emotions that were present

and a zero for those emotions that were absent. Total positive affect (TPA) and total negative affect (TNA) were calculated using the total scores for each checklist and ranged from zero to 17. Interrater agreement for this section was $\kappa = .67, p < .01$.

These scripts were also coded for the use of cognitive appraisals in relation to the environment. A 21-item cognitive checklist was developed by the primary researcher based upon the codes that emerged from the scripts. Coders were provided with this checklist and asked to allocate 1 point for each cognitive state that appeared in the scripts and a zero for those that were absent. A total score was calculated which ranged from 0 to 21. A list of the codes may be found in Table 4.3. Interrater reliability for this task was $\kappa = 0.66, p < .01$.

Table 4.3

Cognitive appraisals checklist

Cognitive appraisals		
Free	At ease	Reminiscent
Secure	Cozy	Energetic
Capable	Comfortable	Detached
In control	Normal	Positive
Special	Familiar	Playful
Bored	Alone	Able to be myself
Belonging	Adventurous	Fortunate

Finally, coders were asked to rate each script using a scale of 1 (no correspondence) to 7 (excellent fit) for its ability to convey aspects of what Bowlby identified as an attachment bond. The components that were assessed

were the desire for proximity (the author conveys the desire to return to the place), a sense of loss (the author conveys a sense of loss when reflecting upon the place), safe haven (the author conveys a sense of using the environment as a refuge or somewhere that they could depend upon for comfort and safety) and secure base (the author conveys a sense of the place as having been consistently available to them as a source of security).

An example of a statement receiving a score of seven on the sense of loss question would be '*there has always been a sense of loss since moving from there*'. A score of seven for proximity would be allocated to a statement such as '*I yearn to live there again. It is the type of environment that every child should grow up in*'. An example of a high score for safe haven would be '*It makes me wish I could still have that place to go to, somewhere where I can cut off from the world*'.

Finally, a high score for secure base would be represented by a comment such as '*If I imagine this house being sold and not having the backyard or the house to visit periodically, then I think that I would feel like part of my identity was gone or that some kind of life anchor was gone for me*'. Interrater agreement for this section ranged from $\kappa = .67$ to $\kappa = .69$, $p < .01$.

4.5.4 Memories of a childhood place

The final question in this section asked participants to share a memory of their favourite childhood place. Scripts were classified for the appearance of common themes. Content analysis of the scripts suggested nine themes which were further classified into two codes – personal and social. The coding checklist containing relevant examples are shown in Appendix D (Section 2). Similar to the previous section, the personal aspects of place included the

atmosphere of the place, evaluations of the place, reference to the place as an escape or retreat, the sense of freedom, privacy or control of space experienced in place, the personalisation of the space (including possessions) and a sense of pride or achievement experienced within that place or as a result of interactions with that place. The social aspects included relationships with family members and others, references to childhood games and adventures experienced within the place, and the recollection of special occasions.

Coders were provided with a checklist for each code and were instructed to allocate one point for each theme found within the script and a zero for their absence. Total scores ranged from 0-6 for the personal home ($\kappa = .80$) and 0-4 for the social home ($\kappa = .86, p < .01$). Average scores were computed for each code.

4.5.5 A favourite place within the current home

The second section of the Environmental Autobiography related to the place that participants currently refer to as home. The first prompt required participants to specify a favourite place within the home. Responses were coded as either a personal zone (bedroom, bathroom, somewhere they went to be alone) or social zone (deck, pool, lounge room, a place where they socialise with others), and whether it was inside or outside the home. Complete agreement between coders was achieved for this section.

Participants were also asked to reflect upon how being at their favourite place made them feel. Initial analysis of the responses revealed four categories of feelings: comfortable/relaxed; safe/secure; happy/content; and those that said they were unable to articulate a feeling in relation to the place. Scores were allocated based upon the presence (1) or absence (0) of these feelings. Coder

agreement for this section ranged from $\kappa = .70$ to $.86$, $p < .01$.

Scripts were also assessed for positive and negative affect and cognitive appraisals using the checklists developed for reflections of the childhood place (section 4.5.4). There was no evidence of negative affect in response to this question hence no scores were recorded. Scores for total positive affect ranged from 0 to 17 and scores for cognitive appraisals ranged from 0 to 21. Coder agreement ranged from $\kappa = .67$ to $.75$ $p < .01$.

4.5.6 Descriptions of the current home

The next prompt asked participants to describe their home to someone who had never been there. Content analysis of the scripts suggested seven themes were applicable for use. The first three themes, atmosphere of home, evaluations of home, and comfort, referred to personal aspects of the home. Social aspects of the home comprised statements relating to relationships with family members and others, and physical aspects of the home included the physical features of the home and its location.

Coders were provided with a checklist (Appendix D, Section 3) which included parameters for each theme and examples of relevant scripts. Scripts were scored for the presence (one point) or absence (zero) of each theme. Total scores ranged from 0-3 for the personal home, 0-2 for the social home and 0-1 for the physical home. Total scores were computed for each code. Interrater agreement for this section ranged from $\kappa = .69$ to $\kappa = .89$, $p < .01$.

4.5.7 Things that are missed when away from home

The fourth question asked participants what they miss when they are away from home. Content analysis of the scripts suggested a total of 8 themes were evident and three overall codes. Once again the personal aspects of the

home included the atmosphere and evaluations of home; feelings of comfort; relaxation; safety and security; familiarity and routine; freedom, privacy and control of space; and the personalisation of space (including possessions). The other two codes were people/pets and physical features. The coding scheme in relation to this question may be found in Appendix D (Section 4).

Coding instructions and the allocation of scores were similar to those provided for the descriptions of home and were based upon the presence or absence of a theme. Total scores were calculated for the personal aspects of home and ranged from 0-8. Interrater agreement for this section ranged from $\kappa = .69$ to $\kappa = .82$, $p < .01$.

4.5.8 Memories of the current home

The last prompt in the section on the current home required participants to share a memory of their home. Scripts were coded for valency of emotion, whereby they were scored as either positive or negative/mixed. For example, a response such as *“I loved it! My grandfather was a great guy and he always did stuff with me. It was a very safe cozy place with a lot of love and patience”* was rated as positive. Responses such as, *“I have all I need but not all that I want. My memories are locked in a container at my brother’s house and until I have my own ideal home I will survive and move forward here. I am not a prisoner in any way except in my own mind. My dreams are my freedom and they will eventuate and that keeps me going and keeps me strong.”* was rated as negative/mixed. Agreement across coders was $\kappa = .79$, $p < .01$.

Content analysis of the scripts revealed four broad categories and nine specific themes. The first category, which I have termed personal aspects, contained three themes. The first theme was the atmosphere of home, which

encompassed the ambience of the home and how it feels to be there. The second was psychological growth which contained comments relating to the spiritual or psychological growth of the individual. The third theme focused on aspects of self expression such as the home as a representation of the self and home as a place to be one's self. The final category of physical aspects contained the personalisation of space theme which related to comments that entailed the control or appropriation of space. Examples of statements classified under each theme may be found in Appendix D (Section 5).

Coders were instructed to allocate a point for each theme that was found in individual scripts. Totals for each code were calculated. Scores ranged from 0-4 for personal aspects, 0-2 for feelings, 0-2 for social aspects, and 0-1 for physical aspects. Interrater agreement for these sections ranged from $\kappa = .65$ to $\kappa = .81$, $p < .01$.

Following from the logic of Bartholomew and Horowitz (1991) and Scharfe and Bartholomew (1994), these scripts were also coded for their degree of correspondence to each of the four prototypical attachment patterns as they theoretically apply in relation to the environment of home. Each script was rated on a 7-point scale ranging from no correspondence with the prototype to a good fit with the prototype. Continuous ratings of the four attachment patterns were used to determine the participant's attachment style. The highest attachment rating was deemed to be the best indicator of their predominant environmental attachment representation. The prototypes and examples of scripts that were judged to be a good fit with each prototype are shown in Appendix D (Section 6). Interrater agreement for these sections ranged from $\kappa = .68$ to $\kappa = .75$, $p < .01$.

4.5.9 Cherished possessions

The next section of the environmental autobiography was designed to assess attachment style differences in the way that people relate to their possessions. The exercise required participants to identify five of their most cherished possessions (in order of importance), specify how they acquired them and reflect upon what those items mean to them.

Content analysis of the possessions nominated by participants was guided by the findings of previous research (Dittmar, 1989, 1991; Richins, 1994; Kamptner, 1995) and yielded a total of four categories as shown in Table 4.4.

Table 4.4

Possession type classifications

Possession type	Parameter
Sentimental items	Objects representing interpersonal ties such as gifts, photos, family videos, heirlooms
Practical objects	Items such as tools, electrical appliances, kitchen goods, furniture, artwork, antiques, collections and ornaments. All forms of transport including those used for recreation. Sporting equipment, musical instruments, music CD's and DVDs
Self	Objects representing a person's accomplishments and ties to a personal past. Items such as letters, journals, trophies, yearbooks and personal mementoes. Objects related to appearance including clothing, make up, jewellery
Other	Items that can not be otherwise classified

Coders were instructed to classify each possession into the category which they deemed to represent the most appropriate fit. Total scores for each category were calculated for each participant. Coding agreement for this task ranged from $\kappa = .75$ to 1.00 , $p < .01$.

Personal meanings attributed to the cherished possessions were content analysed. Based upon the findings of Richins (1994) a total of six categories were deemed appropriate for use. These categories were utilitarian, enjoyment, interpersonal ties, identity, items representing substantial financial investment, and others which could not be classified. Examples of items classified according to each of the categories may be found in Appendix D (Section 7). Coders were asked to classify each statement of personal meaning to a single category that represented the best fit. Total scores for each meaning category were calculated. Interrater agreement ranged from $\kappa = .79$ to $.83$, $p < .01$.

Based upon findings from the research of Csikszentmihalyi and Rochberg-Halton (1981), content analysis of the method of acquisition of the listed possessions resulted in the use of 6 coding categories as specified in Appendix D (Section 8). These categories were represented by items that were purchased, gifts, items that were inherited, items that were related to achievement or rewards, those that were crafted, and others which were unable to be classified into any single theme. Total scores were calculated for each category. Interrater agreement ranged from $\kappa = .77$ to $.91$, $p < .01$.

4.5.10 Visual representations of the home

Participants were asked to provide a visual representation of their home and were encouraged to use shape, colour, and words as needed to convey the meaning of home. Content analysis of the drawings was conducted and a list of three coding categories (physical, social and personal aspects) with seven specific themes evolved. The coding categories, specific themes and examples may be found in Appendix D (Section 9). Physical elements of the home were coded for the type of drawing (whether they were simple house plans/designs or

more elaborate sketches of homes) and whether they included evidence of outdoor spaces (gardens, sheds, pools etc). Social elements of the home referred to evidence of relationships with others and personal aspects related to the communication of the atmosphere and the spiritual elements of the home and the inclusion of possessions. Coders were instructed to allocate a point for the occurrence of each of the themes and total scores were calculated for each category. Interrater agreement for this task ranged from $\kappa = .77$ to $.91$, $p < .01$.

Chapter 5 Results and discussion study 1

The major objective of this study was to investigate the relationship between place attachment, interpersonal attachment and the experience of favourite childhood places and the current home environment. The first two objectives were to describe and explore the experience of, and attachments to, favourite childhood places and the current home. The third and fourth objectives were to examine links between place attachment and interpersonal attachment, and to compare the experience of childhood place and current home to place and interpersonal attachment.

This section will begin with a brief discussion of the data analysis and the screening of variables which were used for this study. I will then address the first two objectives by reporting descriptive statistics for the place attachment and interpersonal attachment measures, the environmental autobiography (childhood place, current home and possessions) and demographics.

To address the third and fourth objectives I will first report the findings of correlational analyses used to investigate the relationships between place attachment and interpersonal attachment. Then results comparing the experience of childhood place and current home to the place attachment and interpersonal attachment measures will be reported. The chapter will end with a discussion of the findings in relation to the aims and hypotheses.

5.1 Data analysis and screening

One participant supplied incomplete data on all except the attachment measures and was removed from all analyses, thus reducing the sample size to 99. In assessing normality of variables, it was apparent that most variables were normally distributed. Only rated levels of secure attachment were heavily

skewed, towards the positive end. However this pattern is known in the literature and could be explained in terms of theory, and so it was not considered an anomaly of this data set.

The attachment dimensions of anxiety and avoidance were calculated for both the RQ and HAS measures according to the formula specified by Griffin and Bartholomew (1994b, see page 91 of Chapter 4). Anxiety was derived by adding the preoccupied and fearful scores and subtracting the secure and dismissing scores. Avoidance was calculated by adding the dismissing and fearful scores and subtracting the secure and preoccupied scores.

Seventy-seven percent of the scores for the HAS anxiety dimension (scores ranged from -8 to 9) and 82% of the HAS avoidance dimension (scores ranged from -9 to 6) were below zero. To remove negative scores, a constant was added to the scores for each dimension of the HAS to bring the minimum score on both dimensions to zero. After the transformation HAS anxiety scores ranged from 0-17, and HAS avoidance scores ranged from 0 to 15. No transformations were required for the RQ.

5.2 Descriptive statistics for the place attachment and interpersonal attachment measures

Descriptive statistics for the attachment categories on the HAS, and RQ are presented in Table 5.1. Results suggested that a majority of participants feel secure attachment in relation to their homes. Results for the RQ indicated similar ranges to past research which reports a range of 47-55% for secure participants, 17-18% for dismissing, 14 -16% for preoccupied and 13-21% for fearful participants (Bartholomew & Horowitz, 1991; Scharfe & Bartholomew, 1994).

Table 5.1

Frequencies for the place attachment and interpersonal attachment measures

Attachment Measure	<i>n</i>	%
Home Attachment Scale		
Secure	75	75.8
Preoccupied	15	15.2
Dismissing	3	3.0
Fearful	6	6.1
Relationship Questionnaire		
Secure	50	50.5
Preoccupied	10	10.1
Dismissing	19	19.2
Fearful	20	20.2

(N=99)

Table 5.2 shows means and standard deviations for the ratings data provided on the HAS, RQ and ECR-R.

Table 5.2

Mean and standard deviations for the place attachment and interpersonal attachment ratings

Attachment Measure	<i>M</i>	<i>SD</i>	Range
Home Attachment Scale (HAS)			
Secure	5.33	1.88	1-7
Preoccupied	2.34	1.68	1-7
Dismissing	2.04	1.61	1-7
Fearful	1.87	1.62	1-7
Anxiety Dimension	4.84	3.54	0-17
Avoidance Dimension	5.22	3.35	0-15
Relationship Questionnaire (RQ)			
Secure	4.79	1.80	1-7
Preoccupied	2.78	1.96	1-7
Dismissing	3.65	1.80	1-7
Fearful	3.24	2.11	1-7
Anxiety Dimension	9.59	4.73	0-24
Avoidance Dimension	9.36	4.53	0-19
Experience in close relationships-revised (ECR-R)			
Anxiety	2.68	1.21	1-7
Avoidance	3.06	1.22	1-7

(N=99)

Both measures were rated using seven-point scales with higher scores indicating a higher degree of affiliation with the attachment style. Means and standard deviations for the RQ were consistent with previous research by Schmitt et al. (2004). Means and standard deviations for the ECR-R were also consistent with previous research reported by Sibley et al., (2005) (anxiety $M = 2.16$, $SD = 1.08$ and avoidance $M = 2.06$, $SD = 1.13$).

5.3 Descriptions of favourite childhood places

For each section of the environmental autobiography, the coders assessed each script and assigned scores for the presence or absence of specific themes (see Chapter 4, page 95). A score for each coding category was formulated by adding the total scores for each theme relevant to that code that was mentioned in the text. Hence individual scores could range from 0 to greater than 1. Descriptive statistics for the favourite childhood place are presented in Table 5.3. Means and standard deviations were calculated for all codes (derived by the coders) of the childhood place and are presented in Table 5.4. Table 5.3 simply shows the percentage of participants who mentioned each of the relevant themes within their scripts (hence, the frequencies reflect the presence or absence of a theme not the total number of times it was coded).

In order to get participants thinking of the places where they spent time as children, they were asked to specify a favourite place. The type of place identified was fairly evenly split across inside locations, outside locations and locations which were away from home, but the overwhelming majority of participants (93.9%) said it was a place they generally spent time with others. Participants were then asked to *describe* their favourite place.

Table 5.3.

Frequencies and percentages reported for favourite childhood place

Coding categories and themes	Proportion of responses containing theme	
	N	%
Location		
Inside location	35	35.4
Outside location	34	34.3
Location away from home	30	30.3
A place to be alone	6	6.1
A place to be with others	93	93.9
Description		
<i>Personal aspects</i>		
Atmosphere	71	71.7
Evaluation	31	31.3
Freedom/privacy/control	10	10.1
Personalisation/possessions	7	7.1
<i>Social aspects</i>		
Family	51	51.5
Others	15	15.2
<i>Physical aspects</i>		
Physical features/aesthetics	95	96.0
Location	66	66.7
Reflections		
<i>Positive Affect</i>		
Contentment	63	63.6
Happiness	77	77.7
Love	27	27.3
Pride	2	2.0
<i>Negative affect</i>		
Anger	15	15.2
Fear	8	8.1
Sadness	45	45.5
Shame	1	1.0
Memories		
<i>Personal aspects</i>		
Atmosphere	64	64.6
Evaluation	26	26.3
Escape/retreat	10	10.1
Freedom/privacy/control	16	16.2
Personalisation/possessions	12	12.1
Pride/achievement	4	4.0
<i>Social aspects</i>		
Family members	83	83.8
Relationships with others	45	45.5
Childhood games/adventures	67	67.7
Special occasions	22	22.2

Note: (N= 99) Coding categories are in italics.

Table 5.4.

Means and standard deviations for all favourite childhood place codes

Coding categories and themes	<i>M</i>	<i>SD</i>	<i>Range</i>
Description			
Personal aspects	1.20	.84	0 - 3
Social aspects	.66	.62	0 - 2
Physical aspects	1.63	.49	0 - 2
Reflections			
Total Positive Affect (TPA)	2.48	1.86	0 - 10
Total Negative Affect (TNA)	1.02	1.35	0 - 6
Cognitive appraisals	2.55	2.03	0 - 10
Desire for proximity	4.71	2.58	1 - 7
Sense of loss	4.46	2.56	1 - 7
Safe haven	4.87	2.00	1 - 7
Secure Base	4.10	2.13	1 - 7
Memories			
Personal aspects	1.33	.99	0 - 4
Social aspects	2.19	.97	0 - 4

(*N*=99)

Ninety-six percent of the sample described their favourite place in terms of its physical appearance. For example Twiggy described her favourite place as “a kind of small park. It had a big dry field with some play equipment at one end of it. There were swings, a slide, a wooden climbing thing, and monkey bars.” Similarly Myrilimi described her brother’s bedroom where she spent much of her childhood play time: “It had very big windows the size of a whole wall. The room was square with the bed against a wall, near the window. There was not much other furniture in the room, it had in built closets”.

The social aspects of the place commonly included family members (51.5%) as reflected in these comments by Lilly: “I remember dancing around the kitchen on Dad’s feet, and Mum teaching me how to read. Mum was always

singing and I was always getting into mischief when I played with my older brother and his friends.”

The next section required participants to articulate how they feel when they think about the childhood place now. For the majority of the sample happiness and contentment were reflected in feelings towards their favourite place. For some the happiness was tied to family and friends as suggested by Charlie Begg: “It makes me feel calm. Some of the happiest times of my life were here and I feel like it connects me to the past in the present, to my family and early friends.” For others it was the experience of the place that was linked to feelings of happiness. For example: “When I look back and think about that place now it always brings a smile to my face because I remember how much fun that place used to be.” Forty-five percent of the sample also mentioned sadness, however, as illustrated by these comments from Bill: “It makes me feel lost and makes me realise that my life belongs to this bleak and lost place rather than the real world that others enjoy.”

As indicated by the means and standard deviations reported in Table 5.4, positive and negative affect scores were relatively low. Although low levels of negative affect would be expected, given that participants were responding to a favourite childhood place, the low levels of positive affect were a little surprising.

Just over a third of participants spoke of time spent with family as reflected in this script from Lily: “Getting up early every morning when I was younger to have breakfast with my Dad. Mum teaching me and my brother how to sing. Playing dress ups with my sister.” Others referred to relationships with friends that have endured over time as evidenced by this excerpt from Rebecca:

"I had my 5th birthday party here and invited my entire preschool class. These children grew with me and we are all still close friends today."

Childhood games and adventures were also mentioned by approximately one third of the sample as typified by this response from Jennifer: "Swimming in the dam with friends as a child, having mud fights and races between each other, and riding the horses into the dam."

Coders assessed the reflections of childhood place for evidence of participants referring to these places in relation to four attachment functions (desire for proximity, sense of loss, safe haven and secure base). Similar levels of each function were found (see Table 5. 4).

5.4 Descriptions of the current home

Descriptives for demographics related to the current home are reported in Table 5.5. The majority of the sample lived in houses, had lived in their current home for less than 12 months, and had moved house once or twice as a child. Half of the sample lived in rental accommodation and approximately one third were living with family.

Descriptives for the current home codes may be found in Table 5.6 (see also Chapter 4 page100). Means and standard deviations for participant codes are shown in Table 5.7. When describing the current home many participants included status related evaluations of the home as illustrated by comments ranging from Angie's: "It's very classy, just like the cover of Vogue magazine," to Bill's: "I am ashamed of the way that I have to live and would avoid describing it to anyone." The atmosphere of home was also reported by a large proportion of participants (55.5%). This category was epitomised by comments such as "It is an open and friendly environment. You don't have to worry about breaking

anything or keeping things clean (it is not a vogue living photo opportunity).”

Table 5.5

Frequencies reported for demographics

Coding categories and themes	N	%
Type of dwelling		
House	78	78
Unit/Townhouse	16	16
Campus accommodation	6	6
Length of time in current home		
Under 12 months	44	44
1 – 5 years	29	29
Over 5 years	27	27
Mobility History – child		
Never moved	16	16
Once or twice	36	36
3 – 5 times	22	22
6 – 10 times	15	15
More than 10 times	11	11
Mobility history - adult		
Never moved	16	16
Once or twice	38	38
3 – 5 times	19	19
6 – 10 times	13	13
More than 10 times	14	14
Ownership status		
Renting	51	51
Own home	15	15
Live with family	34	34

(N = 99)

Not all participants reported an atmosphere that was positive as these comments from Lilly indicate a level of discontent: “I don’t have as much privacy as I’m used to. Not my favourite place to be. Doesn’t feel like a home.” Not surprisingly physical aspects of the home featured in the majority of responses (71.8%) with descriptions such as “Low set house, 2 bedrooms and extra detached” and “My home is located in Mt Pleasant close to one of Mackay’s shopping centers. It is a 3 bedroom home with 2 large family rooms and 3 car accommodation.”

The codes for a favourite place within the current home were equally distributed across the sample. Personal zones such as the bedroom were a popular choice (49.5% of the sample) because of the ability to be alone, as suggested by Shelly: "I feel better when I'm in my room and on my own. It's private and I can dream." Bedrooms were also favoured as places that are a representation of the self as suggested by San: "My bedroom is my favourite; it makes me feel more at home than anywhere in the house. It represents me."

Table 5.6

Participant frequencies for reporting aspects of the current home

Current Home	N	%
Description(N=99)		
<i>Personal aspects</i>		
Atmosphere	55	55.5
Evaluation	76	76.8
Comfort	24	24.2
<i>Social aspects</i>		
Family	22	22.2
Other	15	15.2
<i>Physical aspects</i>		
Physical components	56	56.6
Location of the home	15	15.2
Favourite Place in the home (N=99)		
Location		
Personal zone	49	49.5
Social zone	42	42.4
No favourite place	8	9.1
Inside	70	70.7
Outside	21	21.2
<i>Feelings (N=91)</i>		
Comfortable	45	49.4
Safe/Secure	16	17.6
Happy/content	23	25.3
No feelings specified	7	7.7
Things missed when away(N=99)		
<i>Personal aspects</i>		
Atmosphere	19	19.2
Evaluation	14	14.1
Comfort	13	13.1

Table 5.6 (Cont'd)

Current Home	N	%
Relaxation	9	9.1
Familiarity/routine	32	32.3
Freedom/privacy/control	22	22.2
Personalisation/possessions	38	38.4
Shelter/security/safety	9	9.1
People and Pets	63	63.6
Physical aspects	7	7.1
Visual Representations(N=97)		
Plan	24	24.7
Sketch	65	67.0
Includes relationships with others	27	27.8
<i>Personal aspects</i>		
Atmosphere	29	29.9
Spiritual elements	15	15.5
Possessions	9	9.3
Visual representations with text (N=71)		
Text used to provide a legend of items	31	43.7
Text with an affective tone	40	56.3
Memories(N=94)		
<i>Emotions</i>		
Negative/Mixed	15	16.0
Positive	79	84.0
<i>Personal aspects</i>		
Atmosphere	79	84.0
Psychological growth	14	14.9
Growth of family/friends	12	12.8
Self expression	6	6.4
<i>Social aspects</i>		
Relationships with others	75	79.8
Social occasions	65	69.1
<i>Physical aspects</i>		
Personalisation of space	24	25.5
<i>HAS prototypes</i>		
Secure	69	73.4
Preoccupied	8	8.5
Dismissing	16	17.0
Fearful	1	1.1

Note. Number of participants varies in each section as this table represents only those who reported these aspects of the home.

Table 5.7
Means and standard deviations for ratings of the current home

Current Home	<i>M</i>	<i>SD</i>	Range
Description			
Personal aspects	1.55	.97	0 - 3
Social aspects	.66	.62	0 - 2
Physical aspects	.72	.65	0 - 2
Things missed when away			
Personal aspects	1.58	1.17	0 - 5
Visual representations			
Personal aspects	.55	.76	0 - 2
Memories			
Personal aspects	1.12	.91	0 - 4
Social aspects	1.41	.83	0 - 2
HAS Prototypes			
Secure	5.04	2.22	1-7
Dismissing	1.96	1.85	1-7
Preoccupied	1.73	1.58	1-7
Fearful	1.18	.86	1-7

(*N*=99)

Social zones were also well represented (42.4% of the sample) as captured by these comments from Carly: “My favourite place in this home is on the verandah which overlooks the bush. I sit out here with my partner and a drink and the quiet overwhelms me. I feel peaceful here” and Don: “Kitchen table - the reason it feels so good is because it’s a centre piece where the family has spent much time together and it brings back many peaceful and happy memories.”

