

CHAPTER 3 A METHODOLOGICAL APPROACH FOR UNDERSTANDING THE SOCIAL CONSTRUCTION OF HERITAGE SCALES

Studies investigating the construction of scale have primarily focussed on understanding the processes that shape and constitute social practices at different levels of analysis (Marston 2000). In order to study the social construction of scale in cultural heritage management, the concepts of 'place' and 'sense of place' will be utilised. 'Place' is a location with meaning that can be perceived in different ways by different people (Cresswell 2004). 'Sense of place' is the manner in which individuals and groups perceive, experience and understand place (Relph 1997). Places are not static but are produced to suit particular purposes (Manson and O'Sullivan 2006). It is argued here that as cultural scales concern the 'framing' (Delaney and Leitner 1997; Mamadouh, Kramsch et al. 2004), or limitation, of place as it is applied across the landscape (see Section 2.3), it is the inclusion (or exclusion) of particular spaces, places and senses of place that construct heritage scales. By investigating relationships between people and places, and how places are described and defined, the current research will reveal the manner in which different stakeholders abstract heritage spaces into various scales.

This chapter proposes a methodological approach to examine the social construction of heritage scales, and the material consequences of such constructions. First, the concepts of 'place' and 'sense of place' will be outlined in order to define them for use in the research. This will be followed by a discussion of the manner in which studies of place have been approached within human geography, highlighting the "*bipolar*" (Entrikin 1991) nature of epistemological approaches that have pitted qualitative methodologies against more quantitative ones. Arguing in support of mixed-method approaches as a way of improving studies of place, the value of integrating Geographical Information Systems (GIS)-based spatial analysis and qualitative interview analysis will be discussed as a technique to assist with identifying the spatial and physical consequences of the socially constructed ideas of scale and place. Finally, the chapter will address the particular methods used within this study to investigate perceptions and interpretations of the relationship between Angkor

and its surrounding area and, through this, the various constructions of heritage scales for Angkor-Siem Reap.

3.1 Understanding Place

People are constantly interacting with places in their everyday lives (Jordan, Raubal et al. 1998). It is a fundamental condition of the human experience (Tuan 1974; Entrikin 1991), and an idea which is central to both human geography and cultural heritage (Graham, Ashworth et al. 2000; Hay, Hughes et al. 2004). We know that places differ and that these differences are not imaginary, but are actual features of the world (Entrikin 1991; Bradley 2003). Despite its centrality to human existence, the idea of place is a difficult and abstract concept to define as it has meant different things to researchers coming from different epistemological backgrounds (Cresswell 2004). There is an ongoing duality within many ideas of places, where it is acknowledged that people are simultaneously within and part of places, whilst also perceiving place as something separate and external as the context for human actions and behaviour (Entrikin 1991). Place can be both an object and a way of looking at that object (Cresswell 2004).

The focus of place studies within geography has shifted over the last fifty years, from describing the uniqueness, or similarities, of regions (and places) towards exploring the reasons why places are different or similar (Cresswell 2004). The positivist epistemologies of geography understood places as more closely interlinked with the concept of space (Taylor 1990; Pickles 1995). In trying to define geography as a precise 'hard' spatial science, positivist geographers criticised the study of regions and places as descriptive, subjective, atheoretical and, therefore, unscientific (Entrikin 1991; Portugali 2006). Places were transformed into spaces, so that meanings and values became merely the attributes attached to a coordinate location, ignoring that which could not be mapped or measured (Jordan, Raubal et al. 1998; Cresswell 2004). Space became "*placeless*" (Relph 1976:30), and therefore a dehumanised, abstract concept (Hendrickson and Heffernan 1999; Portugali 2006; Feagan 2007). However, these philosophical shifts became the foundation for wider changes from descriptive studies to the search for wider laws and theories of spatial organisation (Entrikin 1991).

Opposing these developments, post-positivist geographers sought to explore the wider reasons for differences within and between places by explaining the production and construction of place, rather than just describing existing regions (Keith and Pile 1993; Cresswell 2004). Studies and definitions of place were strongly linked to the human experience of 'being-in-the-world' (Tuan 1974; Cresswell 2004). Place became recognised as *"the intimate human relations between people and their homes, neighbourhoods, cities, lands and countries"* (Portugali 2006:648). Whilst it was recognised that there was something natural and obvious about place (Casey 1993), there was also uniqueness in the manner of the experience (Tuan 1977; Pratt and Hanson 1994). Critical cultural geographers have recognised that people have different experiences of place, highlighting an understanding of place as a social construct (Hendrickson and Heffernan 1999; Richardson and Jensen 2003; Cresswell 2004; Pickerill and Chatterton 2006). Places weren't to be thought of as areas defined by coordinate locations, but as something integrated through meanings into the wider world (Massey 1994; Verdi 2004).

Attention was also paid to the role of place in the creation, maintenance and transformation of power through domination, oppression and exploitation (Lefebvre 1974; Swyngedouw 1997; Shamaï and Ilatov 2004). No longer neutral, place was understood as being constructed by the underlying social processes reflecting issues of age, gender, class, lifestyle, sexuality and ethnicity (Lefebvre 1974; Cresswell 2004; Portugali 2006). As the context of human, behaviour and judgements, power is conveyed through both the meaning and the fabric of places (Jordan, Raubal et al. 1998; Richardson and Jensen 2003; Cresswell 2004). Through the conceptual fusion of space and experience, place gives areas of the earth's surface, and the people using them, a sense of sameness and a sense of uniqueness (Entrikin 1991).

3.1.1 Sense of Place

The study of place is linked with understanding an individual's (or group's) relationship with, experience and perception of place: their sense of place. Each individual has a unique sense of place that is influenced by the social meaning of an area, its function, its history, its

name and its physical form (Lynch 1960; Lynch 1972; Keith and Pile 1993; Relph 1997; Shamai and Ilatov 2004). Sense of place is essential to identity in that it is what “*connects us to the world*” (Relph 1997:208). Sense of place is a subjective value, varying between individuals (and groups) (Lynch 1960; Rose 1995), and continually changing with time and across space (Massey 1993).

Sense of place is not only our social interactions with place; it is also what we do there – how we physically interact with the environment, material landscape, and other people (Dicken 2004; Shamai and Ilatov 2004). While architects and urban planners have been interested in the impact of the built environment on our sense of place (Lynch 1960; Jordan, Raubal et al. 1998), from a human geography standpoint the perceptual and social aspects of sense of place have often seemed to override the physical qualities of place (Hay, Hughes et al. 2004; Shamai and Ilatov 2004). Richardson and Jensen (2003), in their discussion of European spatial policy discourse, see the material environment as a key part of meaning creation in places. The form of place plays an active role in creating and representing the “*meaning of the social imaginary*” (Richardson and Jensen 2003:13), materialising and realising meanings previously only conceptualised through symbolic languages. “*As much as built space lets us move in some ways, but not others, so it is the nature of all spatial constructions to encourage some experiences and discourage others*” (McCullough 1996:4 in Jordan, Raubal et al. 1998). Thus place and our understanding of it is a complex integration of the tangible and the intangible.

Relph (1976) argues that the only true way that someone can have a sense of place was through a long and deep experience and involvement with place. However, this argument ignores the fact that many senses of place are created and maintained at a distance (Corbett and Keller 2006). The concept of World Heritage would not work if people were unable to develop a sense of place when visiting heritage sites for only a short period of time, or when reading or learning about them on television from a great distance (Byrne, Brayshaw et al. 2003). The development of attachments to place must happen quickly for the value of a heritage site to be conveyed to visitors (du Cros and McKercher 1999). Through interpretation cultural heritage managers attempt to facilitate this process (Evans 2002), but different individuals and groups will perceive places in different ways, and not

always as intended by those who create and control them (Daniels 1992; Knox and Pinch 2000). The differences between senses of place are complex (Lanegrn 1986; Shamai and Ilatov 2004), and are influenced by, and influence, the many different aspects of a perceiver's identity (Rose 1995). Distinct understandings of place can usually coexist, but sometimes they can be a source of conflict (Casey 1993; Massey 1993; Jamal and Getz 1999). Within cultural heritage management, legal battles, local conflict and other violence have resulted from stakeholders possessing conflicting senses of place that are not successfully mediated (Chang, Milne et al. 1996; Ashworth and van der Aa 2002; Bianchi 2002).

3.1.2 Scale and Place

Through three core beliefs of scale theory (Marston 2000; McMaster and Sheppard 2004), the linkage between perception of place and construction of scale can be observed. Scale is firstly understood as a subjective framing and abstraction of reality (Marston 2000). Scale influences the manner in which people understand and manipulate the world (Pavlovskaya 2002). Similarly, perceptions of place are not perfect images of the reality (Goodey 1974), but are an interpretation of human-environment relationships. Through scale, we define the extent of a place and the detail with which we describe its contents. Richardson and Jensen (2003) see the continual production and reproduction of scale as part of the continual process of establishing boundaries between places, locations and sites of experience. In perceiving place, people include and exclude certain aesthetics, behaviours and people, and, as a result, scale is used as a means to establish boundaries which distinguish between these places and the people who use them (Elwood and Martin 2000; Pickerill and Chatterton 2006). The process of defining a region, or place, will include or exclude environments, cultures and people that are seen to fit with an individual's, or group's, sense of place (Robinson 1998; Malcolm 2001; Smart and Smart 2003). These boundaries will influence our understanding of human-environment relationships (Sibley 1992; Kong and Law 2002). Thus the differentiation of geographical scale establishes, and is established, through the geographical structure of social interactions (Miller 1997; Marston 2000).

The second core belief of scale theory is that the outcomes of the particular ways in which scale is constructed are tangible and have material consequences (Marston 2000; Richardson and Jensen 2003). This perhaps provides the closest linkage with the concepts of place and sense of place. The construction of scale does not only differentiate between existing places (Kurtz 2003; Larsen 2004), but the process also creates new places through the manipulation of human-environment, and human-human, relationships (Meethan 1996; Silvey 2006). Scale is both embedded in and the outcome of everyday life and institutional structures (Whitehead 2003; Simonsen 2004). It impacts on the creation and experience of places through the governance of those places (Roberts 2001; Butz and Besio 2004).

