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Photography in architectural education:
A tool for assessing social aspects of the built environment

Selay Yurtkuran Tok[a] *, Ian Kaplan[b], Yavuz Taneli[a]

[a]Uludag University, Department of Architecture, Görükle, Bursa 16059, Turkey
[b]Leeds Metropolitan University, Carnegie Faculty of Sport and Education, Leeds, UK

Abstract

Architectural undergraduate education uses visual methods within both teaching and design processes. One method, photography, is mostly used for illustrative documentation. However, using photography more creatively offers rich potential for student engagement with the social environments they work within. In this study, students digitally photographed the built environment of Karaköy, Istanbul and went through a process of keywording and interpretation of their photographs. The results function in a documentary capacity, but also provide insights into the students' social understandings of the built environment, which, in the context of architectural teaching and learning, has value for both students and instructors.
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1. Introduction

Architectural undergraduate education uses visual methods such as drawing/sketching, photography and computer modeling as a language within both teaching and design processes. Photography, in particular, has great potential, as a method for students to represent their understandings of the built environment, however is most often used as a form of illustrative documentation of material aspects of the built environment, rather than as a stimulus for critical interpretation or analysis of underlying social issues. Using photography more creatively within architectural design courses offers rich potential for student engagement with the social environment they work within and provides a means for them to assess such spaces.

This paper discusses a study carried out in 2009 with undergraduate architecture students in Uludag University, Department of Architecture, Bursa, Turkey. The study builds on the researchers' previous work using photography in combination with other visual methods to 'read' a village in Turkey in the context of 'place memory'. Since the earlier study proved promising, this current research is premised on the idea that photography is an effective method of communication in architectural education in terms of enabling students to represent their social awareness of the

* Selay Yurtkuran Tok. Tel.: +90-224-294-2142; fax: +90-224-294-2142
E-mail address: selayyurtkuran@uludag.edu.tr

built environment. Social awareness, in this sense, includes understandings of social, behavioral, political and emotional dimensions relating to the photograph and the space it represents.

Although the current study generated a large body of images and commentary, for the purposes of this paper we have selected a small sample in order to demonstrate how the methodology works and to consider its potential within the context of architecture education. Specifically, we focus on two photographic images (Figure 2, 3) and accompanying keywording / interpretation from the photographer and five other student 'observers' of the image (Table 1, 2).

1.1. Using photography to assess the built environment – 'reading' cities, 'reading' photographs

The potential for photographs to stimulate discursive reflection is known and increasingly utilized in the social science fields of anthropology (Collier & Collier, 1986; Harper, 2002), psychology (Ziller, 1977; Cronin, 1998) health (and general) education (Wang & Burris, 1994; Ewald & Lightfoot, 2001; Kaplan, 2008). However, ironically, in more traditionally visually oriented fields, including architecture, photography is used primarily as a literal form of documentary illustration. To a certain extent, it is not surprising that this is the case, as architecture is primarily concerned with photography as a tool for optical realist recording as a means of documenting the immediate material environment. In this way, photography aids design processes without being used as a stimulus for deep interpretation and reflection. The only exception may be areas of behavioral research that overlap with the field of architecture, where preference studies require users to evaluate built environments through static or dynamic photographic images (Heft & Nasar, 2000). We suggest that photography can be used more fully in the context of architecture education through an interpretive process of 'reading' images, a process which fits within a paradigm of visual literacy, but moves beyond a simplistic, semiotic 'decoding' of imagery (Elkins, 2003).

We consider 'reading' in this context to be a process of interpretation concerned with complexity, which takes account of multiple layers of meaning including: the material, the social, behavioral, temporal (Zeisel, 1986), and cultural (Rapoport, 1990). This process is culturally specific and culturally mediated (Kress & van Leeuwen, 1996; Banks & Morphy, 1997; Rose, 2001). Although neither cityscapes, nor photographs of cityscapes can be 'read' in the sense that written text is read (Rose, *ibid*), here 'reading' refers to a process of interpretation and elicitation (Harper, 2002). That is, an intentional effort (both inductive and deductive) to comprehend the sensory experience represented in the photo coupled with an awareness and accounting of the feelings, thoughts, memories and emotions which are stimulated through engaging with that experience.

