

# **Incorporating local knowledge into urban environmental research: the photo-survey method**

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## **Abstract**

As multi-disciplinary work thrives, innovative methods of data collection, measurement and evaluation are slowly emerging within many disciplines. Within this paper we present an original participatory approach for incorporating residents' views of local sustainability issues into urban environmental research. We successfully combined self-directed photography with log-sheets as prompts for semi-structured interviews in the form of a 'photo-survey'. The photo-survey was one aspect of a multi-method approach incorporating qualitative and quantitative techniques. It provided an excellent tool to engage residents and to understand the experiences of those living in an inner city area. A background to the method is explained, alongside the findings from a study conducted in central London. Through involving local people in this way we were able to gather a rich, detailed set of data illustrating the huge variations in the experiences of residents living within the same local area. The participatory nature of the method also brought many benefits to the research process, noticeably a change in the dynamic between the researcher and the participant. The resulting dataset is multi-format and novel ways of accessing and using this resource to gain greater understanding of various environmental sustainability issues are also being developed within this project. However, the study also raised some important considerations for future work undertaken with this method and with using photographs as a set of data, especially how the tool can be used within wider participatory processes.

Key words: self-directed photography; participatory research methods, photo-survey; local sustainability; urban environmental research

## **1. Introduction**

As multi-disciplinary work thrives, innovative methods of data collection, measurement and evaluation are slowly emerging within many disciplines. Dynamic, creative and engaging qualitative methodological styles are being developed and used; Latham (2003), Kindon (2003) and Crang (2003) provide excellent examples of how methodologies can be pushed, moulded and experimented with. Social research has primarily been based on verbal methods, with the dominance of and reliance on certain techniques, such as interviews and focus groups. There is no doubt these established methods are valuable for obtaining information and developing an understanding of society, however different methodological styles may enable the acquisition of different types of knowledge and understanding (Dewsbury 2003). Rather than suggest a complete overthrow of established methodologies, a dialogue can be created between conventional methods and novel approaches; methods can, and should, be made to 'dance a little' Latham (2003 p.2000).

This paper describes a multi-disciplinary research project in which we have developed a participatory research method to capture and analyse local knowledge on urban environmental issues. We successfully combined the visual technique of self-directed photography with traditional qualitative methods (log-sheets and interviews) to form a 'photo-survey'. The photo-survey was one aspect of a multi-method approach incorporating qualitative and quantitative techniques to assess the quality of an urban environment (Clerkenwell, London). By involving the research participants through these methods we aimed to diffuse any existing power dynamics in the research process - the participant was given the freedom to take photographs of whatever they wanted at times and locations convenient to them, raising issues that were important to them. This paper reflects the use of this methodological approach, however it is first necessary to outline the theoretical background to using photography as a research method.

## **2. A background to photography**

Photography has been used as a research tool throughout a range of disciplines (anthropology, psychology, sociology and human, cultural and urban geography) and at a range of scales to engage diverse individuals and communities. However, despite its utility in specific cases, it is still, like many visual methods, a marginalised, fragmented, under-utilised methodological tool. The history and evolution of visual methods has been outlined by many authors, and may help to explain why visual approaches have rested on the periphery of many disciplines. Harper (1998), Edwards (1992) and Banks (2001) all provide thorough accounts of the historic and theoretical framework of visual methods. During the 1960's the sub-disciplines of visual sociology and visual anthropology emerged due to the growing use of photography, films, maps and diagrams in social research. A milestone study by Mead and Bateson (1942) led the way for visual anthropology; they used a process of photo-observation, combining images and text to share their insight into the cultural practices of the Balinese. Other studies followed this approach, yet these initial studies seemed to present a partial view of the subject(s) highlighting more about the academic 'gaze'. Collier (1967) and Becker (1974) present excellent guidelines for using visual methods, however despite these landmark essays, exploring the visual through the visual has remained on the edge of most disciplines. Within Prosser's (1998) comprehensive overview of image-based research he proposes that its isolation has roots in the influence of quantitative epistemology and an empiricist view of science on qualitative research. Whether this is the case, using visual methods is inherently problematic due to their complex nature and this in turn may deter usage.

