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### **Visual Seduction: The Ambiguity of Visual Images in PPGIS**

**Abstract:** Visual images have long played an important role in participatory planning processes. One frequently used technique is to have residents take photographs of their community depicting features they like and want to protect and features they dislike and want to change. The primary benefit of this approach lies in its ability to link residents' appraisals with actions directed at either preserving or transforming particular community attributes. In addition, such images are easily linked to geographic features and are therefore an important component of many PPGIS projects. In the absence of explanatory text, however, images convey vague or confusing messages. Providing a platform for marginalized voices is one critical goal of PPGIS, but this aim may be undermined by over-reliance on images whose meaning is ambiguous. PPGIS projects can overcome this obstacle by allowing community members to provide narrative explanations for their images. This paper presents examples from ongoing participatory planning projects in Harrisburg, Pennsylvania and on the Red Cliff Reservation in Wisconsin. In these cases, participation plays an important role in the community planning process where the goal was to incorporate the voices from all members of the community. In part, this work demonstrates the usefulness of translating familiar planning techniques into a GIS framework, but it also highlights some of the obstacles to meaningful public participation.

## INTRODUCTION

Visual images are seductive, particularly within the field of participatory planning and community design. They gloss the covers of planning reports and fill website pages. In the face of rapid urban development, one good visual image of, say, a small dairy farm or a historic site or children playing in a green field, seems to convey an unambiguous message about protecting family farms or preserving community heritage or the importance of urban open spaces. Especially when photographs are produced by participants and published in reports or websites, such images are often used to represent community values around which there is broad consensus. But in the absence of other information, what do we really know about the intended meaning of any particular image or the degree of consensus on its putative meaning?

Visual images are seductive, in part, because their meanings are unstable, a condition which allows different viewers to project their own (sometimes conflicting) meanings onto the same image. At the same time, some images—especially photographs—seem to present self-evident truths. Vision is a privileged way of knowing the world and a photograph appears to capture an instantly recognizable “fact” about the world in which we live. It is precisely this quality of embodying multiple meanings, while simultaneously presenting a single unambiguous truth, which makes visual images so seductive. *And so problematic.*

Images are important qualitative data. Participatory techniques, such as those employed in visioning exercises, have long included photographic methods of collecting qualitative data from participants (EPA 2002). Photographs, drawings and sketch maps can be used to illustrate residents’ affective appraisals of their neighborhoods, connect community desires to specific actions and link vague ideas (like neighborhood beautification) to specific places on the ground. Digital photography, furthermore, produces images easily incorporated into GIS. Although qualitative data are somewhat problematic in traditional approaches to GIS—for example, in its primer on GIS and environmental visioning, the EPA warns that interpretations of qualitative data (such as photographs) are subjective and should be approached with caution (EPA 2000, p. 26)—in public participation GIS, qualitative data reveal a great deal about community visions for their collective future.

Much of the recent work on visual image interpretation has emerged from the growing field of Visual Culture, where researchers from a wide variety of disciplines are concerned with understanding “visual forms as an agency to advance various social, cultural, political, and educational ends” (Sullivan 2003, 196). The overarching goal of participatory planning processes, including PPGIS, is to widen the circle of voices contributing to planning decisions aimed at effecting positive community change. Images provide community participants a means of adding their voice, their *visions*, to the GIS

products of participatory planning projects. Understanding how images work helps explain their problematic position in PPGIS, while also providing guidance for their expanded and improved use.

## HOW IMAGES WORK

Recent work by the geographer Gillian Rose (2001) has provided an important road map for navigating the difficult terrain of visual material interpretation. Understanding the meaning of visual materials is deceptively complex; what seems like a straightforward task is complicated because meaning is constructed in multiple, often unacknowledged, ways. In summarizing the research literature, Rose details five characteristics of images that contribute to the production of meaning. The first is that *all* images do work; that is, the meanings they convey serve particular interests by supporting or resisting particular positions. Acknowledging the political work of images places them in the same category as all the other products of participatory planning processes, such as public hearing transcripts, community assessments, vision statements, action plans, maps and planning documents. An understanding of how images work, then, provides the theoretical underpinning for making them work *for* community interests through the PPGIS process.

Second, images either make visible or make invisible social difference; that is, all images either produce or reproduce relations of social power. This is accomplished by the way images naturalize relations of power by presenting them as self-evident, commonsensical ‘truths’ about the world. Third, meaning is not just embedded in the image itself, but is produced in the act of looking. Therefore, it is critical to understand the social conditions in which this viewing takes place. Fourth, images are part of wider cultural practices (this is the link to visual *culture*). Images produced during participatory planning processes, for example, must be understood within the systems of representation operating throughout the process itself. In other words, meaning is produced, in part, through the systems that authorize some meanings, while regulating, filtering or silencing others. Finally, meaning is constructed *socially*. Meaning is actively produced through the particular ‘ways of seeing’ that define and distinguish different social or stakeholder groups. In the realm of participatory planning, for example, stakeholder groups coalesce around a shared understanding of how neighborhoods and communities ought to develop. Such collective beliefs produce interpretations that highlight certain meanings, while ignoring alternative interpretations.

In addition to these five characteristics, Rose argues that meaning is produced in three distinct sites. The first refers to the specific circumstances under which the image is produced. In PPGIS, for example, we need to know the particular context of the participatory process. Who convened the meeting? Who facilitated? How were the images produced and by whom? The second refers to the image itself, to the way the content is selected, framed and presented. The last site where meaning is produced refers to the act of looking

at the image (what Rose (2001, p. 25) calls its “audiencing”). This site includes the context of the viewing—its mode display and the audience’s way of seeing. When presented with a photograph, drawing or map, however, we tend to focus only on the image itself, ignoring the contexts of both its production and its display. The ambiguity of an image is almost always assured—there is little information in the image itself that relates to its production or its original display.

