Routledge
Taylor & Francis Group

Visualising community: using participant-driven photo-elicitation for research and application

Paul M. Van Auken[a]*, Svein J. Frisvoll[b] and Susan I. Stewart[c]

[a]*The Department of Sociology, Environmental Studies, University of Wisconsin Oshkosh, 317 Swart Hall, Oshkosh, WI 54901, USA;* [b]*Centre for Rural Research, NO-7491 Trondheim, Norway;* [c]*USDA Forest Service, Northern Research Station, Evanston, IL, USA*

Despite a contemporary socio-culture revolving around cultural consumption of imagery, metaphors, representations and "gaze", photo-elicitation is a rarely used method for social scientists and planners to acquire knowledge. In this paper, we discuss participant-driven photo-elicitation, a process in which participant photos are paired with in-depth interviews. Based upon a review of the literature on photo-elicitation and our own transnational fieldwork experiences with it, we argue that this method has four primary advantages: photos can provide tangible stimuli for more effectively tapping into informants' tacit, and often unconscious, consumption of representations, images and metaphors; produces different and richer information than other techniques; and may also help to reduce differences in power, class and knowledge between researcher and researched. Finally, we argue that this method has unique potential to empower participants' involvement in activities related to local planning for sustainable community development and natural resource management efforts.

Keywords: photo-elicitation; public participation; sustainability; community

Introduction

No matter how familiar the object or situation may be, a photograph is a restatement of reality; it presents life around us in new, objective, and arresting dimensions, and can stimulate the informant to discuss the world about him as if observing it for the first time. (Collier 1957, p. 859)

In an era in which consumption of imagery, "gaze" and metaphors are central to individuals' construction and comprehension of themselves (Urry 1990), of nature (Sack 1997, Macnaghten and Urry 1998), of rurality (Urry 1990, Crouch 2006), and of social life (Rose 2001), it is paradoxical that photo-elicitation is so seldom used. If people understand their world more and more through images, using graphical representations as stimuli for reflection would seem to be a logical development in social science research and participatory planning.

Our particular focus is on better understanding the interplay between people and their natural and built environments, which is central to many issues facing communities impacted by tourism, resorts, summer communities, recreation and retirement migrants. Amenity-led development relies on natural beauty and resources to produce what it sells, but the production of amenities may threaten those same resources (Urry 1995, Goe *et al.*

---

*Corresponding author. Email: vanaukep@uwosh.edu

2003). Simultaneity also characterises social life; migrants often choose to live in amenity communities to enjoy the quality of life, which can lead to population growth and economic diversification (Krannich and Petrzelka 2003). Increased seasonality and extra-local investment, however, may reduce the year-round availability of goods and services and undermine local influence over the shape of the community (Luloff and Bridger 2003).

In this context, research methods must capture the visual, so that perceptions of amenities, of changes, of people and their various and conflicting roles can be explored. Power is central to the interplay of actors in the community; year-round and seasonal residents, business owners and civic leaders each have distinct roles in production, consumption and change. Hence, research methods must permit observation and recognition but minimise disruption or realignment of power relations. Further, the relationship between informant and researcher is not power-free, either (Rose 1997, Smith 2006).

Photo-elicitation may not be a miracle cure, but its broader use could address these and other concerns regarding social science research methods. It has potential for empowering stakeholders not "fluent" in abstract planning tools (e.g. zoning codes, regulatory language), as the visual character of the method (in combination with interviews) brings abstract questions down to a very hands-on and approachable level. Furthermore, photo-elicitation can give the role of representations, imagery and metaphors some deserved attention in the social sciences.

In this article, we first review the literature devoted to photo-elicitation, showing that the method is thought to have three particular qualities: *the photographs it generates provide the stimuli for "deep" interviews; it can produce different types of information than other social science techniques; and it addresses concerns about power relations between researcher and subject.*

Building upon the literature on visual methods and our own findings from employing photo-elicitation research in transnational fieldwork, we argue that *participant-driven photo-elicitation* (PDPE) holds outstanding promise, not only for social science research but also for application in land-use planning, visioning and other attempts to achieve sustainable community development. In addition to having the three qualities recognised in the literature, we argue that *PDPE may help to stimulate engagement in local affairs.* Here, we present research conducted in the mid-western USA and Norway, describe data collection and analysis, and share evidence to support these findings.