Photographs provide a snap shot of reality; the knowledge a photograph shows is partial and situational, 'recording the surface, rather than the depth' (Harper 1998 p.25). A photograph is both socially and technically constructed, it imparts an objective view of the world, which can be interpreted subjectively (and differently) by many, as Grady (2001 p.84) points out 'images can represent complex subjective processes in extraordinary objective form'. This concern is emphasised by many authors, including Sontag (2001) who illustrates that photographs are evidence not only of what's there, but also of what an individual sees; they are not just a record, but an evaluation of the world. Consequently photographic images can tell us a lot about social and power relations and practices. Power structures in the regime of knowledge have been uncovered by geographers examining notions of vision and gaze. Some feel that the presence of a camera can reinforce existing power struggles between the observed/observer and the researched/researcher (Rose 2001). This is a possible explanation for the 'disenchantment with visual approaches' within the field of geography (Crang 2003 p.500). Postmodern, and

participatory, thought encourages the diffusion of 'boundaries' between the researched and the researcher, and calls for a rethink of the representation of others in data collection and research analytical methods. A collaborate approach is desired, where both the researcher and the researched are co-operatively involved in the process of knowledge production. Certain photographic methods can achieve this goal. The technique of self-directed or auto- photography, where the research participant (not the researcher) takes the photographs, certainly gives rise to an opportunity for any existing power structures or boundaries to be broken down between the researched and the researcher.

A review of studies using the technique of self-directed photography has shown that it has been applied predominately and successfully with young people, but has yet to be employed as widely in studies comprising of adults (Aiken and Wingate 1993, Tunstall *et al.* 2004 Dodman 2003 and Yamashita 2002). Support for the method comes from those who have used it, including Markwell (2000), who argues the case for self-directed photography within the human geography field, stating; 'it narrows the epistemological gap between the lived experiences of those being studied and the subsequent interpretation by the researcher' (p.97). Self-directed photography can therefore help prevent many of the problems associated with representing the viewpoint of another person. Citing Ziller and Smith (1977) Dodman (2003 p.294) points out 'the camera is able to document the subject's perceptual orientation with a minimum of training and without the disadvantages of the usual verbal reporting techniques'. Another reported strength of self-directed photography is the power and control the method gives to the subject (as they are the one who decides what and when to photograph). This unique aspect has appealed to some researchers who have noted that the camera can empower the subject, promoting self-esteem, autonomy and competence (see Wang *et al.* 1996 who used the photo novella approach with Chinese village women). Hence, self-directed photography has the potential to bring a number of advantages to the research process.

### **3. London, Clerkenwell: urban voices and images**

The area targeted for this study was a neighbourhood in the Ward of Clerkenwell, to the north east of central London, England. It is a mixed-use area, with housing located near the main daytime and night-time commercial and leisure activities. Within the area there are a variety of amenities (shops, offices, entertainment facilities) located within close proximity to residential areas, which themselves are varied. Thirty-two residents from Clerkenwell were involved in the photo-survey and subsequently interviewed. They were also involved in an indoor pollution monitoring campaign and a sound-walk as part of this project. Approximately two weeks before the scheduled interview dates a disposable camera (27-exposure, 35mm film, 400 ISO with flash), a log-sheet, prepaid envelope and instruction letter were sent to each participant. Participants were asked to take photographs of their local area, noting the time, date, location and a short description of the photograph on a log-sheet provided. We did not want to be too prescriptive in telling participants what to photograph, so the instructions simply stated: 'we would like you to take photos that record both the positive and negative aspects of your area. Please bear in mind how things sound and smell when taking the photos as well as what they look like'. This gave participants freedom to take photographs of whatever they wanted at times and locations convenient to themselves. Once the photographs were developed a semi-structured interview was conducted with each participant. The interview was based upon the participants' photographs and a number of general questions about the urban environment, made specific to the

resident's locality. Participants were asked to refer to their photos at any stage during the interview.

In total six hundred and eighty photographs were taken by the participants (an average of twenty-four per participant). The photographs, interviews and log sheets provided a rich, detailed set of data for analysis. Previous studies illustrate that photographs can be analysed and interpreted in a number of ways, from a range of perspectives. Due to the large number of photographs and the supporting interviews and log sheets, a mixed analytical approach was deemed suitable for this study. We combined a hermeneutic approach, based on the narrative of the photograph from the perspective of the photographer (the participant), and a contents analysis method developed from the data itself similar to that taken by Lutz and Collins (1993). Each photograph was subsequently coded and mapped within GIS (geographical information systems) for analysis. Participants captured social, economic and environmental aspects of urban living, all of which appear to have vital roles in influencing the way they perceive their local environment. These three aspects are inherently interlinked, and the photographs taken indicate that residents view their local area and its environment in this holistic way. The diverse range of photographs taken also illustrates that there is a huge variation in experiences of residents living within the same local area. Novel ways to access and use the photographs to gain an understanding of environmental sustainability are also being developed within this project, however, this paper reflects on the methodological process itself, later papers will focus on results and analysis.