For some, outdoor areas were popular (21.2% of the sample) as places to be alone: “Out the back - I sit out there alone and think a lot. It makes me feel peaceful.” For others outdoor areas represented a time for social activities: “My

favourite place is probably the back yard. We spend a lot of time outside, it makes me feel relaxed and free of worries.”

A small percentage (8.1% of the sample) said they had no favourite place: “Not necessarily a favourite place - I just enjoy being home where I can relax with my children”. One participant demonstrated a level of anger and resentment in relation to his room: “No I hate this place - my room feels like a prison.”

The importance of possessions in making a person comfortable was reflected by Tinkerbelle: “All my possessions are in my room and I am always comfortable”. She also mentioned the importance of being able to be herself when she is in her room: “I get to be myself more so than when I am in the rest of the house with my family etc.”

When asked what they miss when away from home the majority of participants (63.6% of the sample) mentioned relationships with those they live with. For example, Andie said: “My Mum, Dad, brother and sister. No matter how much they annoyed me when I was living at home with them. They are the only things I miss about not being at home.”

Approximately one third of the sample mentioned missing possessions and the familiarity offered by the home as captured by these comments from Lizzie: “The familiarity of it, definitely. Having familiar items around you, knowing where everything is; having everything at your fingertips.” These comments from Rebecca suggest that the personalisation of space is not only a source of great comfort but also has a normalizing effect: “Just my things, my furniture. The familiarity of it all, everything is there because you like it and you want it to be. Having this stuff makes you feel comfortable.”

Not everyone expressed positive sentiments towards the home, however, as represented by these comments from Bill: “I don’t miss it at all and long to be somewhere else.” Others expressed a clear delineation of the house as a dwelling which takes its meaning from its occupants and the possessions acquired throughout life, as illustrated by these comments from Mystique: “I don’t miss my home. It doesn’t really mean much to me. It’s what’s in it that I miss.”

Memories of the current home were positive for the majority of participants (79.8% of the sample) and generally included comments about the atmosphere, the people they share the space with, and feelings of contentment. One participant, who was classified as dismissing on place and personal attachment measures, spoke of an inability to form attachments with houses because he had moved repetitively as a child: “I just live in the house. I have moved houses / cities many times as an adult and I find it hard to bond with any house now. I don’t feel any personal attachment here, and view it as being a temporary abode.” These sentiments are indicative of the inability to acknowledge the importance of relationships and the restricted emotionality associated with this attachment style (Bartholomew & Horowitz, 1991).

Coders assessed each script for its degree of correspondence to each of the four prototypical attachment patterns as they theoretically apply in relation to the environment of home. Each script was rated on a 7-point scale ranging from no correspondence with the prototype to a good fit with the prototype. Means and standard deviations for the HAS prototypes (Table 5.7) are similar in proportion to the HAS attachment styles (as shown in Table 5.1).

For the visual representations of home, the majority of participants

provided a sketch which included outdoor areas and added text to convey the way they felt about their home or to enhance their description of the home. Approximately one third of participants included family and friends and the atmosphere of home in either visual or text format.

The drawing from Jeremy, featured in Appendix E, is an example of a basic plan using text to orient the reader with the layout of the house. In contrast Jelly Baby's drawing (Appendix F) contains text that conveys emotions and uses a sketch of her home as a background to a heart representing the love that is found within the home. The drawing shows evidence of the importance of others, and the spiritual connection that she perceives she has with the home. Similarly the drawing from Jack (Appendix F), although it contains no text, conveys the spiritual connection that he feels with the home.

The drawings from San and Rebecca (Appendix G) also use text to articulate the feelings that their homes inspire, while the drawing from Kiah (Appendix H) conveys the atmosphere of each of the major areas of her home. Jeremy, Jelly Baby, San, Rebecca and Kiah were all classified with secure place attachment. These visual representations would be considered consistent with this attachment style as they present an image of home as accepting and comforting.

In contrast, Bill, who was classified with a fearful place attachment style, uses text to orient the reader to the location of his room and possessions within what he terms "*his cell*", thus implying his dissatisfaction with his current home environment (Appendix I). Fearful attachment is generally associated with an inability to form close relationships with people or place due to feelings of insecurity in relationships, largely driven by a fear of rejection. Hence Bill's

visual representation would be considered consistent with attachment theory.

Juan Pablo, who was classified with a dismissing place attachment style, chose to provide text only saying:

I currently live in a house, yet I do not have a 'home'. For the majority of my life there has been a level of 'detachment' between me and any of the places I have lived. I have enjoyed living in many places, yet have not felt an 'attachment' to any one in particular as a 'home'. I guess my 'home' is not an actual physical location, it will always be somewhere within me.

This representation of home would also be considered consistent with theory which suggests that dismissing attachment is associated with restricted emotionality and a tendency to dismiss the importance of relationships.

Having discussed participant experiences of childhood places and the current home, I will now move to a discussion of the personal possessions found within the home environment.

5.5 Descriptions of possessions

Descriptives for the type of possessions listed, how the possessions were acquired and the personal meaning attached to the possessions are listed in Table 5.8. Means and standard deviations for the type of possessions listed, how the possessions were acquired and the personal meaning attached to the possessions are listed in Table 5.9. There was a total of 448 possession items listed with an average of 4.53($SD = 1.18$) items per participant. Four participants listed no items at all.

Participants were asked to list five items that they cherished and would find it difficult to live without. Approximately one-third of the sample listed sentimental and practical items as well as those that represented an extension of the self.

Table 5.8

Total frequencies reported for possessions codes

Coding categories and themes	Possession codes	Participants	
	<i>n</i>	<i>n</i>	%
Possession type			
Sentimental items	143	75	75.8
Practical items	149	67	67.7
Extensions of Self	125	67	67.7
Other	31	23	23.2
How possessions were acquired			
Purchased	116	56	56.6
Gift	182	78	78.8
Inherited	21	18	18.2
Achievement/award	10	8	8.1
Crafted/Collected	91	61	61.6
other	28	22	22.2
Personal Meanings			
Utilitarian	57	36	36.4
Enjoyment	55	39	39.4
Interpersonal ties	263	85	85.9
Identity	40	28	28.3
Others(security)	31	22	22.2

(N=99)

Gifts were the most frequently reported possessions. The majority of items listed were important because they represented ties to others as illustrated by this comment from Carly: “These photos are memories of childhood, past relationships, marriages, friends (old and new); also, photos of my parents and grandparents remind me of my lineage.”

Items such as cars and sound systems were mostly listed as being important for their functional purpose in a person’s life and the enjoyment that they provide, as represented by these comments from Neo: “It acts as my transport getting me from a to b and c on the weekends” and Carly: “My sound system is important to play the music I love and which appeals to so many of my senses.”

Table 5.9
Means and standard deviations for all possession codes

Coding categories and themes	<i>M</i>	<i>SD</i>	<i>Range</i>
Possession type			
Sentimental items	1.44	1.24	0 - 5
Practical items	1.50	1.41	0 - 5
Extensions of self	1.26	1.16	0 - 5
Other	.31	.66	0 - 3
How possessions were acquired			
Purchased	1.16	1.30	0 - 5
Gift	1.84	1.40	0 - 5
Inherited	.21	.48	0 - 2
Achievement/award	.10	.42	0 - 3
Crafted	.92	1.02	0 - 5
other	.28	.61	0 - 3
Personal Meanings			
Utilitarian	.58	.99	0 - 5
Enjoyment	.55	.86	0 - 4
Interpersonal ties	2.66	1.62	0 - 5
Identity	.42	.82	0 - 5
Others	.31	.65	0-3

(*N* = 99)

The next section is focused on the links between place attachment and interpersonal attachment, and on comparisons of the experience of childhood place and current homes in light of those attachments.

5.6 Associations between place attachment, interpersonal attachment and the codes extracted from the environmental autobiography

5.6.1 Place attachment and interpersonal attachment

To investigate relationships between the place attachment and interpersonal attachment measures a series of Pearson correlation analyses were conducted (see Table 5.10). In terms of intercorrelation between place and interpersonal attachment, most noteworthy are the significant correlations between the (RQ) preoccupied interpersonal attachment style and each of the home attachment styles and dimensions. The results suggest that those with a

preoccupied interpersonal attachment style were more likely to be preoccupied, dismissing, fearful, and anxious in relation to their home environment.

Table 5.10

Correlations between place attachment and interpersonal attachment

Interpersonal attachment	Place attachment (HAS)					
	Secure	Preoccupied	Dismissing	Fearful	Anxious	Avoidant
RQ Secure	.16	-.06	.01	-.07	-.14	-.09
RQ Preoccupied	-.37**	.29**	.31**	.39**	.37**	.39**
RQ Dismissing	.13	-.01	.04	-.23*	-.19*	-.15
RQ Fearful	-.20*	.17*	.19*	.14	.16	-.19*
RQ Anxious	-.35**	.22*	.20*	.34**	.35**	.34**
RQ Avoidant	.04	-.03	-.02	-.14	-.09	-.08
ECR-R anxious	-.14	.11	.15	.17*	.14	.18*
ECR-R avoidant	-.24**	.20*	.15	.21*	.25**	.21*

Note: * $p < .05$; ** $p < .01$ (1 tailed). $N = 99$

Significant negative correlations were also found between the secure place attachment style and both the RQ anxiety dimension and ECR-R avoidant dimension. Thus higher levels of secure place attachment correspond to lower levels of interpersonal relationship anxiety and avoidance. In addition to these findings, both the anxiety dimensions of the RQ, and the avoidant dimension of the ECR-R, were consistently correlated with the place attachment measures in the direction predicted by theory. In fact the general pattern of significant correlations in Table 5.10 is consistent with theory. Thus, these analyses, overall, give support for the prediction that place and interpersonal attachment processes are conceptually linked. Attachments to people and to places are not independent of one another.

5.6.2 Associations between place attachment style and recall of favourite childhood places

Correlations between the place attachment styles and childhood place

codes are shown in Table 5.11. Secure place attachment was significantly associated with childhood memories of being with others ($r = 0.23$), with memories of social occasions ($r = 0.18$), with more positive affect in recall ($r = 0.17$), and with significantly less negative affect ($r = -0.24$).

Table 5.11

Correlations between place attachment and codes for childhood places

Childhood Place	Place attachment					
	Secure	Preoccupied	Dismissing	Fearful	Anxious	Avoidant
Location						
Distance from home	.09	-.15	-.17*	-.12	-.10	-.11
With others ^a	.23*	-.18*	-.23*	-.13	-.16	-.21*
Description						
Personal aspects	-.03	.06	.07	.07	.04	.05
Social aspects	-.06	-.15	-.12	-.14	-.05	-.01
Physical aspects	.12	.02	-.03	-.12	-.09	-.14
Reflections						
Total positive affect	.17*	.00	.03	-.03	-.12	-.10
Total negative affect	-.24**	.19*	.16	.24**	.25**	.23*
Cognitive appraisals	.14	-.01	-.08	.04	-.03	-.10
Proximity	.07	.05	.07	.01	-.04	-.03
Loss	-.03	.13	.20*	.04	-.01	.06
Safe Haven	.14	.04	.05	-.01	-.08	-.08
Secure Base	.15	-.05	-.11	-.07	-.08	-.15
Memories						
Personal aspects	-.10	.07	.07	.10	.10	.11
Social aspects	.18*	-.06	-.12	-.14	-.13	-.20*

Note: $N=99$. ^a Point Biserial correlations. * $p < .05$; ** $p < .01$ (1 tailed);

Conversely, the preoccupied, dismissing and fearful attachment styles and anxious and avoidant dimensions were significantly associated with reporting childhood memories of being alone and with reporting of negative affect in recall (see Table 5.11). Hence the adult place attachment styles and dimensions are reflected in recall of childhood experience but only in the *social* and *affective* domains. Descriptions and cognitions of childhood places were unrelated to place attachment however.

5.6.3 Associations between interpersonal attachment styles and recall of

favourite childhood places

Correlations between interpersonal attachment and childhood places were calculated and are shown in Table 5.12. Secure interpersonal attachment was associated with remembering childhood places that were inside rather than outside or away from the home ($r = -0.24, p < .01$), with more positive affect in recall of childhood places ($r = 0.20, p < .05$), and with descriptions of the childhood place that were less personal and therefore more group oriented in nature ($r = -0.20, p < .01$). The dismissing and preoccupied interpersonal attachment styles were largely uncorrelated with recollections of childhood place, although the preoccupied style was associated with the sense of loss experienced when reflecting upon time spent in that place ($r = .19, p < .05$).

The fearful style and the avoidance dimension of the RQ, however, were negatively associated with positive affect in recall, and with references to a secure base in recollections (see Table 5.12). The measures of anxious and avoidant interpersonal orientation on the ECR-R were largely uncorrelated with childhood place reflections.

5.6.4 Associations between place attachment and the codes for the current home

Correlations between place attachment and the codes extracted from descriptions of the current home can be found in Table 5.13. Secure place attachment was associated with describing the home in terms of its physical appearance ($r = .23, p < .05$), remembering positive emotions ($r = .25, p < .01$) and social aspects of the home ($r = .24, p < .01$), feeling comfortable ($r = 0.19, p < .05$), and reporting more positive affect in relation to their favourite place ($r = .18, p < .05$).

Table 5.12 *Correlations between interpersonal attachment and childhood places*

Childhood Place	Interpersonal attachment							
	Secure	Preoccupied	Dismissing	Fearful	RQ Anxiety	RQ Avoid	ECR-R Anxiety	ECR-R Avoid
Location								
Distance from home	-.24**	.13	.04	.08	.17*	.08	.13	.11
With others ^a	.14	-.07	-.17	-.07	-.05	-.12	-.07	-.08
Description								
Personal aspects	-.20*	.02	.10	.09	.09	.16	.07	.15
Social aspects	.04	-.09	-.02	-.04	-.06	.00	.12	-.06
Physical aspects	.11	.02	-.01	-.07	-.06	-.10	-.06	.14
Reflections								
Total Positive Affect	.21*	.11	-.12	-.19*	-.07	-.27**	-.06	-.01
Total Negative Affect	-.03	.02	-.04	.03	.05	.02	-.05	.10
Cognitive appraisals	.01	.01	.03	-.09	-.05	-.01	-.15	-.07
Proximity	-.01	-.04	.03	.03	-.10	.05	.04	.05
Loss	.09	.19*	-.14	-.05	.08	-.19*	-.04	.14
Safe Haven	.10	-.06	-.04	-.05	-.07	-.05	-.03	-.05
Secure Base	.16	-.08	-.09	-.17*	-.14	-.14	-.08	-.02
Memories								
Personal aspects	.01	.02	.09	-.08	-.07	-.00	-.12	-.10
Social aspects	.10	-.11	-.03	-.14	-.14	-.06	-.21*	-.17*

Note: * $p < .05$; ** $p < .01$ (1 tailed); ^a Point Biserial correlation

Table 5.13 *Correlations between place attachment and codes for the current home*

Current Home	Place attachment					
	Secure	Preoccupied	Dismissing	Fearful	Anxious	Avoidant
Description(N=99)						
Personal aspects	.02	.03	.02	.04	.02	.00
Social aspects	-.06	.23*	.27**	.17*	.01	.13
Physical aspects	.23*	-.18*	-.26**	-.25**	-.20*	-.29**
Favourite place at home (N=91)						
Feelings evoked by that place						
Comfortable(present/absent) ^a	.19*	-.18*	-.18*	-.25**	-.22*	-.22*
Safe (present/absent) ^a	.03	.11	.03	.09	.06	-.02
Content (present/absent) ^a	-.13	.12	.08	.10	.14	.09
Cognitive Appraisals	.07	-.05	-.08	.08	.01	-.02
Total Positive Affect	.18*	-.15	-.18*	-.08	-.12	-.15
Things missed when away from home(N=99)						
Personal aspects	.15	-.14	-.21*	-.19*	-.14	-.21*
People & pets (present/absent) ^a	.11	.09	-.09	-.04	.01	-.17*
Memories(N=94)						
Personal aspects	-.01	.13	.09	.09	.07	.03
Social aspects	.24**	-.07	-.12	-.07	-.14	-.18*
Physical aspects	.10	.01	-.01	-.01	-.05	-.07
Valency of emotion	.25**	-.25**	-.20*	-.20*	-.25**	-.19*

Note: * $p < .05$; ** $p < .01$; ^a Point Biserial correlations

In contrast, the preoccupied, dismissing, fearful, anxious and avoidant place attachment styles were all negatively correlated (see Table 5.13) with describing the home in terms of its physical appearance, feeling comfortable in the home, missing personal or identity related aspects of the home when away from it, and recalling positive emotions in relation to home.

Again, the attachment styles were unrelated to cognitive aspects in descriptions of the current home, and there were few meaningful correlations between place attachment and the codes from the visual representation of the home. Hence these analyses are not reported here.

Worth noting was the inconsistency in the pattern of correlations for social aspects of descriptions and memories of home and place attachment styles and dimensions. While those who were securely attached to place were more likely to recall memories of the social aspects of their current home, they were less likely to include them when describing their home. Conversely, those who were preoccupied, dismissing, fearful, anxious and avoidant were unlikely to report social aspects when recalling memories of home but more likely to include them when describing the current home.

While not all of these correlations were significant, their pattern suggests attachment style differences are evident when articulating the appearance and experience of home. Perhaps individuals who are insecurely attached to their home are preoccupied with relationships and social engagements that are played out in that environment, but are not likely to report positive memories of relationships in the home when reflecting on the past.

These findings are consistent with attachment theory. According to Bartholomew and Horowitz (1991) fearful individuals desire contact with others

but express an inability to develop trust, and dismissing individuals tend to engage relationships on a superficial level with little or no emotional investment. Thus they find it difficult to establish and maintain long-term relationships, and this is reflected in insecure place attachment. Similarly, preoccupied individuals desperately seek the company and attention of others but are commonly in conflict with others. Therefore, they are unlikely to report experiences in the home that reflect positive social engagements or relationships.

Correlations between HAS place attachment styles and the attachment prototypes developed for the coding of memories of the current home were calculated and are shown in Table 5.14.

Table 5.14.

Correlations between place attachment styles and place attachment prototypes

Place attachment (N=99)	Place attachment prototypes			
	Secure	Preoccupied	Dismissing	Fearful
Secure	.42**	-.38**	-.26**	-.31**
Preoccupied	-.32**	.30**	.15	.10
Dismissing	-.36**	.24*	.19*	-.06
Fearful	-.34**	.33**	.15	.32**
Anxious	-.37**	.39**	.19*	.39**
Avoidant	-.41**	.33**	.23*	.23*

Secure attachment was positively associated ($r = 0.42$, $p < .01$) with the secure prototype and negatively associated with the dismissing, preoccupied and fearful prototypes (r 's = -0.26 to -0.38). Conversely, the preoccupied, dismissing, fearful, anxious and avoidant styles were all negatively associated with the secure prototype (r 's = -0.32 to -0.41) and positively associated with the dismissing, preoccupied, and fearful prototypes (r 's = 0.19 to 0.39). These results provide evidence of a relationship between attachment prototypes and codes extracted from memories of the current home and so they also provide

evidence for the construct validity of both measures.

5.6.5 Associations between interpersonal attachment and the codes for the current home

Correlations between interpersonal attachment and the codes extracted for the current home can be seen in Appendix J. In general, the correlations are weak and it is difficult to discern any patterns in the results. Consequently, these analyses are not discussed here.

Correlations between interpersonal attachment and place attachment prototypes coded from memories of the current home are shown in Table 5.15.

Table 5.15

Correlations between interpersonal attachment and place attachment prototypes

Interpersonal attachment	Place attachment prototypes			
	Secure	Preoccupied	Dismissing	Fearful
Secure	.13	-.01	-.12	-.05
Preoccupied	-.22**	.13	.09	.17*
Dismissing	.04	.00	-.04	-.07
Fearful	-.18*	.10	.13	-.02
RQ Anxiety	-.25**	.10	.16	.11
RQ Avoidance	-.04	.02	.07	-.06
ECR-R Anxiety	-.14	.11	.05	.05
ECR-R Avoidance	-.19*	.12	.11	.13

Note: (N=99); *p <.05; **p <.01(1 tailed)

Significant negative associations were found between the secure place attachment style and the preoccupied and fearful interpersonal attachment styles, and the RQ anxiety and ECR-R avoidance dimensions (r 's = -0.18 to -0.25). A significant positive association was found between the fearful place attachment style and the preoccupied interpersonal attachment style (see Table 5.15).

The pattern of correlations shows a positive association between the

secure place attachment prototype and the secure attachment style, and negative associations between the secure place attachment prototype, and the insecure attachment styles.

5.6.6 Associations between place attachment, interpersonal attachment and possessions

No significant associations were found between place attachment and the type of possessions codes (Appendix K). There were some interpersonal attachment style differences, however, which are worthy of mention, as they lend support to the notion of a link between the way we relate to people and those possessions we hold near and dear. People who were securely attached in their relationships with others were more likely to talk about items that represented ties to other people, and those who were preoccupied in relationships were more likely to specify items that were sentimental. Conversely, those insecurely attached in relationships were less likely to specify sentimental items, items that were inherited or those that represented ties to others (see Appendix L).

5.6.7 Content richness and the attachment measures.

In order to investigate whether the depth of information supplied was related to place attachment and interpersonal attachment, two content richness indexes were calculated, one for childhood place, and one for the current home. The descriptive statistics for the Content Richness Indexes are shown in Table 5.16, and Table 5.17 shows the correlations between the Content Richness Indexes and the attachment measures. For the calculation of the childhood place index total scores for descriptions (personal, social and physical), reflections (positive and negative affect), cognitive appraisals, and memories

(personal and social) of the childhood place were added together. Higher scores were indicative of greater richness.

Table 5.16

Descriptives for the content richness Indices

Content Richness Index	<i>M</i>	<i>SD</i>	Range
Childhood Place	13.08	4.68	5-28
Current Home	11.51	3.66	3-22

(*N* = 99)

Table 5.17

Correlations between attachment styles and the content richness indices for the environmental autobiography

Attachment styles	Content Richness Index	
	Childhood place	Current home
Place attachment		
Secure	.07	.20*
Dismissing	.02	-.16*
Preoccupied	.04	-.11
Fearful	.05	-.14
Anxiety	-.05	-.15
Avoidance	-.05	-.20*
Interpersonal attachment		
Secure	.09	.24**
Dismissing	-.02	-.08
Preoccupied	.03	-.03
Fearful	-.15	-.25**
RQ Anxiety	.01	-.18*
RQ Avoidance	.08	-.23*
ECR-R Anxiety	.03	-.07
ECR-R Avoidance	.06	-.11

Note: (*N*=99); **p* < .05; ***p* < .01(1 tailed)

For the current home the calculation included total scores for descriptions (personal, social, physical), feelings of the experience of being in a favourite place within the home (comfort, safe, happy), what people miss when away from home (personal, people and physical), visual representations (sketch, type of text, relationships, personal aspects) and memories (personal,

social and physical). As would be predicted from attachment theory, the content richness index for the current home was positively associated with secure attachment styles for both place and interpersonal attachment. Conversely the dismissing, fearful, anxious and avoidant styles in both place and interpersonal attachment were negatively associated with the content richness index for the current home. This indicates that those who are securely attached to their homes and in their relationships, report greater levels of elaboration in their scripts. Curiously, there were no associations between content richness and attachment styles for childhood place.

5.7 Discussion of Study 1

The aim of this study was to investigate the relationship between place attachment and interpersonal attachment in relation to childhood places, and the current home environment. This section will begin by discussing the first two research objectives, which were to investigate the experience of a favourite childhood place and the current home. I will then discuss the third research objective, which was to compare those experiences within an attachment framework. The final objective, to investigate links between interpersonal attachment and place attachment, will include a discussion of the findings in relation to the study hypotheses.

5.7.1 Attachment style differences in the experience of childhood places and the current home.

Place attachment and interpersonal attachment style differences were evident throughout the reflected experiences of favourite childhood places and the current home. This section will provide a review of those differences.

Secure attachment

Secure place attachment was associated with reflections of time spent with others and memories of social occasions in a favourite childhood place, and higher levels of positive affect and lower levels of negative effect in written reflections on the childhood place. Similarly secure attachment in interpersonal relationships was associated with higher levels of positive affect in reflections on the childhood place, and remembering favourite places inside the home environment.

Those who were securely attached to place were more likely to: describe (in more detail) their current home in terms of its physical appearance; remember positive emotions and social aspects of the home and report more positive affect. They were also more likely to report feeling comfortable in relation to their favourite place within the home. Secure interpersonal attachment was also related to missing personal aspects of the home when away and recalling memories of the home that reflect social elements.

These findings are consistent with attachment theory, i.e., secure individuals have a high sense of attachment security, comfort with closeness and interdependence, high levels of warmth, self confidence and intimacy in relationships, and a positive approach to self and others (Bartholomew & Horowitz, 1991; Mikulincer, Shaver & Pereg, 2003).

Retrospective research has indicated that secure individuals remember parental relationships as warm and affectionate (Collins & Read, 1990; Feeney & Noller, 1990; Hazen & Shaver, 1994). They also desire intimate relationships and seek a balance of closeness and autonomy in their adult relationships (Feeney and Noller, 1996). Hence, it is not surprising to see that positive affect, memories of social occasions, time spent with others and the identification of

favourite places inside the home were reflected in the scripts of participants with secure attachments to place and people.

Like the results for the favourite childhood place, the findings for the current home reflect the positive working models that form the basis of secure attachment. The importance of place as a venue for social relationships has been reinforced with these findings, which also demonstrate the use of rich physical descriptors of home as a contextual frame within which to locate temporal and social elements.

Preoccupied attachment

Few correlations were found between the preoccupied attachment styles and the experience of a favourite childhood place, however preoccupied place attachment was associated with time spent alone in the favourite childhood place and higher negative affect in reflections on the childhood place. Those who were more preoccupied in relationships with people reported a greater sense of loss when reflecting upon their favourite childhood place.

The negative affect and sense of loss reported in the reflections of a childhood place is consistent with previous research associated with the preoccupied attachment style, which indicates the presence of exaggerated emotionality in discussions of relationships and a tendency to suffer from separation anxiety (Bartholomew & Horowitz, 1991, p. 228). The findings are also consistent with the environmental prototype of preoccupied attachment which reinforces the level of emotional exaggeration and dependence on place.