The final argument of scale theorists is that conflict and change are inherent attributes of scale (Marston 2000). Both the concepts of place (de Certeau 1988; Johnston 1991) and scale (Kelly 1999; McMaster and Sheppard 2004) acknowledge the many different perspectives and influences in understanding the world and human interactions with it. Scaled places are the embodiment of social relations of empowerment and disempowerment and the arena through, and in which, they operate (Pred 1984; Sibley 1992; Cox 1998; Elwood 2002). Constructions of both place and scale are open to further transformation (Agnew 1997; Massey 1999; Marston 2000; Mitchell 2001).

3.1.3 Place in Cultural Heritage

'Place' and 'sense of place' are key concepts in contemporary cultural heritage management (Graham, Ashworth et al. 2000; Aplin 2002). In assessing the significance of a site or object, emphasis is placed on the credibility, or authenticity, of place (de la Torre and Mason 2002; Pocock 2002; Byrne, Brayshaw et al. 2003; Taylor 2004). The search for distinctiveness and authenticity of place is not limited to specific significant cultural heritage sites, but has been adopted by those worried about the destruction of 'meaningful' places (Entrikin 1991; Blair 1993; Pannell 2006). The increased interest in both authenticity and heritage has been seen by cultural geographers as a response to a growing sense of 'losing place' (Relph 1976; Teo and Nuang 1995; Vines 2001), where everything seems to look and feel the same (Entrikin 1991; Relph 1997; Cresswell 2004). While acknowledging that there is some natural diffusion between cultures and places, Relph

(1976; 1997) emphasises that the distinctiveness of place comes from pre-modern traditional elements and feels anything else can be viewed as fraudulent creations. Similarly, preservation and conservation movements have treated places as cultural artefacts, seeking to preserve them in what is considered an 'authentic' manner (Entrikin 1991; Handler 2003; Prosper 2007). However, this view is rejected by those who recognise a progressive sense of place that changes over time and interacts with the wider world (Massey 1991; Uprichard and Byrne 2006). Places are not unique because of residues of the past, but because they are individualistic collections of networks, adaptations and interactions between different scales (Massey 1993; Chang, Milne et al. 1996).

The temporal, geographical and social variability of sense of place have been acknowledged by heritage management organisations (for example, ICOMOS Australia 1999 Burra Charter: Article 1.2). However, some preservationists have sought to stabilise the meanings associated with places in a self-conscious manner as a response to a perceived human need for attachment and identity (Entrikin 1991; Vines 2001; Jamal and Hill 2004). Recognition of variations in senses of place, both between individuals and over time, requires a constant redrawing of boundaries to define what belongs inside and outside of a place (Massey 1993; Barnes 2004). Perceptions of these boundaries are a key part of the social construction of scales in heritage (Blomley 2004; Collinge 2005).

3.2 Investigating a Sense of Place

Studies of place and sense of place have investigated questions such as what makes a place important, how are meanings assigned to places, and how do people select the defining characteristics of a place (Entrikin 1991; Anderson and Gale 1992; Casey 1993; Jordan, Raubal et al. 1998; Lorimer 2003). Approaches towards these questions have tended to be methodologically divided, between quantitative and qualitative methodologies, objective and subjective epistemologies (Entrikin 1991; Pain and Francis 2004; Shamai and Ilatov 2004). However, advocates of mixed-methods approaches seek to move past these divides and create more detailed narratives (Entrikin 1991; Jordan, Raubal et al. 1998; Philip 1998; McKendrick 1999; Portugali 2006; Uprichard and Byrne 2006). In developing a methodology for exploring the social construction of scale in cultural heritage in this thesis, the merits of

each 'side' of the debate will be outlined, before highlighting the need for a mixed-methods approach.

3.2.1 A Divided History of Place Studies

Just as there are varied understandings of place, so are there many different ways of investigating the concept (Shamai and Ilatov 2004). Traditional methodological divisions exist between the objective and the subjective; the quantitative and the qualitative; the general and the specific (Lawson 1995; Sheppard 2004). From one position, a removed and seemingly objective researcher seeks to quantitatively explain a place within the larger scheme of things (Taylor 1982; Anschuetz, Wilhusen et al. 2001). The alternative involves the researcher experiencing place, trying to understand its subjectivity through qualitative methodologies. Entrikin (1991) sees this as a 'decentred' (quantitative) versus 'centred' (qualitative) perspective of place. Both have flaws, with the decentred approach losing much of the significance of place as it becomes a location or generic relation, and the centred approach being too specific with meaning only relating to an individual's goals and concerns (Entrikin 1991; Craglia, Leontidou et al. 2004). Whilst these depictions lie at the extreme, a quantitative – qualitative divide remains in many place studies.

Place studies have often relied on qualitative techniques and methodologies to explore the meanings behind places (Philip 1998; Anderson 2004). These have typically involved small-scale intensive research, exploring everyday life as experienced by all sorts of people and communities at different times and in different places (Hay 2005; Winchester 2005). Understanding the researcher's perceptions, experiences, expectations and prejudices is seen as important (Philip 1998; Pain and Francis 2004). As meaning and discourse are central (Philip 1998; Thomas 2007), qualitative methodologies seek to reach an emotional understanding of place (Entrikin 1991; Eisenhauer, Krannich et al. 2000). However, qualitative approaches have often been criticised because of (negative) associations with subjectivity (Philip 1998; Hanssen 2000; Robbins and Krueger 2000). Qualitative interpretation and analysis is seen as value laden and possessing the potential for misinterpretation by the researcher (Massey 1993; Baxter and Eyles 1999; Heeks 2002). There have also been difficulties in linking theory and experience (Entrikin 1991; Martin 2001; Craglia, Leontidou et al. 2004).

Quantitative approaches seek to follow traditional scientific methods, aided by statistical techniques to test hypotheses and verify theory (Philip 1998; Barnes 2004). In contrast to qualitative approaches, large datasets are condensed and generalised into categories by an apparently objective researcher (Robinson 1998; Thrift 2002). The utilisation of quantitative methodologies is seen as facilitating academic rigour, facilitating comparative analysis that allows for the creation and testing of theories of place (Domosh 2001; Wolman 2004). Cultural and humanistic geographers have often rejected such approaches as being unable to adequately describe the complexities of human experience (Daniels 1992; Cresswell 2004). Others reject quantitative methodologies because of their assumption of a 'universal truth' (Philip 1998; Portugali 2006). However, those seeking a middle ground have called for a re-evaluation of the potentials of quantitative approaches to human geography, particularly their ability to situate qualitative research in a broader context (McLafferty 1995; Rocheleau 1995; Robbins and Krueger 2000; Sheppard 2001; Cope and Elwood 2009). It has been argued that quantitative methodologies are not bound to positivist understandings of the world (Pavlovskaya 2006). If used for post-positivist purposes techniques and tools, such as GIS and other forms of quantitative spatial analysis, can highlight the individual and support the rejection of meta-narratives of place (Sui 1994; Elwood 2006; Kwan 2008; Cope and Elwood 2009).

3.2.2 A Mixed-Methods Approach

Renewed debate surrounding the merits and problems of quantitative and qualitative methodologies in human geography, coupled with a desire to combine theory and practice in studies of place, is resulting in a contemporary push towards integrating different methodological approaches (Philip 1998; Anschuetz, Wilhusen et al. 2001; Jiang 2003). By combining two or more methods at the same stage in the research process, evidence can be triangulated and expanded by going deeper and covering a broader range of issues and opinions (Rocheleau 1995; Philip 1998; McKendrick 1999). An integrated approach allows for both description and explanation (Abler 1993; Flowerdew 1998), and understands place as a product of both "*totality*" and "*contextuality*" (Entrikin 1991:133). The challenge is to retain an appreciation, and an understanding, of the importance of the uniqueness of a

place, while insisting on the necessary interdependence of any place with other places (Massey 1993; Flowerdew 1998; Eisenhauer, Krannich et al. 2000).

Mixed-methods approaches encourage polyvocal understandings of place (Haraway 1991; Martin 2001). By employing a range of methodological strategies, the researcher does not privilege a particular way of looking at the world (Philip 1998; Tashakkori and Teddlie 1998). The complexity of the world can be better understood when epistemology and methodology are allowed to have a fluid relationship (Meppem and Gill 1998; Anderson 2004; Bringer, Johnston et al. 2004; Uprichard and Byrne 2006). Others (Philo, Mitchell et al. 1998; Doel 2001; Poon 2005) argue that the present division between quantitative and qualitative human geography, a result of the positivist and post-positivist conflict, is artificial. The utilisation of mixed-methods approaches in studies of place has the potential to enhance not only the information gained, but also enriches the different perspectives presented and investigated (Hugo 2001; Crang 2002; Jiang 2003).

3.2.3 Critical GIS

The use of GIS in mixed-methods approaches has experienced increasing popularity. The rapid rise of GIS in the 1980s and 1990s, both within the academic, and the wider, communities, led many human geographers to question its value to the discipline (Schuurman 2000; Hodgson and Schroeder 2002). Critics of the use GIS in social and cultural research have tended to view it as a tool that reinforces, rather than challenges, existing power and knowledge structures (Pickles 1995; Towers 1997). Other critiques of GIS have addressed an inadequate representation of space, especially in its neglect of the qualitative attributes of place and people (Jordan, Raubal et al. 1998). There have also been criticisms of its positivist epistemology; its development as an instrument with little introspection; its technique-driven and data-led methods, and; its ethically-questionable roles for the state (Taylor 1990; Sui 1994; Rundstrom 1998). Thus GIS, used uncritically, becomes a servant of social processes and not the "*assumed beacon of scientific truth*" (Schuurman 2000). While many (Barndt 1998; Harris and Weiner 1998; Howard 1998; Elwood 2001; King 2002; Kwan 2002; Laituri 2002; Schuurman 2002; Elwood and Leitner 2003) have responded to these criticisms and sought to develop alternative GIS practices, a significant number of GIS researchers and users still treat GIS as a realist endeavour, failing to account for the many

influences on data, analysis and display that confound realist interpretations of results (Budic 1994; Kliskey 1995; Barredo, Demicheli et al. 2004). These positivist researchers view GIS as a unique tool to further legitimise geography as a science and as a profession (O'Kelly 2000; Crampton and Krygier 2004). Many of these researchers (Mason, Baltsavias et al. 1997; Bahaire and Elliott-White 1999; Rakodi 2003), and GIS users in general, assume GIS represents the 'real' world adequately, if imperfectly (Del Casino and Hanna 2004). In particular, few users have questioned the ontology applied to the data they utilise (Pickles 1997; Towers 1997; Massey 1999; Seiber 2000; Winter 2001). Thus spatial representation through GIS has become a way of linking scientific theories to the real world.

