

Chapter 3

People, Place and Fish: Exploring the Cultural Ecosystem Services of Inshore Fishing through Photography

Tim G. Acott and Julie Urquhart

Introduction

The Millennium Ecosystem Assessment (MEA, 2005) set out a framework for understanding the benefits that humans derive from the environment in order to inform decision making. It categorized these benefits as: *provisioning services*, such as food, water, timber; *regulating services*, such as climate control, waste, water quality; *supporting services*, such as soil formation, photosynthesis, nutrient cycling; and *cultural services*, such as recreational, spiritual and aesthetic benefits. Since then there has been a plethora of research and wider interest in devising ways of assessing and measuring those services (Haines-Young and Potschin, 2009; Sagoff, 2011; Shan and Swinton, 2011), often involving economic valuation techniques devised by economists and ecologists. While these can be useful for assessing the provisioning, supporting and regulating services, measuring or assessing the cultural services that humans receive from ecosystems has proved to be more problematic. However, there is increasing recognition of the role of multiple disciplines in understanding the complex and multi-faceted ways that ecosystems shape culture and cultural value.

There is a growing research agenda on the use of social science approaches to cultural ecosystem services (CES) (Chan et al., 2012; Milcu et al., 2013), however less attention has been paid to the contribution from the arts and the humanities. In this regard, Coates et al. (2014) assert that social science methods (whether quantitative or qualitative) might benefit from drawing on approaches from the arts and humanities when it comes to the consideration of CES. Some of the issues include interviewees being unaware of the existence of CES or the ability of people to articulate or reflect on cultural values (Bieling and Plieninger, 2013). In order to address this, the UK National Ecosystem Assessment Follow-On called for a more explicit integration of the arts and humanities with social science in order to deepen and broaden the discussion of CES (Coates et al., 2014). One way that the arts and humanities can play an important role in adding value to ecosystem services “is for creative practitioners to produce inspiring poems, paintings, films

and other artworks, based on a reflective process informed by evidence of the cultural benefits of Ecosystem Services” (Coates et al., 2014, 33).

In this regard, a range of different creative media can be points of engagement between people and the natural world and can encourage people to explore places that are shaped both by nature and culture (Coates et al., 2014). Creative media can be used to represent aspects of the natural world, and can be an important way that people engage with ecosystems. As such, photography, through the representation of different human-environment relationships, can bring new cultural worlds into being and focus attention on issues that might otherwise remain in the background.

It is with the key question of “what is the role of photography for our understanding of CES?” that we approach the subject of this chapter. We, firstly, consider the role of photography in the co-production of culture and how it can be both creative practice and a social science research tool. Secondly, we draw on the experience of two photographic projects, which were conducted as part of European research programmes carried out between 2009–2014, to reflect on the role of photography in understanding CES through an exploration of sense of place in inshore fishing communities.

Creative Practice and the Co-production of Culture

From a social science perspective there are different ways that photography can make a contribution to understanding CES. First, in the discipline of geography it is common to use photography as a means of recording information about natural and built environments. For instance, geological field sections, a particular landscape view or perhaps an architectural detail. Photography can be used to build up a collection of images that record key details of features that contribute to sense of place. Landscape character assessment and urban character assessment make use of photography as a way of documenting key features of interest (for instance the work by Natural England on National Character Areas). The importance here is not the aesthetic quality of the images but the information that is being depicted and cataloguing for subsequent analysis. This experience is consistent with photographic traditions dating back to the nineteenth-century that saw increasing acceptance of the ‘authority’ of a photograph to show the world as it really is.

However, this authoritative view can be contrasted with a representational perspective, as Sontag (1977) suggests: “Although there is a sense in which the camera does indeed capture reality, not just interpret it, photographs are as much an interpretation of the world as paintings and drawings are” (6–7). Photographs are not wholly objective but neither are they completely subjective (Ward, 2004). Sontag (1977, in Ward 2004) explores the meaning of photography as lying between two poles of beauty (self-expression and concern for emotion and aesthetic) and truth (communication). This continuum aptly captures how photography can traverse the relationship between image and reality with a creative element. Yet there is a difference between photography and other forms of representation, in

that a photograph is tied to a material reality in a way that, for instance, a painting is not.

Second, the role of photography in social science research spans many disciplines including anthropology, environmental psychology and human geography (Markwell, 2000). Images can be integrated with other forms of information, even where the central focus is not the analysis of the visual. In this case images and photographs are not just sources of data, they help to facilitate the process of research (Gold, 2004). In this latter sense photography can mediate the relationship between a researcher and the subject: “In retrospect, I realize that I learned as much from the social interactions involved with taking photographs, showing images to respondents, and sharing prints with colleagues and students as I did from analyzing what is shown in the images themselves” (ibid.: 151). This mediation might occur in numerous ways, for instance, seeking permission to photograph somebody can be the starting point in developing a relationship with them. A camera in the field can be the point around which a discussion can begin between researcher and subject. This interaction between research and participant can continue as the photographs are produced and presented to an audience.