Background

The monopoly of knowledge production by professionals (Gibbons *et al.* 1994) and a "crisis of representation" experienced by scholars have recently received attention (Stewart and Floyd 2004). Such concerns are based on the notion that power and knowledge are mutually reinforcing (Foucault 1980), and that class, gender, race and sexuality constitute aspects of power that influence the production of knowledge. Paired with such concerns are questions about whose right it is to produce knowledge, whether social science methods can actually yield "valid" data, whether that data is relevant, and if so, relevant to whom (Shandas and Messer 2008)? According to Flower (2008),

> When town and gown try to work together, the gowns possess the dominant discourse – and typically assume that their language, concepts, and forms of argument are the most effective for understanding these problems and should be learned and used by everyone else. (p. 102)

Such an approach does not effectively engage and empower non-academic citizens, which helps to explain the failure of much traditional social science research to enhance

community literacy, which enables people to "take rhetorical agency in their lives and for their community" (Flower 2008, p. 44).

Photo-elicitation – the insertion of images into interviews – is by its nature distinct from many traditional methods. In a seminal study to test its efficacy, Collier (1957) found that photo-based interviews were significantly longer and more focused than traditional ones. Compared with traditional interviews, those involving photo-elicitation produce "deeper" interviews, based on the notion that photographs elicit precise and "at times even encyclopedic" (Collier 1957, p. 856) information and "can trigger responses that might lie submerged in verbal interviewing" (Collier 1957, p. 854).

Others (cf. Beilin 1998, Rose 2001, Harper 2002, Stewart and Floyd 2004) stress the multidimensional qualities of images, which can represent experiences, social domains and physical settings. Photographs can help sharpen informants' abilities to reflect upon and explain their experiences and perspectives, and provide memory "anchors" (Loeffler 2005) related to specific places or events from last week or last decade.

There are two primary variants of photo-elicitation. The first is externally driven; subjects are asked to evaluate images that have been preselected by researchers. According to Beilin (1998, p. 4), landscape studies using this variant "have tended to include provision of a set of photographs that are shown to all respondents". Respondents might be asked to give their perspectives on various land-use scenarios depicted in photographs (Campbell 2006) or computer-designed images. Such processes have been widely used in planning, most notably through visual preference surveys (Nelessen 1994, Crisman 2006). Since the researcher, planner or consultant controls the stimuli, though, this version is relatively top-down and closed-ended. Consequently, there are questions about its ability to address concerns about representation (Stewart and Floyd 2004) and the validity of the data it produces (Crisman 2006).

The second alternative is participant-driven: subjects choose the images that are the foundation of the interview. This version embodies photo-elicitation's ability to break down barriers between researchers and subjects, creating opportunities for citizens to be more meaningfully involved in data generation. Through the use of PDPE, control is shifted from the researcher to the participant, as "the subject becomes the teacher" (Harper 1987, p. 12). Because it de-centres the authority of the researcher, PDPE addresses postmodern concerns about representation, making it a "particularly sociological version of visual research" (Harper 2002, p. 15).

PDPE can take interviews to impressive topical depths, with the ability to "capture aspects of lived experience in ways that would not be possible with other methods" (Stewart and Floyd 2004, p. 450). Further, when "two or more people discuss the meaning of photographs they try to figure out something together" (Harper 2002, p. 23), hence photo-elicitation is thought to result in more collaborative knowledge production.

Finally, PDPE has been shown to produce lower refusal rates (Stedman *et al.* 2005) and effectively reach reticent informants (Beilin 1998) or members of socially marginalised groups (Klitzing 2004). Simply put, asking respondents to talk about photographs is typically perceived as being less threatening (Collier 1957, Klitzing 2004) and more engaging than other methods.

Study areas and methods

Photo-elicitation was implemented in two areas during the years 2005–2007 to study the perceptions of local stakeholders regarding landscape and community change. An ongoing exchange and collaboration between Norwegian and American scholars on

resource management issues and community responses to growth, development and landscape change uncovered interesting similarities and differences between communities in the mid-western USA and mid-western Norway. The similarities between these areas in terms of their built and natural landscapes, economic histories and trajectories, and rural cultures deepened our interest in understanding the social processes that shape them.

Bayfield County, Wisconsin, lies on the northern periphery of the Midwest, bordering Lake Superior. It includes over 400,000 acres of public forest and the Apostle Islands National Lakeshore, and has transitioned away from dependence on extractive industries to a seasonal, service-based economy. Tourism centres on the tiny, historic village of Bayfield, due to its bucolic charm and proximity to the Apostle Islands, and recent development has led to social and environmental concerns.