Those who have been more responsive to the criticisms of GIS made by cultural and humanistic geographers have sought to explore the relationship between GIS and critical geographies (Fisher 1997; Schuurman 2000; Kwan 2002; Elwood 2006; Propen 2006; Kwan 2007). For these researchers, GIS is not inherently positivist, but simply reflects the historical connections with positivist spatial science (Crampton and Krygier 2004; Poon 2005; Dunn 2007). Instead those who practice critical GIS highlight the socially constructed nature of the technology and the practice (Harvey and Chrisman 1998; Seiber 2000; Martin 2003). Critical GIScientists recognise the varied roles for GIS and spatial analysis, depending on the different epistemological tradition it sits with, from conservative and supporting the status quo, through to liberating in its use in constructing alternative representations of the world and events (Egenhofer, Glasgow et al. 1999; Goodchild 2004). They stress the lack of neutrality in both the production of maps and their end representations and consumption ((Crampton and Krygier 2004; Del Casino and Hanna 2004; Harris and Hazen 2004). When complemented by the contextual information on the ground and at the micro-scale, GIS visualisations can establish important connections between large-scale phenomena and the everyday lives of individuals (Abler 1993; Toupal, Zedeño et al. 2000; Couclelis 2004). As GIS is capable of displaying and overlaying many layers of data, it can be used to reveal spatial contexts, depict spatial connections, and hint at the complex social relationships among people and places (Kwan 2002; McLafferty 2002; Schuurman 2002; Elwood 2006). In her work to uncover the hidden social changes in Russian urban transformations, Pavlovskaya (2002) argues that analysing urban change at a fine geographic scale and using detailed datasets would have been technically impossible without computer-based GIS spatial

analysis. Thus one of the key strengths of GIS methods lies in their ability to help researchers identify complex relationships across space (Kwan 2002; Dunn 2007).

3.2.4 Exploring Scales of Heritage

To investigate perceptions of the relationship between Angkor and its surrounding area and population, a mixed-methods approach will be utilised. The interpretation of cultural heritage is concerned with understanding, experiencing and creating heritage places (Hewison 1989; Rumble 1989). Exploring perceptions and attitudes that define the meaning and value of tangible remains of the past will reveal forms of inclusion and exclusion (King 1998), which shape the boundaries and define the scales of heritage. The use of a mixed method approach will facilitate a polyvocal enquiry into place and scale (Mark, Freska et al. 1999; Elwood and Martin 2000), highlighting potential issues arising from conflicting perceptions and constructions of place, space and scale.

To reveal both the meanings and values that construct scales, and the material consequences of the resulting scales, the key methods utilised in this research will be semi-structured interviews, textual analysis, and GIS-based spatial analysis. These approaches were selected to increase the quality of the polyvocal understandings of Angkor. Semi-structured interviews, targeted towards the local community, allow access to the perspectives of stakeholders who have been previously underrepresented (Sullivan 2004; Miura 2005) in the Angkor heritage management process. Textual analysis of documentation from the International Coordinating Committee for the Protection and Safeguarding of the Angkor World Heritage Site (ICC) will facilitate the inclusion of changing attitudes and ideas of heritage professionals and governments. GIS-based spatial analysis will assist with integrating and comparing different perceptions of the spatial and material components of place and scale.

UNESCO's current approach to cultural heritage management practices, particularly in Asia, is to simultaneously increase the use of GIS by heritage managers, as well as the involvement of local (particularly indigenous) communities in heritage management processes (Box 1999; UNESCO Principal Regional Office for Asia and the Pacific 1999).

However, such an agenda could seem to be potentially contradictory when GIS has received heavy criticism as a disempowering and positivist technology (Taylor 1990; Openshaw 1991; Taylor and Overton 1991; Pickles 1995). One solution would be to use a fully participatory GIS approach, which has the potential transform GIS into a tool for empowerment (Craig and Elwood 1998; Harris and Weiner 1998). However, within this research, such an approach was proven to be neither possible (accessibility to population) nor appropriate for answering the research questions. Instead, a mixed-methods approach will be utilised to demonstrate the manner in which GIS-based spatial analysis can be integrated with more qualitative methodologies, to raise awareness of, and include, different perspectives of place and scale within heritage management processes (Pavlovskaya 2002).

3.3 A Methodology for Understanding the Construction of Scale at Angkor

The remainder of this chapter details the methods utilised within the research project. It outlines the stakeholders targeted to facilitate a polyvocal understanding of Angkor, as well as the techniques utilised to analyse these varied perceptions and understandings. This research examines the social construction of scale at Angkor in order to understand the relationship between heritage and the surrounding area and population. Several questions, specific to the Angkor case study, were used to frame the methodological process:

- What is 'Angkor'?
 - What is considered heritage?
 - What meanings and values are attached to this entity?
 - What is the physical, or spatial, definition of the valued space?
- In interpreting Angkor, how do different stakeholders perceive the surrounding area and population?
 - What is the geographical and temporal context of Angkor?
 - What does not belong around Angkor?
 - How far does the context extend beyond Angkor?
 - Which interpretations (or narratives) of Angkor are dominant?
 - How have contextualised interpretations of Angkor affected the surrounding area?
 - What is the role of modern space?

- What is the relationship between Angkor and its surrounding area and population?
 - What is the spatial relationship between Angkor and the surrounding area?
 - Is there a hierarchy between heritage space, associative space, and modern space?
 - What impacts do different perceptions of Angkor have on the material landscape?
 - How are the surrounding population affected by perceptions of Angkor?
 - How are the boundaries between heritage and non-heritage defined, maintained, or altered?

In order to provide a polyvocal understanding of the scales of heritage at Angkor, three stakeholder groups were considered: the local community; the staff of the Authority for the Protection and Management of Angkor and the Region of Siem Reap (APSARA), and; the International Co-ordinating Committee for the Safeguarding and Development of the Historic Site of **Angkor** (ICC). Tourists were not considered in this research as extensive investigations have previously been conducted into their perceptions, interpretations and experiences of Angkor (Fournier, Durand et al. 1993; Wager 1995; Barré 2002; Durand 2002; Vann 2002; Winter 2002; Ballard 2003; Winter 2003; Winter 2004; Taylor and Altenburg 2006). These studies suggested that much is being done to cater for foreign interpretations of Angkor, as the economic survival of Cambodia has been, and remains, closely tied to the continuation of the heritage tourism industry (Durand 2002; Winter 2008). The current research will explore, in later chapters, the dominance of tourism and its influence on the interpretations and perceptions of Angkor by other stakeholders.

3.3.1 Analytical Approach

The analysis within this research has been framed (Creswell 1998; Kearns 2005) within the researcher's understanding of the world and human communication (Holloway and Jefferson 2000). As outlined in the preceding sections of this chapter, the research has been philosophically constructed with a belief that there are many different ways of perceiving and understanding 'reality' (Winchester 2005). The polyvocal hermeneutical approach adopted here argues that, whilst there is a material landscape which humans interact with (Hoggart, Lees et al. 2002), there is no true 'reality' as we all observe and interact with the world in both unique and similar ways (Heron and Reason 1997; Peuquet 2002). Consistent

with hermeneutical philosophy and theory (Schwandt 2000), the language of interviews and documents utilised within this research was seen as not only a tool for description but also as something that can manipulate the world it describes (Waitt 2005). This research moves beyond only understanding the meanings embedded within language, to also adopt a complementary constructivist approach (Hoggart, Lees et al. 2002). It is recognised in this research that the social behaviour and language with which we classify, or categorise, our world also affects (even creates) the material landscape (Schwandt 2000). In other words, in this research, our perception of the material creates language, whilst simultaneously the meanings and images of language creates the material (Barnes 2004).

In this current polyvocal study, the voices of those who have not been previously heard were sought in order to investigate harmony and dissonance (Hampton 2005; Loulanski 2006). A multitude of understandings and perceptions were considered as an important part of managing Angkor's heritage values, and a key part of this research was to also recognise and integrate experts within the polyvocal analysis. An observable concern within cultural heritage management is the interpretivist approach (Schwandt 2000) that heritage professionals adopt in the course of their work. Heritage assessments and other aspects of management require the consultant, or expert, to search for the meanings within a social object and action (Ritchie 1998). Their understanding of the object is externalised and objectified (Mizoguchi 2000). The understandings of the heritage professional are seen as being removed from, and remaining unaffected by, the process of interpretation. Indeed, even the World Heritage Committee's (WHC 2008) Operational Guidelines for the Implementation of the World Heritage Convention states that the Committee must achieve an objective assessment of value, where they evaluate a site's worth only through the submitted documents. While increasingly attentive to the variety of opinions put forward by others, it is rare for a heritage professional to acknowledge their personal social and political position and influences when analysing the significance and values of a heritage site (Smith 2000; Byrne, Brayshaw et al. 2003; Smith 2004). Within this research, the 'expert' at Angkor is recognised as another stakeholder possessing an agenda which will frame a particular understanding of the site.

3.3.2 Interview Analysis

In seeking a polyvocal understanding of Angkor, it was seen as important to ensure the research gave consideration to a diversity of experiences and relationships with the sites and landscapes (Pain 2004). With limited research into the perspectives and understandings of the local community towards Angkor and its surrounds, it was felt that undertaking in-depth interviews would allow for the inclusion of more qualitative opinions, narratives and experiences (Baxter and Eyles 1999; Thomas 2007). Whilst questionnaires would have provided greater coverage through access to a larger sample size, the data obtained would have been driven by the researcher rather than having the flexibility and adaptability that a semi-structured interview provides (Crang 2002; Hay 2005). Similarly, in seeking the perspective of Cambodian heritage professionals, it was felt that the personal understandings of those who have daily contact and involvement with the management of the site (i.e. the Siem Reap-based staff of APSARA) were also best obtained through interviews. In undertaking in-depth interviews with APSARA staff, questions could be tailored to the experiences, responsibilities and comfort (due to potentially politically-sensitive information) of individual participants. The use of a survey, questionnaire, or more formally structured interview would have required questions to be standardised to suit the researcher's understanding of possible responses and outcomes (Hay 2005). In addition, it was also hoped to include interviews from representatives of foreign groups involved in the management of Angkor, however this was not logistically possible (see section 3.3.3.1).