The association with time spent alone in the favourite childhood place would appear to be somewhat contradictory. Preoccupied attachment is characterised by a preoccupation with close relationships, a tendency to seek

the company of others and dependence upon others for self esteem. Hence it would be expected that favourite places would be linked to time with others. However it is possible that the level of conflict and rejection that often forms part of preoccupied relationships is in part responsible for the time spent alone (Bartholomew & Horowitz, 1991). This is reinforced by research conducted by Granot and Mayseless, (2001) which suggests that preoccupied children are often less popular with, and explicitly rejected by their peers.

Those who were preoccupied in relation to place were less likely to mention the physical appearance of the home and more likely to mention social aspects when describing their current home to others. They were less likely to report feeling comfortable in their favourite place within the home, and were more likely to recall negative emotions in relation to their home. Being preoccupied in interpersonal relationships was associated with missing people and pets when away from home.

The emphasis placed upon people and social aspects of the home is consistent with research suggesting that a preoccupation with close relationships is characteristic of this attachment style (Bartholomew & Horowitz, 1991). The recall of negative experiences in the current home is consistent with previous research which indicates the high level of incoherence and exaggerated emotionality used when discussing relationships and the dependence upon others associated with the preoccupied attachment style (Bartholomew & Horowitz, 1991). The findings are also consistent with the environmental prototype of preoccupied attachment.

Dismissing attachment

Those participants who recorded higher levels of dismissing place

attachment were, more likely to report a sense of loss when reflecting upon the childhood place and less likely to report spending time with others. They were less likely to report positive affect, less likely to say they felt comfortable in their favourite place within the home, less likely to report missing personal aspects of the home when they were away, and more likely to recall negative emotions in relation to their current home.

The dismissing interpersonal attachment style showed no associations with the experience of childhood places but was associated with the recounting of memories of the physical aspects of the current home and descriptions of home that incorporated less personal and more physical aspects.

These findings are not surprising given that dismissing attachment is characterised by the downplaying of the importance of relationships, restricted emotionality, and an emphasis on independence and self reliance leading to an avoidance of intimacy (Bartholomew & Horowitz, 1991). The findings are also consistent with the environmental prototype which suggests that dismissing attachment would be synonymous with the dismissal of the importance of place, restricted displays of emotionality in regard to place, and an emphasis on independence and self-reliance in relation to place, as opposed to a need for comfort and stability.

Fearful attachment

When reflecting upon the favourite childhood place, fearful place attachment was related to reporting higher levels of negative affect, and fearful interpersonal attachment was related to lower levels of positive affect. Fearful place attachment was associated with descriptions of the current home that incorporate more social and less physical aspects, feeling uncomfortable in the

favourite place within the home, not missing personal aspects of the home when away, and recalling more negative emotions in memories of the home. Similarly, fearful interpersonal attachment was associated with feeling uncomfortable in the favourite place within the home and not missing personal aspects of the home when away.

These findings are consistent with the fearful environmental prototype which is characterised by an avoidance of the formation of any relationship with place due to a fear of loss, a sense of insecurity that is felt in place and an inability to recognise and appreciate the level of comfort and stability afforded by place. The findings are also consistent with research that suggests fearful interpersonal attachment is characterised by the avoidance of intimacy due to a fear of rejection, and a basic distrust of others (Bartholomew & Horowitz, 1991). Hence those classified as fearful are theoretically more likely to report negative affect in regard to relationships with place and people.

Attachment anxiety

Previous research suggests that the attachment anxiety dimension is associated with a fear of rejection and abandonment, negative beliefs about the self, a sense of helplessness, and difficulties regulating affect and cognition which lead to disjointed organisation of self representations and easily accessible negative emotions and memories (Mikulincer & Florian, 1998; Mikulincer, Shaver, & Pereg, 2003).

In support of these findings, the anxiety dimension of interpersonal attachment (RQ) was associated with the identification of favourite childhood places away from the home (RQ anxiety dimension), and with reporting less social aspects when recalling memories of a favourite childhood place (ECR-R

anxiety dimension). These findings suggest that those who show high levels of relationship anxiety are more likely to seek environments where they will spend less time with people, hence reducing fear of rejection and abandonment.

Similarly, those who scored higher in place related anxiety were more likely to report high levels of negative affect when reflecting upon the favourite childhood place and the current home, and less likely to report being comfortable in their current home.

Attachment avoidance

The avoidance dimension of place attachment was associated with time spent alone in a favourite childhood place and elevated levels of negative affect when reflecting the childhood place. Those who scored higher on the RQ (interpersonal) avoidance dimension reported lower levels of positive affect and were less likely to report a sense of loss when reflecting upon the favourite childhood place. Hence the avoidance dimension of both place and interpersonal attachment reflects an emotional distance between person and place, consistent with attachment theory.

5.7.2 Links between place attachment and interpersonal attachment

The general hypothesis was proposed that patterns of attachment to place would covary with patterns of attachment to people, such that each of the place (HAS) attachment styles would be positively correlated with the corresponding interpersonal attachment style (see page 82 for a list of hypotheses).

Supporting this general hypothesis, while the magnitude of correlations was modest, there were positive associations found between place attachment and the corresponding interpersonal attachment styles and dimensions,

although not all of these were significant (see Table 5.10). This trend was evident for all but the RQ avoidant dimension which was low negatively correlated with the HAS avoidant dimension.

Also noteworthy was the consistent pattern of significant positive associations found between the interpersonal preoccupied attachment style and all the insecure place attachment styles and dimensions of the HAS. This suggests that those who exhibit higher levels of preoccupation in relationships are generally much more insecure in relation to their home environment. Hence while the preoccupied individual may seek the “*security*” that the home environment affords, their emotional intensity, and idealistic tendencies may lead to feelings of inadequacy and thoughts of the home environment as unsupportive. In short, there is conflict between wanting to feel “*at home*” and wanting to explore “*other homes*” in search of the ideal.

I also hypothesised that secure place attachment would be negatively correlated with the preoccupied, dismissing and fearful styles, and with the anxiety and avoidance dimensions. This trend was largely supported with the data indicating negative correlations between the HAS secure style and the insecure interpersonal attachment styles and dimensions. The exceptions to this trend were the RQ dismissing style and RQ avoidant dimension.

Overall, while the magnitude of correlations is weak their general pattern indicates support for the hypothesis that place and interpersonal attachments are conceptually linked.

5.7.3 Links between place attachment, interpersonal attachment and reflections on the experience of childhood places and the current home.

Based upon the findings of Bartholomew and Horowitz (1991), I

hypothesised that the detail with which experiences of childhood place and the current home were described (i.e., the level of elaboration or content richness) would covary with interpersonal and environmental attachment styles. I expected that the secure and preoccupied attachment styles would predict higher scores on elaboration or content richness. Conversely I expected that the dismissing and fearful attachment styles, would predict lower scores on content richness.

Although no attachment style differences were found in the detail with which childhood places were described, there were significant attachment style differences for descriptions of the current home. In support of the hypotheses, both secure place attachment and secure interpersonal attachment were associated with the elaboration of greater detail when reflecting upon the current home (see Table 5.18).

Also as predicted, the dismissing and fearful place and interpersonal attachment styles, and the anxiety and avoidance dimensions were all negatively associated with the level of elaboration in descriptions of the current home. There were no significant associations, however, between the preoccupied attachment styles and the depth of elaboration.

5.7.4 Links between place attachment, interpersonal attachment and valency of emotion and affect in reflections on the childhood place and current home.

I predicted that the valency of affect in the reflections on place would covary with both place and interpersonal attachment. I expected that secure and preoccupied attachment styles would be reflected in references to positive affect experiences in place. There was mixed support for these hypotheses

For reflections on a childhood place, there was a significant positive correlation between Positive Affect scores and secure place and interpersonal attachment. For reflections on a favourite place within the current home there was also a significant correlation between Positive Affect scores and secure place attachment. There were no significant correlations however between Positive Affect scores and the interpersonal attachment styles.

For memories of the current home there were also significant associations between positive affect and secure place attachment. In addition, there were significant correlations between the insecure place attachment styles and Negative Affect. No significant correlations were found between valency of affect and the interpersonal attachment styles. Overall, these results indicate support for links between the place attachment styles and the valency of affect referenced in descriptions of important places.

5.7.5 Links between place attachment, interpersonal attachment and references to safe have and secure base.

In hypothesis four I predicted that those with secure and preoccupied place attachment styles would make more references to the childhood place as a secure base and safe haven, would express a greater sense of loss, and would report greater desire to maintain proximity to place. Conversely, I expected that the dismissing and fearful place attachment styles would make fewer such references. Disappointingly, few significant correlations were found between the place attachment styles and any of these variables.

5.7.6 Links between place attachment, interpersonal attachment and what people miss when they are away from home.

I predicted that the secure and preoccupied attachment styles and the

anxiety dimension for both place attachment and interpersonal attachment would positively correlate with participants missing the personal and social aspects of the home when away from it. I also predicted that the fearful and dismissing attachment styles and the avoidant dimension would be negatively correlated with these measures.

Consistent with the hypothesis, those who were secure, preoccupied and anxious in relation to place were more likely to say that they missed the people and pets they share their home with when they travel away. Those who were securely attached also said they missed the personal aspects of home. Conversely, those who were dismissing, fearful and avoidant were less likely to say that they missed the personal aspects of home or people and pets (see Table 5.13).

For interpersonal attachment, those who were securely attached were more likely to miss the personal aspects of home rather than people and pets. Conversely those who were preoccupied were more likely to miss people and pets as opposed to the personal aspects of home. Hence, the general pattern of correlations is consistent with attachment theory and indicates general support for this hypothesis.

5.7.7 Links between place attachment, interpersonal attachment and possessions.

I hypothesised that the secure and preoccupied attachment styles would be associated with reporting more sentimental items, gifts, and other items with interpersonal meaning. Conversely, I predicted that the insecure attachment styles would be negatively correlated with these measures.

Partial support was found for this hypothesis in relation to interpersonal

attachment. There were positive correlations between secure attachment and items that represented ties to others and between preoccupied attachment and sentimental items (see Appendix L). Further support was evidenced by negative correlations between the dismissing attachment style and items that were sentimental, inherited and represented ties to others.

Curiously, there were no associations between the place attachment styles and the possession content codes. This was consistent with the lack of association between place attachment and the possession codes relating to affective experience, described earlier.

5.7.8 Links between place attachment prototypes, HAS place attachment scores and interpersonal attachment styles and dimensions.

Using the prototypical working models of attachment to place theorised in chapter 3, I predicted that there would be clear attachment style differences in the reflected memories of the current home. I predicted that each attachment prototype would correlate positively with its corresponding place attachment style (HAS scores) and interpersonal attachment style (RQ and ECR-R scores). I also suggested that the secure prototype would be negatively correlated with the preoccupied, dismissing and fearful styles, and with the anxiety and avoidance dimensions, and that the preoccupied, dismissing and fearful prototypes would be positively correlated with the anxiety and avoidance dimensions of place and interpersonal attachment.

As was shown in Table 5.14, there was support for these predictions with clear evidence of relationships between the place attachment prototypes and the corresponding HAS place attachment styles and dimensions. The predicted, negative correlations between the secure prototype, and the

preoccupied, dismissing and fearful place attachment styles were also found.

Further, there were positive correlations between the preoccupied, dismissing and fearful prototypes and the anxiety and avoidance dimensions of place attachment. Hence it appears that the place attachment prototypes are a good predictor of place attachment styles and dimensions measured on the HAS. This lends support to the validity of both measures.

5.8 Summary of Study 1

Study 1 investigated the experience of a favourite childhood place and the current home, and articulated both place and interpersonal attachment style differences in those experiences. Links between the place attachment and the interpersonal attachment styles have also been illustrated, with evidence of a consistent *pattern* of correlations between the place and the interpersonal attachment styles. The results provide no evidence that place and possession attachment are conceptually linked.

Chapter 6 Study 2 Methods

The second study was designed to further investigate links between interpersonal and place attachment and, more specifically, to examine participants' social and place networks in relation to attachment styles.

6.1 Participants

Snowball recruitment was used for this study. A team of five researchers (psychology students) were responsible for the recruitment of five initial participants who were required to pass on information about the study and the contact details of the research team to people within their current social network. One hundred and five people chose to participate (68 females and 37 males) ranging in age from 18-79 ($M=39.8$, $SD=13.0$). Of this sample 68.6% were married or living in defacto relationships, 23.8% were single, 1.9% were widowed, and 5.7% were either separated or divorced.

6.2 Measures

Similar to the first study, a questionnaire booklet containing a number of new and published measures was utilised for this study.

6.2.1 Interpersonal and environmental attachment measures

As for study 1, the Experiences in Close Relationships – Revised (ECR-R; Fraley, Waller & Brennan, 2000) scale was used to measure interpersonal attachment (see Appendix C) and the Home Attachment Scale (HAS) was used to measure environmental attachment (see page 92). Dimensions of anxiety and avoidance were computed for both scales using the same procedures as in the first study. Due to the large number of measures used in this study and the estimated completion time, the Relationship Questionnaire was omitted from

this study.

6.2.2 Attachment Network Questionnaire (ANQ)

In order to assess the social networks of participants, the Attachment Network Questionnaire (ANQ; Trinke & Bartholomew, 1997) was chosen. The ANQ was designed to assess attachment hierarchies in relation to five components which were identified by Bowlby (1980) and Ainsworth (1989) as crucial to attachment development: actively seeking to be in close proximity to the attachment figure; safe haven – the use of an attachment figure in times of distress; using the attachment figure as a secure base from which to explore; the strength of emotional ties to an attachment figure; and mourning the loss of an attachment figure.

Sample questions tapping each component include: safe haven (Who do you want to go to, to help you feel better when something bad happens?), secure base (“Who would you like to be able to count on to always be there for you and care about you no matter what?”), proximity seeking (“Who is it important for you to see or talk with regularly?”), mourning after hypothetical loss (“Whose death would have the greatest impact or effect on you regardless of what the effect may be?”), and emotional connection (“Rank order all of the people on your list in terms of who you feel the most emotionally connected to”).

On the ANQ participants are required to list five people that they feel a strong connection to regardless of the nature of that tie (positive, negative, or mixed), and note their relationship to that person (for example partner, parent, friend etc). They are then asked to rank those people from 1 to 5 in the order of their importance (1= least important and 5= most important) in terms of Bowlby’s attachment components. There were a total of seven questions to be

ranked – two questions for safe haven use, two questions for secure base use, one question each for proximity seeking, mourning after a hypothetical loss and emotional connection. Higher scores represented higher ranks. The ANQ may be found in Appendix M.

6.2.3 Environmental Networks Questionnaire (ENQ)

The Environmental Network Questionnaire (ENQ) was designed as an environmental analogue to the Attachment Network Questionnaire. Its purposes were to assess place attachment hierarchies in relation to the attachment functions specified by Bowlby (1980) and Ainsworth (1989) and to measure the level of emotional connection to place.

Similar to the ANQ, the Environmental Network Questionnaire asked participants to record five places they feel a connection to. As for the ANQ, they were then asked to rank those places in order of importance for the relevant attachment functions (safe haven behaviour, secure base use, proximity seeking, and mourning after a hypothetical loss). Participants were also asked to rank their emotional connection to each place. Rankings of one to five were used with higher scores representing higher ranks.

Sample questions on the ENQ were: safe haven (“Where would you want to go to, to help you feel better when something bad happens or you feel upset?”), secure base (“Which place would you like to be able to count on to always be there for you to go to no matter what?”), proximity seeking (“Where is it important for you to be or visit regularly?”), mourning after hypothetical loss (“The loss of which place would have the greatest impact or effect on you regardless of what the effect may be?”), and emotional connection (“Rank order the places listed in order of which you feel the most emotionally connected to”).

The measure may be found in Appendix N.

6.2.4 Personality measure

Previous research (Shaver & Brennan, 1992) has indicated that attachment styles are related in theoretically predictable ways with the Big Five personality dimensions. Research has also demonstrated links between measures of sociotropic (socially dependent) and autonomous personality (socially independent; a preference for solitude and privacy), romantic attachment dimensions (anxiety and avoidance) and ratings in relation to social networks which included partners and a close platonic friend (Sibley & Overall, 2007).

Personality profiles for this study were measured using the *Big Five Inventory* (BFI; John & Srivastava, 1999; see Appendix O). The BFI – 44 is a 44 item short phrase scale designed to measure the Big Five personality traits of Extraversion (E), Agreeableness (A), Openness (O), Conscientiousness (C), and Neuroticism (N). Participants were asked to rate their level of agreement with a series of self descriptors such as: “Tends to find fault with others” (tapping A) and: “Is full of energy” (tapping E). Items were rated on a five point scale ranging from strongly disagree to strongly agree. The BFI is considered to be a widely used and reliable short form measure of the Big Five trait domains with alpha reliabilities averaging above .80, and test – retest reliabilities averaging .85 (John & Srivastava, 1999). Reliability statistics for the BFI - 44 in the current study were calculated and considered adequate with Cronbach alpha’s ranging from .65 for Conscientiousness to .84 for Extraversion.

6.2.5 History of home and neighbourhood measure

Similar to the environmental autobiography used in Study 1, participants were asked a series of questions in relation to their childhood home. Sample questions included “what made this place feel like home?” and “Have you ever revisited your childhood home, and if so how did it make you feel?”.

The second part of this measure concentrated on the current home. Questions included items such as “How would you describe your current home to someone?” and “What did you do when you first moved into this home? Was there any form of behavioural ritual or celebration that you engaged in?”

This was followed by a section which focused on the participants’ neighbourhood. Participants were asked to consider a series of questions including “How would you describe your neighbourhood?”, “Do you know and / or trust your neighbours?” and “Which of the following do you consider to be within the boundaries of your neighbourhood: the street, the entire suburb, only specific areas of the suburb, the block in which the house is located?”

6.2.6 Feelings of home measure (FOHM)

This questionnaire was purpose designed and based upon previous research. The questionnaire elicits ratings of place identity, place dependence, place attachment and feelings of security in relation to the home. The measure was used to investigate relationships with interpersonal and environmental attachment styles and dimensions, personality traits and the history of home.

The questionnaire contained 13 items (see Appendix P) which were rated on a five point scale ranging from strongly disagree to strongly agree. The questionnaire was broken down into place identity (Items 1, 3 and 10), place attachment (items 2, 9, 11 and 13), place dependence (items 4, 5, 6, 7,

and 12) and security (item 8). The questions were adaptations of those used in research by Williams and Roggenbuck, (1989), Williams and Vaske (2003) and Jorgensen and Stedman (2001).

Questionnaire items included: “My home is very special to me” (Place identity), “I feel very attached to my home” (place attachment), “I could not imagine living anywhere else” (place dependence), and “I feel secure when I am at home” (security). Scoring of the measure involved computing an average of the items for each dimension. Items 6, 7, and 13 were reverse scored.

6.2.7 Demographics

The demographics section included questions relating to: age; gender; marital status; the length of time the participant had lived in their current home; and their financial commitment to that home.

6.3 Coding of attachment networks and history of home and neighbourhood measures

Each script was coded by two independent coders who were blind to the purpose of the study. Similar to the first study, a codebook was provided (Appendix Q) containing the parameters of eligible codes for each question (see section 6.3.2 for examples of code sets for each question).

A sample of the scripts was used for training the coders. Differences in judgments were discussed in the presence of the primary researcher and resolved where possible. Where the resolution of differences was not achieved those codes were removed from further analysis.

6.3.1 Coding of the Network Questionnaires

Participants were asked to rank their chosen attachment figures and

environments on each attachment function. Consistent with the method used by Doherty and Feeney (2004), for the type of relationship and environment listed, distinctions between the first, second and subsequent places were recognised by allocating a score of three to those listed in first place, two for those listed in second place and one for all subsequent places.

Participants were asked to rate each person and each environment in order of importance for each attachment function. A sliding scale was applied with a score of five points allocated for those ranked first and a score of zero allocated to those people and environments not used for each attachment function. Hence in all analyses a large score represents a higher value. With a total of five people and five environments that could be listed, each attachment function had a possible range of scores between zero (where the person or environment was not used for the attachment function) and five (where the person or environment was relied upon heavily for the attachment function).

Mean scores were computed for safe haven (desired + actual use) and secure base (desired + actual use) functions, and strength of attachment was derived by computing the average across attachment functions (safe haven, secure base, proximity seeking, and hypothetical loss) which gave a possible range from zero to five.

Consistent with the scoring of Trinke and Bartholomew (1997) and Doherty and Feeney (2004) each relationship type was assessed in relation to each of the attachment dimensions and as such only those participants who listed the relevant figure or place were included in analyses that related to that figure or place. For example only those participants who specified a partner were considered in analyses surrounding that figure and only those people who

specified a current home were included in analyses regarding that place.

An overall measure of the strength of both environmental and interpersonal networks was achieved by computing an average of all attachment functions for the range of places and people. Higher scores indicated stronger levels of attachment across the environmental and interpersonal networks.

6.3.2 Coding of the history of home and neighbourhood measure

Similar to the methods used in the first study, the prompts throughout the history of home measure were designed to assess the participants' characteristic experiences and feelings toward place with a focus on childhood and current homes. The responses to each prompt were treated as a separate data set. Each script was read repeatedly by the primary researcher. Recurring themes were noted and parameters for each code were developed. In some cases the themes and parameters designed for the first study were applied. In most cases responses were coded for the presence or absence of a theme as opposed to a frequency count in order to attenuate for those responses that were repetitive in content. The following section discusses each component of the history of home measure and the coding that was applied.

6.3.3 Coding of the childhood home

Participants were asked to think about the first home they could remember and to talk about what it was that made it feel like home. Responses to this question were coded into three categories, the social aspects of home (people, pets and social occasions), the atmosphere of home (appraisals of the way the place felt or made them feel such as warm, comfortable, familiar; personal possessions were included in this category), and the physical aspects

of home (how the place looked, where it was located and the length of time they had spent in the place, for example “I grew up here”, “I have lived here all my life”).

Responses were coded for the presence or absence of each. Average scores were computed for each of the three codes. Total scores ranged from 0-3 for the personal home, 0-3 for the social home and 0-2 for the physical home. Coder agreement for this section ranged from $\kappa = .91$ to 1.00 , $p < .01$.

Participants were also asked if they had revisited their first home and if so how it made them feel. For those who had returned, responses were coded into positive or negative/mixed emotions. Perfect agreement between coders was reached for this section. The coding checklist for the childhood home may be found in Appendix Q (Section 1).

6.3.4 Coding of the current home

Participants were asked how they would describe their home and their neighbourhood to others. Responses were coded using the same criteria as the previous study (see Appendix D, Section 3). Responses were coded for the presence or absence of each theme. Average scores were computed for the personal and physical aspects of home with total scores ranging from 0-3 for the personal home, and 0-2 for the physical home.

Due to the low number of responses in the “Social” category it was coded as a general theme incorporating the presence or absence of references to people, pets or social events, hence a total score and average were not computed. Among the judges coding agreement ranged from $\kappa = .77$ to $.97$ ($p < .01$) for this task.

The final question in this section asked participants what they generally

do to make a house feel like home. The scripts were coded for the presence or absence of social engagements (such as cooking a meal, throwing a party), physical rituals (such as redecorating, painting), decorating and personalising space (unpacking and allocating space for possessions, dressing the space). Perfect agreement was reached for this section. The coding checklist for this question may be found in Appendix Q (Section 2).

6.3.5 Neighbourhood

Participants were asked how they would describe their neighbourhood to others. Responses were coded for the presence or absence of aspects of three major categories of personal aspects (the atmosphere of the neighbourhood, evaluations of the neighbourhood) social aspects (people/pets/social events) and physical aspects (facilities and location). Coding agreement ranged from $\kappa = .67$ to $.89$ ($p < .01$) for this task

Participants were asked to delineate the range of their neighbourhood by allocating a point to each of the areas they believed to be incorporated by the term. The choices were: the street they live in; the city block their home is in; the suburb their home is in; specific areas of the suburb only; facilities in another suburb; the entire town. These scores were totalled and a higher score was considered to represent a greater neighbourhood range. Scores ranged from 0 to 6. Perfect agreement across coders was achieved for this section.

6.4 Procedure

Participants were asked to read and sign an information and consent sheet. Participants were asked to complete the questionnaire battery in the following order: demographic information, the Attachment Networks Questionnaire (ANQ), the Environmental Networks Questionnaire (ENQ), the

Experiences in Close Relationships – Revised (ECR-R), Home Attachment Scale (HAS), BFI – 44, History of Home and Neighbourhood measure, and Feelings of Home Questionnaire (FOHM). The questionnaire battery was completed in the homes of participants and took approximately one hour to complete.

Chapter 7 Study 2: Results and Discussion

7.1 Overview of Study 2

The major goal of this study was to further investigate the relationship between place attachment and interpersonal attachment, but this time with a view to analysing these measures in relation to environmental and interpersonal attachment networks (as defined in Chapter 6, page 150-151) and personality profiles. There were five research objectives considered in this study. The first research objective was to examine the structure and strength of interpersonal and environmental networks in relation to place attachment, interpersonal attachment and personality traits. The second research objective related to the examination of possible links between place attachment and interpersonal attachment. The third research objective was to investigate links between place attachment, interpersonal attachment and personality profiles. The final two objectives considered personality differences alongside environmental and interpersonal attachment style differences in relation to the experience of the childhood home, current home and immediate neighbourhood.

This section will begin with a brief discussion of the data analysis and the screening of variables which were used for this study. I will then report descriptive statistics for each of the measures, followed by the findings of the correlational analyses which were used to investigate the relationships between place attachment, interpersonal attachment, personality profiles, and the attachment networks. Finally, I will compare the experience of the childhood home, current home and neighbourhood with place attachment, interpersonal attachment and personality profiles. The chapter will conclude with a discussion of the findings in relation to the aims, objectives and hypotheses.

7.2 Data Analysis and Screening

Normality of the variables was assessed and the normality plots revealed the attachment style variables were non-normally distributed. Examination of the data however revealed that, as for Study 1, the pattern of responses could be explained theoretically and thus were considered to reflect characteristics of the measures used as opposed to problems with sampling.

As for Study 1, the dimensions of anxiety and avoidance were calculated for the HAS measure according to the formula specified by Griffin and Bartholomew (1994b, see Chapter 4, page 93). Seventy-four percent of the scores for the HAS anxiety dimension (scores ranged from -9 to 7) and 89% of the HAS avoidance dimension (scores ranged from -12 to 8) were below zero, hence a constant was added to the scores for each dimension of the HAS to bring the minimum score on both dimensions to zero. After the transformation HAS anxiety scores ranged from 0-16, and HAS avoidance scores ranged from 0 to 20.