2. Methods

In the study, students worked individually using digital photography to consider the built environment of Karaköy, Istanbul. The participants were asked to take a series of photographs at different times over the course of one day and were encouraged to use a 'snapshot' approach to photography, that is, to take their photos quickly in a direct response to their engagement with the area and without spending too much time on composition. This approach has both practical and theoretical implications (Figure 1).

Participants were asked to choose one image among the set of photographs they produced during the initial exercise and interpreted 'the' photo in terms of their intentions in taking it and understandings of what it depicts (Figure 2, 3; Table 1,2). Alongside narrative descriptions, participant photographers also generated keywords to describe this image. It was then shared with 20 other participant observers in the class, themselves also participant photographers, who were asked to interpret and keyword the image without knowledge of the photographer's identity, interpretations, or keywording. All participants shared a familiarity of the Karaköy area, having studied the area through activities as part of the current studio class, however, it was important that the photographs were taken during a single day, within a given week, and interpreted individually without knowledge of each others' interpretations in order to ascertain whether shared familiarity of the area would lead to shared interpretations (Figure 1).

To facilitate interpretations of the photographs, participants were asked to complete a form with a series of open-ended questions (Table 1, 2). Basic guidelines for 'reading' the built environment were discussed in class prior to this activity; however, the concept of 'reading' photographs was introduced later, prior to the interpretation activity. Participants were asked to 'read' and describe each image, then to choose five keywords and list them in priority

order. Finally, observers were asked to consider why they thought the photographer had chosen a particular image as 'the' photo to share with the class (Figure 1).
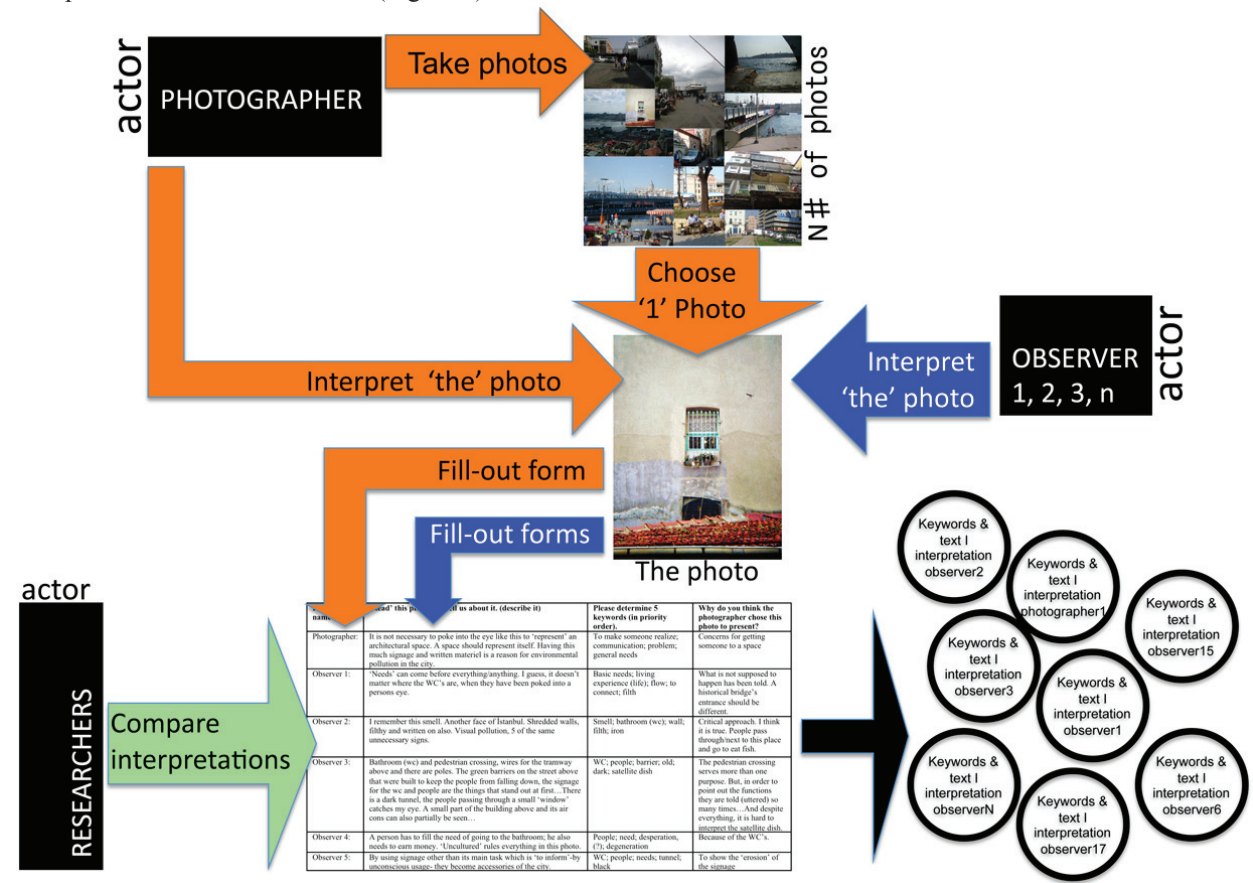