3.3.2.1 The Local Community

At Angkor, there has been increasing interest in improving the representation of local people in the heritage management process (Bouchenaki 2002; Sullivan 2004; Candelaria 2005). Research and management projects, addressing Cambodian attitudes and utilisation of Angkor, have traditionally divided the population into two groups: those who live inside the Angkor Park (Ishizawa 2002; Ballard 2003; Miura 2005; Mackay 2008), and; Cambodian's who live in other parts of the country, such as Phnom Penh, who consider Angkor a part of their national identity (Takei 1998; Vann 2002; Slocomb 2006). This divide is based around the differing experiences of either living within the Angkor Park and having regular and/or continued interaction with the site (Luco 2005), or otherwise of undertaking a 'pilgrimage' to visit it (Winter 2004). Absent from these studies has been the population

who are situated just outside the core heritage area (see Figure 1-2), particularly those who live within the urban settlement of Siem Reap. Instead of being included in analysis, they are often the focus of negative judgements about the manner in which their socio-economic development is being achieved (for example, Boukhari 2002; Mackay 2008; Rabe 2008). However, if 'local' is to be defined as possessing a close physical and personal relationship with a heritage site (Aplin 2002; Johnston 2004), then it is argued here that those who live outside, in the surrounds, of the Angkor Park should also be included within local population stakeholder analysis. The regular use of Angkor by those who reside outside the Park is easily observable and should not be classified as 'tourist' use, but instead should be seen as utilisation linked to everyday life (explored further in Section 4.3.4). Similarly, throughout the town, and when arriving at the airport or the bus station, visitors are greeted by signs welcoming them to Siem Reap-Angkor, imagery which invokes a close relationship between the town and the heritage site. Thus in this research, 'local community' was defined as residents of the Siem Reap-Angkor region, encapsulating both urban settlement and World Heritage area.

Many research projects conducted at Angkor have focused on community, business and religious leaders for local perspectives and participation (JICA 2004; Mackay and Sullivan 2008; Rabe 2008). Whilst these people may be economic or political representatives of the population, their ideas may not necessarily be characteristic of the lived realities of normally disempowered groups such as women, the less educated and younger community members (Heron and Reason 1997; Perreault 2003). Critiques of participatory approaches in cultural heritage management, outlined in Chapter 2, have highlighted the manner in which these practices can often be about containment rather than inclusion (Few 2001). Participation often remains controlled by the 'top' and is managed to avoid dissent and conflict, and to maintain control of knowledge and procedure (Few 2001; Pain and Francis 2004). Thus the decision by researchers, planners and managers to consult cultural leaders about cultural heritage could be viewed as assuring a discussion among like-minded individuals, rather than the cooperation between those who potentially conflict. By interviewing a broad range of 'ordinary' residents for this research, a more polyvocal understanding of Angkor could be explored. Similarly, it was anticipated, that by examining the perceptions of the local residents, the research could help to reveal causes of potential tension within heritage management processes.

As there was no current census, or other contemporary demographic data, it was not possible to develop demographically representative or more formalised sampling techniques within this project. There was an awareness that within the population of the region there would not be a single 'community' perspective, but rather there was the potential for the population to have very diverse understandings of the interactions between people and place (Entrikin 1991; Massey 1991). As several of the interview questions were concerned with spatial understandings of Angkor (see Section 6.3), sampling did reflect a desire for dispersion across the Angkor-Siem Reap region. Thus participants were sought along the main north, south, east and west transport routes, as well as within the urban core (Figure 3-1). Extensive field observations, conducted prior to and during, the interview period (See section 3.3.4.1), suggested that it would be difficult to consistently find people outside buildings in areas off the main routes. Instead by following the main transport routes and utilising primarily opportunistic sampling (Bradshaw and Stratford 2005), the interviewer (through the translator) approached people who were visible from the road, such as stall holders or those working in small open-air restaurants. Neither itinerant shoppers nor pedestrians were approached due to the impracticalities of conducting an extended interview with these people beside the road (Kitchin and Tate 2000). This selection method resulted in a large proportion of interviewees being employed in the retail sector. By having the interviews take place at a location 'belonging' to the interviewee, some of the power relationship between interviewer and interviewee was counteracted (Elwood and Martin 2000). In addition, to avoid pressuring potential participants, the translator was the first to approach interviewees, with the researcher remaining at a distance. The translator utilised a prepared participation information statement to obtain permission for the interview to continue. It was felt that by approaching the local community in this manner, community members could more freely reject participation (approximately 10% of those approached). This was important in a town where white people have economic power through tourism, and Khmers are seldom openly rude to (European) foreigners.

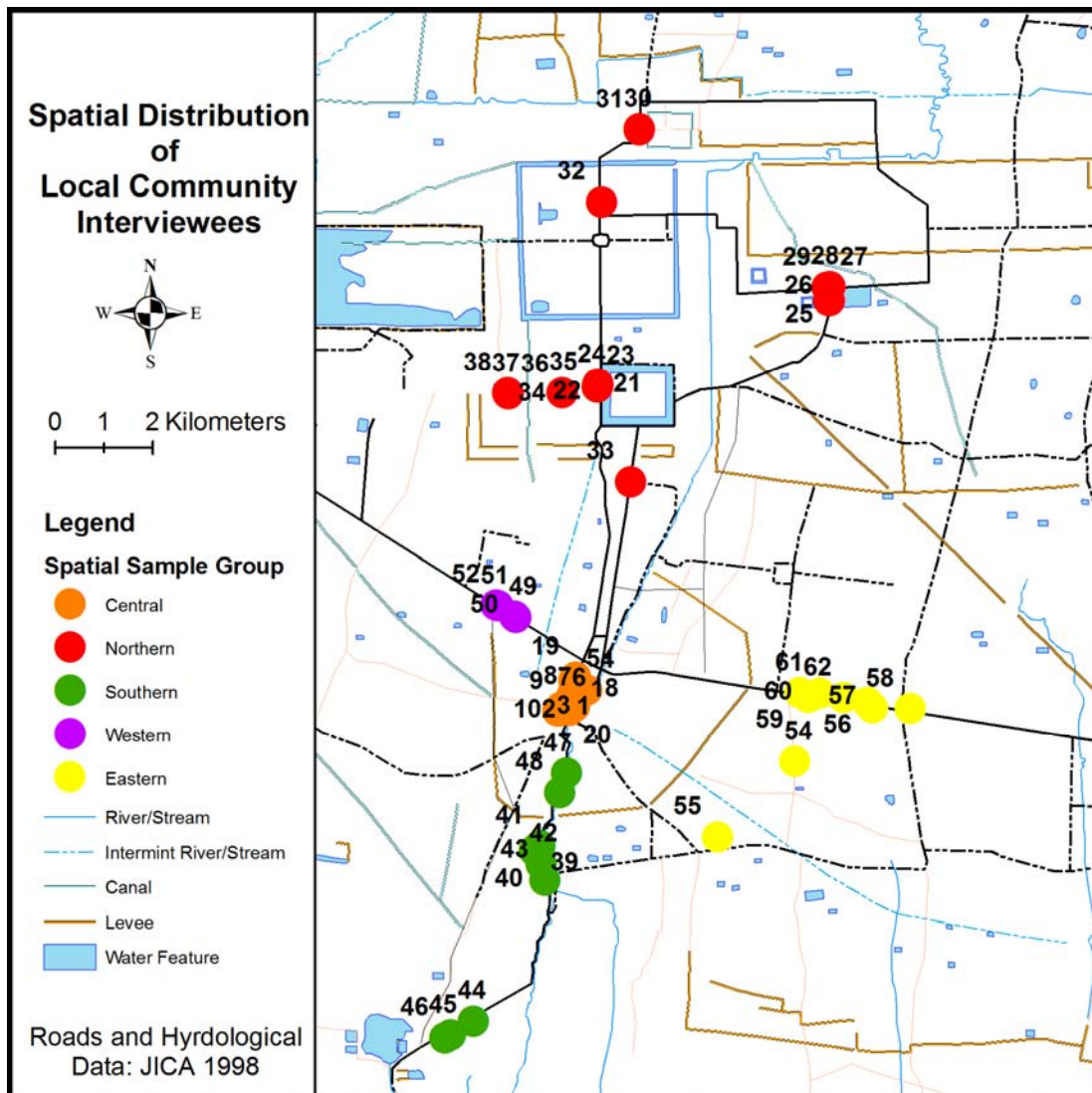


Figure 3-1. General location of local community interviewees, . Interviews were undertaken to collect the perspectives of five spatially varied groups based around the residence of the interviewee. The groups were situated to the North, South, East and West of the town, and within the central business area of Siem Reap town.

Twenty interviewees were sought in each spatial sample group, with each interview taking between 15 minutes and one hour, depending on the conversation which developed. It was possible to obtain the full number of interviewees within the central parts of the town and to the north inside the Angkor Park. However, to the south and east only 15 and 10 interviews, respectively, were obtained, and it was only possible to conduct four interviews in the west, where there was a lack of people who satisfied the sampling criteria. The absence of people beside the road was indicative of the area which had many hotels and ‘enclosed businesses’ but few houses, shopfronts and stalls. In total 64 interviews were

collected from the local community over two fieldwork periods in 2005 and 2006. The resulting interviewees satisfied the spatial requirements for the project, and also provided a broad range of other attributes for comparison, such as length of time in Siem Reap (67% of interviewees born in Siem Reap and 33% of interviewees from other provinces), and being from an urban (61% of interviewees) or rural (39% of interviewees) background. As many interviewees were females (74% of interviewees), and none were community leaders or spoke of having participated in any kind of research concerning Angkor or Siem Reap, it was also felt that they provided perspectives not previously considered in Angkor research (see Appendix A).