Showing photographs to participants can be a form of photo-elicitation (see Harper, 2002) and the starting point for individual and group interviews. Photography can help social science researchers to understand and explore the meanings that environments have for people. Photo elicitation can take many forms (Van Auken et al., 2010; Stewart et al., 2004; Kerstetter and Bricker, 2009) but the key idea is that photographs are used as a starting point to stimulate discussion with individuals or groups about what a place means to them. The photographs can be taken by members of the community or by the researcher. The photographs provide a stimulus for a resulting conversation. As with the use of photographs to record information, the aesthetic quality of the pictures are really of secondary concern, the emphasis is on how the photographs can promote discussion on the meaning that environments have for people. Beyond the individual, photography also has a role to play in community development: “it is becoming clear that community use of photography can be used to give voice to, and make visible, otherwise hidden groups and community-based issues” (Purcell, 2007, 112). In thinking about the process of photography and the creation of cultural value the following section turns to creative practice and the co-production of culture.

In photography for policy related research it is important to consider the practice of taking photographs and the relationship that is co-constructed between the researcher, human participants, the non-human world and policy makers. Understanding the importance of photography is to see the act of taking a picture as a process that brings new worlds into existence as old tropes are challenged and new narratives can be told. As Sontag (1977, 11) argues: “A photograph is not just the result of an encounter between an event and a photographer; picture taking is an event in itself, and one with ever more peremptory rights – to interfere with, to invade, or to ignore whatever is going on. Our very sense of situation is now articulated by the camera’s interventions”. Crang (1997, 360) describes these

linkages as a 'circuit of culture' where he suggests that it is important to examine how cultural products are actually taken up and used: "The circuit elaborates the flows from producers to product to consumers and back in a developing and ever-changing spiral, as each works with the materials of the previous stage". But, as Crang cautions, "this can too easily imply that the consumption practices are a separate field from those of production" (ibid.: 360).

Photography connects the photographer with subject and then to an audience where the photographic representations are circulated. The process of becoming a viewing subject is connected with ways of seeing the world (Rose, 1992 in Crang 1997). The circuit of culture begins to talk to the performative turn that has become increasingly important in geographical research. In this sense all human practice is understood as being 'performed' in a public presentation of the self. Through conceptual work such as 'non-representational theory' (Thrift, 2008) the focus of enquiry has shifted from representation to ideas of performance and practice (Wiley, 2007). Images not only represent a social reality, they also shape the way people think (Burri, 2012). The practice of photography, therefore, is as important as its representations. Practice refers to the production of the photographs as well as their subsequent circulation in society.

Pictures have the capacity to frame ontology through bringing our attention to certain aspects of the world over others, or in Heidegger's terms to make part of the world 'occurrent' (Crang, 1997). This chapter aims to explore the intersection of 'occurrence' with photography, fisheries and policy and explore how photography might be useful for understanding CES in the context of sense of place in inshore fishing communities. Through two research projects¹ spanning five years and covering four European countries, photography has been integrated in multiple ways to explore and make visible the cultural services that arise through the practice of inshore fishing in coastal communities. The focus was on how inshore fishing contributes to the creation of a particular sense of place that is important for both residents and visitors in these locations. We set out the range of photographic approaches that were used and reflect on their utility for revealing and, in some cases, producing cultural values associated with inshore fishing.

In doing so we want to move beyond thinking about photography as simply record keeping or representation and consider perspectives that span the social sciences and the arts and humanities with emphasis on both the processual dimensions and the end image. Crossing these disciplinary divides is not an easy task as it entails embracing a range of contested ontologies and epistemologies. For the social scientist important questions might include: What type of data does photography produce?; What is the relationship between data, the researcher and the subject?; What guidelines or approaches should be followed when using photography for research purposes? From an arts perspective emphasis may instead be placed on the creative process and the production of new, visually arresting or

1 CHARM III (co-funded by the INTERREG IVA Channel Programme, 2009–2011) and GIFS (co-funded by the INTERREG IVA 2 Seas Programme, 2011–2014).

meaningful images as well as critical thinking in the arts relating to innovation in technology and style. It is in the synergy between social science and the arts that we feel there is the greatest salience of photography to contribute to broad policy-making and community development agendas in natural resource management.

Through these projects we explore the use of photography as both a creative process and as a tool that can provide meaningful engagement with communities and individuals around the practice of inshore fishing. In this regard, photography is used to both elicit and create CES values. However, in order to engage with people and communities it was important to use terminology that they would recognise and be comfortable with. The UKNEA recognised that most people are more comfortable with terms such as 'nature', 'place' and 'landscape' (which carry greater cultural meaning for people) rather than terms 'ecosystem' or 'ecosystem services' (UKNEA, 2011). In order to capture both the perceptual, experiential and the situated values of people we adopted the idea of 'sense of place' as a conceptual, and yet familiar, framework. The following sections, firstly, give a brief overview of the concept of sense of place, followed by the differing ways that photography has been used in our projects.

