

15

'Place' and sustainability: research opportunities and dilemmas

Susan A. Moore

Abstract

Place, as the centre of peoples' experiences and lives, has become a focus in natural resource management in the 1990s. Efforts have and are being made to consider place in forest, national park and farm management, and in managing resource uses such as hunting. Place is the intersection of people's physical, biological, social and economic worlds. Sustainability relies on all four worlds and most importantly integrating across them. As such place provides a window to understanding sustainability especially given its expression at the intersection of these worlds.

Place is, however, difficult to define and measure. Substantial, past, research effort has focused on quantitative measures of aesthetic appeal as a surrogate for place. In more recent years interest in the meanings associated with place has led to qualitative research. This paper overviews the current range of research approaches and includes the dilemmas and opportunities associated with each. Also included is a brief description of our recent research using photo elicitation, an approach relying on photos and associated narratives, to investigate farmer's sense of place in relation to their farmlands in the Western Australian wheatbelt.

Choice of research approach should be guided by requirements for the findings including: (1) accuracy in reflecting the respondent's association with place; (2) ability to capture the complexity of place and sustainability; (3) applicability of findings beyond the site-level and ability to generalise; and (4) ease of communicating research findings, especially to managers. Qualitative research methods seem best for examining the complexities of place and sustainability, especially the *genius loci* of place. However, quantitative results are most easily communicated to managers, the people with primary responsibility for sustainable land management practices.

Introducing and defining place

'Place' has become a focus in natural resource management in the 1990s. Efforts have and are being made to consider place in forest, national park and farm management, and in managing resource uses such as hunting. But what is 'place'? There is a substantial literature on place in environmental psychology, human geography, anthropology and landscape architecture. Place has also been widely considered in the literary world. The term has been used to mean location, locale, region, space, site, setting, landscape and environment (Kruger, 1996). Current researchers talk of place creation, place attachment, sense of place and place identity. The most common term is sense of place which is increasingly used to cover two or more component variables, such as place attachment and place familiarity.

My preference and following on from Relph's (1976) work, is to define and address place itself as an integrated phenomenon:

Places are fusions of human and natural order and are the significant centres of our immediate experiences of the world. They are defined less by unique locations, landscape, and communities than by the focusing of experiences and intentions onto particular settings. Places are not abstractions or concepts, but are directly experienced phenomena of the lived-world and hence are full with meanings, with real objects, and with ongoing activities. They are important sources of individual and communal identity, and are often profound centres of human existence to which people have deep emotional and psychological ties. (Relph, 1976: 141)

This definition sees place as an outcome, as a coming together of the physical and social worlds. This outcome is individually and communally (ie. socially) determined, so place is both individually and socially constructed. This definition also reflects the contemporary social-constructionist perspective of place; that place is defined by people through interactions with the place and with each other.

Place is also a process, a concept captured nicely by Kruger (1996) in her recently completed doctoral work on place. She used the term 'place creation' to describe the dynamics of place as a process. Place is about transforming and appropriating nature and space and in turn the culture and character of people being changed by place (Brandenburg & Carroll, 1995; Kruger, 1996). Place has also been described as the way in which people attach meaning and importance to space (Stankey, 1995 in Kruger, 1996).

The attributes of place include the physical setting, activities, experiences and identity. For example, for many people their favourite place is a nearby park or reserve. For many people in Perth, Crawley Bay, a sheltered grassy bay on the edge of the Swan River readily accessible from the city and northern suburbs of Perth, is a special place. The physical setting is the river with shady peppermint trees and a sandy beach, protected water for

children to swim and paddle in, and numerous barbecues. The activities include swimming; throwing large, brown river jellyfish at your brothers, sisters, parents and friends; barbecuing; enjoying Western Australian wines; playing ball; and perhaps netting the river shallows for prawns.