3.3.2.2 Staff of the Authority for the Protection and Management of Angkor and the Region of Siem Reap (APSARA)

APSARA is the national authority in-charge of the safeguarding and conservation of Angkor (Boukhari 2002). With a broad remit that covers archaeology, monumental restoration, forestry, urbanisation, tourism and social development, the Authority is responsible for many different issues and aspects of Angkor (Pisith 2004). APSARA is thus a key stakeholder in the interpretation and management of the site (Durand 2002). Within this research, the personal opinions and understandings of staff were sought to, firstly, compare these perspectives with formalised understandings of the ICC (see section 3.3.3) and, secondly, illustrate that personal biases and experiences cannot be fully put aside when interpreting and managing a heritage site.

Over the last 15 years, APSARA has had many structural incarnations reflecting both conservation and sustainable development priorities and politics (Winter 2008). When this research was undertaken, there were six APSARA departments involved in the implementation and communication of management policies at Angkor-Siem Reap: Department of Monuments and Archaeology 1 (DMA1), Department of Monuments and Archaeology 2 (DMA2), Department of Urbanisation and Development (DUD), Department of Water and Forests (DWF), Department of Tourism (DT), and Department of Demography and Development (DUD), as well as one administrative department based in Phnom Penh. As each department had different responsibilities and concerns that they must face each

day (Lemaistre and Cavalier 2002), it was felt important to obtain a diversity of responses so as to account for professional influences on personal opinions.

Each department head was approached for an interview, with responses gained from DMA2, DUD and DWF. The other departments felt that they had other priorities and could not commit the time (DT), or did not respond to repeated requests (DUD and DMA1). Within each APSARA department there is a hierarchy of department leaders, fieldworkers, and administrative staff. As many of the department heads are foreign-trained, and often it is the field workers who interact with the site, the people and the surrounding area, it was felt necessary to also interview field staff from each department. Permission was granted from each of the interviewed department heads to interview 2-4 of their staff (DMA2 – 4 interviewees, DUD – 2 interviewees, and DWF – 4 interviewees). A total of 13 in-depth semi-structured interviews were undertaken with APSARA staff in November 2006 (see Appendix B). The variance in numbers reflected the activity level of the department during the period in which the research was undertaken, when the DUD was unfortunately highly involved with a JICA project.

3.3.2.3 Interview structure

The purpose of the interviews was to facilitate the collection of both spatial and more descriptive data from the local community and APSARA staff. The utilisation of interviews facilitated the collection of rich data concerning people's experiences, opinions and feelings (Kitchin and Tate 2000). Semi-structured interviews were utilised as the researcher (and potentially the interviewee) would have the flexibility to expand or contract discussion to suit the experiences, emotions, interests and comfort of the interviewee (Lindsay 1997; Dunn 2005). The benefit of having a flexible framework when interviewing allowed conversations with APSARA staff to reflect on their work, with discussions enhanced by drawing on discussions of occupational experiences. One APSARA staff member seemed pleased to have the opportunity to not only reflect on the problems (and benefits) she observed in the region, but also appeared to appreciate the chance to create linkages between her professional and personal experiences. Such an example demonstrates the importance of recognising heritage professionals as subjective stakeholders within heritage

interpretation and management processes, and not simply seeing them as objective experts (Smith 2001).

With a strong interest in the spatial understanding of place, the questions in this study were focused towards maximising the collection of spatial information. Beyond the asking of 'where' something occurred, the development of questions was grounded within literature which has explored the use of GIS in capturing sense of place. These studies have often focused on the functional aspects of place (for example, Jordan, Raubal et al. 1998; Kwan 1998; Pavlovskaya 2002; Kwan 2008), exploring how the movements, activities and experiences of people create and reflect perceptions of place and identity. The developments of critical GIS have openly examined the inclusion of multiple realities within a computerised GIS so as to explore the diversity of experiences across space. The phrasing of questions was also strongly guided by the work of Lynch (1960), who highlights the role of the form of landscapes coupled with experience in creating individual spatial understandings as influencing the social meaning of an area, its function, its history and even the names attached to places. The physical elements of spatial images were divided into five elements (Lynch 1960):

- Paths - channels along which the observer moves;
- Edges - linear elements not used or considered as paths by the observer;
- Districts - medium-to-large sections of the city, conceived as areas with an identifiable character;
- Nodes - strategic spots in a city into which an observer can enter, and which are the intensive foci to and from which they are travelling, and;
- Landmarks - the observer doesn't enter these, but orientates around them.

Whilst the work of Lynch (Lynch 1960; 1972; 1991) framed the spatial orientation of many questions, it was also recognised that some information could not be closely linked to spatial location (Abbot, Chamber et al. 1998). Such information was also actively sought for the qualitative narratives which connect spatial stories through experience and cultural meanings.

In anticipation of incorporating mental maps and diagrams as a source of community information within a GIS, questions were initially designed to facilitate the construction of hard copy maps by interviewees. However, it was quickly established that frequently used techniques, such as mental mapping, could not be utilised. 'Mental mapping' is a technique utilised in many participatory GIS and management projects to capture spatial information from participants, either through drawing maps or through interacting with prepared maps (Weiner, Harris et al. 2002; Smith, Morgan et al. 2003). In many locations where interviews with the local community were conducted, it was not practical for map drawing by participants to occur, due to lack of space or wet areas (due to rainfall). In other areas, interviewees were unwilling to participate actively in putting pen to paper. One (bolder) participant said that they couldn't read and write so didn't feel comfortable with an activity involving drawing. Others felt that they didn't know the 'correct' location so didn't want to make a permanent mark, but would rather just indicate a general area with their hands. It was therefore decided to ask people to provide as many verbal descriptions to location as possible. The interviewer utilised visual support to facilitate this discussion. A map was produced using the same data available to APSARA and international teams at Angkor (thus similar to maps produced for managing the landscape). However, it was discovered, through conversations with *moto* drivers and several of the earlier interviewees, that a map which abstracted space into points, lines and polygons was not easily understood, interpreted or interacted with by interviewees. Instead, these discussions revealed that interviewees found it easier to interpret an aerial photograph of the region. In the absence of up-to-date aerial photography for Siem Reap – Angkor, an image utilising ASTER data from 2004 was used to facilitate and guide spatial discussions (Figure 3-2).

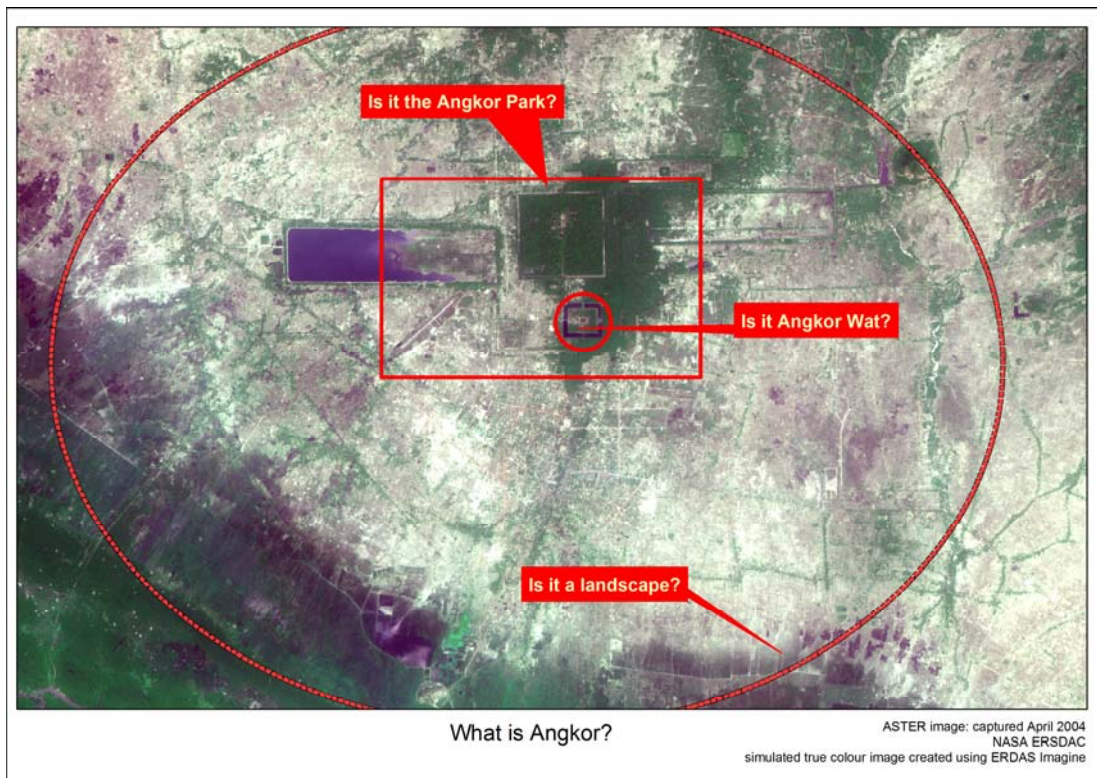


Figure 3-2. ASTER satellite image depicted in true colour, captured in April 2004, used to guide interviewees in providing spatial responses to questions. Traditional maps involving points, lines and polygons were discarded when it was established that such data could not be easily understood or interpreted by interviewees.

Interviews were designed around three key research themes (see Appendix C) of defining Angkor and Siem Reap, the relationship between Angkor and Siem Reap, and the changes observed in the region since 1993. As a large and complex issue, the latter of these was not included in the final analysis as it would divert the discussion from the core argument of this thesis. The resulting material was, however, used to inform the analysis of understanding place, scale and related issues at Angkor. Within these four themes, the researcher utilised a variety of open-ended and more structured questions. Open-ended questions were utilised for many of the issues discussed, due to their potential to reflect a person's own thinking rather than the possibilities predicted by the interviewer. This is reflected within the results of this thesis, where categorisation of data is not completed until qualitative descriptions have been explored and understood.

Some questions and issues were found to be of a more abstract nature when put to interviewees (i.e. what is Angkor?) and for these questions it was necessary to provide 'prompts', or examples, to facilitate the ability of interviewees to respond (i.e. "Do you see Angkor as Angkor Wat? Is it Angkor Thom?, etc.). The use of prompts for broad or abstract questions during interviews has been accepted by qualitative researchers as being necessary at times (Hoggart, Lees et al. 2002). In this project, care was taken not to lead or bias responses when providing prompts. It was made clear to interviewees that they could provide a personalised response, with many electing to deliver a qualitative description rather than selecting the language of the examples provided. The use of 'prompts' also proved useful in counteracting any miscommunication when moving between English and Khmer, as the interpretation of key words in questions and responses was guided by the prompts provided.