Sense of Place

There is increasing interest in using the idea of sense of place in the management of natural resources (Williams and Stewart, 1998; Farnum et al., 2005; Cantrill, 1998; Kianicka et al., 2006) particularly when related to the idea of ecosystem services (MEA, 2005; UKNEA, 2011). There is an abundance of literature on sense of place that spans numerous academic disciplines including humanistic geography, environmental psychology, sociology and architecture (Davenport and Anderson, 2005; Kyle and Chick, 2007; Clay and Olson, 2007). However, many studies make reference to landmark work conducted in the 1970s by humanistic geographers Yi Fu Tuan and Ed Relph (Tuan, 1974; Relph, 1976). They draw on phenomenological perspectives to suggest that sense of place refers to the emotional meanings that people have for places and is grounded into social relationships and processes that occur in particular settings (Acott and Urquhart, 2014). Thus, sense of place is about trying to understand complex human-environment relationships by exploring the meanings that people construct and attribute to places (Kaltenborn, 1998). However, with the emphasis on meaning it is important to remember that sense of place is also grounded in a material physicality and places are defined by their physical environment (Stedman, 2003). Malpas (2008) reminds us that there is a common tendency to view culture as something that is additional to and separate from its materiality. Eisenhauer et al. (2000) assert that there is a reciprocal relationship between physical environments and people in what Crist (2004, 12) calls a "cultivation of receptivity" in which humans can receive meaning from the world through "opening oneself, listening, watching, being within, letting be, or merging into". In this sense, social life and culture will influence place meanings, but the material elements of place are also important.

In our work we were interested in the way that photographic representation is also a form of practice and engagement with the world. Making use of a camera mediates our engagement with the world and the production of images draws in broader participants in a process of ‘world making’. In other words, photography used in this research moves into a co-constructionist sphere whereby new networks are created that give rise to particular actants and negotiated ways of knowing. Both projects focused on the CES that arise as a result of inshore fishing along the coasts of the English Channel and Southern North Sea. The aim was to understand the cultural benefits that arise from the activity of inshore fishing by exploring how it contributed to ‘sense of place’ in coastal towns. The following sections outline how photography was used:

1. As an auditing tool to record and document the physical environment
2. As a tool to help individuals reflect on what is important about a place (exhibitions)
3. As a mediator between researcher and subject to facilitate interviewing (photo-elicitation)
4. As a creative endeavour that creates representations of places and thus contributes to place making (professional photography)

Auditing the Visible CES of Inshore Fishing

The coasts of southern England and northern France are well known for their fishing towns and villages. For example, the numerous coves and inlets of Cornwall, dotted with fishing boats, either moored in picturesque harbours or drawn up onto beaches. Or charming French harbours such as Saint-Vaast-la-Hougue, once a thriving port for the Newfoundland fishing fleets, but now supporting an inshore fleet and oyster and mussel fishery. These fleets of small boats have a particularly important role to play in creating distinctive place identities in small towns and harbours and have resulted in the production of a wide range of material objects, in both past and contemporary practice. During research as part of the CHARM III project in 2009–2011 over 75 coastal towns and villages were visited in England and France and a photographic survey of objects, activities and urbanscapes that related to fishing was completed (Acott and Urquhart, 2012; Urquhart and Acott, 2014; Urquhart and Acott, 2013).

Decisions had to be made about which objects to include in the survey. While some objects were clearly directly related to marine fishing others referenced general maritime activities more broadly. These objects represented ways in which the activity of marine fishing was being translated into cultural artefacts which created tangible objects that contributed to a sense of place and place character within communities. The types of objects were wide ranging but included fishing boats, nets, pots, books, buildings, paintings, tourist souvenirs, information boards, monuments, street furniture and so forth. While some of these objects contributed to character in a clear and obvious way (e.g. the fishing boats) others

were less obvious (e.g. a decoration hung in a window, or a fisheries-related door knocker). Nevertheless, all the objects were visible from public places and in that way helped to contribute to the overall character of a place.

Exhibitions

In the GIFS project, the CHARM photo auditing was extended with two principal researchers taking photographs of activities and objects associated with inshore fishing. They visited different towns and locations as outsiders to the fishing industry but took a series of photographs that were tangible, visible evidence of the CES associated with fisheries (Figure 3.1).

The intention here was not to simply record objects associated with inshore fisheries. The resulting photographs would be used in a travelling exhibition (Figure 3.2) visiting seven locations (Looe, Whitstable and Wells-next-the-sea in England, Le Guilvinec, Rennes and Saint-Vaast-la-Hougue in France and Oostende in Belgium) over the summers of 2013 and 2014. The exhibitions were a mechanism for engaging visitors to explore inshore fishing in relation to CES and were organised under themes taken from the Millennium Ecosystem Assessment and included aesthetic values, cultural identity, education and knowledge, heritage values,



Figure 3.1 Capstan Wheel at Penberth, Cornwall. Visible evidence of cultural heritage

Source: T. Acott and J. Urquhart



Figure 3.2 Community exhibition in Looë, Cornwall

Source: T. Acott and J. Urquhart

inspiration, social relations, spiritual and religious values and tourism and recreation. Each theme had a number of pictures associated with it and a small amount of text that described the theme and provided some context to the picture. In addition to the researcher photographs, people living in the communities were also invited to submit photographs and a short textual description to the exhibitions. The objective of this part of the research was to create a narrative around the importance of inshore fishing and to highlight the many different ways the activity could be valued.

Throughout the course of the exhibitions various interactive elements were introduced in order to test their efficacy for promoting community participation. Initially it proved difficult to get people visiting the exhibitions to write down comments. As the exhibitions progressed efforts were made to develop interactive elements (Urquhart et al., 2014). Statements were designed around a visual five-point Likert scale where members of the public could indicate their views by placing colour-coded stickers of an animated face on the scale (Figure 3.3). The stickers were colour-coded in an attempt to gain demographic information, with yellow stickers representing the views of residents and red stickers representing the views of visitors. In addition there was also a comment box placed by each statement that enabled members of the public to anonymously provide more views relating to the statement if they so wished.