Hitra and Frøya are neighbouring islands, located off of Norway's mid-western coast, and the area features an archipelago of islands designated as a national preserve. Fishing and agriculture have undergone significant restructuring in recent decades, causing population decline. Fish farming is now a major employer, but industry volatility has led some to look to the area's natural amenities, particularly its miles of coastline and numerous small islands, to spur place-oriented development.

While our mixed qualitative methodology also included traditional interviews and participant observation, PDPE was the linchpin. This method was chosen based on the notion that images of these similar physical environments would be excellent tools for understanding community change based on amenity-led development in socially and politically different contexts.

Data for this study are derived primarily from 76 in-depth interviews with 90 people in the two study areas conducted from June 2005 to July 2007. They were strategically sampled (Bryman 2008) in order to incorporate a wide range of actors – both professionals (e.g. mayors, municipal planners, economic development professionals) and everyday participants in community life, as year-round (of various social classes) and part-time inhabitants (e.g. seasonal home users) – with the goal of attaining as representative a sample as possible in both study areas for this qualitative research project. In practical terms, informants were selected from a random sample of property records and civic association rolls, and via snowball sampling that began both with randomly selected participants and key informants from each area.

After recruitment, participants were asked to photograph places in their community in five categories (Table 1).

These categories were created to provide a modicum of structure while allowing participants to freely choose from a wide range of possibilities. Interviews followed, and after asking a series of background questions, photos were viewed together and participants asked to explain why they took each photo. The photos served as a *de facto* interview guide for much of the interview, and while we provided the framework, the photographs were subjects of the informants' own choosing, such that they generally had much to say about each one. Follow-up questions were employed to elicit additional information, or

Table 1.   Categories of photographs participants were encouraged to take prior to in-depth interview.

1	Places/objects that you value for ecological, economic, recreational or socio-cultural reasons
2	Places/objects that in your mind detract quality of life
3	Places/objects that in your mind have changed for the better or worse
4	Places/objects that in your mind should be preserved
5	Places/objects that in your mind should be modified or redeveloped

to re-focus the interview around the research questions; they were typically along the lines of, "why is this place so important to you?" and "how does it relate to your feelings about changes in the community overall?"

To develop the contextual base for each site and to incorporate additional informants, 39 non-photo-based interviews were conducted with 48 informants. Many of these interviews were with key informants who were highly involved with local affairs (e.g. local politicians, bureaucrats, business people). They followed the same general interview guide as the photo-based interviews, but without the photographs. The research was designed to be flexible, to allow for maximisation of sample size and balance out potential self-selection bias in photo-elicitation participants. Therefore, some "typical" citizens who declined to take photos were interviewed in this traditional manner as well. While these interviews were often shorter and a bit less in-depth, they were nonetheless informative. The fact that not all respondents participated in PDPE, while a limitation of this study, also allows for comparative analysis of photo- and non-photo-based interviews.

This process produced a rich data set, including well over 100 hours of recorded interviews and 430 participant photos. Interviews were recorded, transcribed and analysed, along with extensive field notes, using an iterative qualitative analysis process, through which extended case method (Burawoy 1991) was applied to uncover the general implications of our particular cases. Participants captured a wide variety of images representing diverse meanings, which led to discussion of myriad topics related to their lives and their perceptions of the landscapes, buildings, politics, organisations and people that comprise their communities. Data were organised around dominant themes related to persistence and change in local and regional economics (e.g. restructuring from traditional, extraction- and production-based economies to more amenity-led, consumption-oriented activities), development and land use (e.g. seasonal home development, real estate appreciation, landscape fragmentation, land conservation), and social relations (interaction between long-term and seasonal residents, governmental actors and citizens, community members in general).

Results

As was expected, photos of places that represented "nature" or favourite recreation spots were very common in both amenity areas. For example, upper-middle-class seasonal residents of the Norwegian study area took the photo featured in Figure 1. According to the female participant, "we like to take it slow. Just sitting in the boat, fishing, and looking at nature and things like that".

The place captured in this photo represented leisure and escape from everyday, urban cares for these seasonal stakeholders.

According to a year-round resident of rural Bayfield County and working-class service employee who took the photograph presented in Figure 2, "This is one of my all-time favorite places. . .I go there a lot. . . I, and my daughter, trout fish. . . I can't afford to get a boat and be out fishing on the big lake".

The latter example in particular demonstrates the depth of our interviews and "thickness" of PDPE-produced data. A photo designed to capture a favourite recreational spot produced an explanation with sociological implications and led to extended discussion of class stratification in the Bayfield area, with the participant later indicating that,

> You go down this road to the golf course, most of those homes are second homes. . . for many years there were one or maybe two real estate brokers in town. Now, I bet there's 8 or 10. . . the real estate market or brokers are really driving prices up. And, um, that I think is a real negative to our community.