The questions and their position in the interview were also designed to avoid leading interviewee responses. In particular, the order of questions for certain interrelated themes were purposefully dispersed throughout the interview, rather than clustered together. This enabled comparison and validation of responses by examining their consistency (Kitchin and Tate 2000). However, any differences in an individual's responses were also examined for contextual differences. For example, discussion of emotional connections with Angkor may make a person see Angkor as within an urban settlement, whereas a discussion of the growing built environment and the contrasting forests of the Angkor Park may mean that an interviewee perceives a physical separation between town and heritage site. Thus in constructing, conducting and analysing the interviews, the researcher was aware of the situational context of meanings found within responses (Gee 1999).

3.3.2.4 Conducting the Interviews

In conducting the interviews consideration was given to location and timing (Elwood and Martin 2000). For APSARA staff, interviews were conducted in a private room away from observation by other (particularly, senior) staff. The interview timing was left to the convenience of the staff and their department. For the local community participants, interview location reflected the sampling methodology utilised (see section 3.3.2.1) as well

as a desire to ensure that participants felt comfortable to freely express themselves. Interviews were conducted at the business or home of the interviewee, rather than asking them to come to an office or other unfamiliar location. They were sought outside the morning, lunch and evening peak business and retail times, to place as little inconvenience as possible on the interviewee. Many continued their business, such as selling drinks or preparing meals, whilst talking. This situation worked well with participants often willing to extend their conversations in these quieter times and when not pressured to resume employment activities.

A translator was provided for all interviews as the interviewer did not speak Khmer. The local community interviewees were reliant on this form of communication. Most APSARA staff felt that they had sufficient English to respond to questions and did not use the provided translator. Two APSARA staff interviewed initially felt their English would be insufficient and brought a colleague into the interview to assist them. However, in these circumstances the translators were only used for occasional words or phrases.

Highly aware of issues of power that develop when conducting interviews, particularly with those that develop when communicating between women, a feminist approach was utilised to relax interviewees (Winchester 2005). Conversational techniques, drawing on similarities of experience, and commenting on children or nearby family, were all utilised to lighten the mood of the interviewee and interview. At the start of each interview it was made clear that there were no correct, or incorrect, responses, and that interviewees were made to understand that personal opinions and experiences were being sought by the researcher. At times the pronoun 'you' was emphasised in the question, particularly when it was felt that the interviewee wanted to give a 'correct response'. The interviewer was also aware of the potential for questions to be interpreted as political or culturally sensitive (Dunn 2005). Discussions were had prior to the interviews with the translator, and other Khmer speakers, about the appropriate manner in which to phrase questions, structure the interview and approach participants. Effort was put into phrasing questions, such as 'Why is Angkor important?', in a manner so as to not cause offence. Throughout the interview both the researcher and the translator also sought to read the body language of the interviewee. This helped to recognise when questioning became uncomfortable, such as when a

participant felt unable to provide a correct answer or was becoming pressed for time or attention elsewhere. Following the interview, the translator and interviewer briefly reviewed the interview to see if notes should be added to enhance the data collected.

Interviews were recorded using both paper and, where permitted, digital voice recording. The recording of interviews was designed to be as subtle as possible. By having a translator present, the interviews with the local community could be handwritten during the interview. To ensure the collection of qualitative data, the focus was on recording the flow of words, rather than the categories of words. Notes were reviewed at the end of the interview with the translator, and again at the end of the day by the interviewer. Three of the later interviewees also permitted their interviews to be digitally recorded. After transcription these recorded interviews were used to evaluate the quality (good) of the written interviews. All the APSARA interviewees granted permission to have their interviews digitally recorded. This facilitated a more fluid conversation with the interviewee, which was also assisted by the freedom of not needing a third party translator. So that participants were not overly conscious of the microphone, it was positioned to the side so that it did not intrude into the visual space of the interview. No names were taken during the interview to avoid potential breaches of privacy and to ensure that participants felt free to express their opinions and concerns. Following the completion of interviews, they were transcribed and then reviewed for gaps and to determine areas of discussion which could be expanded upon in future interviews.

3.3.2.5 Analysis

The analysis of interview transcripts was undertaken in a manner which would ensure the facilitation of a polyvocal understanding of the relationships between Angkor and its surrounding landscape and population. For this purpose, the qualitative computing package **QSR's NVIVO 6** was utilised. This software package was designed to facilitate qualitative analysis of text, including interviews and literature (Lee and Esterhuizen 2000). It was constructed within a methodological approach that sought to facilitate 'grounded theory' (Punch 1998). This means that it has been designed to function most effectively within open qualitative research, rather than closed quantitative questionnaires (Newman and

Mclean 2006). Practitioners of grounded theory see the research process as one which develops through ideas and concerns of participants, rather than through the proving or disproving a pre-existing theory (Bringer, Johnston et al. 2004). The use of a grounded theory approach, therefore, facilitates a pluralist understanding of place, space and scale. Within cultural heritage management, such an approach could assist with revealing the concerns and issues for different stakeholders, as well as highlighting the connections between stakeholders and heritage sites. However, with the limits of time and the need to target the selection of interview subjects to prove theory, rather than to generate theory, through fieldwork, this study cannot be viewed as grounded theory research. Instead it adopts the techniques that allow analysis to be driven by the responses gained, with the continual revision of previous analysis allowing ideas to grow and develop (Schwandt 2000).

The process of analysis within the **NVIVO** software is one that involves the continual 'coding' of themes and questions found within the text (QSR International 2002). Coding is the selection and labelling of words, phrases or extended passages of text (Hoggart, Lees et al. 2002). This is not an exclusive process, as text can fit within many different themes and can be continually recoded within 'nodes' of information (di Gregorio 2000). This can be an automated process, where the software assists the research to identify recurring words and themes (Pearce and van Hoven 2005). However, in this research, the process had to be done manually due to the flexible structure of the interview questioning, and the phrasing and language within text that resulted from translating between Khmer and English. Following the transcription of interviews, all text pertaining to each of the key themes (see 3.3.1) was collated. Through a process of reading and rereading, the text was further coded within each theme to separate answers for each of the questions asked within the interviews, as well as to explore other topics that arose when reviewing the data. Analysis of the semi-structured interviews undertaken with staff of APSARA and the local community recognised the presence of a text and a subtext (Arksey and Knight 1999; Silverman 2000). Through the utilisation of the **NVIVO** package coding could be continually reviewed and expanded as new research questions were identified (Kwan 2008). After the initial coding was completed, the analysis was checked and revised to ensure accuracy of text selection and validity of coding and created nodes.

Resulting from the coding was a complex web of nodes of information. Categorisation of data was initially avoided to ensure a polyvocal approach. All responses were considered and seen as valid concerns. Behind this was the researcher's philosophical and methodological belief that knowledge and perception is highly individualistic (Peuquet 2002), and that there is no one true objective 'reality' (Hay 2005; Waitt 2005; Winchester 2005). There may be conformities across the system, which facilitate communication and organisation, but the disconformities are just as important for understanding potential conflict through lack of communication (Creswell 1998). Quantitative categorisation of qualitative descriptors was only done to facilitate comparison between stakeholder perceptions.

Once interviewing was completed and the researcher was satisfied with the complexity and utility value of the coding, the results of the qualitative data analysis were considered in a number of ways. Relationships between responses given for different questions by different stakeholders were examined through cross-coding. For example, if an interviewee perceived Angkor as valuable for economic purposes, what was their perception of the urban tourist landscape? A useful part of the *NVIVO* software was its ability to output data in tabular and matrix form. This enabled a cross-examination of the various attributes of stakeholders with responses given (or not given). Lastly, the results of the qualitative analysis were incorporated with spatial information to explore the spatial understandings of the Angkor-Siem Reap region.

3.3.3 Textual Analysis of the Cambodian and Foreign Contributors to the International Co-ordinating Committee for the Safeguarding and Development of the Historic Site of Angkor (ICC)

The third stakeholder group to be considered in this research was the International Co-ordinating Committee for the Safeguarding and Development of the Historic Site of Angkor (ICC). The ICC was initially established as part of the World Heritage Committee's requirements for the inscription of Angkor (Lemaistre and Cavalier 2002). This committee was given the task of overseeing and coordinating international efforts to protect and develop the Angkor-Siem Reap region (Winter 2004). The ICC primarily acts as an advisory body, making recommendations to UNESCO, the Cambodian Government and other

relevant bodies (Beschaouch 2002). The inaugural meeting was held in Paris in December 1993, and the ICC has subsequently met twice-yearly for the last 15 years, primarily in Siem Reap, with a 10th anniversary summit held in Tokyo in December 2003. The secretariat of the ICC is provided by UNESCO in Phnom Penh, and France and Japan act as co-chairs, with the Cambodian government the other major party. International teams involved in Angkor's heritage management and socioeconomic development are allowed representation through their government representative and/or team leader(s). There are also a number of international agencies such as ICCROM, ADB, UNDP, and several NGOs participate. The structure of the ICC reflects historic monetary aid contributions to the country (Japan and France have traditionally been the key contributors), as well as pre-Khmer Rouge, colonial power structures (Hitchcock and King 2003). Whilst participants come from a number of different professions, including archaeologists, art historians, urban planners, tourism planners and environmental scientists, their work at Angkor relates to an aspect of cultural heritage management, thus they shall be collectively referred to as heritage professionals throughout this thesis.

The ICC holds considerable sway over the management of Angkor as it can directly advise UNESCO and the World Heritage Committee of any dissatisfaction with Cambodia's conservation and management of Angkor heritage (Candelaria 2005). The ICC has influenced the extent to which modern activities can be undertaken in the areas surrounding the Angkor monuments – such as filming (Winter 2002), and has held the Cambodian government accountable for negotiating adequate financial returns from tourist entry fees (Candelaria 2005). Similarly, at the ICC international teams can be called upon to explain discrepancies in their reports and actions at the site, such as UNESCO querying the Indian Ambassador and Archaeological Survey of India as to their real plans to comply (or not) with agreed conservation and interpretation approaches for Ta Prohm (ICC 2005). Whilst the ICC may not be active on a day-to-day basis, all international projects must be cleared through the Committee as it has an interest in the long-term plans for the site (Lemaistre and Cavalier 2002). There is a dominant participation by certain countries and organisations (France, Japan, UNESCO and Cambodia), so the analysis was conducted by categorising contributions as either Cambodia or International, and ignoring sub-divisions.