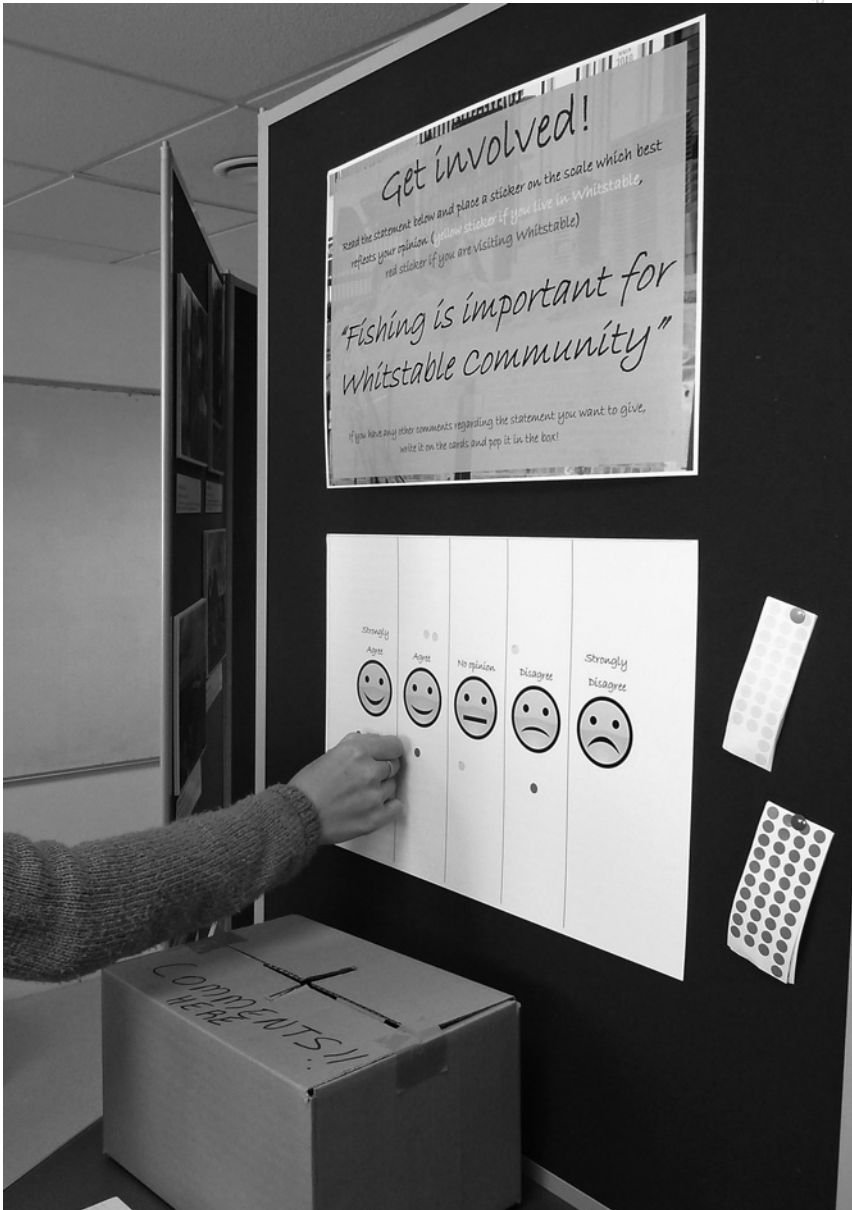


Figure 3.3 An example of a statement and response scale
Source: T. Acott and J. Urquhart

Initial results suggest the exhibitions are providing new ways for people to understand the cultural importance of inshore fishing. Many comments on the quality of the exhibition were provided in the visitors' book, for example:

- “Well done, a great show – a way into seeing anew” – Looe
- “An excellent exhibition, which captures a key element of the life of the town. Images are used to considerable effect and the range of perspectives brought to bear on Whitstable is compelling. Very interesting” – Whitstable
- “Beautiful, thought provoking and important, all strength to you” – Looe
- “I think the interactive aspects of this exhibition are important as participation is a growing element of art where the artist can become the facilitator, so that the public cease to feel disconnected and become more involved in the creative process thus giving it life and new ideas from the outside. The project is then holistic” – Saint Vaast
- “The interactive nature of the display is fantastic and really engaging and appealing to both young and old – fantastic job!” – Whitstable

Submissions by local communities included a range of subject material as illustrated in Table 3.1. The number of different subjects taken helped to make visible the diverse ways inshore fishing contributes to cultural value. By linking to the MEA themes it was possible to deliver a narrative about the way that inshore fishing is relationally associated with a broad variety of terrestrial activities (e.g. heritage, songs, artworks, sculptures, monuments). An awareness of this cultural

Table 3.1 Range of photographs submitted by subject in order of popularity

	France		Belgium		England		TOTAL	
	No.	%	No.	%	No.	%	No.	%
Boats	26	37	1	11	44	31	71	32
Harbour/ seascape	22	31	0	0	28	20	50	23
Fishers/ processors	10	14	2	22	24	17	36	16
People on shore	0	0	1	11	10	7	11	5
Fishing	6	8	1	11	4	3	11	5
Tourism	1	1	1	11	10	7	12	5
Gear	1	1	0	0	7	5	7	3
Fish market	2	3	2	22	2	1	6	3
Seagulls	0	0	0	0	7	5	7	3
Art	1	1	1	11	3	2	5	2
Auction	2	3	0	0	0	0	2	1
Fish	0	0	0	0	3	2	3	1
Signs	0	0	0	0	1	1	1	0

complexity is generally not present in many fisheries related policy developments, although the recent revision of the European Common Fisheries Policy does allude to the importance of small-scale fisheries ((EU) No 1380/2013). Ongoing work is developing the exhibition so that it can be used as a group photo-elicitation methodology. The key element here is to transform the normally passive experience of an exhibition into one where the visiting audience wants to provide reflective feedback about their experience.