Figure 1.   "Taking it slow, looking at nature."

Numerous participants presented photos of ordinary scenes, such as that captured in Figure 3 to represent the communal effort that goes into running and maintaining a local community – a common thread in this study. The Bayfield small business owner who took this photo, for instance, elaborated in the interview that "two years ago we redid (the) playground; it was about $150,000 of value... that cost the city only $10,000... all of the construction work was done voluntarily".

This is another example of the multiple layers of meaning embedded in PDPE-produced data; the participant meant to highlight an important new amenity for his community, but in discussing the photo revealed that perhaps more important than the park itself was the social interaction and commitment to the locality embodied in the efforts to create it.

Figure 2.   "One of my all-time favorite places."

Figure 3.   A product of communal efforts.

Vestiges of traditional economies and landscapes, as well as historical buildings and cultural amenities, form another category of photos commonly presented in both areas, as demonstrated in Figures 4 and 5.

PDPE naturally draws out critical reflection about community, as demonstrated by the year-round, middle-class participant photographers' worries about the loss of the cultural landscape, when local farmers no longer desire to do the hard work necessary to maintain it (Figure 4) and because the site "isn't worth a helluva lot" as a small fish processing facility (Figure 5).

Gathering places – sites of formal and informal interaction that can be so critical to the formation of community – were also commonly photographed. This is noteworthy because

Figure 4.   Maintenance of the cultural landscape by farmers.

Figure 5.   Example of the threatened traditional landscape.

everyday places and their social meanings can be neglected in traditional interviews in favour of more controversial subjects.

About the place depicted in Figure 6, the year-round resident of Hitra who took the photograph indicated that, "if there is a nice summer night there might be some people who get together down there. We bring beers and things and enjoy ourselves very much...Yes, to have common areas like this is really important".

As was expected, participants took many more photos of places they felt positively about, consistent with one of the identified shortcomings of the method (Stewart and

Figure 6.   "To have common areas like this is very important."

Figure 7.   New seasonal home built upon the island's "best view".

Floyd 2004). Photos did, however, also facilitate discussion of issues of concern, as alluded to above. In Norway, numerous participants took photos meant to signify two controversial local issues: a proposed wind park and seasonal homes built within the national coastline protection zone, within which homes are not to be constructed. For example, according to the upper-middle-class participant who took the photo presented as Figure 7, this new seasonal home upon the island's "best view" does not fit into the local landscape and dwarfs neighbouring homes. She could not understand the lack of regard for neighbours – who frequently gathered on the property to picnic and enjoy the view of the sea – and local history or why the new home was allowed to be placed so close to the shore.

Discussion

The three primary benefits of photo-elicitation identified in the literature resonate well with our own experience, which also revealed a fourth quality inherent in the PDPE process: *it has the potential to stimulate engagement in local affairs*. We now discuss these characteristics in turn.

Photos can provide tangible stimuli for "deep" interviews. In our experience, compared with the non-photo-based interviews, those based on PDPE were generally longer, more focused and more effective in getting below the surface. For example, when asked about preservation versus development, an upper-class, long-time local realtor and "smart growth" advocate indicated that it is "a dilemma", and with regard to the impact of gentrification noted that "if it's a boring ranch, without a lake view, we have a chance to sell it to" local working people. Similar to many non-photo-based interviews, this one produced interesting responses but failed to readily reach the topical depths of PDPE. A lifelong resident of the Bayfield area and a middle-class business owner, for instance, provided the following introduction to the photo presented as Figure 8, which helped to bring the same issue to life.

> Here's a classic example of what's happening. . . a ramshackle little shack, and then they bought the lot here and they put up this massive, enormous, almost what do you call it. . . Greek revival?. . . and it's just shadowing these little houses where people used to live.

Figure 8.   "Just shadowing these houses where people used to live."

This informant proceeded to explain the impact of new development on her bottom line, indicating that,

> They just came through and they raised everybody's taxes. . .I said 'I've only got 100 days a
> year to make a living and I need to put a new roof on and paint the place'. . .And that building
> across the street sold for $350–360,000 so they look at this place and double the value.