Initially it was hoped to interview or survey, representatives from the many and varied organisations which participate in the conservation and management of Angkor – Siem Reap, but it was not possible to get access to the necessary personnel. Instead textual analysis was conducted on the minutes of the ICC meetings, which are transcripts of the discussions held. The main themes and issues considered within the remit of the ICC, and therefore discussed at the meetings, include: the safeguarding and protection of Angkor; the institutional framework for governing the site, and; the sustainable development of the population in and around the World Heritage Area. As the material presented at the ICC consists of reports from commencing, ongoing and completed international projects, as well as a wide discourse representing attitudes and perceptions of Angkor and the surrounding area and population, it was felt that it would be an appropriate substitute for interview or survey data. The minutes of the ICC meetings are distributed online, as well as directly to participants and are available through the International Documentation Centre in Siem Reap and the UNESCO office in Phnom Penh.

3.3.3.1 Analysis of Documents

Using the documentation from the ICC meetings, two levels of analysis were undertaken. Firstly, the text of the minutes for meetings held in 1993 and 2003 were studied in-depth in a similar manner to the interview transcripts (see Appendix D). It was originally intended to analyse documentation for all meetings of the ICC (1993 to present). However, upon accessing the archives, the full minutes were missing for many of the intervening years. Major assemblies of ICC participants took place in 1993 (Paris) and 2003 (Tokyo), as a means to take stock and plan for the future. For these years, documentation had been successfully archived and was readily available. The discussions and presentations recorded at these major gatherings considered both past and current projects, with many participants also speaking of their visions for Angkor in the future. It was felt that these years would provide substantial material for analysing government and official attitudes towards the management and conservation of Angkor and Siem Reap. Both Cambodian and foreign contributions were considered and compared, assessing one of the ICC's broader aims of achieving "*common objectives and seamless co-ordination between the different national public actors and their international partners*" (Lemaistre and Cavalier 2002). To position this analysis within a broader temporal context, quantitative content analysis was

performed in *Microsoft Excel* on the agendas for ICC plenary meetings held between 1993 and 2006 (see Appendix E). This analysis identified trends in discussion of the key ICC themes (sustainable development, research and safeguarding, and institutional framework).

Language and its relationship with the material landscape were given methodological consideration when considering the textual analysis of the ICC documents and the analysis of the interviews (Arksey and Knight 1999). In analysing the ICC documents, it was understood that within these texts ideas were expressed that may influence the ideas of other stakeholders. Government and other official documentation, such as those recording the ICC meetings, are created with political and social motivation (Schwandt 2000; Waitt 2005). While this may not reflect a particular author's personal thoughts, the presented text is the 'public face' of the ICC, and a particular knowledge and understanding of the world will develop through the meanings and representations created (Kelly 1999; Dicken 2004; Waitt 2005). The social and political power of the voices recorded within the ICC documents (government and international agencies) also ensure that these documents, their text and subtext, will inform what people think and do when managing the Angkor World Heritage area. The textual analysis contained within this research adopts a critical theory ideology (Creswell 1998) that acknowledges the role of social, political and economic power structures in influencing what people say and do (Rose 2002; Waitt 2005). However, unlike some critical theory research, the analysis within this thesis presupposes that all responses could be true, as methodologically and philosophically there can be no 'reality', or one way of knowing the world, by which to triangulate for discrepancies (Kyem 2004). Instead, the results of the multiple methods are interwoven to create a complex story from different perspectives (Abbot, Chamber et al. 1998), and divergence is seen as a point of conflict to be explored. The influence of various economic, social and political factors on perceptions of the world can be found by looking at the linkages between responses to different questions (Roberts 2001). Thus, the research also acknowledges that meanings and ideas can also be hidden amongst the text (Robinson 1998).

Two approaches to understanding meaning within text were utilised in this research: content analysis which considers the occurrence and connections of ideas discussed within

a text, and the more interpretative hermeneutical analysis which seeks deeper meanings and connections. The former often converts qualitative descriptions into numbers, such as calculating how many respondents mention a word. By moving the approach closer to hermeneutical analysis, the cultural meanings and connections between qualitative descriptions can be explored and interpreted for different stakeholders (Gee 1999). Analysis of the ICC documentation for 1993 and 2003 was undertaken in a similar manner to that for the interview transcripts. This was a suitable approach as the documentation reviewed (for 1993 and 2003) were transcripts, recording not only the formal presentations, but also the discussion and clarification of controversial points. **NVIVO** was used to identify themes and issues through the coding and recoding of each contribution by an international or Cambodian participant. NVIVO coding nodes were developed for the ICC documents which represented questions previously asked of interviewees (see 3.3.2.3), as well as any additional topics that arose when reviewing the documents. When the researcher was confident with the resulting nodes and coding, the results were compared with the interview data from other stakeholders through the methods outlined above (see 3.3.2.5).

3.3.4 GIS-Based Spatial Analysis

GIS-based spatial analysis was utilised in this research to observe the spatial and material consequences of varied constructions of scale and perceptions of place. Though heavily criticised as an imperialistic technology (Taylor 1990; Pickles 1995; Rundstrom 1998), GIS can be a site for disrupting the dualist understandings of quantitative or qualitative methodologies (Goodchild 1991; Sui 1994; Kwan 2002; Cope and Elwood 2009). GIS can also assist with synthesising individual and general approaches to place (Gregory and Healey 2007), allowing for both the detail of place but also the contextualisation of place (Abler 1993). Within this research, GIS-based spatial analysis was utilised to illustrate the spatial conceptualisation and material consequences of the socially constructed scales of heritage at Angkor.

Within geography there has been recent interest (Cope 2005; Kwan 2008) in the value of qualitative computing packages (such as **NVIVO**) for facilitating the integration of qualitative data into GIS-based spatial analysis. However, this work is still in its infancy. On

the surface the open-ended qualitative analysis of interviews and texts that is undertaken in such software would seem to have only weak linkage with the quantitative methodologies facilitated by GIS-based spatial analysis packages, such as ESRI's **ArcGIS**. However, similarities can be found between the two types of software (Kwan 2002), with both adopting a highly visual approach, assisting the user to understand connections and relationships between objects and between various types of data. In this research, the results of the coding within **NVIVO** were generated as tables formatted to join with spatial information that enabled analysis within **ArcGIS**. This software package was utilised as it is a mainstream GIS software package also used by APSARA in the management of the Angkor Site. Despite concerns expressed in the literature about software constraints directing the analysis and techniques used (Shiffer 2002; Johnson, Louis et al. 2004), it was decided that analysis would be undertaken within the constraints of the program. If the methods developed in this research were to have future application, it was important to demonstrate adaptability for users less-skilled in GIS-based analysis through the use of tools widely available in mainstream software.

The GIS-based spatial analysis undertaken in this research can be divided into three sections: intensive field observations; analysis of place perceptions, and; exploration of the Angkor landscape. The techniques chosen were simple and freely available in most software packages widely utilised at the site. This was done purposefully to demonstrate that the process of including polyvocal understandings of the landscape can be done without the development of advanced GIS skills. Instead, the emphasis is placed on the collection of data and ensuring participation of the local community and other stakeholders in determining and developing the material which will be included.

3.3.4.1 Field Observation

The existing data for the Angkor region consisted primarily of land cover information developed for the Angkor ZEMP (1993-5) and by the Japanese International Cooperation Agency (1998 and 2005). In addition, there were several remotely-sensed data sets available, including aerial photographs (1993 and 2003), NASA JPL AIRSAR (2000), Landsat (1990 and 2002), IKONOS (2004), and Quickbird (2004). Whilst these data are useful for

giving an overview of human activities and the environment across the region, they did not provide a complete picture of the human-environment interactions. Whilst the language of cultural heritage management utilises qualitative descriptions of buildings, people and the environment, the GIS that plays a part in the management of Angkor (Box 1999) consists primarily of quantitative data. Categorisation of the landscape has been through broad 'factual' descriptions of the landscape, such as types of vegetation, the location of buildings, roads and water bodies, and the location of known Angkorean structures. Included within the land cover data were land use layers that divided the populated landscape into the urban and rural areas. Despite these being subjective terms (Pacione 2001), there was no indication within the documentation of each dataset of how such categories were determined. It was therefore decided that extensive field data would be collected reflecting the qualitative descriptions of urban and rural, heritage and non-heritage landscapes described by interviewees and the ICC documentation. This data could then be incorporated with existing data to explore definitions of the Angkor landscape (section 3.3.4.3). The intensive process of data collection had the added benefit of giving the researcher extensive spatial land use knowledge of the region that proved useful in understanding and relating with the descriptions given by interviewees.

As the field site covered over 540 square kilometres, sample points on a 1km x 1km grid were collected to provide systematic coverage across the Angkor-Siem Reap region. The boundaries of this region were delineated through the use of the available remote sensing datasets, and satisfied a number of criteria. The area included all settlement to the east and the west that appeared to be a continuation of the urban centre of Siem Reap. Areas of urban growth were also included and their location was initially determined through visual comparison of datasets and through interview data. The area also extended to include the village settlements to the north of the Angkor Park that are part of the ZEMP zone 2. When the grid was initially applied to the main urban area of Siem Reap town it was found to be too coarse, so a second grid of 500m x 500m was overlaid over the urban core. The boundaries of this area captured the detail of transitions within and between urban and rural spaces. As a result of reconnaissance fieldwork, the boundaries of the second grid were matched to bypass roads being constructed around the town (Figure 3-3). In total there were 705 points where field observations were taken.