7.3 Descriptives for demographics

Demographic information for the sample is shown in Table 7.1. Redressing the problem of low home ownership which was evident in Study 1, the majority of the sample owned their own homes (57%). The length of time spent living in the current home ranged from six months to 57 years ($M = 8.8$, $SD = 12.2$). Mobility history indicated that approximately 87% of people had moved homes during their childhood, with just over one third having moved more than six times. Over half the sample had moved more than six times as an adult. These statistics do appear to be quite high. I did not ask for information about the reasons why people had moved and as such can not

comment at depth on this aspect, however, it should be noted that participants were sampled from an area of Australia which has a large population of military families, and people who work in the mining industry. Both are associated with high levels of residential mobility.

Table 7.1

Frequencies reported for demographics

Coding categories and themes	<i>n</i>	%
Type of dwelling		
House	78	74.2
Unit/Townhouse	22	21.0
Mobile Home	4	3.8
University lodging	1	1.0
Mobility History – child		
Never moved	14	13.3
Once or twice	31	29.5
3 – 5 times	25	23.8
6 – 10 times	27	25.7
More than 10 times	8	7.6
Mobility history - adult		
Never moved	5	4.8
Once or twice	17	16.2
3 – 5 times	23	21.9
6 – 10 times	36	34.3
More than 10 times	24	22.8
Ownership status		
Family lodgings	8	7.7
Renting	37	35.2
Own home	60	57.1

(*N* = 105)

7.4 Descriptive Statistics for the Place Attachment and Interpersonal Attachment Measures.

Descriptive statistics for the categorical measure of the HAS are presented in Table 7.2. Secure and fearful attachment styles represented a slightly lower percentage of participants than in Study 1, and there were a slightly higher proportion of preoccupied and dismissing participants. Results once again indicated that the majority of participants were secure in relation to their homes.

Table 7.2
Frequencies for the HAS place attachment measure

Home attachment Scale	<i>n</i>	%
Secure	73	69.5
Preoccupied	20	19.0
Dismissing	7	6.7
Fearful	5	4.8

(*N*= 105)

Anxiety and avoidance dimensions were calculated for the HAS using the same logic as the first study. Anxiety was derived by adding the preoccupied and fearful scores and subtracting the secure and dismissing scores. Avoidance was calculated by adding the dismissing and fearful scores and subtracting the secure and preoccupied scores. Means and standard deviations were computed for the HAS place attachment ratings and the ECR-R interpersonal attachment measure. The results are shown in Table 7.3.

Results for the HAS attachment ratings were similar to the first study. Scores on the HAS anxiety and avoidance dimensions were slightly higher for this sample.

Table 7.3

Mean and standard deviations for the place attachment and interpersonal attachment ratings

Attachment Measure	<i>M</i>	<i>SD</i>	Range
Home Attachment Scale (HAS)			
Secure	5.63	1.42	1-7
Preoccupied	2.76	2.09	1-7
Dismissing	1.96	1.46	1-7
Fearful	1.90	1.52	1-7
Anxiety Dimension	6.07	3.43	0-16
Avoidance Dimension	7.48	2.94	0-20
Experience in close relationships- revised (ECR-R)			
Anxiety	2.61	1.36	1-7
Avoidance	2.34	1.11	1-7
<i>(N = 105)</i>			

The results for the ECR-R dimensions are consistent with previous research (anxiety $M = 2.16$, $SD = 1.08$ and avoidance $M = 2.06$, $SD = 1.13$, Sibley et al., 2005).

7.5 Descriptive statistics for the Personality Measure

Means and standard deviations were calculated for each dimension of the BFI – 44 and are presented in Table 7.4. These results are consistent with those reported in previous studies (e.g. Extremera & Fernandez-Berrocal, 2005; Gramzow, Sedikides, Panter, Sathy, Harris, & Insko, 2004).

7.6 Descriptive statistics for the Environmental Networks Questionnaire (ENQ)

The Environmental Network Questionnaire was designed as an environmental analogue to the Attachment Network Questionnaire (Trinke and Bartholomew, 1997). The measure was used to examine place attachment

hierarchies in relation to the attachment functions specified by Bowlby (1980) and Ainsworth (1989), and to measure the emotional connection to each place listed in the hierarchy (see Chapter 6, page 150).

Table 7.4

Mean item ratings and standard deviations for the BFI - 44

Attachment Measure	<i>M</i>	<i>SD</i>	Range
Extraversion	3.47	.71	1-5
Agreeableness	4.02	.52	1-5
Conscientiousness	3.77	.51	1-5
Neuroticism	3.09	.84	1-5
Openness	3.54	.78	1-5

Note: These scores represent mean ratings for individual items because the BFI-44 subscale scores contain different numbers of items.

After listing five environments that were important to them, participants were required to assign rankings in order of importance (1 = not important, to 5 = very important) to only those environments relevant to each attachment function. For example if they rely upon only three of the five environments to help them feel better when something bad happens or they feel upset, they would rank only those three environments for that particular function.

Descriptive statistics for the type of place listed on the ENQ are presented in Table 7.5. The current home was listed by the majority of participants along with holiday destinations. Previous homes were listed by approximately two-thirds of participants along with parental homes, friend's homes, and leisure environments. The work environment was listed by only 10% of participants and was excluded from further analysis.

Means and standard deviations were calculated for attachment functions, emotional connection and attachment strength for each environment listed and

the results are shown in Table 7.6. The current home was consistently rated the highest across attachment functions. Attachment strength was greatest for the current home followed by the parental home and leisure environments (see Table 7.6). Emotional connection was greatest for the current home followed by the parental home and leisure environments. Interestingly, previous homes received the lowest ratings for attachment strength and sense of loss.

Table 7.5

Frequencies for places listed in the Environmental Networks Questionnaire

Type of place	<i>n</i>	%
Current home	91	86.7
Previous home	71	67.6
Parental home	69	65.7
Relative's home	67	63.8
Friend's home	67	63.8
Work	11	10.5
Leisure environment	71	67.6
Holiday destination	82	78.1

(*N*= 105)

Consistent with previous research (Doherty & Feeney, 2004; Trinke & Bartholomew, 1997), the attachment components of safe haven, secure base, emotional connection and hypothetical loss were considered to be the fundamental indices of an attachment bond. Hence, following the logic of Trinke and Bartholomew, only those environments that were ranked (from 1-5) on at least one of the safe haven questions (item A and/or B, Appendix N), one of the secure base questions (item C and/or D, Appendix N), the hypothetical loss question (item F, Appendix N) and the emotional connection question (item G, Appendix N) were considered to represent an environment to which an attachment bond had been formed.

Table 7.6

Mean composite ranks on each attachment function for each environment

Attachment function	Attachment place						
	Current home	Previous homes	Parents' homes	Relatives' homes	Friends' homes	Leisure	Holiday
Number of participants	91	71	69	67	67	71	82
Safe Haven	4.21 (1.31)	1.78 (1.66)	2.70 (1.73)	2.11 (1.63)	2.29 (1.64)	2.61 (1.68)	2.23 (1.63)
Secure Base	3.92 (1.44)	1.77 (1.75)	2.88 (1.82)	2.14 (1.72)	2.37 (1.63)	2.60 (1.75)	2.06 (1.70)
Proximity	4.09 (1.55)	1.61 (1.66)	2.75 (1.82)	2.28 (1.75)	2.27 (1.62)	2.80 (1.71)	2.27 (1.0)
Loss	3.51 (1.73)	1.56 (1.68)	2.75 (1.79)	2.10 (1.71)	2.39 (1.75)	2.44 (1.74)	2.11 (1.80)
Attachment Strength	3.96 (1.23)	1.71 (1.59)	2.78 (1.62)	2.15 (1.59)	2.33 (1.56)	2.59 (1.49)	2.16 (1.61)
Emotional connection	4.03 (1.35)	2.15 (1.55)	2.80 (1.57)	2.19 (1.18)	2.06 (1.10)	2.50 (1.25)	2.55 (1.37)

Note. Higher values represent greater attachment (range 5-1); standard deviations in are in parenthesis

Based on these criteria, all participants had at least one environment to which an attachment bond had been formed. For this sample ($N = 105$), 78% were deemed to have formed an attachment bond with the current home, 42.9% with a previous home, 53.3% with the parental home, 45.7% with a relative's home, 48.6% with a friend's home, 54.3% with a leisure environment and 52.4% with a holiday destination.

An overall measure of the strength of the environmental network as a whole was obtained by computing an average of all attachment functions (total scores for items testing safe haven, secure base, hypothetical loss and emotional connection for each environment) for the range of places listed. Higher scores indicated stronger levels of attachment across the network and ranged from 0 – 35 ($M = 12.71$, $SD = 7.38$).

7.7 Descriptive statistics for the Attachment Networks Questionnaire (ANQ)

The Attachment Network Questionnaire (Trinke & Bartholomew, 1997), was used to assess interpersonal attachment hierarchies in relation to the attachment components identified by Bowlby (1980) and Ainsworth (1989), and to measure the level of emotional connection to each person listed in the hierarchy (see Chapter 6, page 149).

Participants were required to list five people that they were close to, and specify the type of relationship they had with that person. Descriptive statistics for the type of relationships listed on the ANQ are presented in Table 7.7. Partners were listed most often, followed by mothers, siblings, and friends.

Participants were required to assign ranks to individual relationships to indicate the level of importance (1 = not important, to 5 = very important) of each figure in relation to four attachment components (safe haven use, secure

base use, proximity seeking, evidence of mourning after the hypothetical loss of the person), and their level of emotional connection to that person.

Table 7.7.

Frequencies for persons listed in the attachment networks questionnaire

Relationship	<i>n</i>	%
Partner	85	80.9
Mother	80	79.2
Sibling	80	79.2
Friend	78	74.3
Father	71	67.6
Relative	71	67.6
Child	59	56.2

(*N*= 105)

Means and standard deviations were calculated for each attachment component and are shown in Table 7.8. Consistent with previous research (Doherty & Feeney, 2004; Trinke & Bartholomew, 1997), partners were ranked consistently high across attachment functions, attachment strength and emotional connection. Hypothetical loss was considered greatest for partners, followed by mothers and children. Emotional connection was greatest for partners followed closely by children. Relatives were rated consistently low for all functions, attachment strength and emotional connection.

Similar to the ENQ and consistent with previous research (Doherty & Feeney, 2004; Trinke & Bartholomew, 1997), the attachment components of safe haven, secure base, emotional connection and hypothetical loss were considered to be the fundamental indices of an attachment bond. Hence, following the logic of Trinke and Bartholomew, only those environments that were ranked (from 1-5) on at least one of the safe haven questions (item A

Table 7.8.

Mean scores on each attachment function for each attachment figure

Attachment function	Attachment figure						
	Partner	Mother	Father	Sibling	Child	Relative	Friend
Number of participants	85	80	71	80	59	71	67
Safe Haven Mean	4.65 (0.69)	3.09 (1.54)	2.65 (1.48)	2.67 (1.37)	2.64 (1.70)	1.95 (1.32)	3.08 (1.62)
Secure Base Mean	4.56 (0.90)	3.43 (1.60)	3.09 (1.56)	2.81 (1.37)	2.65 (1.65)	2.12 (1.40)	3.09 (1.60)
Proximity	4.49 (1.11)	3.14 (1.70)	2.75 (1.61)	2.81 (1.47)	2.90 (1.70)	2.06 (1.38)	2.86 (1.57)
Loss	4.20 (1.56)	3.45 (1.75)	3.06 (1.72)	3.31 (1.53)	3.34 (1.73)	2.47 (1.60)	3.13 (1.66)
Attachment Strength	4.52 (0.76)	3.27 (1.48)	2.88 (1.46)	2.84 (1.28)	2.80 (1.38)	2.11 (1.28)	3.06 (1.46)
Emotional connection	4.21 (1.57)	3.56(1.43)	3.20 (1.64)	3.24 (1.36)	4.19 (0.96)	2.70 (1.36)	2.50 (1.56)

Note. Higher values represent greater attachment (range 5-1); standard deviations are in parenthesis

and/or B, Appendix M), one of the secure base questions (item C and/or D, Appendix M), the hypothetical loss question (item F, Appendix M) and the emotional connection question (item G, Appendix M) were considered to represent a person to whom an attachment bond had been formed.

Based on these criteria, all participants had at least one person to which an attachment bond had been formed. Of the sample, 71.4% were considered to have an attachment bond with a partner, 64.8% with mothers, 60% with fathers, 68.6% with siblings, 43.8% with children, 56.2% with relatives, and 64.8% with friends.

7.8 Descriptives for the History of Home and Neighbourhood Measure

The history of home and neighbourhood incorporated questions related to the childhood home, the current home, and the neighbourhood. The following sub-sections present (and discuss) descriptives for each question and each environment.

7.8.1 Qualities of the Childhood Home

Descriptive statistics for the childhood home codes are presented in Table 7.9. The majority of the sample referred to people, pets or social occasions in their analysis of what made the childhood home feel like home. For instance Totor said it felt like home because: “All of my family were there” and Kylie said: “It was a small community – good friendships with neighbours, parents were not yet separated, mother not working then, there was a lot of time together”.

Social occasions were captured by this comment from Juan Pablo: “We had good birthday parties there and Mum made toffee apples”. Two thirds of the sample referred to the personal aspects or the atmosphere of home and roughly

a third included comments referring to how the place and their possessions made them feel. For example, Big Ears said: “The love – my family was all there and it always felt warm and cosy. It was full of photos, nick knacks and memory keys. Things to remind you of those you love and those who love you.” Robert remembered: “There was always soup on the stove when we got home from school”.

Table 7.9

Frequencies and percentages reported for the childhood home codes

Coding categories and themes	Proportion of responses containing theme	
	n	%
What made it home?		
<i>Personal aspects</i>		
Atmosphere	69	65.7
Possessions	29	27.6
Safe/secure	34	32.4
<i>Social aspects</i>		
Family and pets	77	73.3
Other people	38	36.2
Social occasions	29	27.6
<i>Physical aspects</i>		
Grew up there	42	40.0
Descriptions of home	36	34.3
Return to the childhood home		
<i>Emotions</i>		
Positive	52	49.5
Negative/mixed	24	22.9
Never been back	29	27.6

(N = 105)

Approximately one-third of the sample incorporated physical aspects of the home into their appraisal of what made the place feel like home. For example, Gordon described a range of physical elements as well as social

occasions: “There were glass lined doors with fish and seaweed patterned on them, dried grass tiles down the hallway. I remember the backyard, especially the almond tree and the kitchen where we always had sit-down meals with the family.” Not all participants reported happy times, however, as Mike responded by saying: “It didn’t feel like home, we just resided there.”

The majority of the sample had revisited their childhood home and reported positive emotions as exemplified by these comments from Sun: “Happy, reflective, and satisfied” and Elizabeth, “I felt relaxed and happy.” Some had returned to a family that still live in the home as reflected by Dick Tracey: “Yes many times. It was very nostalgic, my grandparents still live there”; and Big Ears: “Yes I go there all the time, my grand parents still live there and it makes me feel comfortable and calm.”

Those who described negative or mixed emotions included Peto who wrote: “There was a sense of loss of the carefree, loving environment, a feeling of the tides of change sweeping over us all”, and Meathead: “I was overwhelmed, things have changed, I felt frustrated – can’t go back things are not the same.” The sense of loss was reinforced by Natasha who said: “It didn’t feel like mine anymore. There were quite a number of changes”; and Lucky: “I was disappointed that it had changed so much, there was a new family living there.”

A sense of psychological growth as a result of loss was illustrated by Charlie Begg “It made me sad, I missed being there, but it also made me angry because the people that moved in built extensions and changed the house to suit themselves. Looking back now I would say that they’re entitled to but at the time it was upsetting.”

In summary, a range of interrelated aspects contributed to what it felt like to be 'at home' as a child. The atmosphere, the feeling of safety and security, the comfort of the possessions and the familiarity they bring with them were contextualised by the physical elements of the dwelling itself.

7.8.2 Descriptive Statistics for the Current Home

Descriptive statistics for the current home are shown in Table 7.10. The majority of the sample made reference to physical aspects of the home such as: "High-set Queenslander, 3 bedrooms upstairs, 2 downstairs, 3 toilets, with a spa in the main bathroom", and: "A high-set Queenslander, dark grey weatherboards with white trim." Approximately half the sample made comments relating to the atmosphere of the home such as: "Our home is cosy and relaxed", and: "My home is located in the bush and there is a strong feeling of peace and calmness that you only get when you are with nature."

In response to the question of what people do to make a house feel like a home, the majority of people unpacked their belongings, put photos on display and personalised their space. Charlie Begg remembers: "When I moved my stuff into the flat it felt like home when I could display all of the things I had collected over the years to make a home. Photos were really important." Flossy also noted the importance of possessions: "Adding pictures and homely things to the living room made it feel like home." For Ms Anderson the familiarity of her possessions was the key to feeling at home: "I put my old bed on the veranda and it felt good. It was a home right away."

Approximately a third of the sample said they had some form of house warming celebration. For Pamela Rose the house warming was quite a large affair: "We celebrated by throwing a huge party for 60 friends and family",

whereas for Peto it was a much more laid back experience: “I raided the fridge, sat and watched a movie”.

Table 7.10.

Frequencies and percentages reported for current home codes.

Coding categories and themes	Proportion of responses	
	<i>n</i>	%
Current home		
Description		
Personal aspects		
Atmosphere	46	43.8
Evaluation	39	37.1
Comfort	46	43.8
Social aspects		
People	38	36.2
Social Occasions	19	18.1
Physical aspects		
Physical features/aesthetics	75	71.4
Location	47	44.8
Making a house a home		
Social engagements	29	27.6
Physical Rituals, renovations	14	13.3
Decorating, unpacking	80	76.2
Nothing	4	3.8

(*N*= 105)

Physical rituals which included renovations or refurbishments were undertaken by a small proportion of the sample. For some it was a major renovation as reflected in these comments from Isabella: “I did a complete renovation, had it repainted inside, ripped up the carpet, and polished the floorboards.” For others there were reasonably minor but important refurbishments as reported by Kaylene: “We painted the walls, and made a garden.” For Elizabeth it was a gradual process: “Over time I decorated and

furnished every single room in the house myself.”

A small portion of the sample reported that they either did not engage in any form of ‘moving in’ ritual or simply did not yet feel like they were ‘at home’. Juan Pablo complained: “I still have not made this place feel like home – this is not my home!”

In conclusion, descriptions of the current home generally include a rich array of components including details of the location, the way the home looks and feels, the level of comfort it provides, the people that live there and the times that are shared. Most people engage in some form of ritual to delineate the transition of house to home. These rituals generally involve the unpacking and locating of personal possessions and the introduction of the home to friends and family.

7.8.3 Descriptive statistics for the Neighbourhood

Descriptive statistics for the neighbourhood are shown in Table 7.11. The majority of participants said they knew and trusted their neighbours. In describing their neighbourhood the majority of participants mentioned personal aspects (such as how the neighbourhood feels to them). Comments such as these by Peto: “My neighbourhood has the right energy”, and Imogen: “It is relaxing and alive”, are reflective of the atmosphere reported by participants. Some were not so positive, however, as these comments from Juan Pablo suggest: “It is isolated there is no contact with the neighbours. This house is like an island, it could not be any more remote if it had a moat around the fence.” Interestingly, Juan Pablo was classified as having a preoccupied interpersonal and place attachment style and these comments are indicative of the prototypical behaviours associated with that style (as discussed in Chapter 3).

Table 7.11

Frequencies and percentages reported for neighbourhood codes.

Coding categories and themes	Proportion of responses containing theme	
	<i>n</i>	%
Description		
Personal aspects	84	80.0
Social aspects	35	33.3
Physical aspects	69	65.7
Neighbours		
Know neighbours	86	81.9
Trust neighbours	82	78.1
Neighbourhood Range		
Street	69	65.7
City block	32	30.5
Suburb	40	38.1
Specific areas of suburb	32	30.5
Facilities in nearby suburb	27	25.7
Entire town/city	31	29.5

(*N*= 105)

Approximately two-thirds of participants referred to the physical aspects or location of the neighbourhood and quite often included comments about the facilities such as these comments from Pierre: “We live on the main road but the traffic is not that bad. There is a major shopping centre 2 minutes walk from here and a medical centre is close by”.

While participants often spoke of the friendly atmosphere of the neighbourhood and often mentioned neighbours there was limited mention of social interaction. For instance Elizabeth said that there were “nice people with nice houses, a lot of elder people”, and Belinda reported “some neighbours are friendly, others stick to themselves.” Fred, however, did report interaction: “People interact and help each other”; as did John: “You can ask your

neighbours for anything and sometimes they offer to give you a hand”.

When asked to consider what forms their neighbourhood, the majority of participants listed the street they live in, followed by the entire suburb, the city block their street is located in, and specific parts of the suburb. Neighbourhood range was calculated by summing these aspects and varied from 0 to 6 (higher scores represent a greater neighbourhood range) with a mean of 2.20 ($SD = 1.36$).

7.8.4 Descriptive Statistics for the Feeling of Home Measure (FOHM)

The Feelings of Home Measure was purpose designed to elicit ratings of place identity, place dependence, place attachment and feelings of security, in relation to the home environment. The measure contained 13 items which were rated on a five-point scale (ranging from strongly disagree to strongly agree, higher scores represent higher levels of agreement).

Means and standard deviations were calculated for each dimension of the FOHM and are shown in Table 7.12. The results indicate moderate to high levels of secure attachment to place, consistent with the HAS.

Table 7.12

Means and standard deviations for the Feeling of Home Measure (FOHM)

Dimension ($N = 105$)	M	SD	Range
Place Identity	3.91	.96	1-5
Place attachment	3.80	.79	1-5
Place dependence	3.15	.61	1-5
Security	4.23	.90	1-5

7.9 Associations between place attachment, interpersonal attachment and the Environmental Network Questionnaire (ENQ)

To test the hypothesis that there would be place and interpersonal attachment style differences in the composition of environmental networks (Hypothesis 1), Pearson correlations were computed between the place and interpersonal attachment styles and the Environmental Network Questionnaire (see Table 7.13). To construct the Environmental Network, as described earlier, participants were asked to list five environments which they share a close emotional connection to. A total of eight environments were listed overall. Only those participants who listed each environment were included in each set of correlations, hence the *n*'s for these analyses varied between 67 and 91. What is interesting about the results shown in Table 7.13 are the consistencies of association within environments, and the contrasts between them, relative to secure versus insecure attachments (as highlighted by the boxed enclosures). This section will discuss these findings in relation to attachment theory.

Secure place attachment was associated with the use of the current home for all attachment functions; it was also associated with greater emotional connection and attachment strength. There were, however, no correlations between the secure place attachment style and other environments, which suggests that the home environment fulfils their many attachment needs.

There were few significant correlations between the place and interpersonal attachment measures, and previous homes, but one significant trend is worth noting. Those who were securely attached to place valorised their current home and devalued previous homes, whereas those individuals with insecure place attachment styles showed the reverse, reporting more

emotional connection to a previous home. Of note, is the lack of significant associations between the place attachment styles and emotional connections to any other environment. This indicates, as noted, that those who are securely attached to their current home are able to fulfil most of their attachment needs in that environment. It would appear that although they acknowledge the place of previous homes in their environmental network, they are no longer emotionally connected to it. The reverse is true of the insecure attachment styles. By maintaining an emotional connection to a previous home they may be avoiding the need to form a close relationship with the current home, and quite possibly, those they share that space with. This is also consistent with the high levels of emotionality, negative affect and anxiety that is generally associated with the more insecure attachment styles.

There were no significant correlations between place and interpersonal attachment styles and the homes of parents or friends so these have not been reported in Table 7.13 (see Appendix R). Relatives' homes, leisure places and holiday destinations were important for those who were preoccupied and anxious in relation to place. This is in stark contrast to their feelings toward current and previous homes and indicates that they seek environments away from the home to fulfil their attachment needs. In fact, the overall trend of the data indicates that those who are insecurely attached (to people and place) were more comfortable in leisure and holiday settings (these trends are highlighted by the boxed enclosures in Table 7.13). Insecure place attachment and high levels of avoidance in relationships were associated with greater attachment strength in relation to leisure environments, and the use of those environments as a secure base and safe haven.

Table 7.13

Correlations between place attachment, interpersonal attachment and Environmental Networks

Attachment components	ECR-R		Place attachment					
	Anxiety	Avoid	Secure	Preoccupied	Dismissing	Fearful	Anxiety	Avoidance
Current Home(N=91)								
Secure Base	-.01	-.12	.14	-.17	-.11	-.13	-.17	-.08
Safe Haven	-.12	-.22*	.32**	-.23*	-.31**	-.34**	-.29**	-.33**
Proximity	-.03	-.21*	.21*	-.24*	-.28**	-.26**	-.23*	-.21*
Loss	-.12	-.19*	.25**	-.21*	-.27**	-.25**	-.23*	-.24*
Emotional connection	-.03	.01	.31**	-.28**	-.22*	-.34**	-.35**	-.24*
Attachment Strength	-.20*	-.07	.26**	-.24*	-.27**	-.28**	-.27**	-.24*
Previous Home (N = 71)								
Secure Base	.01	.13	-.09	.08	-.03	.09	.13	.02
Safe Haven	-.00	.03	-.12	.08	.03	.13	.14	.09
Proximity	.01	.04	-.07	.13	.01	.22*	.20*	.06
Loss	-.00	.08	-.12	.16	-.01	.21*	.23*	.05
Emotional connection	-.10	-.15	-.31**	.32**	.14	.21*	.35**	.10
Attachment Strength	.00	.08	-.11	.11	.00	.16	.17	.06
Relative's home (N= 67)								
Secure Base	-.05	.14	-.13	.34**	.13	.10	.25*	-.08
Safe Haven	.03	.15	-.12	.33**	.05	.07	.26*	-.13
Proximity	-.11	.10	-.07	.30**	.12	.13	.22*	-.06
Loss	.06	.16	-.14	.37**	.13	.12	.28*	-.09
Emotional connection	.02	.09	.03	.13	.00	-.09	.03	-.17
Attachment strength	-.02	.15	-.13	.36**	.11	.11	.27*	-.10

Note: *p < .05; **p < .01(1 tailed) Boxes indicate significant trends which are addressed in text.