PDPE did indeed produce deep interviews, which tended to flow smoothly from one topic to the next due to the concrete stimuli of the photographs. If the discussion based on one photo began to wane, a shift to the next renewed interest and focus, as attention was directed to another conversation anchor. According to an economic development professional from Hitra-Frøya with experience in various types of data gathering,

> It's different, but I do see the point. . . you have some key points to hold on to during the inter-
> view, I think. It's easier to get progression, even though you still have got those who keep
> things on the side of the point you at least have something to hold on to.

Due to the inherent need for the informant to prepare himself/herself ahead of time, the PDPE interviews tended to feature more informed participants, as they had to ponder the photo-taking tasks, and actually take the photographs, prior to the interview. This contrasts with other qualitative methods in which the informants are only rarely given instructions to reflect on the issues to be dealt with by the interview.

Pairing photos with interviews often led to unexpected depths of discussion. For example, a working-class professional fisherman from Frøya took a photo of overflowing garbage containers, which was meant to capture the banal issue of inadequate waste disposal services. The subsequent interview revealed, however, that the photo represented a much broader societal critique, based on the participant's assertion that the Norwegian government is "privatising everything", with negative implications for local quality of life.

Photo-elicitation produces "thick" data and different kinds of information than other techniques. Our experience with PDPE fully supports this assertion as well, as elucidated below.

Without interpretation by the photographer, one might have assumed that the subject in Figure 9 was chosen because playing golf was very important to the photographer, or

Figure 9.   "We created something with our own bare hands."

conversely, that the informant disapproved of this particular land use. The year-round resident and teacher from Hitra-Frøya who took it, however, indicated that it represents a positive change that was accomplished by the voluntary association of local residents. According to her, "there were 5 of us, and...we started Hitra Golf Club...We created something with our own bare hands". The simple question, "why did you take this photograph?" initiated a discussion of community development, which eventually led to the participant disclosing her multifaceted frustration with rural living. This example not only reveals the thick data that PDPE can produce, but also underscores the vital role of pairing photo-based methods with interviews, since the meaning is dependent upon the photographer for interpretation.

Similarly, a walking trail along Lake Superior was photographed by numerous participants to represent individual social or recreational values. It often led, however, to broader discussion of proposed lakefront development; conflict had come to a head in 2004 due to the city's proposal to sell some of its property along the trail to a developer who planned to build a large condominium complex, which was consistent with an existing land-use plan but unleashed a storm of opposition. An ordinary picture of an ordinary-looking trail was able to capture multi-layered meanings attached to a particular place and led to discussion of local politics and community life, both past and present.

The previously quoted teacher from Hitra-Frøya indicated that, "I had to step out of my life and stand on the outside and look into it. And that for me is a really interesting process". This supports Harper's (2002) assertion that for photo-elicitation to be effective, it must "break the frame" and cause participants to look at things in a new way. Putting cameras in the hands of informants and allowing them to choose the angles seems to effectively facilitate this.

Further, Stedman *et al.* (2005) assert that photo-elicitation can be particularly useful for comparison. This proved to be true in our study for comparing the various stakeholder groups and the cross-national study sites. Being able to place photos side-by-side can provide an initial notion of the divergence and commonality of values and interests held by members of the different stakeholder groups and places being studied. Viewing the

photographs along with participants' reflections also sparked fruitful examination of the theoretical implications of what we were observing, leading to substantive discoveries.

Photo-elicitation can help to bridge the gaps between the researcher and subject. Based on our experience with PDPE, we believe that this is one of the most important qualities of the method. The uniqueness of PDPE proved helpful in convincing people to participate. A long-time resident and teacher from Bayfield County indicated that the active photo-taking endeavour described in our recruitment letter caused her to not discard it, "which I would have with a survey". This response was somewhat surprising, since PDPE places a larger work load on subjects than a questionnaire or traditional interview. Yet, most participants enjoyed pondering what to photograph, as well as physically engaging with their community to do so, and were therefore excited about discussing the fruits of their labour. PDPE also places the informant at the pivot of the interview in such an explicit way that his/her status is seen as vital for the research.

Indeed, rather than the abstract, probing questions of an outsider serving as the focal point, the tangible photos taken by participant themselves are the object of attention in PDPE interviews. The method can thus reduce power differentials between researcher and subject, more ethically producing social data. However, the task of taking pictures is not necessarily democratic and will not eradicate power differentials on its own. Some participants may remain intimidated or sceptical of social researchers or may engage in behaviours that reflect social desirability bias. PDPE practitioners need to recognise and attempt to address such limitations to the extent possible. We agree with Packard (2008) that visual methods are not a "cure-all for power imbalances" (p. 75) and that care must be taken to design projects such that they do not reinforce traditional power dynamics, but PDPE does represent a promising alternative.