Experiences and intentions, another attribute of place, are one of the hardest of place attributes to define and describe. Experiences refer to past events that have occurred or involve a particular place; these experiences may have been individual or involved several or many others. Experiences from childhood are often important in creating place. Crawley Baths, constructed on the edge of Crawley Bay, were used by many Perth children in the 1950s and 1960s to learn to swim, they went prawning with their parents and families along the northern shorelines of the Swan River or learned to sail in dinghies in the sheltered waters of Crawley Bay. Intentions are somewhat similar, they are experiences and intentions occurring in the present. Many people using Crawley Bay do so with the intention of enjoying family and friends.

Place also provides an affirmation of roles and identities, both self- and group-identity. Using the example again of picnicking at Crawley Bay, parents enjoy their parenting role while others reinforce their social self-identity by entertaining and chatting with friends. Also, part of Perth residents' group-identity is closely tied to the Swan River and an outdoor lifestyle shared with friends and family. Thus, picnicking at Crawley Bay confirms this group-identity.

Although place can be broken down into and considered as separate but connected attributes such as physical setting and associated individual and communal identities, there is another less tangible, intrinsic feature of place. This is the sense of place which has been variously termed 'spirit of place' or 'genius of place' (*genius loci*) (Relph, 1976). *Genius loci* includes the aforementioned attributes but is more than the sum of these. For this reason, a number of researchers are directing their attention to understanding the meanings ascribed to a place by those associated with it in efforts to access this 'sense of place'. This is the social constructionist approach mentioned earlier, where researchers seek to access meanings people have for a place in an effort to extricate more intangible attributes such as *genius loci*.

Place and sustainability

Place is the intersection of people's physical, biological, social and economic worlds. Sustainability relies on all four worlds and most importantly on integrating across them. Place integrates these worlds and as such provides a window to understanding sustainability. Sustainability requires activities that are biologically and physically possible, socially adoptable and economically feasible (Firey, 1960). This typology recognises the social aspects of sustainability in two of the three spheres – social and economic.

Place relies heavily on social considerations and understanding social worlds, in particular how people's individual and communal identities are derived from, influenced by and influence place. Additionally, the whole concept of place is socially constructed. Sustainability is similarly a social construct, being constructed differently from social group to social group. There is no objectively definable thing called sustainability that we can identify remote from social considerations. As such, the social nature and aspects of place and sustainability are similar and essential to our broader understanding of these concepts.

Locating this work

Place is not only difficult to define, it is notoriously difficult to measure. There have been few attempts to provide an overview of possible research approaches, the most notable exception being Kruger's (1996) work. This paper begins filling this gap by describing a range of approaches, from quantitative to qualitative, to place research. Included is a general description of our recent research using photo elicitation to investigate farmer's sense of place in relation to their farmlands in the Western Australian wheatbelt. This qualitative research method relies on photographs and associated narratives to explore the meanings attached to place.

The choice of research method for researching place in relation to sustainability should be guided by requirements for the findings, namely: (1) accuracy in reflecting respondent's association with place; (2) ability to capture the complexity of place and sustainability; (3) applicability of findings beyond the site-level and ability to generalise; and (4) ease of communicating research findings, especially to managers. Qualitative approaches, such as photo elicitation and participant observation, best meet the first and second criterion. Quantitative approaches, for example those based on measurement scales, best meet the last two criteria.

Place research provides access to the multiple facets of sustainability, particularly the social facets. It also allows exploration of the elusive nature of the intersection of the biophysical and socioeconomic worlds, an intersection integral to sustainability. Qualitative research methods seem best for examining the complexities of place and sustainability, especially the genius loci of place. However, quantitative results are most easily communicated.

Place research

As previously mentioned, place is difficult to measure and quantify. In the past, substantial research effort has been directed toward quantitative measures, especially measures of aesthetic appeal, in many instances as an indirect measure or surrogate for place. In more recent years, interest in the social-constructionist perspective and the meanings associated with place has led to qualitative research.