Table 7.13 (Cont'd)

Attachment components	ECR-R		Place attachment					
	Anxiety	Avoid	Secure	Preoccupied	Dismissing	Fearful	Anxiety	Avoidance
Leisure Place(N = 71)								
Secure Base	-.22*	.21*	-.18	.22*	.27*	.20*	.20*	.13
Safe Haven	.19	.21*	-.17	.24**	.25*	.21*	.21*	.11
Proximity	.17	.20*	-.12	.14	.23*	.13	.11	.12
Loss	.10	.25*	-.18	.19	.29*	.14	.15	.14
Emotional connection	-.03	.18	-.04	.14	-.04	.07	.15	-.09
Attachment Strength	.17	.24*	-.17	.22*	.25*	.19	.20*	.12
Holiday destination (N = 82)								
Secure Base	.31**	.18	.06	.16	-.07	-.01	.10	-.18
Safe Haven	.27**	.14	-.07	.22*	.13	.03	.13	-.05
Proximity	.24*	.12	.06	.11	.06	-.11	-.03	-.14
Loss	.27**	.18	-.04	.25*	.02	.00	.16	-.15
Emotional connection	.03	.09	.11	.00	.02	-.04	-.06	-.06
Attachment Strength	.29**	.17	.00	.20*	.04	-.01	.10	-.13

Note: *p < .05; **p < .01(1 tailed). Boxes indicate significant trends which are addressed in text.

Conversely, high levels of relationship anxiety were associated with the use of holiday destinations for attachment related functions. These findings are supported in research by Carnelly and Ruscher (1999) who found that high levels of interpersonal anxiety and preoccupied attachment predicted the use of leisure environments as a way of regulating negative affect in relationships. Similarly, Hazen and Shaver (1990) found that exploratory behaviour represents a means of fulfilling unmet attachment needs and providing an environment which increases opportunities for the development of close bonds. Based on this logic, if the current and previous homes have failed to provide adequately for the attachment needs of those who are insecurely attached to place, then they will seek environments where this may be redressed.

The prediction of place and interpersonal attachment style differences in the structure of place attachment networks was supported. Those who were securely attached to place were more likely to use the current home for attachment functions, attachment strength and emotional connection. Conversely those with insecure place and interpersonal attachment styles and dimensions were more likely to feel attached to earlier homes, or to holiday and leisure places. It is concluded that while those who are securely attached to place fulfil their attachment needs within the current home, those who are insecurely attached, anxious and avoidant in relation to place and people, are more likely to seek that fulfilment elsewhere as an escape from the current home.

7.10 Correlations of interpersonal attachment with The Attachment Network Questionnaire (ANQ)

To test the hypothesis that there would be place and interpersonal

attachment style differences in the composition of social networks (Hypothesis 2), a series of Pearson correlations were computed between the Attachment Network Questionnaire, and the place and interpersonal attachment styles (see Table 7.14). Of the seven relationship types identified in the ANQ, there were few correlations between the attachment measures and mothers, fathers, children and friends. Hence, these have not been reported in the Table (see Appendix S). The following section details the findings in relation to partners, siblings and other relatives.

Insecurity in both interpersonal and place attachment spheres was associated with low investment in relationships with partners, and high investment in more 'distant' relatives, whereas security in both interpersonal and place attachment spheres was associated with high investment in intimate partners, but not more 'distant' relatives.

There was also evidence for high investment in more 'distant' relatives for those individuals who were more anxious in relationships. Low investment in siblings was evident for those who were more fearful and anxious in relation to place. Hence intimate partners are used to fulfil the attachment needs of the securely attached (to people and place), whereas more distant relatives are preferred for the insecurely attached (to people and place).

Leaving aside the measures for parents and children, this data links place attachment styles to interpersonal networks. It is concluded that those who are secure in relation to place are secure in relation to their partners, specifically.

Table 7.14

Correlations between place attachment, interpersonal attachment and the attachment network questionnaire

Attachment components	ECR-R		Place attachment					
	Anxiety	Avoid	Secure	Preoccupied	Dismissing	Fearful	Anxiety	Avoidance
Partner(N=85)								
Secure Base	-.28*	-.27**	.17	-.16	-.33**	-.23*	-.13	-.25*
Safe Haven	-.31**	-.27**	.28**	-.18	-.22**	-.14	-.20*	-.19*
Proximity	-.19*	-.27**	.22*	-.02	-.17	-.07	-.07	-.21*
Loss	-.05	-.04	-.02	.07	-.14	-.02	.10	-.11
Emotional connection	-.04	-.03	-.03	.07	.02	.08	.09	.02
Attachment Strength	-.27**	-.27**	.20*	-.10	-.29**	-.16	-.09	-.25*
Sibling (N= 80)								
Secure Base	-.02	-.11	.00	-.12	.08	-.16	-.19*	.04
Safe Haven	-.02	-.09	.01	-.16	.03	-.24*	-.24*	.00
Proximity	-.00	-.04	.21*	-.17	-.09	-.24*	-.27**	-.14
Loss	.05	-.01	.04	-.13	-.10	-.26*	-.17	-.11
Emotional connection	.20*	-.03	.12	-.19*	-.12	-.22*	-.22*	-.09
Attachment strength	-.00	-.08	.05	-.16	-.00	-.24*	-.24*	-.03
Relatives (N = 71)								
Secure Base	.06	.08	-.23*	.21*	.08	.15	.24*	.07
Safe Haven	.06	.13	-.23*	.17	.05	.07	.20*	.04
Proximity	.04	.11	-.23*	.14	.05	.08	.19	.07
Loss	.15	.06	-.26	.16	-.04	.11	.26*	.04
Emotional connection	.10	.14	.06	-.01	-.19	-.22*	-.05	-.23*
Attachment Strength	.08	.11	-.27*	.19	.05	.12	.24*	.06

Note: * $p < .05$; ** $p < .01$ (1 tailed)

7.11 Associations between personality traits and the Environmental Network Questionnaire (ENQ)

To investigate personality trait differences in the construction of environmental networks (Hypothesis 3) a series of Pearson correlations were computed (see Table 7.15). Only those participants who listed each environment were included in each set of correlations, hence the *n*'s for these analyses varied between 67 and 91. There were no correlations between personality traits, parental homes and friend's homes, hence these have not been reported (Appendix T). Similar to the previous section the consistencies of association within environments, and the contrasts between them, provide the key results.

The pattern of correlations for Extraversion, Neuroticism, Agreeableness, and Openness in relation to holiday destinations suggests that most participants are 'secure' in these settings. The opposite was evident for those individuals who were higher in conscientiousness. Individuals who are high on Conscientiousness are diligent and goal directed. They prefer to plan, prioritise and organise tasks rather than reacting impulsively (Barnett, 2006; John et al., 2008). Holiday destinations tend to be associated with relaxation, spontaneity and impulsivity and as such these environments may represent a challenge for those who are highly conscientious. Perhaps those high on Conscientiousness remain attached to their home and workplace, and as a result they have difficulty adjusting while on holiday.

Extraverts seek environments which provide them with high levels of stimulation, activity and social interaction. These attributes are often associated with holiday destinations. Research suggests that neurotics (high levels of anxiety, negative emotionality and sadness) tend to avoid environments which

Table 7.15

Correlations between personality traits and environmental networks

Attachment components	Extraversion	Neuroticism	Agreeableness	Openness	Conscientiousness
Current Home(N=91)					
Secure Base	-.05	-.12	.12	-.01	-.01
Safe Haven	-.07	-.01	.21*	-.10	.04
Proximity	.01	.16	.14	-.14	.06
Loss	-.13	-.11	.19*	-.23*	.05
Emotional connection	-.08	.04	.10	.12	-.15
Attachment Strength	-.06	-.03	.20*	-.11	.02
Previous Home (N = 71)					
Secure Base	.12	.23**	-.02	.11	-.11
Safe Haven	.15	.19	-.02	.18	-.11
Proximity	.13	.32**	.14	.13	.06
Loss	.15	.26*	.18	.17	-.02
Emotional connection	-.13	.02	-.11	-.08	.04
Attachment Strength	.14	.27*	.04	.16	-.08
Relative's home (67)					
Secure Base	.03	.04	.20	.05	.04
Safe Haven	-.04	.14	.12	.02	.03
Proximity	-.09	.08	.30**	-.03	.21*
Loss	-.10	.27*	.18	-.07	.11
Emotional connection	.06	.04	.12	-.27*	.08
Attachment Strength	-.04	.12	.20	.01	.08

Note: * $p < .05$; ** $p < .01$. Boxes indicate trends discussed in text.

Table 7.15 (Cont'd)

Attachment components	BFI-44				
	Extraversion	Neuroticism	Agreeableness	Openness	Conscientiousness
Leisure (N = 69)					
Secure Base	-.13	-.12	.09	.27*	.02
Safe Haven	-.21*	-.11	.06	.25*	.02
Proximity	-.17	-.13	.10	.17	.13
Loss	-.05	.02	.01	.19	.11
Emotional connection	-.04	-.10	.00	.19	.26*
Attachment Strength	-.15	-.11	.07	.25*	.09
Holiday destination					
Secure Base	.19*	.32**	.18	.20*	-.14
Safe Haven	.20*	.30*	.20*	.18	-.03
Proximity	.24*	.32**	.14	.18	-.06
Loss	.16	.32**	.22*	.21*	-.05
Emotional connection	-.01	.05	.13	-.03	.09
Attachment Strength	.21*	.34**	.20*	.21*	-.08

Note: * $p < .05$; ** $p < .01$. Boxes indicate the trends that are discussed in text.

encompass competitive social interactions, so holiday destinations which provide relaxed social interactions would be preferred (Barnett, 2006; John et al., 2008). This is supported by the pattern of correlations between Neuroticism, leisure environments and holiday environments.

The prosocial orientation towards others which is characteristic of Agreeableness is reflected by high levels of trust in others, a desire to avoid interpersonal conflict and encourage social acceptance (Barnett, 2006; John et al., 2008). The findings indicated that although those who were higher in Agreeableness were secure across most environments, holiday destinations appear to provide an environment where they are particularly comfortable.

Openness to experience implies originality and complexity of thought, a desire to seek new and varied environments and experiences, and a preference for variety as opposed to routine (Barnett, 2006; John et al., 2008). The findings for Openness indicate a preference for both holiday and leisure environments. Given the inherent desire for variety that is associated with this personality trait it is likely that these environments provide the levels of novelty and stimulation required to nurture the imaginative, curious nature of high Openness.

Also noteworthy, was the relationship between Neuroticism, and the current and previous homes. Similar to those with insecure attachment styles, Neurotic individuals tend to valorise the previous home but were indifferent to the present home. Neuroticism has been linked to emotional instability, high levels of anxiety, and dissatisfaction in relationships (Shaver & Brennan, 1992; John et al., 2008). It is possible that Neurotic individuals remember their relationship with the previous home as satisfactory in an attempt to compensate their feelings of dissatisfaction with the current home. Overall, the pattern of

correlations indicates that the environments we form attachments to vary predictably based upon personality traits. Hence, the hypothesis of personality trait differences in the construction of environmental networks is supported.

7.12 Associations between personality traits and the Attachment Network Questionnaire (ANQ)

To investigate personality trait differences in relation to interpersonal attachment networks (Hypothesis 4), Pearson correlations were also computed between the ANQ and the BFI-44 (see Table 7.16). Although few strong correlations were found, some of the patterns of correlation are worthy of comment and further explanation.

Openness to Experience was associated with higher levels of investment in partners and children, but lower investment in relationships with distant relatives and friends. Agreeableness was associated with higher levels of investment in most relationships but particularly those with mothers and siblings. Neuroticism was associated with low investment in relationships with children, and fathers but higher investment with mothers. It is possible that these individuals are more anxious in relationships with intimates, children and fathers and hence choose not to rely upon them for attachment related functions for fear that they will not respond in the way that they want.

Extraversion was generally unrelated to particular categories in the social network. Finally conscientiousness was associated with low investment in most relationships but particularly with friends and relatives. It is possible that immediate relatives and friends represent a distraction for the conscientious individual.

Table 7.16 *Correlations between personality traits and interpersonal attachment networks*

Attachment components	BFI-44				
	Extraversion	Neuroticism	Agreeableness	Openness	Conscientiousness
Partner(N=85)					
Secure Base	.07	-.04	.05	.05	-.04
Safe Haven	.11	-.17	.05	-.09	.02
Proximity	.13	-.01	.07	.03	.10
Loss	.14	-.07	.04	.41**	.02
Emotional connection	.17	-.11	.08	.33**	.08
Attachment Strength	.14	-.09	.06	.14	.02
Mother (N = 80)					
Secure Base	-.03	-.04	.19*	.06	-.00
Safe Haven	-.01	.15	.08	-.02	-.06
Proximity	-.15	.08	.22*	-.03	.06
Loss	.10	.21*	.11	.09	-.10
Emotional connection	-.04	.09	.09	.07	-.14
Attachment Strength	-.02	.09	.16	.02	-.03
Father (N = 71)					
Secure Base	.00	-.06	.05	.11	-.18
Safe Haven	.08	-.02	.07	.04	-.20*
Proximity	.02	-.08	.11	.14	-.15
Loss	-.00	-.13	-.03	.18	-.13
Emotional connection	-.12	-.02	.21*	.05	-.07
Attachment Strength	.03	-.07	.06	.11	-.19
Sibling (N= 80)					
Secure Base	.06	.07	.22*	-.00	-.02
Safe Haven	.07	.09	.20*	-.01	-.10
Proximity	.01	.04	.13	-.17	-.05

Note: * $p < .05$; ** $p < .01$

Table 7.16(Cont'd)

Attachment components	BFI-44				
	Extraversion	Neuroticism	Agreeableness	Openness	Conscientiousness
Sibling cont'd					
Loss	.02	.11	.15	-.06	-.08
Emotional connection	.11	.10	.22*	-.04	-.06
Attachment Strength	.05	.10	.20*	-.06	-.05
Child (N = 59)					
Secure Base	.12	-.10	.02	.24*	-.17
Safe Haven	.19	-.01	.00	.24*	-.11
Proximity	.04	-.32**	-.16	.10	.02
Loss	-.13	-.38**	-.16	-.05	.06
Emotional connection	.09	.23*	.16	.42**	-.25*
Attachment Strength	.11	-.19	-.06	.20	-.09
Relative (N = 71)					
Secure Base	.00	.01	.01	.03	.03
Safe Haven	-.06	.06	.02	-.05	-.01
Proximity	-.04	.06	.12	-.10	.10
Loss	-.18	.19	.04	-.27*	-.07
Emotional connection	-.26*	-.06	.14	-.06	.16
Attachment Strength	-.07	.07	.04	-.08	.01
Friend (N = 71)					
Secure Base	-.03	.16	-.07	.20*	-.22*
Safe Haven	-.05	.18	-.00	-.04	-.26*
Proximity	.02	.07	-.01	-.12	-.08
Loss	.08	.01	.00	.09	-.16
Emotional connection	-.01	.01	-.07	.13	-.19
Attachment Strength	-.01	.14	-.03	.05	-.23*

Note: * $p < .05$; ** $p < .01$

The few significant associations and directional trends in the data indicate there is some evidence of personality style differences in the structure of interpersonal attachment networks, but the results on this question are inconclusive.

7.13 Associations of place attachment, interpersonal attachment, and strength of attachment networks.

As previously discussed in Chapter 1, the more varied the relations between the person and the environment the more salient the place becomes and the greater the intensity of the attachment. Shumaker and Taylor (1983) proposed a number of factors that may lead to a strengthening of the attachment bond between people and place, including the physical and social amenities of the environment, and the development of local social networks. They reasoned that positive social relations within a residential setting are paramount to the development of stronger attachment bonds. Giuliani (1991) also suggested links between strong attachments to homes and neighbourhoods and the strength of attachment to a greater number of people, objects and places.

Based upon the research of Shumaker and Taylor (1983) and Giuliani (1991), I hypothesised that stronger attachment to place would be associated with stronger attachments to people (Hypothesis 5). Strength of attachment networks was calculated by computing an average of all attachment functions for each of the places listed in the Environmental Networks Questionnaire and each of the people listed in the Attachment Network Questionnaire. Higher scores indicated stronger levels of attachment across the networks. This hypothesis was supported, with significant positive correlations between the

index of overall strength of the environmental and interpersonal attachment networks for individuals ($r = 0.65$, $p < .01$).

I also hypothesised that strength of attachment would vary across attachment styles with secure attachment associated with higher scores on strength of environmental and interpersonal attachment networks, and insecure attachment styles and dimensions with lower scores on strength of attachment networks (Hypothesis 6). There were no significant relationships between the HAS attachment styles and dimensions, and the strength of the environmental or interpersonal attachment networks. There was, however, a significant association between interpersonal anxiety and the strength of the place attachment network (see Table 7.17).

Table 7.17

Correlations between place and interpersonal attachment styles, personality and strength of Environmental and Interpersonal Attachment Networks

Attachment Styles and Personality Traits	Attachment Network Index of strength	
	Environmental	Interpersonal
Place Attachment		
Secure	-.01	-.12
Preoccupied	.07	.06
Dismissing	-.11	-.05
Fearful	-.04	-.04
Anxiety	.07	.09
Avoidance	-.12	-.03
Interpersonal Attachment		
ECR-R anxiety	.24**	.12
ECR-R avoidance	.11	.10

Note: N= 105; * $p < .05$; ** $p < .01$ (1 tailed)

This suggests that individuals who are anxious in relationships tend to place greater emphasis on building relationships with place.

7.14 Associations between Place and Interpersonal Attachment

As in Study 1, to investigate the relationship between place attachment, and interpersonal attachment (Hypothesis 7) Pearson correlations between the HAS and the ECR-R were computed and these results are shown in Table 7.18.

Table 7.18

Correlations between place attachment and interpersonal attachment

Interpersonal attachment	Secure	Place attachment (HAS)				Avoidance
		Preoccupied	Dismissing	Fearful	Anxiety	
ECR-R anxiety	-.09	.13	.06	.13	.15	.05
ECR-R avoidance	-.22*	.17*	.09	-.00	.15	.03

Note: * $p < .05$; ** $p < .01$ (1 tailed)

Only two significant correlations were found. The results indicate that those who were securely attached to place had lower levels of relationship avoidance, while those who were preoccupied in relation to place exhibited higher levels of relationship avoidance.

While the magnitude of correlations was disappointing, the pattern is consistent with the findings in Study 1. In general there were negative correlations between the secure place attachment style and the anxiety and avoidance dimensions of interpersonal attachment. Conversely there were positive correlations between the insecure place attachment styles and the anxiety and avoidance dimensions of interpersonal attachment.

In summary, the pattern of correlations indicated only very weak support for this hypothesis, with the magnitude of correlations being generally low and non significant but directional.

7.15 Associations between Place and Interpersonal Attachment, and Personality

Correlations between place attachment, interpersonal attachment and

the personality measure were computed and are shown in Table 7.19. Overall, the results provide support for the eighth hypothesis, which suggested that secure place and interpersonal attachment styles would be associated with lower scores on Neuroticism and higher scores on Extraversion, Agreeableness, Openness to Experience and Conscientiousness. Openness, however, was associated with both the preoccupied and dismissing styles. Characterised by originality, creativity and complexity, it is possible that the home environment lacks the level of stimulation needed to engage someone who is high in Openness to Experience. Hence, it is possible that although they feel the need to attach to their homes (preoccupation), the lack of stimulation experienced there may lead to restriction or frustration, a downplaying of the importance of the home.

7.16 The Impact of Home Ownership on Place Attachment

To test the hypothesis that home ownership augments secure place attachment (Hypothesis 9), a chi square analysis was conducted to assess the relationship between secure and insecure place attachment styles and home ownership versus non homeownership. The results indicated no association [χ^2 (df = 1) = 1.98, p = .16], so it appears that security of attachment to place is not dependent upon home ownership. Hypothesis 8 was not supported.

Point-biserial correlations were also conducted to test the hypothesis that home ownership increases the strength of place and social attachment networks (Hypothesis 9).

Table 7.19

Correlations between place attachment, interpersonal attachment and personality

Attachment Styles	BFI - 44				
	Extraversion	Neuroticism	Openness	Agreeableness	Conscientiousness
HAS					
Secure	-.02	-.06	.01	.22*	.18*
Preoccupied	-.06	.14	.18*	-.05	-.04
Dismissing	.13	-.02	.16*	-.21*	-.05
Fearful	.08	-.07	.14	-.09	-.09
Anxiety	-.05	.09	.10	-.05	-.12
Avoidance	.16	-.11	.02	-.22*	-.12
Interpersonal attachment					
ECR-R Anxiety	-.22*	.27**	.07	-.03	-.27**
ECR-R Avoidance	-.28**	.22*	.04	-.06	-.16

Note: * $p < .05$; ** $p < .01$ (1 tailed)

Results showed the strength of the place attachment network was significantly associated with home ownership ($r = 0.18, p < .05$), as was the strength of interpersonal attachment networks ($r = 0.32, p < .01$). It appears that owning a home aids with the formation of attachment bonds with people and places. Perhaps this is due to the residential stability that owning a home often provides.

7.17 The Impact of Residential Mobility on Place Attachment

To test the hypothesis that high levels of residential mobility are associated with insecure place attachment (Hypothesis 10), point biserial correlations were conducted (see Table 7.20).

Table 7.20

Correlations between place attachment and residential mobility

Place Attachment	Residential Mobility	
	Childhood	Adulthood
HAS		
Secure	-.11	-.02
Preoccupied	.11	-.06
Dismissing	.16*	-.06
Fearful	.20*	-.13
Anxiety	.13	-.03
Avoidance	.15	-.03

Note: ($N = 105$); * $p < .05$; ** $p < .01$ (1 tailed).

Residential mobility was classified as high if a person had moved more than three times or low if a person had moved less than that. The results indicated that those who were fearful and dismissing in relation to place were more likely to have moved often as a child. There were no other significant correlations and so there was only limited support for hypothesis 10.

7.18 Correlation of attachment measures and personality traits with codes

extracted from the history of home measure.

To investigate relationships between the attachment measures, the personality trait measures and codes extracted from the history of home measure, a further series of correlation analyses were conducted. The following section provides a review of these findings. Few significant associations were found for the childhood home and neighbourhood codes and so these correlations are not reported here (see Appendix U and Appendix V for the tables of correlations).

7.18.1 Correlations of place and interpersonal attachment with the current home codes

Table 7.21 shows correlations between place and interpersonal attachment with the current home codes. The findings are broadly consistent with attachment theory and suggest that those who are securely attached to place are much more engaged with their home environment.

While the magnitude of correlations is generally modest it is their pattern which is most striking, as indicated by the box enclosures highlighting trends in Table 7.21. Those who were securely attached to place were more likely to feel secure in their homes. They scored higher on place identity, place attachment and place dependence, and generally described their homes in terms of personal aspects (the ambience; how it feels to be at home), and comfort. They were less likely to engage in a form of ritual when moving into a new home but were more likely to throw a house warming party or celebrate with friends. These trends were reversed for the insecurely attached (see Table 7.21). These findings suggest that while the securely attached are generally comfortable welcoming people to their new environment, the insecurely

Table 7.21 *Correlations between place attachment, interpersonal attachment and the current home*

History of home codes (N= 105)	ECR-R		Place attachment					
	Anxiety	Avoid	Secure	Preoccupied	Dismissing	Fearful	Anxiety	Avoidance
Descriptions								
Personal aspects	.11	.20*	.13	-.08	-.22*	-.19*	-.09	-.21*
Comfort	.09	.13	.12	-.19*	-.28**	-.27**	-.17*	-.21*
Social aspects	.14	.02	-.04	.02	-.13	-.04	.07	-.08
Physical aspects	.17*	.10	.09	-.09	-.16	-.11	-.07	-.12
Making a house a home								
Social engagements ^a	-.18*	-.14	.21*	-.19*	-.16	-.17*	-.21*	-.14
Physical rituals ^a	-.08	-.02	-.02	-.05	.01	-.09	-.07	.00
Personalisation of space ^a	.03	.12	-.02	.18*	-.06	-.05	.12	-.18*
No ritual/ritual ^a	.10	-.01	-.30**	.07	.18*	.34**	.24**	.36**
Feelings of home Measure(FOHM)								
Place Identity	-.07	-.06	.24**	-.15	-.18*	-.12	-.17*	-.15
Place Attachment	.15	-.08	.29**	-.18*	-.19*	-.13	-.20*	-.18*
Place Dependence	.01	-.13	.39**	-.22*	-.33*	-.33**	-.30**	-.37**
Security	.03	-.04	.18*	-.17*	-.12	-.14	-.19*	-.10

Note: * $p < .05$; ** $p < .01$; ^a point biserial correlations

attached seek rituals to establish and reinforce their relationship with the new environment.

In summary, for the individual who is securely attached to place, the home environment is viewed as accepting and comforting, and there is an appreciation of the level of stability that the home provides. The findings are reflective of this prototype and suggest that the securely attached individual incorporates the home as part of their identity, recognising the home as a unique and stabilising influence on their lives, while appreciating the fact that they have the freedom and confidence to explore other environments. The home environment is celebrated as a safe and comfortable place which is shared with others. The opposite was found for those who are insecurely attached to place. For them the home is not experienced as an accepting and comforting place, nor is it seen as one of stability or a place that is celebrated with others.

Few significant correlations were found between interpersonal attachment and the current home, but the results did indicate that those who were anxious in relationships were unlikely to celebrate socially when moving into a home and generally described their home in terms of its physical components.

Overall, the findings for the qualitative data codes match those found for Study 1, and indicate support for a relationship between place attachment styles and the experience of the current home. Little evidence however, was found to support the relationship between interpersonal attachment and the experience of the current home. Hence the hypothesis that there would be place

attachment style differences in the experience of the current home was supported, but the hypothesis for interpersonal attachment style differences was not (Hypothesis 11).

7.18.2 Correlations between personality and the current home

Pearson Correlations were also computed to investigate personality trait differences in the experience of the current home (see Table 7.22). Those who scored higher on Agreeableness also scored high on the place identity, place attachment and place dependence dimensions of the Feelings of Home Measure. Given the communal orientation which is associated with this personality trait, these findings make theoretical sense (John et al., 2008). There were few other consistent trends in the results shown in Table 7.22. Overall, these findings indicate little support for the links between personality trait differences and the experience of the current home.