We furthermore contend that asking local stakeholders to take photographs is effective in grounding the data in the setting of interest and better representing their lived experience, increasing the validity and relevance of the data and helping to enhance community literacy (Flower 2008). With a process like PDPE, academic/professional modes of communication[1] are largely bypassed in favour of the vernacular of the subject, meaning that researcher and subject can more readily understand each other. This process can also help subjects feel that they are indeed meaningful collaborators in knowledge production.

As stated, most subjects in our study found the PDPE process interesting, enjoyable and understandable. This functioned to remove barriers to participation and inhibitions about revealing sensitive information. PDPE was effective with participants from a wide variety of backgrounds, but particularly for engaging the "unusual suspects" – people who typically do not participate in social research or planning processes.

Finally, our research also demonstrates that *PDPE can stimulate people to become engaged in local affairs*. It converts passive informants into active *participants*, who may then be spurred to join planning committees, civic associations or simply become more aware of, and involved in, the life of their community. Many of the PDPE participants in our study expressed appreciation for being "forced" to think about their values, to get out into their community and analyse the landscape and corresponding issues. A lifelong resident and small business owner from Bayfield, directing attention to PDPE's stimulating qualities, indicated that,

> I polled several people, a good friend of mine who is with the public lands... and then I have another good friend, real smart, so I went over and asked what do you think about this and what do you think about that? And they were all interested... got some conversation started ahead of time... It was very interesting – I very much enjoyed it.

A Bayfield County teacher stated that her participation in PDPE was the first time in many years that she thought about her values, expectations and interaction with her community and the landscape in which it is built, and indicated that she planned to get more involved in the future. Similarly, the year-round resident and teacher from Hitra-Frøya, an urbanite who had moved there as a part of the Norwegian "green movement" in the 1970s, credited PDPE for helping her to see her community from a fresh perspective and renewing her appreciation for its quality of life, at a time when she was considering moving away.

Another illustration stems from an upper-middle-class Norwegian seasonal resident who was troubled by our PDPE instructions because they forced her to think about negative or stressful things, seemingly ruining (at least temporarily) her sanctuary's idyll. Prior to this, as she revealed in the follow-up interview, she had turned a blind eye to the "dark side" of her leisure-driven consumption of the place. The PDPE process proved to be somewhat cathartic, though, causing her to begin to think more about the connections between her use of a seasonal residence and the broader social life of the host community.

The PDPE process encouraged thoughtful reflection, wider discussion and physical engagement by participants in their communities. It therefore seems to have strong promise for action-oriented research – an "approach for doing collaborative research with practitioners and community partners that can inform practice, programs, community development, and policy while contributing to the scientific knowledge base" (Small and Uttal 2005, p. 936) – and for contributing to increased community vitality overall as people become more involved. Another aspect of PDPE's action orientation is the tangible, place-specific data (photos and narratives) from a variety of people that result from the process and can be used by planners and local leaders to better understand the concerns and hopes of stakeholders, based as they are upon a dialogue involving multiple voices and negotiated meanings about various elements of their community. An upper-middle-class seasonal resident and former politician from rural Bayfield County indicated that, "it's a great way to do a study, because I really had to think about it to take the pictures... you know, if you're looking for public input, that's a real effective idea". Such engagement may have a lasting impact, as "empowerment and recognition come from the experience of participation and belonging" (Shandas and Messer 2008, p. 416).

The fact that PDPE results in photos from stakeholders of various stripes means that local governments, planning committees, civic groups and interested individuals can access data that are not only social scientifically grounded, but also clear and understandable, in part due to the evocative nature of photos. This data can be used at various stages of planning and development processes, such as pre-planning informational gathering; it can be easily disseminated through multimedia presentations at public meetings, or photo essays with accompanying quotes displayed in local libraries or newspapers. It can be used to develop an inventory for asset-based community development or SWOT analysis, or for design charettes that incorporate current values and concerns of local stakeholders into visions of the future that are grounded in local knowledge. PDPE may be a particularly relevant approach for projects that deal with sustainability, such as community-based natural resource management processes, since photographs have a unique ability to capture both ecological and social meanings (Sack 1997).