Photo-elicitation

Photo-elicitation can help to reveal the importance that people attach to a place (Acott et al., 2014). There are different types of photo-elicitation (Purcell, 2007; Fink, 2011; Holgate et al., 2012; Johnson et al., 2008) but, in the GIFS project, ‘researcher-photography’ was used as a form of photo-elicitation interview (PEI) to explore the role of inshore fishing in shaping the relationship of people to place. PEI can take many forms but is generally used where photographs facilitate discussion between researcher and interviewee. The rationale is that a series of photographs can be a starting point for a conversation that can evoke deeper reactions than just speaking to someone without visual prompts. Six case studies were undertaken (Wells-next-the-sea, Isle of Wight, Beer and Looe in England; Le Guilvinec in France and Oostduinkerke in Belgium) involving about 10 participants in each location (Kennard, in prep). A number of photographs were taken by the researcher that depicted issues around exploring the cultural values of inshore fishing (for example Figure 3.4). This approach to PEI gives the researcher control over the photographs used in the discussion and therefore has more ability to direct the conversation. This can be an advantage in that the researcher might be able to introduce ideas and topics that the interviewee had not thought about. Alternatively, participant-elicited photography can be used, where the participant is asked to take photographs that depict what is meaningful to them.

A case study of the PEI approach used in Oostduinkerke, Belgium, provides an example of how the cultural values of residents were explored (Acott et al., 2014). Oostduinkerke is the location of horseback shrimp fishermen (Paardenvissers). This is a non-commercial fishing operation now supported by the tourism industry but which has recently been given World Heritage Status. The importance of the fishing to the cultural identity, heritage values, spiritual services and recreation / tourism were clearly recognised in the PEI study as illustrated by the following quotes from the interview transcripts (Acott et al., 2014; Kennard, in prep):

- “It’s something that is important that I want to cherish and safeguard ... it’s the beating heart of Oostduinkerke” and “... it lives among the people” (82).
- “In order to have a future for the fishermen we have to look at the past, and learn from it” (82).

- “These are people that spend their entire time at the beach – they feel very connected to the sea and the fishing on horseback is a passion of theirs. They want to be connected to the sea on a daily basis. They are people who cannot live without the sea” (83).
- “The fishing used to be more important than tourism, but now tourism has become more important than the fishermen” (83).



Figure 3.4 Horseback fishing in Oostenduinkerke, Belgium. CES themes include education, tourism and heritage

Source: M. Kennard

Professional photography

In the GIFS project the use of photography was extended by hiring a professional photographer, Vince Bevan, to produce a photo-documentary of fishing places in case study locations along the English Channel and Southern North Sea. Vince is an experienced photojournalist with work published in, amongst other editorials, *The Guardian Weekend* and *Geographical Magazine*. His assignments have taken him to many parts of the world including Bosnia and East Timor. The brief was to explore the ‘landscapes of fishing’ in different parts of the study area. He was asked to capture both the diverse landscapes that he encountered, but also the way that fishing activity was visible in the environments that he visited. The result

of his work is a stunning collection of online images and a series of national photography exhibitions starting at the National Maritime Museum in Falmouth (29 March to 18 May 2014) and then travelling to Belgium and the Netherlands throughout the summer of 2014.

The intention of this part of the project was to create a series of visually arresting images that would cause people to take notice and reflect on the issues being depicted (Figure 3.5). In this case photographs were not being used to categorise (unlike the auditing) but a more creative approach was encouraged that made use of the professional photographer's skill and artistry. For instance, the use of saturated colour and light to add drama, the use of shutter speed and aperture to create blur and differential areas of focus. However, this more creative approach did result in various discussions during the course of the project. For instance, initially there was a concern that the images being created were overly romantic depicting a somewhat stereotypical image of pretty boats. Of course, the harsh reality of inshore fishing is very different from this image, with death and injury a constant spectre for many fishing families. From the outset, it was the intention of this part of the project to tell a story around inshore fishing in the early twenty-first century that would resonate with a broad variety of audiences. In this sense then, this activity was in part recording images for posterity. But in another sense, it was creating a narrative that sought to get people to reflect and think about the diversity of inshore fishing activity.

These examples of the types of photography used in two research projects start to illustrate photography as a co-constructed activity creating relational associations between the photographer, the audience and the place. It is a tool to record what is in the environment but is also a creative practice around which new narratives can be constructed. Photography facilitates relationships between researchers and their subjects while also creating new networks of social exchange as pictures are displayed in exhibitions or circulated on the internet.



Figure 3.5 Herring Festival, Boulogne-sur-Mer

Source: Vince Bevan, GIFS Project

Discussion

Photography can play numerous roles in mediating the relationship between people and ecosystems and can contribute to the creation and recognition of environmental values through the development of new networks and sharing of knowledge and information. The following sections discuss the lessons learned from the photography deployed as part of the CHARM III and GIFS projects and argues that photography has an important role in developing policy related perspectives for understanding sense of place and cultural ecosystem services.