7.19 Discussion of Study 2

The primary aim of this study was to investigate relationships between interpersonal and place attachment styles, and personality traits, in relation to environmental and interpersonal attachment networks. This section will use the research objectives as a framework to discuss the results of this study. I will begin with a discussion of the first research objective, which was to examine the structure of participants' environmental and interpersonal attachment networks in relation to attachment styles and personality. I will then explore the second and third research objectives which were to examine the links between interpersonal and place attachment, and personality profiles. Finally, I will discuss attachment style differences in relation to the experience of the current

Table 7.22

Correlations between personality traits and the current home

History of home codes	BFI-44				
	Extraversion	Neuroticism	Agreeableness	Openness	Conscientiousness
Descriptions					
Personal aspects	-.17*	.03	.10	-.06	-.04
Comfort ^a	-.17*	-.07	.12	-.03	-.12
Social aspects	.15	-.02	.02	.31**	-.25**
Physical aspects	-.01	.09	.01	-.01	-.12
Establishing home					
Social aspects ^a	.14	-.27**	-.01	.13	-.03
Renovations ^a	-.01	-.04	-.02	-.10	-.01
Personalisation of space ^a	-.12	.20*	.11	.03	.02
No Ritual/ritual ^a	.03	.07	.07	-.29**	.03
Feelings of home Measure(FOHM)					
Identity	.08	.01	.19*	.12	-.10
Attachment	.00	.09	.17*	.05	-.12
Dependence	-.08	-.00	.17*	.09	.02
Security	.05	.18*	.15	-.06	-.02

Note: * $p < .05$; ** $p < .01$; ^a point biserial correlations

home.

7.19.1 Attachment style differences and environmental attachment networks

In total there were seven environments which qualified as places which people had formed an attachment bond with. Homes represented a large portion of these environments with personal homes (current and previous), parental homes, and other relatives and friend's homes representing five of the seven environments. The other two environments were recreational areas, represented by leisure and holiday destinations respectively.

Attachment style differences were found in the structure and composition of environmental attachment networks. The results indicated that those who are securely attached to place fulfil their attachment needs primarily within the current home, whereas those who are insecurely attached, anxious and avoidant in relation to place and people are more likely to seek that fulfilment elsewhere, perhaps as a form of escape from the current home. The results for personality style differences in relation to the environmental attachment networks were inconclusive and disappointing.

The ability to differentiate between specific types of place within a larger category of similar places was also evident. For example those who were securely attached to place valorised the current home but not the previous home. The reverse was found for those who were insecurely attached to both place and people, and for those who were high in Neuroticism.

Taken as a whole, the findings indicate support for links between interpersonal and place attachment. They also indicate support for the ability of

the participants to differentiate between places listed in an environmental network, based on whether or not they fulfil a range of attachment functions. This provides evidence for the hierarchical nature of environmental attachment networks.

7.19.2 Attachment style differences and Interpersonal Attachment Networks

There were a total of seven types of relationships listed by participants that qualified as attachment bonds. Similar to previous studies, partners were listed by the majority of people and were rated consistently higher than other relationships for attachment functions, attachment strength and emotional connections (Doherty & Feeney, 2004; Hazen & Zeifman, 1994; Trinke & Bartholomew, 1997).

Although, few significant interpersonal and place attachment style differences were found for relationships with parents, children and friends, there were clear differences for relationships with partners, siblings and more distant relatives. Overall, the results indicated that individuals who were securely attached to place chose their partners to fulfil their attachment needs, whereas those who were insecurely attached to both place and people relied upon more distant relatives.

7.19.3 Relationships between place attachment, and interpersonal attachment, and personality traits.

Consistent with the results obtained in Study 1, the relationships between the place attachment and interpersonal attachment style measures showed trends consistent with theory, although the correlations were weak in magnitude. Secure place attachment was associated with lower levels of

relationship anxiety and avoidance. Conversely, insecure attachment was associated with higher levels of relationship anxiety and avoidance. On the other hand, the data overall indicted no consistent pattern of relationships between place attachment styles and personality traits, although agreeableness and conscientiousness were both significantly correlated with secure place attachment.

7.19.4 Attachment style and experience of the childhood home, current home and neighbourhood

Similar to the results obtained in the first study and to research conducted by Smith (1994) and Sixsmith (1996), the personal, social, and physical aspects of place were listed consistently as components of childhood homes, current homes and neighbourhoods. The nature of the responses to the questions relating to the childhood home, the current home and the neighbourhood varied considerably with some accounts demonstrating a depth of emotional connection that people experience with these environments and the people with whom they share them.

The essence of a childhood home was generally reflected in statements that incorporated the atmosphere or 'feel' of the home, the safety and security of being at home, and the social interaction with people and pets. Positive emotions were generally reflected by those who had returned to the childhood home as an adult, although for some, the childhood home was simply a place they grew up in which provided no more than a contextual frame for their physical and psychological development.

Descriptions of the current home mostly demonstrated the interconnection of the physical, social and personal elements of home with most

participants using physical descriptors as a foundation from which to elaborate the atmosphere of their home. For most participants the transition from house to 'home' was marked by some form of ritual and for a large majority this involved unpacking their possessions and personalising the space. For some the importance of the housewarming party was paramount to share their new home with friends and family.

Most people knew and trusted their neighbours. Most descriptions of the neighbourhood included physical descriptors and statements which reflected the atmosphere. The range of the neighbourhood for most people consisted of the street and suburb in which their house was located.

Although home ownership for the participants of this study was much higher than Study 1, there was no association between those who owned their own home and secure or insecure place attachment styles. There was, however, an association between home ownership and the strength of the environmental and interpersonal attachment networks, which indicated that home ownership impacted upon the level of interaction between people and places and thus the formation of attachment bonds.

Residential mobility for the participants in this study was also much higher than for the participants in Study 1. The correlation analyses indicated that high residential mobility as a child impacted upon the fearful and dismissing place attachment styles, increasing their levels of insecurity in place.

Although there were few place attachment or personality style differences found with the codes extracted from the childhood home and neighbourhood sections of the history of home measure, there was some evidence of interpersonal attachment style differences in the experience of the

childhood home. The reasons for this are less clear, but generally speaking, the findings indicated that those who were anxious and avoidant in their relationships (insecure) with others offered more elaborate descriptions of the childhood home (incorporating physical, personal and social aspects of the home), even though returning to the childhood place encouraged negative or mixed reactions to the memories of relationships encountered there.

There was support for a relationship between place attachment style and the experience of the current home, but limited evidence of a relationship between interpersonal attachment and the experience of the current home. These findings reflect a similar trend to that which was evident in the environmental attachment network and reinforce the pattern of attachment style differences in relation to the home. Although the current home was listed as an environment to which most people are emotionally connected, for those who exhibit higher levels of relationship anxiety and avoidance (insecure attachment), this was not an environment they used to fulfil their attachment needs.

7.20 Summary

Study 2 has investigated the composition and structure of environmental and interpersonal attachment networks. It has revealed links between attachment style and the construction, use, and strength, of those attachment networks. It has also provided evidence of the hierarchical nature of both interpersonal and environmental networks, and, of the ability of people to differentiate between different places based on their adequacy to fulfil attachment functions, and make emotional connections.

Similar to Study 1, links between place and interpersonal attachment

styles have been illustrated with evidence of a consistent *pattern* of correlations between the place and interpersonal attachment styles and dimensions.

The study also further elaborated the qualitative experience of place, this time focusing on the childhood home, the current home and the immediate neighbourhood. It has articulated both place and interpersonal attachment, and personality style differences in those experiences.

The final chapter will discuss the findings from both studies in relation to future developments in attachment theory, and to future research in the domain.

Chapter 8 Conclusions

The primary goal of this research was to investigate relationships between place attachment and interpersonal attachment. This process began with a review of the place attachment literature, with a distinct focus on the home environment and possessions. Throughout that review I drew attention to links with the interpersonal attachment literature. In Chapter 2 the interpersonal attachment literature was surveyed, again with a focus on links between the two research streams. The third chapter aimed to tie the two research areas together, articulating basic differences in the theories, and refining the links that were evident.

This study expanded on previous research by exploring the relationship between place and interpersonal attachment, specifically in relation to the home environment. The research was conducted across two studies, the first of which primarily examined interpersonal and place attachment based interactions with the home and possessions. The second study investigated the structure of people's interpersonal and environmental attachment networks, and explored place and interpersonal attachment and personality style differences in the composition of those attachment networks. It also further investigated interactions with place, focusing on the childhood home, the current home and immediate neighbourhood. My intentions for this chapter are: to use the findings of these two studies to highlight the links that were found between interpersonal and place attachment; to qualify *place* as an 'attachment figure'; and to review the global model of environmental attachment proposed in Chapter 3. I will conclude with a discussion of future directions for research on place attachment.

8.1 The relationship between interpersonal and place attachment.

Both studies demonstrated evidence of links between interpersonal and place attachment. Many of these links were found using a number of new measures which were designed for the study, including The Home Attachment Scale (HAS), the measures for place attachment prototypes and the Environmental Network Questionnaire (ENQ). These measures were analogues of the Relationship Questionnaire and the interpersonal attachment style prototypes developed by Bartholomew and Horowitz (1991) and the Attachment Network Questionnaire developed by Trinke and Bartholomew (1997).

In both studies, there were consistent patterns of correlations between place and interpersonal attachment styles. For instance, in Study 1 there were associations between the HAS and corresponding interpersonal attachment styles (RQ) and a consistent pattern of association between the interpersonal preoccupied attachment style and insecure place attachment styles. There were also strong associations between the HAS attachment styles and attachment prototypes. HAS attachment ratings were similar in both studies, showing the majority of participants were securely attached to their homes. Scores on the HAS dimensions of anxiety and avoidance and scores on the ECR-R were also similar in both studies.

Study 2 investigated the construction and use of interpersonal and place networks. With reference to interpersonal attachment networks, the findings suggest that security in both interpersonal and place attachment spheres were associated with high investment in relationships with partners and low investment in relationships with distant relatives, whereas the reverse was

found for insecurity. In relation to place attachment networks, the findings indicated that those who were securely attached to place invested in the current home for attachment functions and emotional connections whereas the reverse was found for the insecurely attached, who placed far greater emphasis on relationships with previous homes, leisure environments and holiday destinations. The associations between interpersonal and place attachment described thus far indicate support for the validity of these measures and the hypothesised links between the two research streams.

Little support was found for relationships between attachment styles and personality traits, and there was no evidence to support a relationship between place attachment styles, and attachment to possessions. There was, however, some evidence of relationships between interpersonal attachment and possessions, with the securely attached in relationships also likely to be secure in the domain of possessions. The study found that those who were securely attached or preoccupied in relationships were more likely to form attachments to items that were sentimental and represented ties to others, whereas the reverse was found for those who were dismissing and avoidant in relationships. Hence although place and possession attachment appear to be unrelated, there was some support for a link between interpersonal and possession attachment.

8.2 The properties of attachment figures and attachment bonds

As discussed in Chapter 2, the properties of an attachment figure, and an attachment bond, represent a very important part of attachment theory. From Ainsworth's (1979) perspective, an attachment figure was one that was relied upon for a range of functions which ultimately led to feelings of safety, security and acceptance, and the confidence to explore the environment, content in the

reliability and availability of that figure. The formation of an attachment bond differs from an 'everyday' relationship in important respects. Attachment bonds are long lasting, specific in their definition and purpose, and involve the internal organisation of the working models of an individual.

In Chapter 3, I suggested that the criteria put forward by Ainsworth as constituting an interpersonal attachment bond could be applied to 'place' within the realm of the attachment/exploration system. In other words, the dynamics of place and interpersonal attachment are inter-related. Overall, the results of this research suggest (a) that the homes that we live in, and the places where we choose to spend our time, can be conceptualised as attachment 'figures', and, (b) that the bonds that we form with these places are 'attachment bonds' in an analogous way to the bonds we have with people as attachment figures.

Reflections by participants on childhood places and current homes, the basis of both studies, suggested evidence for the longevity of the relationships we have with childhood places which still evoke powerful feelings of family love, security and safety. The formation of these attachment bonds to place were further explored using the Environmental Attachment Networks Questionnaire in Study 2.

As discussed in the following section, all participants were shown to have strong attachment bonds to place, and all were able to differentiate their relationships with these places based upon key areas of attachment function (safe haven, secure base, proximity, sense of loss). They also had little trouble expressing perceived levels of emotional connection to each place. Hence, the findings showed clear support for the evidence of the formation of attachment bonds with place, and the ability of place to qualify as an attachment 'figure'.

8.3 A global model of environmental attachment

As discussed in Chapter 2, the research of Collins and Read (1994) suggested people develop a hierarchy of working models consisting of memories of interpersonal attachment related experiences, and beliefs, attitudes and expectations about the self and others in relation to those experiences. They further suggested that the attachment network is structured hierarchically across three levels of representation, beginning with a global representation of relationships in general, followed by relationships with specific categories of people, and then specific people within those categories.

The hierarchical nature of interpersonal attachment has been supported empirically by the work of Overall et al. (2003) and Overall and Sibley (2008). With regard to attachment networks, the differential use of attachment figures for a range of attachment functions has also been studied extensively (Hazen & Zeifmann, 1994; Trinke & Bartholomew, 1997; Doherty & Feeney, 2004).

As an environmental correlate, Morgan's research (2010) on the reflective experience of childhood places suggested evidence for the formation of affectional bonds with place (e.g., long-term relationships, feelings of security, distress experienced upon the loss of the place, and the felt uniqueness of place). Morgan's research also provided evidence for the formation of working models of relationships with place which develop in childhood as the result of repeated, positive interactions with an attachment figure in a given place. Inspired by this work, in Chapter 3, a hierarchically structured model of environmental attachment was proposed. The global model of attachment to place is subject to individual variations, and similar to interpersonal attachment, incorporates a domain specific level of place which is

represented by categories or types of places, and a place specific level represented by individual places. Some encouraging support for the model was found in the present studies.

Evidence of the hierarchical nature of environmental attachment networks was demonstrated in the second study. The findings indicated that having listed a range of specific environments that were important to them (and which could be grouped into domain specific environments) participants were clearly able to differentiate between those environments based upon their use for specific attachment functions, and their level of emotional connection to them. Representing the domain and place specific levels of the model, the environments listed by participants included homes (current, previous, parental, other relatives, friends), leisure environments (hiking tracks, wilderness areas, national parks, beaches, recreational facilities) and holiday destinations (Australian and overseas destinations).

For example, Flossy, a 39 year-old female who was classified with a secure place attachment style listed the current home, previous home, parental home, other relative's home and a friend's home in her place attachment network. Her responses on the Environmental Attachment Network questionnaire indicated that she refers primarily to her current home for all attachment functions, followed by the homes of her parents, another relative (in this case her sibling), and her best friend. Although she listed her previous home as part of her environmental network she did not rate it as a place which she refers to for any attachment function (i.e. the previous home was scored as 0 on the questions relating to the attachment functions). Furthermore, her emotional connection to the environments listed in her network suggested that

the strongest bond was formed with her current home followed by her parent's home, her previous home and the homes of her best friend and sibling. Thus although the emotional connection to a previous home was evident she did not look to this place as one which was available to sustain any form of attachment function.

In contrast, the responses on the Environmental Attachment Network questionnaire for Phaedrus, a 32 year old female who was classified with a dismissing place attachment style, indicated that she refers to a leisure environment (a hiking track located in a natural wilderness area) primarily for all attachment functions, followed by a holiday destination (Hawaii), the home of her sibling, a previous home and finally her current home. The strongest emotional connection was with the leisure environment, followed by the holiday destination, previous home, sibling's home and the current home. Thus although the current home was acknowledged as a part of the attachment network it was devalued against a previous home and other places.

The process of differentiating each environment based on its use for attachment related functions further enabled the classification of the relationship between the person and the place as an attachment bond. Through this process, there was evidence of clear differences in the way that people think about and relate to place. Those differences appear to be influenced by interpersonal and place attachment styles. As evidenced by the profiles of Flossy and Phaedrus, the results of this study showed that those who were securely attached to place relied upon their current home to fulfil their attachment needs whereas those who were insecurely attached, anxious and avoidant in relation to place were more likely to seek the fulfilment of those

needs elsewhere, possibly as an escape from the current home.

In summary, the findings of this research make an important contribution to theory in the area of place attachment as they indicate important areas of intersection between place and interpersonal attachment. The findings discussed in Chapters 5 and 7 indicate that although the magnitude of correlations was sometimes modest, the pattern of correlations was consistent, thus indicating that place and interpersonal attachment are conceptually linked. The results suggested evidence of: similarity in place and interpersonal attachment styles and levels of anxiety and avoidance; similarity in the formation and development of attachment bonds with people and place; and similarity in the hierarchically structured working models of attachment to people and place. The similarity of those working models was evidenced by interpersonal and place attachment style differences in the way that people interact with, and reflect upon, their experience of childhood places, the current home and other environments in which they choose to spend their time.

These findings make significant additions to the body of place attachment knowledge, as they further elaborate the formation, development, structure, and longevity of the bonds that we form with place. As with all research, however, there are limitations that need to be considered, and a range of unanswered questions about place attachment that should be addressed in future research. The following sections examine those limitations and some of the questions arising from this research, and make suggestions as to further lines of enquiry that may increase our knowledge of the relationships between place and interpersonal attachment.

8.4 Limitations of the study

Firstly, in terms of the sampling, although the sample size for both studies was considered adequate, given the types of measures used and the distributions of secure versus insecure attachment styles, future research would benefit from larger sample sizes. Secondly, the sample for Study 1 comprised students, many of whom were renting and so not established in place, or living with family. This shortcoming was redressed in study 2, where the majority of the sample was homeowners.

In relation to the measures used, at least two issues are worth noting. Firstly, the data for Study 1 was heavily skewed towards secure attachment, and generally demonstrated weak differentiation between the insecure attachment styles in both the interpersonal and place attachment measures. Although this could be partially attributed to the sample size, the results do suggest that more sensitive measures are needed in order to delineate the subtle differences of the insecure attachment styles.

Secondly, in order to reduce the time taken to complete the measures in Study 2, the BFI-44, which is a short form measure of the Big Five personality dimensions, was chosen. Given the inconsistent pattern of results in this study, using the BFI-44, it is recommended that future research includes a more comprehensive measure of the Big Five dimensions such as the NEO-PI-R (Costa & McCrae, 1992).

Although these limitations must be acknowledged they do not detract from the significance of the findings. Rather they offer opportunities for future research, which is the subject of the following section.

8.5 Future directions for research

The current research was exploratory, and largely descriptive in nature. It has suggested links between interpersonal and place attachment, examined some new place attachment measures, and further articulated our understanding of the relationships that we develop with place, the people we share places with, and our possessions. The findings have also suggested a number of areas which warrant further investigation.

One promising avenue for future research will be to refine the Environmental Network Questionnaire and the Attachment Network Questionnaire (Trinke & Bartholomew, 1997) to enable the assessment of the *interaction* between people and places in designated networks. This would allow further elaboration of attachment style differences in the experience of place, by examining the impact of internal working models on our perception of, and interaction with the people we share our spaces with.

For example, it would be beneficial to have participants list the people from their attachment network that they interact with in each environment, and the degree to which their absence or presence in that environment impacts upon the overall emotional connection a person develops with place. Secondly the inclusion of a question which details the length of time each place in the network has been part of a person's life, and the frequency of interaction with each place listed would allow us to gauge the impact of the longevity of the relationship, and the frequency of interaction upon the person's ratings of place based attachment functions.

The environmental autobiography (Cooper Marcus, 1979) proved a useful measure with which to elaborate the reflected experience of places, past

and present. I would recommend some modification to the measure, however, for future research in this area. Some of the prompts that were provided to engage the participant in self reflection were, in hindsight, perhaps not specific enough to warrant the depth of experience I was looking for. For example the question which asked participants to describe their home to someone who had not seen it, implied a physical description was required, and most people responded in that way. Rephrasing this question to reflect the way that people “talk” about their home to someone who has never been there, would more likely encourage responses encompassing a wider range of elements. I would also encourage the inclusion of prompts specifically designed to elaborate the use of the environment for specific attachment functions. This would then allow greater integration and cross referencing with the Environmental Attachment Network Questionnaire.

The Home Attachment Style (HAS) Questionnaire, which was adapted from the RQ for use in this study, has shown the potential utility of environmental analogues of the interpersonal attachment measures. Further research should also explore a rating scale measure as an environmental analogue to the ECR-R. This would allow further testing of the similarities between place and interpersonal attachment. Refinements to the HAS may also be needed in order to better specify the differences between the insecure attachment styles.

Given the results of the second study, which indicated links between high levels of residential mobility in childhood and insecure place attachment, research should also pursue the impact of residential mobility on the development of working models of place. There are a number of ways that this

can be achieved. One would involve the inclusion of a section in the environmental autobiography which details residential mobility from childhood to adulthood. A second would be to include a more comprehensive history of residential mobility as part of the ENQ.

As mentioned in the previous section, I would also like to see a more comprehensive personality measure used to investigate possible relationships between place attachment styles and the structure of environmental attachment networks. Nettle and Shaver (2006) found consistent and theoretically meaningful associations between interpersonal attachment and personality measures using the NEO-PI-R (Costa & McCrae, 1992). The current findings were inconsistent but this could be the result of the size of the sample, the distribution of the HAS measure and the inability of the short form personality measure to provide information on different facets of the Big Five traits.

In conclusion, although the research contexts in which interpersonal and place attachment have evolved are quite different (one in developmental psychology and the other in environmental psychology), the findings of the current research indicates there are some conceptual links between them. Further investigation of these links I believe, will help show how the two systems coexist and interact in the process of forming attachments to people and places.

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Appendix A Environmental Autobiography

What does your home mean to you? I would like you to share your thoughts of your home environment and a favourite childhood place with me. The process should take approximately 1-2 hours to complete. Questionnaires are anonymous and all information will remain strictly confidential.

Imagine that you have been asked to write a book about your personal history which focuses on places of significance from the past and the present. While the instructions that you receive from the publisher provides you with some basic ideas from which you can begin your task, the success of the book depends upon your individual, carefully considered recollections of significant environments of your life. There are no right or wrong ways to complete the exercises; this is a very personal journey into individually unique environments.

In order to respect your anonymity, I would like you to choose a “pseudo” name or a name that may be referred to throughout the analysis of this study.

My Chosen Name is:

Section One

This will form the first chapter of your book and should act to introduce the reader to your favourite childhood environment. Simply follow the prompts below to guide you with the writing process.

1. Where was this place?
2. How would you describe this place?
3. How do you feel when thinking about this place now?
4. I would like you to share a memory of this place with me.

Section Two

Next, I would like you to think about the place that you call home. You

will notice that the next page contains a large rectangle. I would like you to use that page, and the materials provided, to draw a visual representation of your home environment. Feel free to add colour, words or verse to your drawing as needed to convey the essence of what you feel about this place. This is not a test of your drawing ability, rather an opportunity to focus on your home and to portray something of the uniqueness of this environment to others.

This section will form the second chapter of your book and should act to introduce the reader to the environment you call home. Simply follow the prompts below to guide you with the writing process.

1. How would you describe your home to someone who has never seen it?
2. Do you have a favourite place at home? If so where is it and how do you generally feel when you are there?
3. What do you generally miss when you are away from home for a lengthy period of time?
4. Please share a memory of your home with me.

Section Three

This will form the third chapter of your book and should act to introduce the reader to your most cherished possessions. I would like you to think of five of your most cherished possessions, those possessions that you simply could not imagine losing or living without. For each item you should communicate how you acquired the item and what it means to you

Demographics

Now I need to know a little bit about you. Please answer the following questions:

1. How old are you?

2. Are you Male ☐ Female ☐
3. What is your nationality? _____
4. What is your marital status? _____
5. What type of dwelling is your home?
(House, unit etc) _____
6. How long have you lived here? _____

7. Do you:

Own	Rent	Live with family	Live on campus
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. How often have you moved house as a child?:

1-2 times	3-5 times	5-10 times	10+
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. How often have you moved house as an adult?:

1-2 times	3-5 times	5-10 times	10+
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appendix B Relationship Questionnaire (Bartholomew & Horowitz, 1991)

Listed below are four short paragraphs describing how people typically feel in close relationships. Read each of the four paragraphs (A,B,C & D) carefully. Now I would like you to tell me how well each of the paragraphs describes the way that you generally feel in close relationships. To do this imagine a scale from 1 to 7 where the following feelings apply:

1	2	3	4	5	6	7
Not at all like me						Very Much like me.

Place the relevant number in the space provided to the left of each paragraph (Note: the terms “close” and “intimate” refer to psychological or emotional closeness – not necessarily to sexual intimacy).

	It is easy for me to become emotionally close to others. I am comfortable depending on others and having others depend on me. I don't worry about being alone or having others depend on me.
	I am comfortable without close emotional relationships. It is very important to me to feel independent and self-sufficient and I prefer not to depend on others or have others depend on me.
	I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like. I am uncomfortable being without close relationships, but I sometimes worry that others don't value me as much as I value them.
	I am uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely or to depend on them. I worry that I will be hurt if I allow myself to become too close to others.

Now please go back to the paragraphs and chose the 1 paragraph that is most descriptive of how you generally feel. Place a tick in the appropriate space below:

A	B	C	D
_____	_____	_____	_____

Appendix C Experience in Close Relationships – Revised

(Fraley, Waller & Brennan, 2000)

The 36 statements that follow concern how people generally feel in emotionally close romantic relationships. We are interested in how you generally experience relationships, not just in what is happening in a current relationship. Respond to each statement by indicating how much you agree or disagree with it. Place a tick in a single box next to each item.

Rate each statement on a scale of 1 to 7 where:

1	2	3	4	5	6	7
Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Moderately Agree	Strongly Agree

1. I'm afraid that I will lose my partner's love.
2. I often worry that my partner will not want to stay with me.
3. I often worry that my partner doesn't really love me.
4. I worry that romantic partners won't care about me as much as I care about them.
5. I often wish that my partner's feelings for me were as strong as my feelings for him/her.
6. I worry a lot about my relationships.
7. When my partner is out of sight, I worry that he or she might become interested in someone else.
8. When I show my feelings for romantic partners, I'm afraid they will not feel the same about me.
9. I rarely worry about my partner leaving me.
10. My romantic partner makes me doubt myself.
11. I do not often worry about being abandoned.
12. I find that my partner(s) don't want to get as close as I would like.
13. Sometimes romantic partners change their feelings about me for no apparent reason.
14. My desire to be very close sometimes scares people away.
15. I'm afraid that once a romantic partner gets to know me, he or she won't like who I really am.
16. It makes me mad that I don't get the affection and support I need from my partner.
17. I worry that I won't measure up to other people.
18. My partner only seems to notice me when I'm angry.
19. I prefer not to show a partner how I feel deep down.
20. I feel comfortable sharing my private thoughts and feelings with my partner.
21. I find it difficult to allow myself to depend on romantic partners.