#### **4. Methodological reflections**

Using the photo-survey method brought noticeable benefits to the research process. The method transformed the relationship and dynamics between the participant and the researcher, and enhanced the actual 'data' collected. These recognised changes are discussed within this section.

##### **4.1 Rapport**

With the camera the participant became the voyager, in taking the photographs and completing the log-sheet, the participant immediately let the researcher into their life; allowing themselves to be followed around their neighbourhood during the process of recording and inscribing local knowledge. This collaborative approach enabled an interesting relationship to be formed: a rapport was built between the participant and the researcher primarily through a shared connection to the photographs. The following quote by one participant, named 'Ben' illustrates this (see Figure 1 for the corresponding photograph):

*Ben: And then I took a picture of the International Magic Shop, which is just up, up on Clerkenwell Road. And I had never spotted before, it was only cause doing this I saw it. And it's hilarious, I went in and they were having the most amazing conversations in there about/ people were talking about you know getting a, trying to get a video about levitation and, and how/ you know someone was asking about videos for levitation and about you know pulling off stunts with ropes and things. And it made me think again there's this vibrancy to the area there's so much going on.*

Ben reports on an experience he encountered whilst undertaking the photo-survey, as the researcher requested Ben to undertake the survey (instigating this process), they both share a connection to Ben's experience which was captured by so

wonderfully by the photograph in Figure 1. This relationship-building is highlighted further by another quote, by a participant named 'David', see photograph in Figure 2:

David: *They had, they had a Saturday bazaar, a Christmas Bazaar. Is that how you pronounce it? Yeah, at the Holy Redeemer Church. And I just went in, paid my 20p to get in, went to the back room, to the kitchen where they've got coffee and mince pies. Yeah. And one of the ladies who was serving there recognised me, she also lives in the square, so we had a chat. And I told her what I was doing with the camera and she laughed. And then came back.*



Figure 1: Photograph of "international magic shop" (left)

Figure 2: Photograph of "Christmas Bazaar" (above)

David reports on an encounter (a conversation) that happened to him whilst he was undertaking the photo-survey, and in doing so establishes a connection between him and the researcher. Many participants recognised that it was their involvement in the research project that led to certain experiences, which were subsequently documented so well by the photographs. This relationship helped to develop a rapport between the participant and the researcher.

## 4.2 Shift in roles

Each participant guided and shaped their interview through the photographs they took, determining the topics and concepts for discussion. It was evident that the photo-survey procedure enabled a shift in the traditional interview roles between the interviewer and interviewee. The following extract from an interview with 'Gareth' referring to the photograph in Figure 3, demonstrates this:

Gareth: *And, and outside Farringdon Station, I mean you, you can't quite see it from there, but it's basically that all these/ all this street furniture here, and when we walked through there weren't many people coming through then, but it's really difficult to navigate your way through there in the mornings, and they've got all these ridiculous boxes and there are some old phone booths which are now derelict. And in the morning it's, it's mayhem down there so everyone walks in the street and then and then you know gets nearly run over.*

Gareth had taken the photograph in Figure 3 to illustrate a specific point, in doing so he had set the agenda for the interview. The photographs provided every participant the opportunity to do this, due to the open instructions given to each participant at the start of the project. This 'freedom' encouraged the breakdown of boundaries between the researcher and the researched. Despite this, it is important to note that the interviewer did view each participant's photographs and log sheet prior to their interview. This preparation was considered essential to ensure the interviewer had some understanding of the issues likely to be raised by the participant.



Figure 3: Photograph of "street furniture outside Farringdon Station"

### 4.3 Confidence

Within this study it seemed that the presence of the photographs gave the participants confidence to express their thoughts, feelings and beliefs about certain subjects. On a number of occasions participants used photographs to illustrate points and confirm feelings. Frequent comments to the interviewer such as '*look you can see it is disgusting*', '*you can see how beautiful it is*' and '*you can see what I mean*', highlight participants reliance on photographs to support claims and gain recognition. Thus, it was evident that the photographs enabled participants to clearly articulate their feelings about their local area and assign meanings to specific places, issues, buildings and streets; a powerful tool for a research method.