Photography was used to document and catalogue phenomena that represented cultural value of inshore fisheries as captured in tangible objects. This approach is consistent with traditions of photography in the nineteenth century that saw governments, the military and commercial organisations turn to photography as the medium most able to record the world accurately (Wells, 2011). Photography has since been employed in descriptive and analytical ways in many social science disciplines including sociology and geography. However, with its focus on a realist ontology that can be accurately depicted this use of photography pays more attention to product and less attention to process. In the case of the GIFS project, using a camera to record those cultural objects that are associated with inshore fishing provided the researcher with a tool that could help guide their observation. Suchar (1997) develops this point and talks about the 'interrogatory principle' of photography. For Suchar the documentary potential of photography is not inherent in the photographs but in the interactive process when photographs are used to explore a particular subject. In our work using a camera helped draw out and make visible background objects that contributed to a sense of place, yet perhaps remained unnoticed for many people at that location. For instance, people using fishing-themed decorations on their houses, benches adorned as memorials to fishermen, tourist wares vying for attention in shop windows.

In our work photography as a process facilitated relationship building between researchers and subjects. This was through the use of exhibitions and PEI techniques with photographs being used as a starting point for conversations about inshore fishing. However, just the act of carrying a camera around and taking photographs of unusual subjects (e.g. signs with fish motifs) could be enough to create a new conversation. Also the importance of the camera to slow the researcher down so that care and attention to detail are considered should not be underestimated. In the case of inshore fishing our photographs were not just representations of reality, they were the starting point for creating a new awareness and understanding of inshore fisheries. In the words of Crang (1997, 362): "Images are not something that appear over and against reality, but parts of practices through which people work to establish realities. Rather than look to mirroring as a root metaphor, technologies of seeing form ways of grasping the world". In our case we were trying to demonstrate the many relational associations that inshore fishing contributes to communities and in so doing were actively promoting cultural value (creating cultural value as opposed to eliciting cultural value).

Part of the process of photography is the creation of a picture, either as physical print or a digital image. We used these representations to develop a narrative around which the values of ecosystems are considered. Through attendance at our exhibitions we presented a way of thinking about ecosystem value that was unfamiliar to many people but consistent with the idea of CES as described in the MEA. In developing such exhibitions photography is moving out from the social science framework of an ontologically realist tool for recording, into the creative sphere of the arts and humanities with a focus on representation and the creation of narratives. The salience of this aspect of the GIFS work, and potentially further afield, should not be underestimated. As articulated in the UKNEA Follow On:

Creative approaches influenced by research in the arts and humanities not only provide new forms of evidence for decision-makers, but can help engage communities and engender stewardship of local natural resources; such approaches may be particularly effective when incorporated into a learning curriculum, for instance. Linking these techniques to wider tools and approaches developed in the landscape and heritage sector represents an opportunity for future innovations in the practical application of cultural ecosystem services concepts. (Church et al., 2014, 6)

The experiences of the GIFS community exhibitions were interesting in that initial feedback indicated that many people had not really thought about the broader cultural contribution that inshore fisheries make to coastal towns. Presenting the photographs in the form of a narrative aligned to cultural ecosystem services helped to put a focus on the importance of fisheries for identity and sense of place in coastal communities. This finding echoes Bieling and Plieninger's (2013) concern that a lack of awareness amongst people may hinder normal CES elicitation techniques.

Social science can help elicit ecosystem values from people, whereas the arts and humanities also have a role in shaping new meanings and creating new value (Coates et al., 2014). In the context of GIFS the professional and community exhibitions are already highlighting the cultural ecosystem services of inshore fisheries. This blurring of research / creative output is reflected by Smith (2014, 4): "Much art is about the experience of the moment, whereas most research is about recording or analysing something after an event". Photography can play a role in both of these aspects. Photography can help capture, document and analyse but it also provides a vehicle for expressing emotive and aesthetic themes to be communicated to wider audiences. In sense of place research the GIFS photographic element brought to the fore the idea that photography is both researching the identity and heritage values of a place, but at the same time it is also contributing to the creation of those values. Perhaps in the same way that books like *Edgeland*s by Roberts and Farley (2012) can draw attention to the cultural values of unfamiliar and unacknowledged nature, photography can be used to highlight and communicate how nature can be translated into a myriad of

cultural values. In the case of inshore fishing photography can offer momentary glimpses into the dangerous world of the last hunters.

Photography also has a role in taking manifestations of place-based values away from their immediate locale and transporting them to far-away places. The professional photography undertaken as part of GIFS has taken the photographs from coastal towns and villages and displayed them in venues in England, the Netherlands and Belgium. The photographic exhibition is a conduit through which the distant valuation of ecosystems can take place. The photographs are removing the need for a direct experience of place. This is not just an academic point. This valuing at a distance can stimulate public support for activities such as inshore fishing and has the potential to be translated into new economic opportunities through the development of responsible tourism initiatives.