We argue that PDPE has four key advantages, but the approach is not without drawbacks. As indicated by Collier (1957) and Harper (2002), photo-elicitation will not work well in every situation. Researching "elites" (i.e. politicians, civil servants, business leaders, etc.) and their views is challenging (Schoenberger 1991, Cochrane 1998, McDowell 1998, Elwood and Martin 2000, Kezar 2003, Smith 2006, Neal and McLaughlin

2009), and we found that it was more difficult to encourage such people to "break the frame" and look at their communities in new ways. The abstract language of zoning maps and other planning tools and rhetoric is, after all, the language of these actors. This often translated into refusal to take photos and shorter interviews with less in-depth responses. Another explanation of the officials' reluctance to fulfil the participatory element of our PDPE design may be that photography does not meet these informants' understanding of their roles. For instance, a mayor's job is not to take photos, and in the cases where we actually had success in getting official informants to take photos, it was clear that it was the informant's private perspective about which we generated data. PDPE, therefore, may not be as effective in generating data on officials' professional views and opinions. One solution, if the visual element is important for a study's research questions and ethical considerations allow it, could be to have officials reflect upon photos taken by "typical" stakeholders. On the other hand, if they agree to participate, PDPE may also therefore be an effective strategy for revealing officials' *private* sentiments – something that can be quite challenging via other social sciences methods.

A second risk with the PDPE method is researcher or informant fatigue. We experienced some challenges based on overzealous photographers (e.g. one interview lasted nearly 4 h), consistent with Collier's (1957) assertion that photos can be *too much* of a curiosity. Conversely, it is clearly problematic if participants feel that the project requires them to do an inordinate amount of work. Some participants did not take enough photographs or their photos did not turn out well, while others were reluctant to take photos because of concerns about the time involved with the process.

The likelihood of participants taking photographs of valued places rather than issues of concern in their communities is another potential drawback. This may be a consequence of some concepts simply being difficult to capture in a photograph (Klitzing 2004), or it may be related to a tendency of people to dwell on positive rather than potentially negative aspects of where they live.

Conclusions

These challenges notwithstanding, our experience with PDPE supports the literature's conclusion that photo-elicitation *produces tangible stimuli for "deep" interviews, which produce "thick" data and different types of information than other techniques, while helping to bridge the gap between researcher and subject.*

While we have primarily used PDPE as a discussion generation tool, the photographs themselves also proved useful, as they now serve as concrete representations of each place and the myriad ways in which residents perceive community persistence and change through their physical and social landscapes. Our PDPE experiences suggest that not only can the method can yield highly applicable data, but it can also energise people who participate.

Indeed, our research uncovered a fourth quality that we argue is a benefit unique to PDPE: *it can stimulate engagement in local affairs*. In an era marked by calls for increased appreciation of local knowledge and participatory planning and community development, PDPE seems to have strong potential as a public participation and community learning tool, producing locally grounded data while encouraging stakeholders to get involved.

Acknowledgements

great people from Hitra and Bayfield County. The authors also wish to thank Dr. Roger Hammer and Dr. Johan Fredrik for their work in facilitating our collaboration and the anonymous reviewers for their helpful comments.

Note

1. Sociologist Gouldner (1979) refers to this as the *culture of critical discourse*, which we would assert helps to create an important gulf between researchers and subjects, and planners and constituents in typical cases.

References

Beilin, R., 1998. The captured land: farmer-based photo elicitation linking conservation knowledge to production practice. *Paper presented to the Association of International Agricultural Extension and Education*, University of Arizona, Tucson, May.

Bryman, A., 2008. *Social research methods*. 3rd ed. Oxford University Press.

Burawoy, M., 1991. Introduction. *In*: M. Burawoy, A. Burton, A. Ferguson, K. Fox, J. Gamson, N. Gartrell, L. Hurst, C. Hurzman, L. Salzinger, J. Schiffman, and S. Ui, eds. *Ethnography unbound: power and resistance in the modern metropolis*. Berkeley, CA: University of California Press, 1–27.

Campbell, D.C., 2006. A proposed approach for employing resident perceptions to help define and measure rural character. *Paper presented at the 12th International Symposium on Society and Natural Resources*, Vancouver, BC, 6 June.

Cochrane, A., 1998. Illusions of power: interviewing local elites. *Environment and Planning A*, 30 (12), 2121–2132.

Collier, J. Jr., 1957. Photography in anthropology: a report on two experiments. *American Anthropologist*, New Series, 59 (5), 843–859.

Crisman, P., 2006. Outside the frame: a critical analysis of urban image surveys. *Places: A Forum of Environmental Design*, 18 (3), 38–43.

Crouch, D., 2006. Tourism, consumption and rurality. *In*: P. Cloke, T. Marsden, and P. Mooney, eds. *Handbook of rural studies*. London: Sage Publications Ltd, 355–364.