### 4.4 Access to detailed local knowledge

Another noticeable benefit to the research process relates to the information gained from the interview itself. The use of photographs during the interview possibly led to the expression of thoughts and comments that would not be accessed through answering the semi-structured interview questions alone. The quote below by 'Julie', talking about her photograph shown in Figure 4, illustrates this. She refers to a specific unique, quirky feature of her neighbourhood:

Julie: *And then number ten is the Love Bus which I/ I don't/ and it goes to Glastonbury and things like that, but I don't really know who owns it or anything at all, but it's just a rather noticeable feature of the area. [Photo 10]*

Interviewer: *And so where is that parked?*

Julie: *Always, always in Myddelton Square.*



Interviewer: *Really?*

Julie: *Yes, yes. I just imagine it's someone with terribly rich parents who live in Myddelton Square and they're just, you know this is the, this is the children going off to rock festivals the whole time, but I've no idea at all, it could be anything you know.*



Figure 4: Photograph of "the love bus".

The quote below by 'Stephen', referring to the photograph in Figure 5, illustrates the way detailed local knowledge was captured through the photographs:

Stephen: *And that pub there used to be a nice welcome pub. Was Clerkenwell Tavern, and then it became the Penny Black. It was famous as the Penny Black because of the post office right opposite. These people taking it over they've matt blacked it, all the front matt blacked it. Look you can see how dull it is. And the sign, a dollar sign bar, \$ Bar. What's it mean to local people.*

Interviewer: *Did you yourself used to go to it?*

Stephen: *Oh yea with the post office. All the clubs around here with the post office, oh loved it.*



Figure 5: Photograph of "the Penny Black pub".

The semi-structured interview consisted of a series of open questions about the residents' experience of city centre living. We did not specifically ask about historical or unique features of the environment but found that the photographs enabled us to access detailed local knowledge on these subjects, and many others, which may have otherwise been missed by undertaking the interview alone.

## 5. Concluding remarks

This study successfully combined an innovative, novel visual technique (self-directed photography) with traditional qualitative methods (log-sheets and interviews) in the form of a 'photo-survey'. The methods complimented each other extremely well, enabling a rich, detailed set of data to be collected. Photography was not only used to document the urban environment, but also as a method to encourage participation within the research process. The method transformed the relationship and dynamics between the participant and the researcher, and enhanced the actual 'data' collected. Overwhelmingly positive feedback was obtained from those involved, one participant stated that the method '*helped them to see their area in a different light*'. This idea has recently been dissected by the author Alain de Botton, who decided to 'travel' around his local area, in doing so he describes how his 'neighbourhood did not just acquire people and defined buildings, it began to collect ideas' (p.252). Previously 'walks along the street had been excised of any attentiveness to beauty, or any associative thoughts, any sense of wonder or gratitude, any philosophical digressions sparked by visual elements' (p.251). For de Botton travelling around his local area released 'latent layers of value' - evoking the simple idea which this study touches upon to 'notice what we have already seen' (de Botton 2002 p. 254).

Within this study the methodology was used for one-to-one situations (between a researcher and a participant), but there are certainly possibilities for use within wider participatory processes and approaches. There is potential for the method to be used as a tool for residents to highlight and communicate concerns, wishes and positive aspects of their local area to fellow residents or decision makers (e.g. local authorities, planners, policy makers, community organisations). It is possible to adapt the method for group situations, however, the methodology needs to be written in a language that makes it usable by local councils or community groups and in a way that can be adapted for using at a variety of levels (e.g. with adults or children, or related to a specific built-developments or general topics).

Despite the method's utility and adaptability some methodological limitations are evident. For instance, it is naive to think that all urban issues can be represented and understood through one technique alone. Some aspects of city living can be sensitive (e.g. crime, anti-social behaviour), personal (e.g. family, friends) or non-visual in nature (noise, air pollution) and therefore not 'captured' by this visual method. For instance, one participant spoke in-depth about young people 'hanging around' in their local area, they also stated: '*I tried to take photos of teenagers in the park smoking drugs and a fight between gangs ... it was impossible to get close enough to capture the subject without endangering my own well being*'. Combining methodologies can overcome this and enable the triangulation of information gathered. Using photographs as a set of data can also be problematic due to the variations in interpretations for coding and subsequent analysis. A photograph provides data that is rich in detail; a photograph can contain a number of features, which means the main subject of the photograph is not always immediately obvious. Presumptions about contents and meanings of visual images are easy to make. Thus, it is essential to identify who is doing the interpretation – the



photographer or the researcher, as the views of each will be significantly different. Nevertheless, combining methodologies can overcome these limitations and enable the triangulation of information gathered.

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