Figure 1. Visual description of the photo evaluation process as it applies to architectural education.

Finally, interpretations and keywords produced by both the photographers and the observers were tabulated and evaluated by the researchers (Figure 1).

Keywording is a selective process not unrelated to the process of choosing particular images to share and discuss. In this sense keywording is a akin to a process of framing which has value in narrowing down the number of available features by '…selecting for attention a few salient features and relations from what would otherwise be an overwhelmingly complex reality' (Schön in Ylirisku, *et al,* 2009:2).

3. Findings and Discussion

One of the most interesting aspects of the students' photographs and interpretations is not so much that they addressed either material, or social/behavioral factors, but that they often addressed these together, uncovering multiple layers of meaning in the sites they refer to. In the following discussion we display two of the most illustrative photographs picked out of a total of 16. A corresponding table, which includes the photographers', and five other random participant observers' (out of a total of 20 participant observers) interpretation and keywording follow the photo.

Figure 2. Photo 1 taken by a participant photographer / observer in the Karaköy area.

Table 1. Interpretation of Photo 1 by photographer and observer participants.

Interpreter	Written interpretations provided as a response to the question: '-Read- this photo and tell us about it'.	Keywords provided by the interpreter in order of importance.	Answers provided as a response to the question: 'Why do you think the photographer chose this photo to present among the other photos?'
Photographer	*It is not necessary to "poke into the eye" like this to 'represent' an architectural space. A space should represent itself. Having this much signage, and written material are reasons for environmental pollution.*	*Make someone aware, communication problem, general needs*	*Concerns for getting someone to a space*
Observer 1	*'Needs' can come before everything/anything. I guess, it doesn't matter where the WC's are, when they have been poked into a person's eye.*	*Basic needs, living experience (life), flow, to connect, filth*	*What is not supposed to happen has been told? A historical bridge's vicinity should be different.*
Observer 2	*I remember this smell. Another face of Istanbul. Crumbled walls, filthy and written on, as well. Visual pollution, five same unnecessary signs.*	*Smell, bathroom (WC), wall, filth, iron (as material)*	*Critical approach. I think it is true. People pass through/by this place and go eat fish.*
Observer 3	*Bathroom (WC) and pedestrian crossing, wires for the tramway above and there are poles. The green barriers on the above street that were built to keep the people from falling down, the signage for the WC and people are the things that stand out at first…There is a dark tunnel, people passing through a small 'window' catch my eye…*	*WC-people-barrier-old-dark-satellite dish*	*The pedestrian crossing serves more than one purpose. But, in order to point out the functions they are told (uttered) so many times…And despite everything, it is hard to interpret the satellite dish.*
Observer 4	*A person has to fulfil the need to go to the bathroom; he also needs to earn money. 'Non-culture' is dominant in everything in the photo.*	*People, desperation, degeneration*	*Because of the WC's.*
Observer 5	*By using signage other than its main task which is 'to inform'-by unconscious usage-they became the accessories of the city.*	*WC, people, needs, tunnel, black*	*To show the 'erosion' of the signage..*