The choice of approach to studying place is determined by a number of influences, the most significant being the researcher's assumptions and past research practices. All social scientists make assumptions of an ontological nature. In relation to place, the researcher may perceive place as constructed by individuals or alternatively as an immutable reality. Recent research trends have been moving toward the former, assuming that place is constructed by and in turn constructs individuals and social groups. The researcher's epistemological assumptions also influence how they might study place and subsequently communicate their findings. Some researchers see knowledge as real, hard, and capable of being transmitted in a tangible form, for others it is softer, more subjective and often spiritual (Burrell & Morgan, 1979). Recent trends are more complex regarding epistemological assumptions, with views of knowledge both as hard and alternatively as less tangible apparent in place research.

The other influence on how place is studied, and this is an influence across all the sciences, is the researcher's past familiarity with data collection and analysis techniques. Choice of research approach is often influenced by the previous approaches used by a particular researcher, for example if scales and indexes have been used to gather and analyse data previously then the researcher will find it easier to use the same approach again. Alternatively, if they have trained using qualitative methods or published in qualitative journals these approaches may be favoured.

To provide an overview of current approaches to studying place, I have analysed abstracts of 18 'place' papers presented at the Sixth International Symposium on Society and Resource Management held in 1996 at The Pennsylvania State University, University Park, Pennsylvania, grouping them according to similar research approaches. 'Place' was one of the 20-odd themes covered over the 6-day Symposium. Also included in the following discussion are several examples of earlier approaches which previously dominated this area of research as well as other current approaches not covered at the Symposium. An analysis of associated opportunities and dilemmas is provided for each grouping.

Place research methods lie along a continuum, from providing quantitative measures of place, often collected remote from the places being researched, through to qualitative descriptions derived through experiencing the place first-hand through in-depth ethnographic studies. For ease of discussion, I have derived five groups with overlapping attributes along this continuum.

They are, moving from most quantitative and remote to most qualitative and lived-world: (1) scale-based surveys; (2) surveys not culminating in scales; (3) nondirective interviewing; (4) photo elicitation, maps, stories and textual analysis; and (5) ethnographic approaches including participant observation.

(1) Scale-based surveys

In this group of approaches, a survey, usually by phone or mail, is administered to provide data for a suite of items related to place. From the responses, the researcher can either directly or indirectly determine aspects of place. All of the papers at the Symposium using this approach investigated place attachment. The results were numbers, for example, a certain percentage of respondents exhibited positive attachment to their community or place.

The benefits of this approach include providing measurements easily comparable with study findings from other sites and previous studies at the same site. Also, because of the remote administration of such surveys, it is feasible to research across a number of sites and conduct place research at a regional, non-local level.

Dilemmas include uncertainty whether the derived place scale and associated survey instrument truly reflect the attributes of place and whether the research potentially structures responses towards the researcher's rather than the researched perceptions of place. These are common dilemmas associated with highly structured approaches to social research, especially where quantitative data are desired. Such dilemmas are not unique to place research.

In terms of the usefulness of the results for managers, quantitative outcomes are easy to understand and as mentioned, it is relatively easy to make comparisons across sites and for the same site over time. Therefore, real advantages exist for managers using place attachment scales and similar measures in making decisions about recreation, historic site and forest coupe management. Research using place scales has been conducted with recreation area users, users of heritage sites in Pennsylvania and investigating attachment to land and communities in southern Appalachia.

(2) Surveys not culminating in scales

Surveys, either site-administered or by mail, provide quantitative and qualitative information on place. Papers presented at last year's Symposium using this approach relied on micro and macro approaches to understanding place. One micro-level study used an on-site survey, based on a series of photos and the surrounding view, to research place in an historic park. A macro-level study used community self-assessment workbooks to investigate place attachment in small rural communities in the inland north-west and

northern Rockies of the United States. This suite of approaches is slightly less quantitative than the previous suite (the scale-based approaches) and allows respondents more flexibility in communicating views outside the structure of the survey instrument, especially where open-ended questions are used.