22. I am very comfortable being close to romantic partners.
23. I don't feel comfortable opening up to romantic partners.
24. I prefer not to be too close to romantic partners.
25. I get uncomfortable when a romantic partner wants to be very close.
26. I find it relatively easy to get close to my partner.
27. It's not difficult for me to get close to my partner.
28. I usually discuss my problems and concerns with my partner.
29. It helps to turn to my romantic partner in times of need.
30. I tell my partner just about everything.
31. I talk things over with my partner.
32. I am nervous when partners get too close to me.
33. I feel comfortable depending on romantic partners.
34. I find it easy to depend on romantic partners.
35. It's easy for me to be affectionate with my partner.
36. My partner really understands me and my needs.

Note: the order of questions was randomised

Appendix D Environmental Autobiography Coding Manual

Section 1. Descriptions of favourite childhood place coding checklist

Code	Theme	Parameter	Examples from descriptions of home
Personal	Atmosphere	Reference to the psychological climate, the spiritual feel of the place and expressions of subjective qualities (such as inviting and peaceful, relaxing)	<i>"I remember it as a fun place where your imagination could run wild"</i> <i>"The beach was a very relaxed and peaceful place"</i>
	Evaluation	Represented by positive and negative statements which suggest the author is evaluating the place (<i>"I love it"</i> or <i>"I hate it and always have"</i>)	<i>"I remember that it was very ugly looking on the outside"</i>
	Freedom/privacy/control of space	Applied to any mention of personal freedom that the place affords, the privacy and the level of control the occupants have over the space.	<i>"Felt free to do or go anywhere around the home. Didn't feel like I had restrictions."</i>
	Personalisation/possessions	Comments relating to the way that people customise their environment to suit them (incorporates the mention of favourite possessions)	<i>"A duchess with ornaments and hair band holders and hairbrush holders all over it.... there were always large clumps of cuttings that we made into barricades and castles"</i>
Social	Family	The script mentions members of the family, pets	<i>"Playing with my brother in the spa bath – bubble fights"</i>
	Other	Comments relating to social functions and of the relationships established with people.	<i>"The whole family would congregate there every Christmas"</i>
Physical	Physical features/aesthetics	Statements relating to the overall appearance of the place and the physical features.	<i>"High ceilings, lots of wooden walls etc, deep pool, fire ladders"</i>
	Location	Comments that relate to where the place is located.	<i>"This place was situated on a hill on the outskirts of the town we were living in"</i>

Section 2. Coding themes applied to the memories of a childhood place

Code	Theme	Parameter	Examples
Personal	Atmosphere	Reference to the psychological climate, the spiritual feel of the place and expressions of subjective qualities (such as inviting and peaceful, relaxing)	<i>"There was a special rose garden. I remember it in four different ways, the smells and flowers blooming in spring, the oranges and reds of autumn the chill of winter and the warmth of summer"</i>
	Evaluations	Represented by positive and negative statements which suggest the author is evaluating the place (<i>"I love it"</i> or <i>"I hate it and always have"</i>)	<i>"Often compared this place with paintings from Monet, just beautiful."</i>
	Escape/retreat	Reference to the place being used to escape or retreat from people or reality	<i>"10 years old under the house. It was dark and quiet no one else came down there so it was very private. No specific memory but I used to go there to get away from my parents and sisters"</i>
	Freedom/privacy/control of space	Applied to any mention of personal freedom that the place affords, the privacy and the level of control the occupants have over the space.	<i>"I remember always playing dress ups and felt free to do or go anywhere around the home. Didn't feel like I had restrictions."</i>
	Personalisation/possessions	Comments relating to the way that people customise their environment to suit them (incorporates the mention of favourite possessions)	<i>"One time in the rumpus room, my brother and I built this big cubby house covering half the room."</i>
	Pride/Achievement	Reference to pride and achievement experienced within the place	<i>My memory is learning to ride without training wheels....I remember it was exciting and I was proud.</i>

Section 2 (Cont'd)

Code	Theme	Parameter	Examples
Social	Relationships with others	Reference to relationships with family members, pets, and other people.	<i>Everyone was friends all the neighbours were really close and us kids grew up together - community</i>
	Childhood games/adventure	Scripts that recall games and adventure experienced within the place.	<i>I remember there were soldiers, cowboys, Indians, wizards, karate kids. It was complete chaos. I took the role of a wizard and was throwing magic fireballs left right and centre.</i>
	Special occasions	Reference to specific special occasions	<i>I will always remember, the Xmas days that we spent at my Auntie's house</i>

Section 3. Descriptions of home checklist

Code	Theme	Parameter	Examples from descriptions of home
Personal	Atmosphere of home	Reference to the psychological climate, the spiritual feel of the place and expressions of subjective qualities (such as inviting and peaceful, relaxing)	<i>"Most people comment on how peaceful our home makes them feel"</i>
	Evaluations of home	Represented by positive and negative statements which suggest the author is evaluating the place (<i>"I love it"</i> or <i>"I hate it and always have"</i>)	<i>"A bit shabby but some nice things; nearly always clean and tidy"</i>
Social	Comfort	Expressions of comfort and relaxation	<i>"It is a very comfortable home"</i>
	Family	Relationships with family members	<i>"It is a wonderful family home"</i>
	Others	Relationships with others	<i>"it is a great place for spending time with friends"</i>
Physical	Physical features/aesthetics	Statements relating to the overall appearance of the place and the physical features.	<i>"3 bedroom timber home... a beautiful old Queenslander"</i>
	Location	Comments relating to the location of the home	<i>"I live in a 3 bedroom home in a place called Sarina"</i> <i>"My home is located at the beach"</i>

Section 4. Things people miss when away from home checklist

Code	Theme	Parameter	Examples
Personal aspects	Atmosphere of home	Reference to the psychological climate, the spiritual feel of the place and expressions of subjective qualities (such as inviting and peaceful, relaxing)	<i>"I miss the casual feeling and sense of security and familiarity"</i>
	Evaluation of home	Represented by positive and negative statements which suggest the author is evaluating the place (<i>"I love it"</i> or <i>"I hate it and always have"</i>)	<i>"I don't miss it at all and long to be somewhere else"</i>
	Comfort	Expressions of comfort	<i>"Most of all I miss being 100% comfortable in my surroundings – I never feel totally at ease when I am away"</i>
	Relaxation	Expressions of relaxation	<i>"You always feel relaxed as soon as you walk in."</i>
	Familiarity/routine	Reference to the familiarity and routine that is experienced in the home. May include reference to familiar possessions	<i>"I miss the familiar surroundings of the place"</i>
	Freedom/privacy/control of space	Applied to any mention of personal freedom that the place affords, the privacy and the level of control the occupants have over the space.	<i>"The space that I have to myself"</i>

Section 4. (Cont'd)

Code	Theme	Parameter	Examples
Social aspects	Personalisation/possessions	Comments relating to the way that people customise their environment to suit them (incorporates the mention of favourite possessions)	<i>"So many things – my possessions, my bed, lounge suite, table, the things that show its my place."</i>
	Shelter/security/safety	Reference to the safety or security that the home provides.	<i>"The general feeling of being safe"</i>
	Internal social relationships	Relationships with family members, including pets	<i>"I miss the occupants of the home the most"</i>
	External social relationships	Reference to friends and others who the participant interacts with	<i>"I leave my home for a length of time I miss the people who drop in"</i>
Physical aspects	Physical features/aesthetics/location	Physical features of the home	<i>"my bedroom, the bathroom and the garden"</i> <i>"I miss the ocean and the way it smells"</i>

Section 5. Memories of home checklist

Code	Theme	Parameter	Examples
Personal Aspects	Atmosphere of home	Reference to the psychological climate, the spiritual feel of the place and expressions of subjective qualities (such as inviting and peaceful, relaxing)	<i>"Most of all I remember feeling at home – how it feels good to be at home."</i>
	Psychological growth	Scripts refer to the psychological growth that occurred while at this place or as a result of association with this place.	<i>"I remember all the big hurdles I experienced growing up here – school, friendships, birthdays, parties, life, goes to show I spent main part of growing up (that I remember now) at this place"</i>
	Self Expression	Scripts refer directly to the place as a representation of the self	<i>"It's just a place where I only let people see who I am comfortable with because it is a representation of me."</i>
Feelings	Security/safety	Reference is made to the feeling of safety and/or security that was afforded by this place or was lacking in this place.	<i>"For the first few weeks I lived here I was obsessed with the thought of someone being in the house when I would hear noises, it really scared me quite a bit and took me a while to get used to."</i>
	Contentment	Refers to feelings of contentment or comfort that was experienced here	<i>"A group of us got together one night and rented a ton of movies got a bunch of munchies and stayed up all night talking about nothing just had fun."</i>

Section 5. (Cont'd)

Code	Theme	Parameter	Examples
Social Aspects	Relationships with others (including pets)	Reference to relationships with family members, pets, and other people.	<i>"My most prominent memory of the home would have to be sitting at the kitchen table with my brother and Mum and Dad having dinner and talking"</i>
	Social occasions	Direct reference to social occasions that were experienced here	<i>"Occasions always called for a family gathering such as Sundays, Birthdays, Christmas and any other functions"</i>
	Growth of family/friends	Psychological or physical growth of family and friends that has been experienced or witnessed within this place	<i>"I watch the children play outside, watch them grow... one can still run under the kitchen bench top – one has grown too tall. One drives off to preschool now with her Dad. I believe my most treasured memories are in everyday mundane events – toilet training, school, running around the yard, weeding."</i>
Physical Aspects	Personalisation of space	Reference to the personalisation of the home. May include possessions.	<i>"So I put all my effort into the garden to then add water features (fishponds with running water etc) right where my bedroom is so now I am distracted from counting cars instead I listen to the lovely soothing sound of the water. I also put a water feature in front of the lounge room window for the same reason."</i>

Section 6. Home attachment style prototype descriptors

Category	Prototype description	Example
Secure	Home as an environment is accepting and comforting. There would be an indication of a sense of stability and the valuing of the home environment, the capacity to maintain a close bond to the home without losing an appreciation of the exploration of other environments, and a coherence of thought displayed during discussions involving the home and other places.	<i>"I remember when we were looking to buy a new home and we'd been house hunting for months... when I walked in I just had a feeling, that this would be the house we'd buy. I walked into my room (empty) and in my head imagined how I would set it up. It just felt so right inside to call this place home. It was out of town and had a huge yard, with some personal touches it was easy to settle into, almost like it was made for us. Even though our family has grown and the house is almost busting at the seams you couldn't leave if you tried. It's so cozy and inviting"</i>
Preoccupied	Overly reliant upon the home environment and other specific places, exhibiting a dependence on place for a sense of personal well-being, and the tendency to idealise the home and places identified as favourites. They would demonstrate a level of exaggerated emotionality when discussing relationships with those places.	<i>"I feel comfortable and enjoy their company. I can discuss anything and never feel pressured to do or say how I feel. It has been a help in bringing me out of myself and coping with my last five years of trauma. I know I will miss it when I move. I have all I need but not all that I want. My memories are locked in a container at my brother's house and until I have my own ideal home I will survive and move forward here. I am not a prisoner in any way except in my own mind. My dreams are my freedom and they will eventuate and that keeps me going and keeps me strong."</i>

Section 6 (Cont'd)

Category	Prototype description	Example
Dismissing	The dismissal of the importance of the home and other places, the restricted display of emotionality in regards to place, their emphasis on independence and self-reliance in relation to place as opposed to a need for comfort and stability, and a lack of coherent patterns of thought when discussing relationships with place.	<i>"I just live in the house. I have moved houses / cities many times as an adult and I find it hard to bond with any house now. I don't feel any personal attachment here, and view it as being a temporary abode. I have a house in Brisbane, but this has little personal attachment for me as it was bought for investment purposes. My house at present in Townsville is just somewhere to store my stuff and provide comfortable shelter. This is probably because I am renting for now and am in Townsville on a 2 year contract it feels transient so I find it hard to think of anything memorable – other than we moved in now we live there"</i>
Fearful	Characterised by an avoidance of the formation of any relationship with place due to a fear of loss, a sense of insecurity in place, and an inability to recognise and, or appreciate the level of comfort and stability afforded by place.	<i>"I remember the first night I stayed here. I didn't have a bed and had to sleep on the hard floor. I felt like was in a prison cell. I felt so desperate that I had been reduced to this, owning nothing but the clothes in my bag. I wanted to die. I was given a mattress and a loan of a desk and a chair the next day. I bought a second hand portable television so that I wouldn't feel so alone when I was here. Every day that I wake up here, the crushing reality that I am alive and live like this hits me like an unexpected blow. I long to have my old life back and my home. The memory of the life I used to have and the place that was my home, that once made me happy and secure, now tortures me daily as I know I can never have that again. I look around at the four walls that are now my life and often weep. I am ashamed of the way I live"</i>

Section 7. Personal meanings of possessions

Possession type	Relevant items	Examples
Utilitarian	Objects which provide a necessity; things that enhance efficiency or are needed for work; items that are valued for functional attributes and those that provide independence or freedom	<i>"My car gets me to and from work"</i> <i>"I could not study without my books"</i>
Enjoyment	Things that provide pleasure, enjoyment, entertainment, comfort, relaxation. Feelings of security and companionship.	<i>"I really enjoy listening to my music"</i>
Interpersonal ties	Representative of personal ties or facilitates the creation and strengthening of personal ties. Symbols of familial history and gifts	<i>"both rings are important to me because they both have family history"</i>
Identity	Objects that represent or facilitate self expression, personal achievement or personal history	<i>"It represents me. I have achieved something" (Paperwork)</i>
Financial aspects	References to cost or value of the item	<i>"it's just because they are very expensive I suppose"</i>
Other/unclassified	Items that can not be classified to one of the previous categories	<i>"I have no items with which I share a strong emotional attachment. I bond with people, animals, but find it hard to place too much worth in objects"</i>

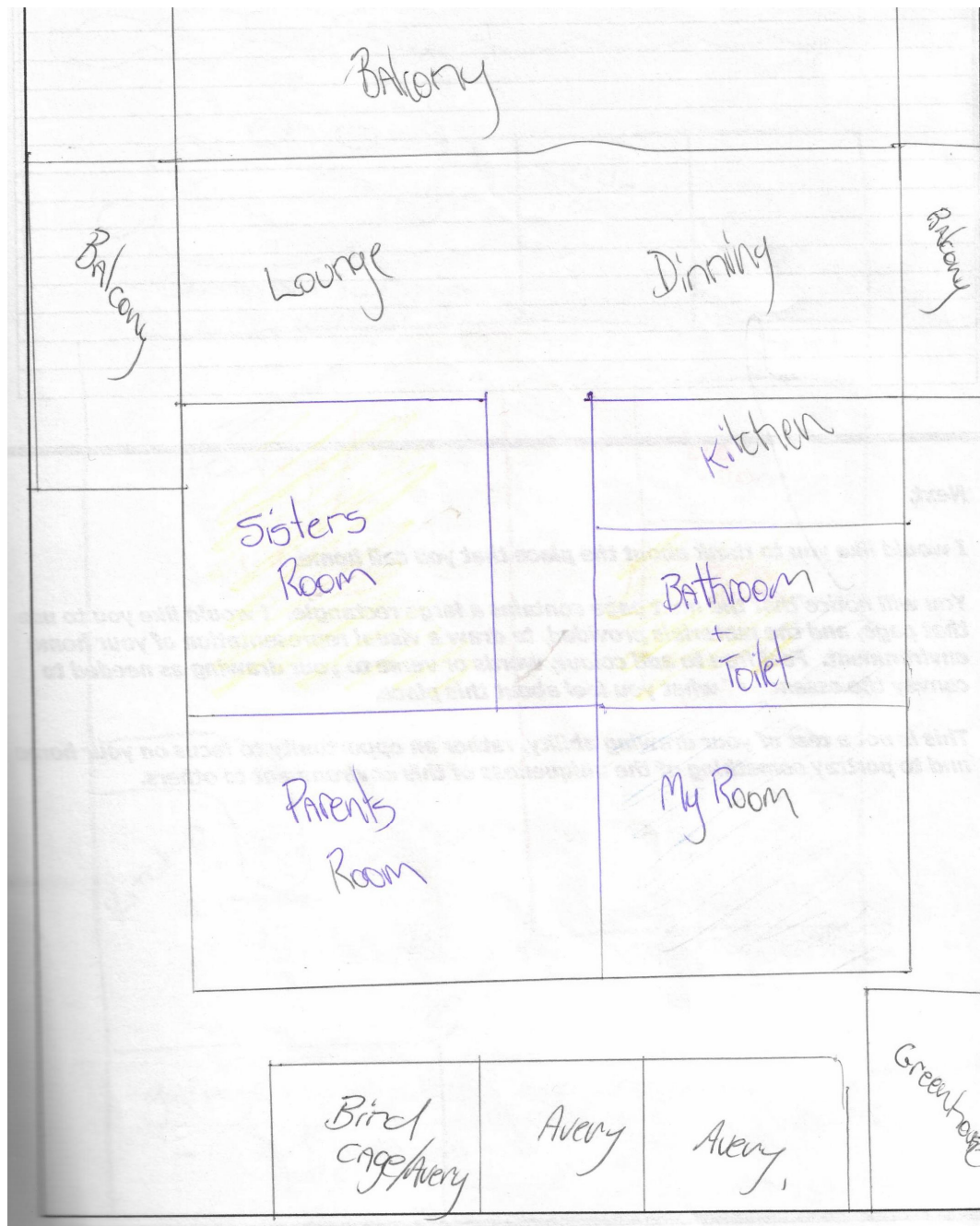
Section 8. Method of acquisition of possessions

Method of acquisition	Relevant items	Examples
Purchased	Objects which were acquired as a result of a purchase regardless of who bought it.	<i>"My husband bought it in Peru while travelling around the world, the famous trip where we met and fell in love."</i>
Gift	Object was received as a gift	<i>"I was given it by my boyfriend on Valentine's day."</i>
Inherited	Items that have been passed down from previous generations	<i>"Given to me by my mother when my grandmother died 5 years ago. I couldn't think of it going outside the family."</i>
Achievement/ rewards	The item may have been acquired as an award or trophy. The item may have been acquired as the result of some form of achievement (a reward)	<i>"I achieved them through many years of hard work and dedication"</i>
Crafted	Item was either made, designed or created by the participant	<i>"I took the photos of people and events over time with my camera."</i>
Others	Those that can not be classified	<i>"I don't put much value on material items & I feel that I would live without them. The only things I couldn't live without are my fiancée, my family and my friends and they're people not items"</i>

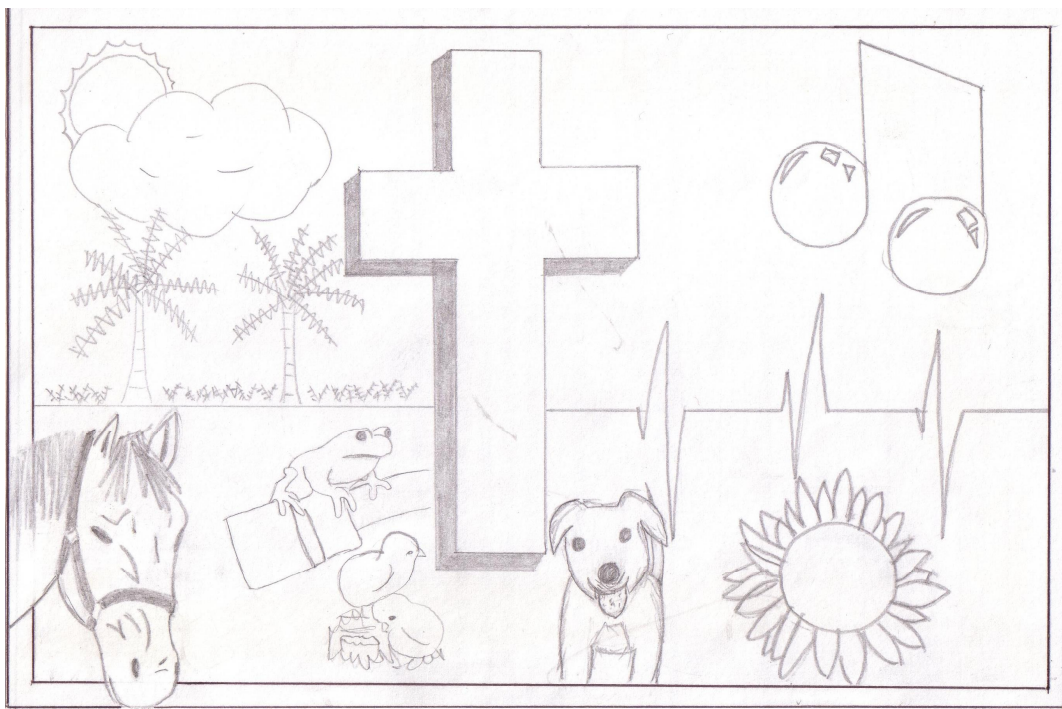
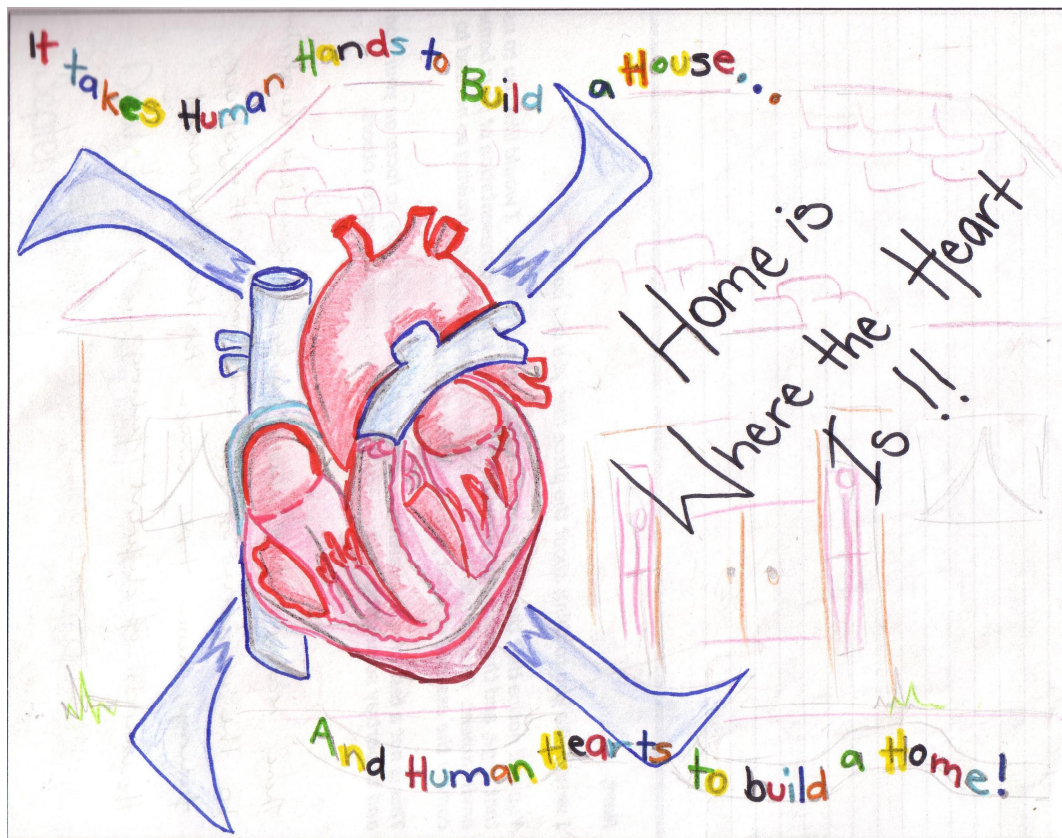
Section 9. Coding categories for visual representations of home

Coding category	Theme	Parameters
Physical	Basic house plan/design	Drawing shows the house plan or basic design. Similar to what would be expected when a house is designed or what is sketched when elaborating a housing layout.
	Sketch of home	More than a simple house plan or design, these drawings give a more dimensional view of a home. They are more like what you would see if you took a photo of the home.
	Outdoor spaces	Outdoor spaces are included in the drawing
Social	Relationships with others (including pets)	Relationships with others are indicated within the drawing or articulated in text within the drawing.
Personal	Atmosphere	The drawing elaborates a sense of the atmosphere or ambiance of the home as a result of either the visual representation itself or the text that has been used to commentate it.
	Spiritual elements	Drawings contain reference to the heart, the soul, and the home as the spiritual centre. This may be achieved in the drawing or the accompanying text.
	Possessions	Possessions are either drawn or indicated in the text that accompanies the drawing