Photo 1 provides an example of what might be described as a 'problem' within the built environment, at least in terms of the students' response to the image. The photographer and all but one observer are concerned with the (over) usage of the 'WC' signage and perceived degradation of a historic site is raised as an issue. The interpretations suggest a shared understanding of the image amongst the students. Although a literal and descriptive approach to the photo is evident in some of the commentary, the interpretations also move beyond this and it is clear that the image has evoked quite emotional responses, which touch on memory and the senses, smell in particular. Students' interpretations of the photo suggest a discomfort, or struggle with the environment as depicted in the image and also the sense that, that for some, the image has triggered their memory of the place as they experienced it firsthand. It is the peculiar quality of a photograph to be (in semiotic terms) both sign and signifier, allowing for the students to both respond to the photo and to their own memories of the place, which the photo depicts (Barthes, 1981). The photo and interpretations highlight a typical architectural dilemma of how to reconcile human material needs with aesthetic considerations.

Figure 3. Photo 2 taken by a participant photographer / observer in the Karaköy area.

Table 2. Interpretation of photo 2 by photographer and observers.

Interpreter	Written interpretations provided as a response to the question: '-Read- this photo and tell us about it'.	Keywords provided by the interpreter in order of importance	Answers provided as a response to the question: 'Why do you think the photographer chose this photo to present among the other photos?'
Photographer / Observer 1	*'Adjoin.' To belong to the existing order, in better terms complexity. To clarify the line between the needs and what is supposed to be.*	*Order, chaos, history, transportation, life*	*I wanted to tell everything that I saw, got affected from that are both valuable and troubled, in Karaköy.*
Observer 2	*There is a surrounded building that is being constructed. There are separators. But everyone is doing his own task. Complex.*	*People, complexity, ship, fish, task*	*She/he tried to tell everything in the photo.*
Observer 3	*The ship is docked, just ahead people are fishing. The name of the 'Marine Building' and the word 'TOKİ'* catches the eye. There are 'borders' of the construction site and there is a person who is sitting comfortably in front of it, without worry. The crowd…*	*The Marine Building - The TOKİ sign and its borders – Crowd – Ship - Clouds*	*Construction, the crowd, ship, fisherman…All are a complexity, in fact they are in their own order.*
Observer 4	*Miserable people gathered together in front of TOKİ*, the rich are in the boat.*	*Despair, helplessness, government, architecture, money*	*I guess he/she tried to convey the crowdedness and the liveliness but she missed nicer and more important things.*
Observer 5	*People below the picture are the pedestrians circulating. 'cruiser', buildings and the air (sky) show the section of the area.*	*Circulation, Building, ship, TOKİ*, Sea*	*To show the existing pedestrian circulation and its relation to the buildings….*
Observer 6	*Karaköy's limited shore that is used, and people. I guess there isn't anywhere left that TOKİ didn't put its hands on. People who are carrying out their everyday routine (life) despite everything*	*TOKİ*, customs' wall, people, ship (plural), limited shore*	*She/he might have wanted to tell the complexity of the area.*

*note – TOKI ('Toplu Konut Idaresi'-Housing Development Administration) is a controversial government subsidised housing association and construction firm which provides cheap housing, however critics accuse the government of using cronyism to fill TOKI construction jobs and for using TOKI as a populous tool to generate votes for the government at taxpayer expense.

Through their photographs and commentary, the students have considered complex sites with multiple dimensions and possible interpretations. As the interpretations of Photo 2 suggest, Karaköy is an area in which the chaotic intersection of history, politics and human activity is manifest in the built environment. A striking element in the interpretation accompanying Photo 2 is the accounting of political and class difference dimensions. It is interesting however that only several of the student participants explicitly pick up on the political significance of the photo, as they see it. The more knowledge one has of the cultural contexts surrounding a photo, the more complex a 'reading' of that image may be, but a lack of cultural or political awareness doesn't preclude interpretation. The students with strong awareness of (and interest in) their country's issues and those with particular political views discussed the significance of the TOKİ sign, whereas others dealt with other aspects of the photo, such as the fishermen. Inevitably, we bring our own personal and cultural baggage into our interpretation of photographs and shared understandings of shared places cannot be taken for granted (Kaplan & Howes, 2004).