Conclusion

We have explored the idea of photography as a co-constructed activity that connects the researcher (photographer), the subject being photographed and the viewing audience. These relational associations embedded in ideas of sense of place and CES begin to challenge the idea of objective research. By taking documentary photographs we were developing a narrative of place, in Heidegger's terms we were making occurrent the importance of the contribution of inshore fisheries to sense of place. This sense of place narrative was also used to explore the idea of CES and in doing so create and disseminate cultural value. In our case the research included photographic auditing, photo-elicitation and professional photography. These resulted in the creation of a series of exhibitions that created a representation of inshore fishing that made visible relational associations between the sea and the land that might have otherwise been hidden from the general public and policymakers alike. The results of the process, therefore, break down distinctions between objective science and artistic creation.

Photography is both revealing a world but at the same time is bringing a world into being. Our research has begun to highlight the importance of understanding how the creative process can contribute to the creation and elicitation of cultural value. The policy-making agenda is often focused on the use of numeric empirical data. However, we are suggesting that understanding the relationship between creative processes and cultural values should be incorporated more fully into policy making. For this to happen the use of a broad range of qualitative and quantitative evidence needs to be admitted together with a realisation that cultural value is something that can be generated as a result of creative processes.

At the outset of this chapter we posed the question "what is the role of photography for our understanding of CES?" By way of work carried out as part of two projects, CHARM III and GIFS, we suggest four ways that photography can be used in the development of CES perspectives:

- As a tool for recording the cultural artefacts produced as a result of the use of ecosystems
- As a process to facilitate engagement between researchers and communities
- As an approach to create new cultural values by developing narratives around cultural ecosystem services and sense of place
- As an education tool to raise awareness of the value of natural resources leading to stewardship and a deeper understanding of those resources

It is hoped that these four interrelated elements can be used as a starting point in CES research to highlight that understanding cultural values is not just about eliciting views, it is also about creating new narratives and programmes of communication and education that create new values. In this sense photography, sense of place and CES are co-constructed around networks of associations spun throughout subjective and objective worlds.

Acknowledgements

The projects reported in this article were co-funded by the INTERREG IVA Channel Programme project CHARM III and INTERREG IVA 2 Seas Programme project GIFS (2011–2014).

References

- Acott, T. and Urquhart, J. (2012) Marine fisheries and sense of place in coastal communities of the English Channel, Final report prepared as part of the INTERREG IVA CHARM III project, Chatham: University of Greenwich.
- Acott, T. and Urquhart, J. (2014) Sense of place and socio-cultural values in fishing communities along the English Channel, in Urquhart, J., Acott, T., Symes, D. and Zhao, M. (eds) *Social Issues in Sustainable Fisheries Management*. Springer: London, 257–278.
- Acott, T., Urquhart, J., Church, A., Kennard, M., le Gallic, B., Leplat, M., Lescrauauet, A.-K., Nourry, M., Orchard-Webb, J., Roelofs, M., Ropars, C. and Zhao, M. (2014) *21st Century Catch*. University of Greenwich, Chatham.
- Bieling, C. and Plieninger, T. (2013) Recording manifestations of cultural ecosystem services in the landscape. *Landscape Research* (38), 649–667.
- Burri, R.V. (2012) Visual rationalities: Towards a sociology of images. *Current Sociology* 60, 45–60.
- Cantrill, J.G. (1998) The environmental self and a sense of place: Communication foundations for regional ecosystem management. *Journal of Applied Communication Research* 26, 301–318.

- Chan, K.M., Guerry, A.D., Balvanera, P., Klain, S., Satterfield, T., Basurto, X., Bostrom, A., Chuenpagdee, R., Gould, R., Halpern, B.S., Hannahs, N., Levine, J., Norton, B., Ruckelshaus, M., Russell, R., Tam, J. and Woodside, U. (2012) Where are cultural and social in ecosystem services? a framework for constructive engagement. *BioScience* 62, 744–756.
- Church, A., Fish, R., Haines-Young, R., Mourato, S., Tratalos, J., Stapleton, L., Willis, C., Coates, P., Gibbons, S., Leyshon, C., Potschin, M., Ravenscroft, N., Sanchis-Guarner, R., Winter, M. and Kenter, J. (2014) UK National Ecosystem Assessment Follow-on. Work Package Report 5: Cultural ecosystem services and indicators, UNEP-WCMC, LWEC, UK.
- Clay, P. and Olson, J. (2007) Defining fishing communities: Issues in theory and practice. *NAPA Bulletin* 28, 27–42.
- Coates, P., Brady, E., Church, A., Cowell, B., Daniels, S., DeSilvey, C., Fish, R., Holyoak, V., Horell, D., Mackey, S., Pite, R., Stibbe, A. and Waters, R. (2014) Arts and Humanities Working Group (AHWG): Final Report, UK National Ecosystem Assessment Follow-on, UNEP-WCMC, LWEC, UK.
- Crang, M. (1997) Picturing practices: research through the tourist gaze. *Progress in Human Geography* 21, 359–373.
- Davenport, M.A. and Anderson, D.H. (2005) Getting from sense of place to place-based management: An interpretive investigation of place meanings and perceptions of landscape change. *Society & Natural Resources* (18), 625–641.
- Eisenhauer, B.W., Krannich, R.S. and Blahna, D.J. (2000) Attachments to special places on public lands: An analysis of activities, reason for attachments, and community connections. *Society and Natural Resources* 13, 421–441.
- Farnum, J., Hall, T. and Kruger, L.E. (2005) *Sense of Place in Natural Resource Recreation and Tourism: An Evaluation and Assessment of Research Findings*. United States Department of Agriculture General Technical Report PNW-GTR-660 Forest Service Pacific Northwest Research Station.
- Fink, J. (2011) Walking the neighbourhood, seeing the small details of community life: Reflections from a photography walking tour. *Critical Social Policy* 32, 31–50.
- Gold, S.J. (2004) Using photography in studies of immigrant communities. *American Behavioral Scientist* 47, 1551–1572.
- Haines-Young, R. and Potschin, M. (2009) Methodologies for defining and assessing ecosystem services, Final Report, JNCC, Project Code C08–0170–0062, 69.
- Harper, D. (2002) Talking about pictures: A case for photo elicitation. *Visual Studies* 17, 13–26.
- Holgate, J., Keles, J. and Kumarappan, L. (2012) Visualizing ‘community’: An experiment in participatory photography among Kurdish diasporic workers in London. *The Sociological Review* 60, 312–332.
- Johnson, S., May J. and Cloke, P. (2008) Imag(in)ing ‘homeless places’: Using auto-photography to (re)examine the geographies of homelessness. *Area* 40, 194–207.