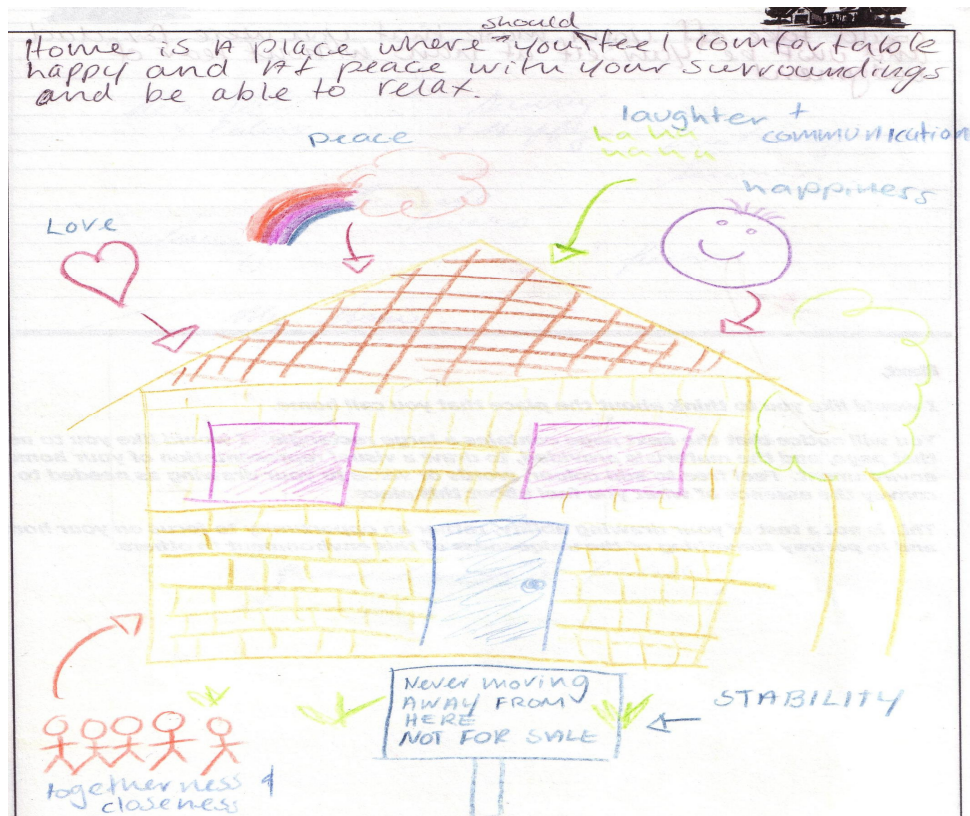
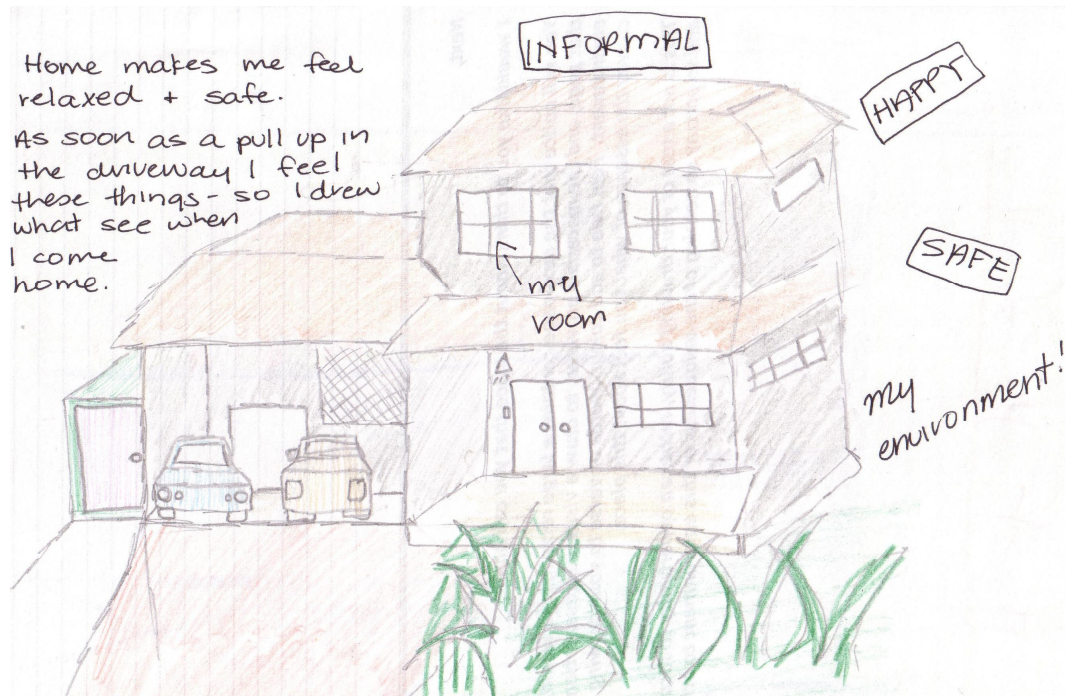
Appendix E Visual representations of home - Jeremy



Appendix F Visual Representations of home - Jelly baby and Jack



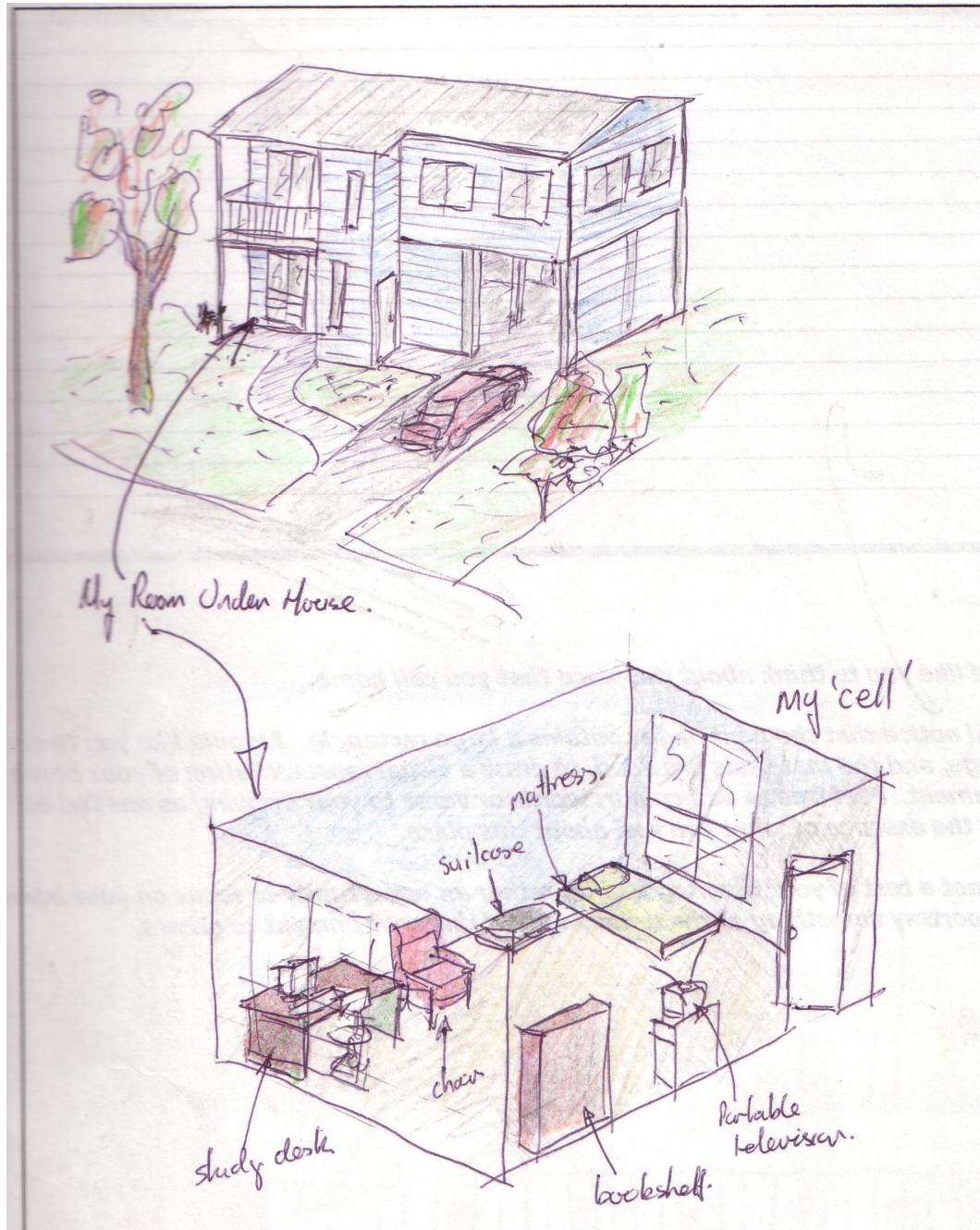
Appendix G Visual representation of home – San and Rebecca



Appendix H Visual representation of home -Kiah



Appendix I Visual representation of home – Bill



Appendix J Correlations between interpersonal attachment and codes from the current home

Table 1. *Correlations between interpersonal attachment and codes from the current home*

Current Home	Interpersonal attachment							
	Secure	Preoccupied	Dismissing	Fearful	RQ Anxiety	RQ Avoid	ECR-R Anxiety	ECR-R Avoid
Description(N=99)								
Personal aspects	.10	.10	-.28**	-.10	.07	-.24**	-.09	.04
Social aspects	.04	-.09	-.02	-.04	-.06	-.00	.12	-.06
Physical aspects	.03	-.01	.17*	-.01	-.08	.05	-.09	-.02
Favourite Place(N=91)								
Feelings evoked by that place								
Comfortable(present/absent) ^a	.05	-.04	-.07	-.21*	-.10	-.14	-.18*	-.14
Safe (present/absent) ^a	.08	-.06	.00	.03	-.04	.00	-.06	.06
Content (present/absent) ^a	-.10	-.05	.16	.19*	.04	.24*	.28**	.02
Cognitive appraisals	.08	.06	-.01	.07	.03	-.01	.07	.02
Total positive affect	.09	-.01	.08	-.17	-.14	-.08	.05	-.06
Away from home(N=99)								
Personal aspects	.17*	-.09	.09	-.27**	-.26**	-.11	-.11	-.17*
People & pets (present/absent) ^a	-.13	.17*	.05	.16	.17*	.08	.13	.20*
Memories(N=99)								
Personal aspects	.03	-.01	-.05	-.04	-.02	-.04	.00	.01
Social aspects	.26**	-.16	-.04	-.13	-.21*	-.12	-.06	-.16
Physical aspects	.18*	.16	-.25**	-.12	.04	-.23**	-.12	.02
Valency of Emotion	-.01	-.08	.05	.02	-.04	.05	-.06	-.05

Note: * $p < .05$; ** $p < .01$ (1 tailed); ^a Point Biserial correlations

Appendix K Correlations between place attachment and possessions

Table 1 *Correlations between place attachment and codes for possessions*

<i>Childhood Place</i>	Place attachment					
	Secure	Preoccupied	Dismissing	Fearful	Anxious	Avoidant
Type						
Sentimental	.01	-.01	.07	-.04	-.06	.01
Practical	.02	.07	-.16	.02	.10	-.11
Extensions of self	-.12	.01	.13	.06	.03	.14
Other	.16	-.16	-.14	-.13	-.16	-.14
Acquisition						
Purchased	.09	-.07	-.07	.00	-.05	-.05
Gift	.01	.08	-.06	.11	.11	.02
Inherited	.03	-.03	-.01	-.08	-.06	-.05
Achieve/reward	.11	-.09	-.05	-.13	-.14	-.10
Crafted/collected	-.14	.01	.19	.02	.00	.16
Other	.12	-.16	-.11	-.09	-.13	-.08
Meaning						
Utilitarian	-.10	.17	-.01	.11	.19	.02
Enjoyment	.04	-.06	-.14	-.04	-.00	-.08
Interpersonal	.03	-.07	.02	-.05	-.08	.01
Identity	-.04	.06	.09	-.01	.00	.03
Others	.09	-.09	-.07	-.00	-.06	-.04

Appendix L Correlations between interpersonal attachment and possessions

Table 1 *Correlations between interpersonal attachment and possessions*

Childhood Place	RQ						ECR-R	
	Secure	Preoccupied	Dismissing	Fearful	Anxiety	Avoidance	Anxiety	Avoidance
Type								
Sentimental	.07	.24**	-.23**	.01	.16	-.22*	-.06	.13
Practical	-.04	-.07	.02	-.11	-.07	-.01	-.02	-.07
Extensions of self	-.04	.00	.01	.02	.02	.04	.06	.03
Other	-.02	-.09	-.03	.06	.01	.06	.02	.16
Acquisition								
Purchased	-.12	-.03	.08	.10	.04	.13	.11	.08
Gift	.10	-.02	-.13	.04	.03	-.07	-.01	.10
Inherited	.15	.11	-.27**	.00	.09	-.21*	-.10	.17*
Achieve/reward	-.30**	-.05	.08	.17*	.14	.25**	.08	.08
Crafted/collected	-.04	.11	.02	.04	.06	.00	-.09	-.07
Other	-.03	-.06	-.05	.09	.05	.06	.10	.13
Meaning								
Utilitarian	-.06	.08	.01	-.05	.03	-.04	.01	.14
Enjoyment	-.10	-.01	-.02	-.17*	-.03	-.05	.08	-.05
Ties to others	.26**	.05	-.22*	-.03	-.00	-.22*	-.16	-.00
Identity	-.34**	.07	.15	.11	.15	.24**	.19*	.05
Other	-.10	-.05	.07	.14	.05	.15	.11	.09

Note: $N = 99$; * $p < .05$; ** $p < .01$ (1 tailed)

Appendix M Attachment Networks Questionnaire

List 5 people in your life, those people that you currently feel a strong emotional tie to, regardless of whether the tie is positive, negative or mixed. These individuals can be listed in any order.

RANKING QUESTIONS

- A. Whom would you want to go to, to help you feel better when something bad happens to you or you feel upset, whether or not you actually go to them?
- B. Whom do you actually go to, to help you feel better when something bad happens to you or you feel upset?
- C. Whom would you like to be able to count on to always be there for you and care about you no matter what?
- D. Whom do you feel you can actually count on to always be there for you and care about you no matter what?
- E. Whom is it important for you to see or talk with regularly?
- F. Whose death would have the greatest impact or effect on you, regardless of what the effect may be?
- G. Who can make you feel upset? (Remember that these are people with whom you have a personal relationship.)
- H. Rank order all of the people on your list in terms of who you feel most emotionally connected to, regardless of whether that connection is positive, negative, or mixed. PLEASE RANK EVERYONE FOR THIS QUESTION.

Appendix N Environmental Networks Questionnaire

List five significant places in your life, those places that you currently feel a strong emotional tie to, regardless of whether that tie is positive, negative or mixed. These places can be listed in any order.

RANKING QUESTIONS

- A. Where would you want to go to, to help you feel better when something bad happens to you or you feel upset, whether or not you actually go there?
- B. Where do you actually go to, to help you feel better when something bad happens to you or you feel upset?
- C. Which place would you like to be able to count on as always being there for you to go to no matter what?
- D. Which place do you feel you can actually count on to always be there for you to make you feel better no matter what?
- E. Where is it important for you to be/visit regularly?
- F. The loss of which place would have the greatest impact or effect on you, regardless of what the effect may be?
- G. Rank order all of the places on your list in terms of which you feel most emotionally connected to, regardless of whether that connection is positive, negative, or mixed. PLEASE RANK EVERY PLACE FOR THIS QUESTION.

Appendix O BFI – 44

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who likes to spend time with others? Using the scale below, please write a number next to each statement to indicate the extent to which you agree or disagree with the statement.

Disagree Strongly	Disagree a little	Neither agree nor disagree	Agree a little	Agree strongly
1	2	3	4	5

I See Myself as Someone Who...

- | | |
|--|---|
| ___ 1. Is talkative | ___ 23. Tends to be lazy |
| ___ 2. Tends to find fault with others | ___ 24. Is emotionally stable, not easily upset |
| ___ 3. Does a thorough job | ___ 25. Is inventive |
| ___ 4. Is depressed, blue | ___ 26. Has an assertive personality |
| ___ 5. Is original, comes up with new ideas | ___ 27. Can be cold and aloof |
| ___ 6. Is reserved | ___ 28. Perseveres until the task is finished |
| ___ 7. Is helpful and unselfish with others | ___ 29. Can be moody |
| ___ 8. Can be somewhat careless | ___ 30. Values artistic, aesthetic experiences |
| ___ 9. Is relaxed, handles stress well | ___ 31. Is sometimes shy, inhibited |
| ___ 10. Is curious about many different things | ___ 32. Is considerate and kind to almost everyone |
| ___ 11. Is full of energy | ___ 33. Does things efficiently |
| ___ 12. Starts quarrels with others | ___ 34. Remains calm in tense situations |
| ___ 13. Is a reliable worker | ___ 35. Prefers work that is routine |
| ___ 14. Can be tense | ___ 36. Is outgoing, sociable |
| ___ 15. Is ingenious, a deep thinker | ___ 37. Is sometimes rude to others |
| ___ 16. Generates a lot of enthusiasm | ___ 38. Makes plans and follows through |
| ___ 17. Has a forgiving nature | ___ 39. Gets nervous easily |
| ___ 18. Tends to be disorganised | ___ 40. Likes to reflect, play with ideas |
| ___ 19. Worries a lot | ___ 41. Has few artistic talents |
| ___ 20. Has an active imagination | ___ 42. Likes to co-operate with others |
| ___ 21. Tends to be quiet | ___ 43. Is easily distracted |
| ___ 22. Is generally trusting | ___ 44. Is sophisticated in art, music, or literature |

Appendix P Feelings of Home Measure

Please rate the following statements about your home on a scale of 1-5 where

1= Strongly agree and 5 = Strongly Disagree

	1	2	3	4	5
1. My home is very special to me (PI)					
2. I feel very attached to my home (PA)					
3. My home says a lot about who I am (PI)					
4. Being at home is more important to me than being anywhere else (PD)					
5. I could not imagine living anywhere else (PD)					
6. I often worry about how I would cope if anything happened to this place (PD) R					
7. I could be at 'home' anywhere (PD) R					
8. I feel secure when I am at home (S)					
9. When I am away from home for a length of time I really miss the place (PA)					
10. I feel my home is very much a part of me (PI)					
11. I always enjoy returning to my home(PA)					
12. I would be devastated if something happened to this place (PD)					
13. I never really attach to houses so moving does not cause me anguish (PA) R					

Appendix Q Coding Manual for Study 2

Section 1. Coding checklist for Study 2 childhood home

Code	Theme	Parameter	Examples from descriptions of home
What made it feel like home?			
Personal	Atmosphere	Reference to the psychological climate, the spiritual feel of the place and expressions of subjective qualities (such as inviting and peaceful, relaxing, warm)	<i>"relaxed and very friendly, had a warm fuzzy feeling"</i>
	Feeling Safe/Secure	Applied to any mention of feeling safe and secure in the environment	<i>"My parents made me feel safe."</i>
	Personalisation/possessions	Comments relating to the way that people customise their environment to suit them (incorporates the mention of favourite possessions)	<i>"Mum put time into decorating my room all my books and toys etc huge sandpit"</i>
Social	Family/pets	Script mentions members of the family, pets	<i>"My family was there. Parents, pets"</i>
	Other	Comments relating to relationships established with people.	<i>"We had good birthday parties there and Mum made toffee apples"</i>
	Social Occasions	Comments relating to social functions.	<i>"lots of friends of a similar age, children would all play in street/neighbourhood together – parents would socialise together"</i>
Physical	Descriptions of home	Statements relating to the overall appearance of the place and the physical features.	<i>"High ceilings, lots of wooden walls etc, deep pool, fire ladders"</i>
	Grew up there	Comments that relate to the place being home simply because they grew up there.	<i>"I grew up in this house and lived there till I left when I was 21 years old"</i>

Section 2. Coding checklist for Study 2 current home.

Theme	Parameter	Examples from descriptions of home
How do you make your house feel like a home?		
Social Rituals	References to social engagements used to celebrate moving in.	<i>"Had a house warming party. Quietly sat around talked to people about the home – suddenly became more familiar"</i>
Physical rituals	Reference to redecorating, renovating, painting	<i>"Started renovating built a shed and carport"</i>
Decorating	Unpacking belongings and personalising the space with personal possessions	<i>"Unpacked our clothes, made the bed, plugged the television in and put the family photos up"</i>

Appendix R Correlations between place and interpersonal attachment, and parent's and friend's homes

Table 1 *Correlations between place attachment, interpersonal attachment and Environmental Networks*

Attachment components	ECR-R		Place attachment					
	Anxiety	Avoid	Secure	Preoccupied	Dismissing	Fearful	Anxiety	Avoidance
Parental home (N = 69)								
Secure Base	-.01	-.08	.14	-.07	-.13	.19	-.03	.09
Safe Haven	.07	-.07	.15	-.10	-.09	.15	-.02	.03
Proximity	-.00	-.07	.04	-.07	.01	.13	-.01	.11
Loss	.13	.08	.02	.08	-.02	.08	.08	-.03
Emotional connection	.10	.02	.05	-.08	-.17	.02	.01	-.03
Attachment Strength	.04	-.05	.12	-.08	-.06	.16	-.00	.06
Friends' homes (N = 67)								
Secure Base	.06	-.11	.07	-.11	-.09	-.11	-.11	-.06
Safe Haven	.06	-.12	.06	-.12	-.12	-.12	-.11	-.06
Proximity	.06	-.09	.06	-.07	-.11	-.11	-.08	-.09
Loss	.07	-.06	.05	-.04	-.06	-.04	-.04	-.04
Emotional connection	.07	.02	.00	-.22*	-.09	-.04	-.12	.09
Attachment Strength	.06	-.10	.07	-.10	-.10	-.11	-.10	-.06

Note: * $p < .05$; ** $p < .01$ (1 tailed)

Appendix S Correlations between place attachment, interpersonal attachment and attachment network members

Table 1 *Correlations between place attachment, interpersonal attachment and attachment network members*

Attachment components	ECR-R		Place attachment					
	Anxiety	Avoid	Secure	Preoccupied	Dismissing	Fearful	Anxiety	Avoidance
Mother (N = 80)								
Secure Base	-.03	-.11	-.10	.10	.04	-.02	.08	-.01
Safe Haven	-.06	-.13	-.18	.11	.17	.07	.10	.14
Proximity	.02	.00	-.01	-.00	-.04	-.07	-.01	-.06
Loss	.06	-.02	-.24*	.26**	.17	.15	.26*	.10
Emotional connection	.28**	.01	-.18	.18	.12	.08	.17	.07
Attachment Strength	-.02	-.09	-.15	.13	.10	.03	.11	.05
Father (N = 71)								
Secure Base	.11	.17	-.13	.06	-.10	.03	.14	-.02
Safe Haven	.06	.13	-.13	.07	-.05	-.01	.11	-.02
Proximity	.06	.05	.02	.04	-.11	.03	.07	-.08
Loss	.09	.20*	-.12	.08	-.08	.06	.15	-.01
Emotional connection	.19	.02	.12	.11	-.18	-.08	.06	-.27*
Attachment Strength	.09	.15	-.11	.07	-.09	.02	.13	-.03
Child (N = 59)								
Secure Base	-.04	.16	-.09	.02	-.07	.13	.12	.08
Safe Haven	-.05	.14	-.06	-.03	-.05	.05	.04	.06
Proximity	-.25*	-.10	.02	-.04	.00	.03	-.02	.05
Loss	-.22*	-.19	.09	-.12	-.08	-.04	-.10	.01
Emotional connection	.35**	.19	-.07	.08	.09	.11	.10	.07
Attachment Strength	-.13	.06	-.04	-.04	-.07	.07	.04	.07

Note: * $p < .05$; ** $p < .01$ (1 tailed)

Table 1 (Cont'd)

Attachment components	ECR-R		Place attachment					
	Anxiety	Avoid	Secure	Preoccupied	Dismissing	Fearful	Anxiety	Avoidance
Friends (N = 76)								
Secure Base	.12	.11	.07	.10	-.17	-.17	.03	-.27**
Safe Haven	.20*	.18	-.03	.10	-.13	-.11	.08	-.17
Proximity	.06	.04	.03	-.04	-.20*	-.13	-.01	-.15
Loss	.18	.17	-.11	.16	-.10	.01	.20*	-.10
Emotional connection	.03	.05	.02	.14	-.02	-.02	.08	-.13
Attachment Strength	.17	.15	-.00	.10	-.17	-.13	.08	-.21*

Note: $p < .05$; ** $p < .01$ (1 tailed)

Appendix T Correlations between personality traits and parent's and friend's homes

Table 1 *Correlations between personality traits and parent's and friend's homes*

Attachment components	BFI-44				
	Extraversion	Neuroticism	Agreeableness	Openness	Conscientiousness
Parental home (N = 69)					
Secure Base	-.01	-.17	.23*	-.10	.19
Safe Haven	.01	-.11	.17	-.00	.09
Proximity	-.15	-.20*	.12	.01	.12
Loss	-.05	.04	.04	.06	.06
Emotional connection	-.15	-.19	.12	-.06	-.06
Attachment Strength	-.04	-.13	.17	-.02	.13
Friend's Home (N = 71)					
Secure Base	.22*	.09	.18	.11	-.15
Safe Haven	.20	.03	.13	.07	-.14
Proximity	.16	.12	.11	.07	-.14
Loss	.16	.19	.17	.09	-.09
Emotional connection	.00	-.06	-.17	-.19	-.04
Attachment Strength	.21*	.10	.16	.09	-.14

Note: * $p < .05$; ** $p < .01$ (1 tailed)

Appendix U Correlations between place and interpersonal attachment, personality and the experience of childhood homes

Table 1 *Correlations between place and interpersonal attachment and the experience of childhood homes*

History of home codes	ECR-R		Place attachment					
	Anxiety	Avoid	Secure	Preoccupied	Dismissing	Fearful	Anxiety	Avoidance
Personal aspects	.28**	.24**	-.03	-.08	-.04	.02	-.01	.06
Social aspects	.20*	.13	-.11	.04	-.04	.06	.11	.03
Physical aspects	.17*	.18*	-.05	-.06	-.06	-.16	-.06	-.05
Valence of emotion ^{a,b}	-.00	-.16	.00	-.11	-.14	.01	-.00	-.02

Note: N=105; * $p < .05$; ** $p < .01$ (1 tailed); ^a Point biserial correlations; ^b N= 76, only those who had revisited the childhood home were included in this analysis

Table 2 *Correlations between personality traits and the experience of childhood homes*

History of home codes	BFI-44				
	Extraversion	Neuroticism	Agreeableness	Openness	Conscientiousness
Personal aspects	-.11	-.11	-.04	.09	-.10
Social aspects	-.01	.11	.04	-.12	-.16
Physical aspects	.05	-.01	.02	-.01	-.04
Valence of emotion ^a	-.03	-.04	-.04	-.16	-.17

Note: n=105; * $p < .05$; ** $p < .01$ (1 tailed); ^a Point biserial correlations; ^b N= 76, only those who had revisited the childhood home were included in this analysis

Appendix V Correlations between place and interpersonal attachment, personality and the experience of neighbourhoods

Table 1 *Correlations between place attachment, interpersonal attachment and the experience of neighbourhoods*

History of home codes	ECR-R		Place attachment					
	Anxiety	Avoid	Secure	Preoccupied	Dismissing	Fearful	Anxiety	Avoidance
Personal aspects	-.07	-.08	.04	-.09	-.01	-.13	-.12	-.02
Social aspects	-.06	-.02	.10	-.17*	-.07	-.18*	-.20*	-.05
Physical aspects	-.01	-.06	.18*	-.15	-.27**	-.19*	-.14	-.21*
Know neighbours	.03	.08	.14	.01	-.10	.05	.01	-.10
Trust neighbours	-.03	.03	.15	-.01	-.07	-.06	-.06	-.14
Neighbourhood range	.11	.06	-.09	.07	-.03	.02	.10	-.01

Note: * $p < .05$; ** $p < .01$;

Table 2 *Correlations between personality and the experience of neighbourhoods*

History of home codes	Place attachment				
	Extraversion	Neuroticism	Agreeableness	Openness	Conscientiousness
Personal aspects	.05	.05	.17*	-.12*	.01
Social aspects	.02	-.10	.16	-.03	.10
Physical aspects	-.03	.03	.00	.03	-.04
Know neighbours	.01	-.04	.19*	.04	.15
Trust neighbours	-.05	-.05	.21*	-.11	.29**
Neighbourhood range	.04	.11	.01	-.08	-.11

Note: * $p < .05$; ** $p < .01$