The opportunities are similar to the first group; surveys allow research across sites in space and time, at macro and micro levels. The same set of photos or same survey instrument can be used with every respondent greatly assisting research validity. As mentioned, because the survey does not culminate in a scale there is a more flexibility in collecting and interpreting research data, especially if there are findings which do not fit the survey instrument provided. The dilemmas are similar to those associated with survey-related scales, that the researcher can never be sure that the variables truly capture the essence of place and that they are not imposing their definitions of place on those being surveyed. For managers, and again similarly to scale-based surveys, having figures and data readily comparable across sites is useful. However, by their very nature, these forms of research do not capture the complexities of place and as such are likely to provide managers with a simplistic view of place and of the likely effects of their management actions.

Much of the earlier research addressing place, drawing on the surrogate of landscape perceptions, used photographs or computer simulations of landscapes and landscape changes. This was a common research approach in forestry where there was and continues to be great interest in how people respond to different logging regimes and the different associated effects on the landscape. Some researchers also took respondents to stands that had been treated in different ways and asked them for their responses (eg. Brunson, 1991). This approach, although implicitly recognising the importance of place, is unlikely to have captured the aspects of place related to a unique physical setting, such as an individual's special place in the forest, or how people socially construct place through interacting with others. It would also be unlikely to capture the place's *genius loci* or 'sense of place'.

(3) Nondirective interviewing

This suite of approaches overlaps with the previous group. It is presented separately because the data are often words and text rather than numbers and respondents can potentially have far more freedom to describe place in their words and terms rather than those of the researcher. An example from last year's Symposium is on-site face-to-face interviews, followed by narrative analysis, conducted with visitors to a national forest in southern Colorado.

The nondirective nature of methods on this part of the continuum provide greater opportunities for the views of the respondents to be clearly heard, unmodified by structured questions and scales. The complexities and

interactions between attributes of place such as childhood experiences, the physical setting and self-identity may become apparent as may their influences on place. On the downside, the data may be messy and difficult to analyse and it may be more difficult to communicate findings to managers. Also, because of the time and expense involved, it is usually not possible to research more than one or a couple of sites, so regional level research is unlikely.

(4) Photo elicitation, maps, stories and textual analysis

This broad collection of qualitative approaches includes photo elicitation, maps, stories and textual analysis. Photo elicitation has been used extensively in anthropology and to a lesser extent in sociology (Collier & Collier, 1986; Harper, 1982). It involves the researcher or subjects taking photos of features of interest to the latter and using the photos as a basis for interviews. This method provides a powerful way of accessing the meanings people ascribe to features, objects and events. The technique had not been applied in natural resource management until recent work by Brandenburg and Carroll (1995).

Our recent research on place in the Western Australian wheatbelt relies on photo elicitation, with farmers using disposable cameras to take photos of places of significance to them on their farmlands. Once prints were developed, they provided the basis for nondirective interviews. The objectives of the research were to: describe the attributes of place as expressed by farmers about their lands; describe how place is created; and describe the influences of place on farm management. About 30 farmers in three shires along the Avon River on the western edge of the Western Australian wheatbelt have been interviewed. Farmers involved in mixed farming on moderate-sized holdings were selected to access place on farms deriving their main source of income from farming. We also selected farmers along the Avon River to gain an understanding of the role of the river in their lives. Photo elicitation has provided immediate and efficient access to place as perceived by farmers and their families in relation to their lands.

Maps, stories and textual analysis can be used in a similar way to photographs. One of the papers from last year's Symposium described hunters providing maps and associated stories about their hunting places in Wisconsin. Another reported on a study using textual analysis to understand the transformation of a Colorado gold mining community into a gambling tourism mecca and the associated change in place. This suite of approaches is less directive than approaches earlier on the continuum.

Photographs, maps and stories enable the researcher to truly reflect respondent's views to the extent that respondents provide visual and verbal material with minimal, although still some, direction by the researcher. This group of approaches also allow exploration of place as a process as well as an outcome. Photos, maps, stories and text often include stories of change as well as describing today's events and relationships. One of the ways we

sought to access change in our place research with farmers was by asking what changes to a place would be acceptable and unacceptable while looking at a specific photo, as well as asking if they would have taken the same set of photos 10 years ago or would their parents/children have taken the same set of photos.