- Kaltenborn, B.P. (1998) Effects of sense of place on responses to environmental impacts. *Applied Geography* 18, 169–189.
- Kennard, M. (in prep) *Sense of Place, Tourism and Inshore Fishing in The English Channel and Southern North Sea*. University of Greenwich Unpublished PhD Thesis.
- Kerstetter, D. and Bricker, K. (2009) Exploring Fijian's sense of place after exposure to tourism development. *Journal of Sustainable Tourism* 17, 691–708.
- Kianicka, S., Buchecker, M., Hunziker, M. and Müller-Böker, U. (2006) Locals' and tourists' sense of place. *Mountain Research and Development* 26, 55–63.
- Kyle, G. and Chick, G. (2007) The social construction of a sense of place. *Leisure Sciences* 29, 209–225.
- Malpas, J. (2008) New media, cultural heritage and the sense of place: Mapping the conceptual ground. *International Journal of Heritage Studies* 14, 197–209.
- Markwell, K.W. (2000) Photo-documentation and analyses as research strategies in human geography. *Australian Geographical Studies* 1, 91–98.
- MEA (2005) *Ecosystems and Human Well-being: Synthesis*. Island Press, Washington DC.
- Milcu, A.I., Hanspach, J., Abson, D. and Fischer, J. (2013) Cultural ecosystem services: A literature review and prospects for future research. *Ecology and Society* 18 art: 44.
- Purcell, R. (2007) Images for change: Community development, community arts and photography. *Community Development Journal* 44, 111–122.
- Relph, E. (1976) *Place and Placelessness*. Pion: London.
- Rose, G. (1992) Geography as science of observation: The landscape, the gaze and masculinity, in Driver, F. and Rose, G. (eds) *Nature and Science: Essays in the History of Geographical Knowledge*. Historical Geography Research Series, London, pp. 8–18.
- Sagoff, M. (2011) The quantification and valuation of ecosystem services. *Ecological Economics* 70, 497–502
- Shan, M. and Swinton, S.M. (2011) Valuation of ecosystem services from rural landscapes using agricultural land prices. *Ecological Economics* 70, 1649–1659.
- Smith, A. (2014) AHRC looks for ways to welcome artists into the fold. *Research Fortnight*, 9th July http://www.absw.org.uk/files/Research_Fortnight_winning_piece_by_Kate_Szell_Dragons_Den_ukcsj14.pdf
- Sontag, S. (1977) *On Photography*. Penguin Books: London.
- Stedman, R.C. (2003) Is it really just a social construction?: The contribution of the physical environment to sense of place. *Society and Natural Resources* 16, 671–685.
- Stewart, W.P., Liebert, D. and Larkin, K.W. (2004) Community identities as visions for landscape change. *Landscape and Urban Planning* 69, 315–334.
- Suchar, C.S. (1997) Grounding visual sociology research in shooting scripts. *Qualitative Sociology* 20, 33–55.
- Thrift, N. (2008) *Non-Representational Theory: Space, Politics, Affect*. Routledge: London

- Tuan, Y.-F. (1974) *Topophilia: A Study of Environmental Perceptions, Attitudes and Values*. Prentice Hall: New Jersey.
- UKNEA (2011) *The UK National Ecosystem Assessment: Synthesis of Key Findings*. UNEP-WCMC, Cambridge.
- Urquhart, J. and Acott, T. (2013) Constructing 'The Stade': Fishers' and non-fishers' identity and place attachment in Hastings, south-east England. *Marine Policy* 37, 45–54.
- Urquhart, J. and Acott, T. (2014) A sense of place in cultural ecosystem services: The case of Cornish fishing communities. *Society and Natural Resources* 27, 3–19.
- Van Auken, P.M., Frisvoll, S.J. and Stewart, S.I. (2010) Visualising community: Using participant-driven photo-elicitation for research and application. *Local Environment* 15, 373–388.
- Ward, D. (2004) *Landscape Within: Insights and Inspiration for Photographers*. Argentum: London.
- Wells, L. (2011) *Land Matters: Landscape Photography, Culture and Identity*. I.B Tauris: London.
- Wiley, J. (2007) *Landscape*. Routledge: London.
- Williams, D.R. and Stewart, S.I. (1998) Sense of place: An elusive concept that is finding a home in ecosystem management. *Journal of Forestry* 96, 18–23.