4. Conclusion and Suggestions for Future Research

The few examples given here begin to scratch the surface of a rich method of working with architecture students, which can illuminate patterns, commonalities and dissonances within social understandings of the built environment. Although it is important that there was intentionality behind the taking of the students' photographs, the 'snapshot' approach to photography adds an element of randomness and serendipity to what appears in the final image and in a sense this reflects the complexity of the environment in which the students worked in. In comparison, in a more traditional approach in architecture education for engaging with the built environment, such as sketching, (arguably) all elements of a sketch are intentional, that is they don't exist without the artist explicitly including them. The speed of the process of 'snapshot' photography also means that projects of this type can be completed quickly and without interrupting, too much, the students' kinaesthetic engagement with the environment, that is their experience of moving through it. The photographic approach outlined here provides a platform for sharing perspectives and while not providing an objective representation of the reality of the built environment (as if that were possible) does offer a set of artefacts, which can be returned to and reflected on longitudinally.

For the architecture instructor, this methodology can provide unique insights into the students' perspectives, what they bring to, what they take and what they want from the built environment. The layering of students' perspectives itself suggests the beginnings of a conversation around the images and ideally the images and commentary can be used more explicitly for the purposes of studio discussion. Whilst the study as outlined here does not attempt to draw definitive conclusions about the method discussed, or the built environment, it does offer suggestions for a way of working, which is quite flexible and adaptable to different teaching and learning contexts. Possible future developments could involve lay members of the community in making and interpreting photographs of their built environments, perhaps alongside students and professionals. Photography coupled with a process of interpretation can be a useful tool in nurturing a new generation of architects to be both materially and socially engaged.

References

Banks. M. & Morphy, H. (Eds.) (1997) *Rethinking Visual Anthropology*. New Haven: Yale University Press.

Barthes, R. (1981) *Camera Lucida-Reflections on Photography*. London: Fontana Paperbacks.

Collier, J. & Collier, M. (1986) *Visual Anthropology: Photography as a Research Method.* New Mexico: University of New Mexico Press.

Cronin, Ó. (1998) Psychology and Photographic Theory, Prosser J. (Ed.) *Image-Based Research: A Sourcebook for Qualitative Researchers*. London: RoutledgeFalmer.

Elkins, J. (2003) *Visual Studies: A Skeptical Introduction*. New York: Routledge.

Ewald, W. & Lightfoot, A. (2001) *I Wanna Take Me a Picture- Teaching Photography and Writing to Children.* Boston: Center for Documentary Studies in association with Beacon Press.

Harper, D. (2002) Talking about pictures: a case for photo elicitation. *Visual Studies*, Vol. 17, No 1. 13-26.

Heft, H. & Nasar, J. L. (2000) Evaluating environmental scenes using dynamic versus static displays. *Environment & Behavior.* 32 (3). 301-322.

Kaplan, I. and Howes, A. (2004) ''Seeing Through Different Eyes': exploring the value of participative research using images in schools' *Cambridge Journal of Education* 34(2).

Kaplan, I. (2008) Ethics and visual research – Being 'seen' being 'heard' engaging with students on the margins of education through participatory photography, in Thomson, P. (ed.) Doing Visual Research with Children and Young People. London: Routledge.

Kress, G. & van Leeuwen, T. (1996) *Reading Images – The Grammer of Visual Design.* Oxon: Routledge. (Preface to 2nd edition).

Rapoport, A. (1990) *The Meaning of the Built Environment: A Nonverbal Communication Approach* (updated edition). University of Arizona Press.

Rose, G. (2001) *Visual Methodologies*. London: Sage.

Wang, C. & Burris, M. (1994) Empowerment through Photovoice: Portraits of Participation. *Health Education Quarterly.* 21(2).

Ylirisku, S., Halttunen, V., Nuojua, J. & Juustila, A. (2009) Framing Design in the Third Paradigm, *CHI*. 1-10.

Zeisel, J. (1986) *Inquiry by design: tools for environment-behavior research* (reprint). Cambridge: Cambridge University Press, (Chapter 7-8).

Ziller, R. & Smith, D. (1977) A Phenomonological Utilization of Photographs. *Journal of Phenomonological Psychology,* 7 (2). 172-181.