The dilemmas relate to the micro-level of these research approaches and the potential difficulties of distilling such data into a form useful and accessible to managers. On balance, however, this approach and the next group of ethnographic ones provide for managers comprehensive, detailed understandings of the complexities of place and the likely effects of their actions and policy decisions on place as perceived by others.

(5) Ethnographic approaches including participant observation

These are the most qualitative approaches on the continuum and data may take years to gather. Ethnographic research usually relies on living in a community for an extended period of time and being able to reflect on the world from the perspectives held by community members. Participant observation is one commonly-used way of understanding a respondent's worldview, such as responses to and interactions with place from their perspective. Other ways include indirect and direct observations (without participating in community life) and interviewing. One paper at the Symposium described a study underway where participant observation and ethnographic interviewing are investigating horseback riding in a national forest.

The great opportunity presented by this suite of approaches is truly capturing the meanings of place, both as an outcome and a process, as seen by those using and living in that place. The dilemmas are difficulties in making generalisations to other places and the time involved in data collection and analysis. For managers, ethnographic place research is a two-edged sword. The data are likely to be the most accurate and comprehensive possible, but may be in a dense form requiring a substantial time commitment to access.

Several summary points can be made about place research methods. Many of the preceding comments on the opportunities and dilemmas of the different approaches to place research merely reflect aspects associated with broader choices between research methods, particularly choices along the quantitative-qualitative continuum. And, in many instances the choice of method in place research as in many other forms of social research is influenced by the researcher's orientation, the nature of the problems being investigated, and how the data generated are likely to be used.

However, having said this, the choice of technique or methods for researching place in relation to sustainability can be made using several criteria. First, the generally-applicable criterion of accurately reflecting respondent's views is of paramount importance in any research.

Ethnographic and story-based approaches are likely to provide the most accurate and probably the most complex and complete descriptions of place as seen through respondent's eyes, hearts and minds. A second criterion and related to the first is the ability to capture the complexity of place and sustainability. Qualitative approaches allow these complexities including the need to understand the intersection between biophysical and socioeconomic worlds to be understood.

The last two criteria are applicability of findings beyond the site level and ease of communicating research findings to managers. Quantitative approaches such as scale-based and other surveys allow place assessment across a region as well as at local levels. Thus, attributes of place for a site or given sites can be compared across space and time and results can be more readily generalised beyond one or a couple of sites. Also quantitative results, being based on numbers, are more easily communicated especially to busy managers and policy makers.

Both these criteria are important in selecting research approaches to sustainability. Sustainability is a regional as well as a local issue and thus needs to be considered and understood at both regional and local scales (Martin & Woodhill, 1995). Quantitative methods may prove more useful for regional-level studies with qualitative approaches more useful at local scales. On the last criterion, ease of communicating with managers, sustainability will not be achieved through research, it will be achieved by managers and policy-makers. As such, place needs to be researched in such a way that the implications for managers of place attachment and creation are readily apparent and easily accessed. At the moment the more quantitative methods provide easier access.

Applying place knowledge to sustainable natural resource management

Place research can and could contribute further to our knowledge and practice of sustainable natural resource management. Because both place and sustainability are located at the intersection of the biophysical and socioeconomic worlds place research improves our understanding of sustainability. Studying place accesses the multiple facets of sustainability, particularly the social facets, as well exploring the elusive but essential nature of the intersections of these worlds, an intersection integral to sustainability. However, care should be taken not to draw any dubious conclusions about the relationships between place and sustainability. Place may be an essential aspect of sustainability, but a strong attachment to place or sense of place may not necessarily be linked to sustainable practices. On the other hand, placelessness may be very strongly linked to unsustainable practices. So, place may be a necessary, but not sufficient condition for sustainability and sustainable practices.

The attributes of place include the physical setting, activities, experiences and identity. Place can provide insights to people's physical setting preferences, insights and knowledge of great importance to managers of facilities such as national parks and historic sites. Not only is the physical setting of great importance to the appeal of these sites, it is also the aspect of the sites over which managers have the greatest control. Sustainable site management depends on being able to manage such sites so that the physical setting remains appealing while also protecting other site aspects identified as desirable.