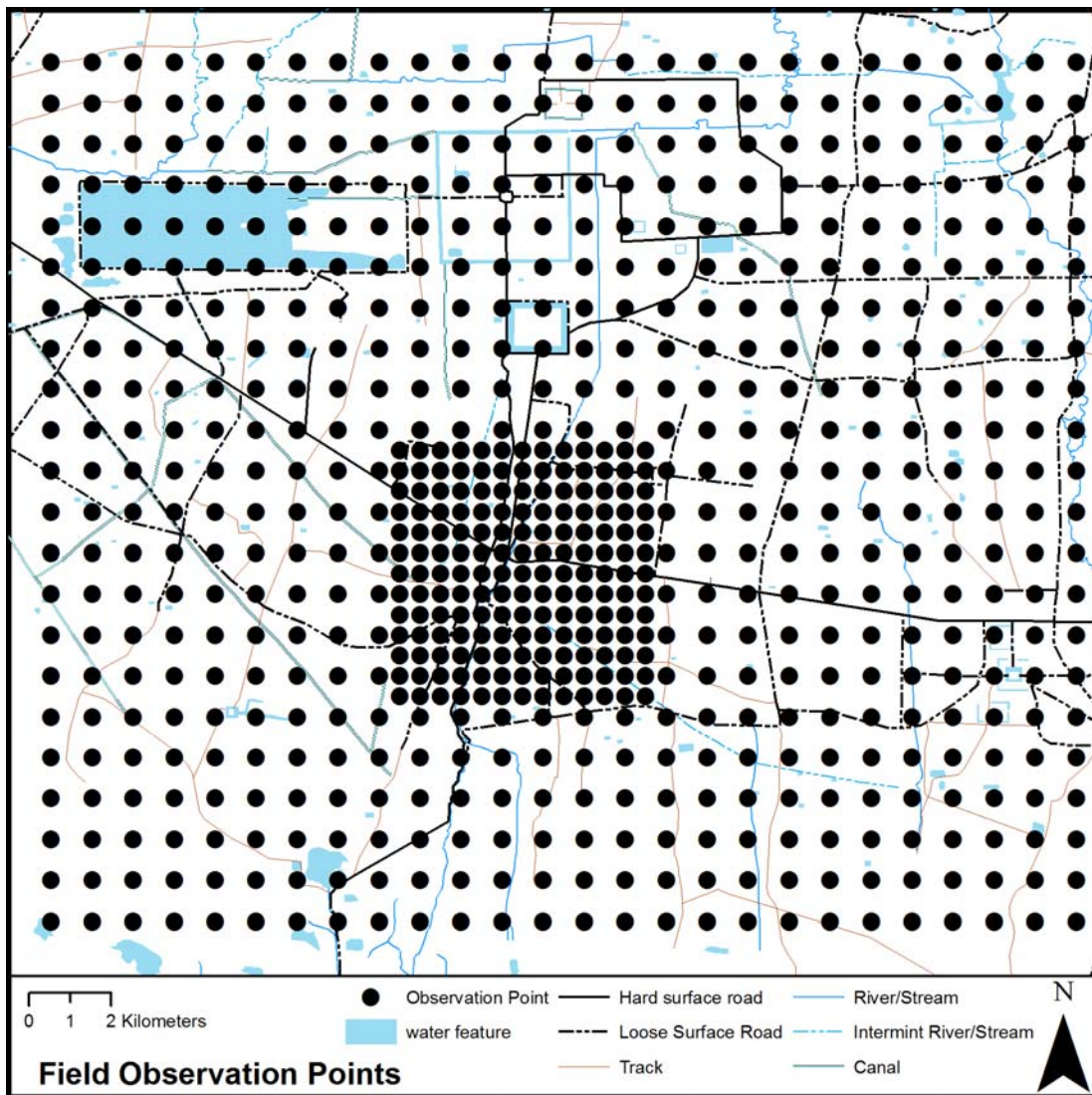


Figure 3-3. Field observations were recorded at 705 sample points distributed across an area over 540 sq km. The survey area was divided into regularly sized grid cells and sample points were located in the centre of each cell. The outer grid, covering a larger area, has a cell size of 1000m x 1000m. The inner grid which provides more detailed observations for the core urban area has a cell size of 500m x 500m.

Three field surveys were conducted in 2005 (January and June) and 2006 (January). Each sample point was visited, except where inaccessible due to flooding (points which lay on the Tonle Sap floodplain), or lack of safe accessible tracks (due to the possible existence of landmines or hostile dogs and people). For those points not visited, data was collected about the surrounding area to facilitate later interpretation from the remote sensing data (particularly the IKONOS and Quickbird imagery). At each point data concerning the existence and properties of buildings, vegetation, roads and people was collected (see Appendix F). Information was also collected about changes that were observed, such as

construction or a new guesthouse sign in what was perceived predominantly as a residential area. Photos of the area surrounding each sample point were captured in a 360° panorama and were used to verify recorded data at a later stage. The field data were entered into a **Microsoft Access** database and then joined with the spatial information for each point within **ArcGIS**.

3.3.4.2 Understanding Perceptions of Place

Through the qualitative interview analysis it became clear that spaces of value are often defined by the acceptance (or rejection) of certain behaviours and attitudes. Each management plan produced for Angkor-Siem Reap will highlight areas that the authors feel will be of potential concern to the protection of the heritage area and development of the surrounding area. For many of these plans, the urban areas occupied and utilised by the local community are seen as having the greatest potential to cause conflict (Butland 2003). To improve the social representativeness of the spatial information held about the region, data were collected in the interviews about places interviewees perceived positively and negatively in Angkor-Siem Reap, as well as places frequently visited in recreational time. The aim of this analysis was to compare the perceptions of the local community with those of APSARA staff and the ICC heritage professionals. These descriptions were then coded within **NVIVO** and attached to a particular location, for example the town, Angkor Wat or the Tonle Sap. The resulting nodes were then output in tabular form for spatial analysis within **ArcGIS**, with the rows describing the location and the columns indicating the percentage of interviewees who perceived that point (positively, negatively or used).

For each location mentioned in the interviews, a corresponding point was created within a vector layer. To avoid spatial determinism by the researcher, points were chosen rather than areas or lines. If areas had been used then either each interviewee would have had to define the boundaries of these areas (not practical for reasons outlined in section 3.3.2.4), or the researcher would have had to define them as part of the analysis and, in doing so, dictate the extent of a problem space. Point data instead provided an indication of the location, and corresponded with Lynch's (1960) analysis of environmental images which highlighted how landmarks (like positive and negative locations) are perceived as point

features upon mental maps. The attribute data (by percentage of interviewees) exported from *NVIVO* was joined with these points. In order to demonstrate that these points are not definitive locations, but instead affect their surrounding landscape, a density layer was then created (using the *ArcGIS Kernel Density* function⁴ with a 1000m search radius) for each perception (positive, negative and use). These density layers identified hotspots of positive and negative perception. As a final step, the density layers for positive and negative perceptions were then combined by subtracting the negative layer from the positive layer to give an indication of the perception of place across the study area. The results of this analysis are presented in Chapter 6.3.2.

3.3.4.3 Identifying the Angkor Landscape

Throughout the interviews and the ICC documentation stakeholders identified social and physical aspects of human-environment interactions across the Angkor landscape that they felt were both appropriate and inappropriate. These perceptions affected the way that they constructed the scales, or defined the limits, of Angkor's heritage and interpretative space. In order to consider the spatial implications of these different understandings, analysis was undertaken to consider the extent of included or excluded aspects of the landscape, such as tourist development, construction of new houses and the location of traditional village architecture. This spatial analysis was not designed to create strictly defined boundaries of modern versus heritage space, but rather to indicate the importance of considering the material consequences of the many different constructions of heritage scales.

From the interview and ICC analysis, the key attributes of the landscape that were identified for consideration included vegetation, people and the built environment. Whilst qualities of these were addressed in the most recent land cover dataset created by the Japanese International Co-operation Agency (JICA) as part of their Siem Reap Urbanisation and Tourism Plan (JICA 2004), this vector data lacked information concerning the qualities of those physical features, such as the height of buildings, the density and height of forests,

⁴ The Kernel Density tool calculates the density of negative or positive locations ESRI (2006). ArcGIS Desktop Help. Redlands, ESRI. **ArcGIS Version 9.2.**

the users of buildings and the style of architecture. This information was collected through the field observations (see section 3.3.4.1). Originally, the researcher had intended to utilise only the field observation data (through interpolation techniques), but the availability of a JICA (2005) building and vegetation layer proved invaluable. Thus the qualitative field observation data was combined with field data, with each feature taking the value of the point closest to it (maximum distance being 500m). The accuracy of this technique was tested by creating a building density layer (using the *ArcGIS kernel function* applied to the JICA building layer) and comparing these values with the observed building layer using the *ArcGIS Geostatistical Analysis* tools. The results of this analysis are presented in Chapter 6.3.3. A layer was created for each identified attribute, where possible, and these were subjected to a visual assessment of their relationship with the heritage structures of Angkor.

3.3.5 Presentation of Results

The results of the data collection and analysis for this research are presented in the remaining chapters of this thesis. In fitting with the grounded theory approach of the qualitative methodologies used for analysis, each of Chapters 4, 5 and 6 is concerned with a key issue relating to the research question. The first two chapters are primarily constructed around the results of the interview and textual analysis. Chapter 4 examines perceptions of Angkor and Chapter 5 explores understandings of the area surrounding the World Heritage site. The analysis presented within Chapter 6 considers perceptions of the relationship between Angkor and its surrounding area and the material consequences of this relationship.

While the processes outlined here require manual interpretation and understanding by those who wish to utilise them within a heritage management system, the methodology and its results will demonstrate how the layers of data utilised to manage a heritage landscape should be continually evaluated and reviewed by different stakeholders, including the local population. Perhaps the ultimate benefit of the techniques described here is to create recognition that the data used to manage a cultural heritage landscape, such as Angkor, cannot be understood or interpreted without some kind of subjective assessment of what to examine. In the case of this project, it was driven by the data

available (creating a perhaps incomplete picture at the end) through existing datasets and field observations, as well as through the perceptions by APSARA and the local community of what was important.

In managing Angkor, Cambodian and international heritage professionals are working not only with isolated monuments, but are managing a region experiencing rapid post-conflict socio-economic development. The techniques described here emphasise the functionality of both the heritage area and the region, by positioning it as something described and used rather than as something determined remotely from photography or satellite imagery. The methodology presented here integrates the qualitative data of interviews and textual analysis with the quantitative techniques of spatial analysis. In proposing a mixed-methods approach to investigate the material consequences of the social construction of heritage scales, it is hoped that such an approach can be adapted in the future to encourage and facilitate participatory management at other heritage sites.