Elwood, S.A. and Martin, D.G., 2000. "Placing" interviews: location and scales of power in qualitative research. *Professional Geographer*, 52 (4), 649–657.

Flower, L., 2008. *Community literacy and the rhetoric of public engagement*. Carbondale, IL: Southern Illinois University Press.

Foucault, M., 1980. *Power/knowledge: selected interviews and other writings, 1972–1977*. New York: Pantheon Books.

Gibbons, M., *et al.*, 1994. *The new production of knowledge: the dynamics of science and research in contemporary societies*. London: Sage Publications Ltd.

Goe, W.R., Noonan, S., and Thurston, S., 2003. From extraction to amenities: restructuring and (in)conspicuous consumption in Missoula, Montana. *In*: W.W. Falk, M.D. Schulman, and A.R. Tickamyer, eds. *Communities of work: rural restructuring in local and global perspective*. Athens, Greece: Ohio University Press, 104–130.

Gouldner, A.W., 1979. *The future of intellectuals and the rise of the new class*. New York: Oxford University Press.

Harper, D., 1987. *Working knowledge: skill and community in a small shop*. Berkeley: University of California Press.

Harper, D., 2002. Talking about pictures: a case for photo-elicitation. *Visual Studies*, 17 (1), 13–26.

Kezar, A., 2003. Transformational elite interviews: principles and problems. *Qualitative Inquiry*, 9 (3), 295–415.

Klitzing, S.W., 2004. Women living in a homeless shelter: stress, coping, and leisure. *Journal of Leisure Research*, 36 (4), 483–513.

Krannich, R. and Petrzelka, P., 2003. Tourism and natural amenity development: real opportunities? *In*: D. Brown and L. Swanson, eds. *Challenges for rural America in the 21st Century*. University Park: Pennsylvania State University Press, 190–199.

Loeffler, T.A., 2005. Looking deeply in: using photo-elicitation to explore the meanings of outdoor education experiences. *The Journal of Experiential Education*, 27 (3), 343–347.

Luloff, A. and Bridger, J., 2003. Community agency and local development. *In*: D. Brown and L. Swanson, eds. *Challenges for rural America in the 21st Century*. University Park: Pennsylvania State University Press, 203–213.

Macnaghten, P. and Urry, J., 1998. *Contested natures*. London: Sage Publications Ltd.

McDowell, L., 1998. Elites in the City of London: Some methodological considerations. *Environment and Planning A*, 30 (12), 2133–2146.

Neal, S. and Mclaughlin, E., 2009. Researching up? Interviews, emotionality and policy-making elites. *Journal of Social Policy*, 38 (4), 689–707.

Nelessen, A., 1994. *Vision for a new American dream*. Chicago, IL: American Planning Association Press.

Packard, J., 2008. 'I'm gonna show you what it's really like out here': the power and limitation of participatory visual methods. *Visual Studies*, 23 (1), 63–77.

Rose, G., 1997. Situating knowledges: positionality, reflexivities and other tactics. *Progress in Human Geography*, 21 (3), 305–320.

Rose, G., 2001. *Visual methodologies*. London: Sage Publications Ltd.

Sack, R.D., 1997. *Homo geographicus*. Baltimore, MD: Johns Hopkins Press.

Schoenberger, E., 1991. The corporate interview as a research method in economic-geography. *Professional Geographer*, 43 (2), 180–189.

Shandas, V. and Messer, B.W., 2008. Fostering green communities through civic engagement: community-based environmental stewardship in the Portland area. *Journal of the American Planning Association*, 74 (4), 408–418.

Small, S.A. and Uttal, L., 2005. Action-oriented research: strategies for engaged scholarship. *Journal of Marriage and Family*, 67 (4), 936–948.

Smith, K.E., 2006. Problematising power relations in "elite" interviews. *Geoforum*, 37 (4), 643–653.

Stedman, R.C., *et al.*, 2005. Resident-employed photography as a tool for understanding attachment to high amenity places. *In*: G.P. Green, S.C. Deller, and D.W. Marcouiller, eds. *Amenities and rural development: theory, methods, and public policy*. Northhampton, MA: Edward Elgar Publishing, 197–215.

Stewart, W.P. and Floyd, M.F., 2004. Visualizing leisure. *Journal of Leisure Research*, 36 (4), 445–460.

Urry, J., 1990. *The tourist gaze: leisure and travel in contemporary societies*. London: Sage Publications Ltd.

Urry, J., 1995. *Consuming places*. London: Routledge.