Similarly activities and experiences, further attributes of place, provide essential insights for sustainable natural resource management. A reminder here, by sustainable I mean socially as well as physically sustainable. For example, if being able to practice some form of agriculture is an essential element of place for farmers in relation to the farmlands in the Western Australian wheatbelt, then a cessation of this activity is likely to break their association with their farms as a special place. Such a break may or not be physically or biologically sustainable; from a social perspective it would not be. Although moving farmers off highly degraded land may be better for long term biophysical sustainability goals, in terms of ties to place and social aspects of sustainability, such a move may jeopardise sustainability in the very broadest sense. Therefore the ties between activities, experiences and place provide some guidance to managers regarding changes which may jeopardise place and sustainability, if either or both of these attributes and place are linked.

Individual and communal identity may be derived from and influenced by place. For farmers, having productive agricultural lands appears to be an essential part of their self-identity associated with and derived from their lands. However, caring for the land is generally an equally important part of their identity. This example clearly illustrates the complexities of place and of identity derived from place – identity may be based on producing and protecting even when the two activities appear mutually exclusive. Thus, managing for sustainability based on place must recognise that the identities derived by people such as farmers from their farmlands may be in apparent conflict.

Conclusion

Place research provides a useful window to sustainability. Not only does place recognise social aspects, it is also located at the intersection of biophysical and socioeconomic considerations, a location shared with sustainability. Attachment to place may not necessarily equate with sustainable practices but in many instances it may. This potential connection warrants further investigation.

A number of methods can be used to measure place, ranging from quantitative, scale-based surveys applied across a number of places to

qualitative, long-running ethnographic studies at one or a few places. Although each method has its advantages and disadvantages, qualitative methods seem best for examining the complexities of place and sustainability, especially the genius loci of place and accurately reflecting the views of people associated with a place. Such qualitative approaches are those preferred by social constructionists a number of whom are currently leading the way in place research.

In all these approaches, the ability to communicate findings to managers in a way they can readily access and use is of fundamental importance. Quantitative results are most easily communicated, but qualitative findings are more likely to truly reflect the nature of place. The challenge for researchers lies in being able to effectively communicate qualitative research findings to busy managers such as public sector employees and farmers. I emphasise managers because they are most likely to have responsibility for sustainable or unsustainable management practices.

Acknowledgments

This research was supported by a Murdoch University 1995 Special Research Grant. Discussions with Mrs Ann Gunness, graduate research assistant and environmental consultant, contributed to the ideas presented in this paper.

References

- Anon. 1996. 'Book of abstracts: the sixth annual symposium on society and resource management: social behavior, natural resources, and the environment'. Symposium held at The Pennsylvania State University, University Park, Pennsylvania, 18-23 May 1996. University Park, Pennsylvania: The Pennsylvania State University.
- Brandenburg, A.M. and M.S. Carroll 1995. 'Your place or mine? The effect of place creation on environmental values and landscape meanings'. *Society and Natural Resources* 8: 381-398.
- Brunson, M.W. 1991. 'Effects of traditional and 'new forestry' practices on recreational and scenic quality of managed forests'. Oregon State University, Oregon, PhD.
- Burrell, G. and G. Morgan 1979. *Sociological paradigms and organizational analysis: elements of the sociology of corporate life*. London: Heinemann.
- Collier Jr, J. and M. Collier 1986. *Visual anthropology: photography as a research method*. Albuquerque: University of New Mexico Press.
- Firey, W. 1960. *Man, mind and land: a theory of resource use*. Westport, Connecticut: Greenwood Press.
- Harper, D.A. 1982. *Good company*. Chicago: University of Chicago Press.
- Kruger, L.E. 1996. *Understanding place as a cultural system: implications for theory and method*. University of Washington, Washington, PhD.
- Martin, P. and J. Woodhill 1995. 'Landcare in the balance: government roles and policy issues in sustaining rural environments'. *Australian Journal of Environmental Management* 2: 173-183.
- Relph, E. 1976. *Place and placelessness*. London: Pion.