## **THE AMBIGUITY OF IMAGES IN PPGIS**

In the absence of information regarding all three sites where meaning is constructed, even an appreciation for the way images work will not produce a clear understanding of its intended meaning. Consider these examples from two ongoing PPGIS projects, one in an urban neighborhood undergoing rapid change and the other in a rural Native American reservation. Figure 1 shows a former Presbyterian Church, now occupied by a Spanish-speaking Methodist congregation. The building is up for sale and the parcel on which it sits is zoned for commercial uses. In the context of a participatory planning project aimed at helping the community cope with rapid demographic and physical change, there are many plausible interpretations of the image, including:

- a positive symbol of the growing cultural diversity in the neighborhood;
- a negative symbol of the flight of middle-class residents to the suburbs, fleeing deteriorating schools and increasingly violent crime;
- a positive example of available social and physical assets in the neighborhood;
- a positive example of the availability of large commercial properties along a major arterial road into the central business district;
- a positive example of local youth serving organizations—an after-school program housed in the church;
- a negative example of the disappearance of faith-based institutions in the community;
- a negative example of general physical deterioration in the neighborhood.



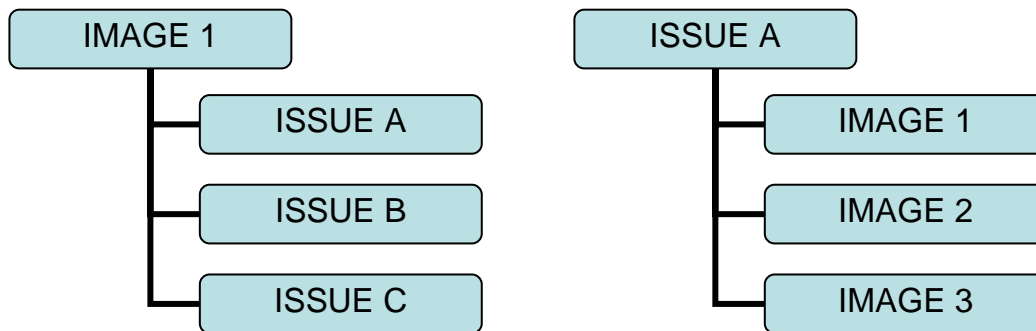
- a negative example of the lack of landscape maintenance of tribal facilities;
- a positive example of important community open space



**Figure 2:** A youth play space on a Native American reservation in Wisconsin.

Each particular interpretation of the photograph in Figure 2 was strongly linked to the particular stakeholder group commenting on the image. For adults, the image represented something positive or neutral about the reservation landscape. For youth, however, the image was mostly discussed as a negative attribute of their community. In addition to negative comments about the landscape itself (its patchy covering of grass, for example), the image was linked to negative comments about the state of recreation for tribal youth more generally (for example, the lack of decent basketballs). Without any text explaining these multiple meanings (and the social context of their difference), the image is ambiguous and its use in PPGIS problematic.

It is fairly obvious that any photograph used in PPGIS is linked to multiple community issues (see Figure 3). Likewise, each issue can be represented by many images, regardless of the particular meaning intended in its production. Because images in PPGIS, like elsewhere, are used to advance particular stakeholder interests, such groups can easily exploit this ambiguity, regardless of the degree to which such tactics are intentional or even acknowledged. Consider the diagram in Figure 3. Assume that “Issue A” and “Issue B” are in conflict and are supported by opposing stakeholder groups. Notice that in the absence of other information, each group can use the same set of images to advance opposing positions. And without other information, no audience will be able to discriminate between the competing views.



**Figure 3:** Each image is linked to multiple issues and each issue can be used to organize multiple images. In PPGIS, these links should be made explicit.

One way out of this dilemma is to develop more rigorous standards for the use of images in PPGIS. At the very least, images should (1) never be decoupled from the context of their production, (2) always be accompanied by any explanatory text produced by the same stakeholder group that created the image, and (3) always be accompanied by an acknowledgement of the multiple meanings they embody for different stakeholder groups.

## CONCLUSIONS

Participatory processes are not without their critics. Some argue, for example, that participation is expensive and reaches few people (Helling 1998); that participation serves local power elites, including local state and economic interests (McCann 2001)—in large measure by steering community consensus toward outcomes compatible with local planning objectives (Pløger 2004); that participatory processes filter community voices through the language of planning, thus “disciplining” community discourse (Tooke 2003). Rather than signaling a retreat from participatory processes, these issues challenge us to develop—together with our community partners—more inclusive participation. We need to find ways to broaden participation, collecting *more* voices, while working against the impulse to filter, regulate, translate or partially ignore community input in the final products of participatory planning processes, particularly in GIS.

Where do we go from here? As many who work with visual materials point out, the meaning of an image is constructed in its relationship to other narratives (Duncum 2004; Healey 2002; Rose 2001). Too often in PPGIS such explicit connections are obscured or rendered invisible. Nonetheless, other unacknowledged associations work to produce ambiguous meanings. We need to develop methods for recording, tracking and displaying information associated with the images that we incorporate into PPGIS. In this way, PPGIS practitioners can indeed include more community voices, while also preserving their intended meanings as well.

## REFERENCES

- Duncum, P. 2004. Visual culture isn't just visual: multiliteracy, multimodality and meaning. *Studies in Art Education* 44(3): 252-264.
- (EPA) US Environmental Protection Agency. 2002. *Community culture and the environment: a guide to understanding a sense of place*. Washington, DC: Office of Water. EPA 842-B-01-003
- (EPA) US Environmental Protection Agency. 2000. *Environmental planning for communities: a guide to the environmental visioning process utilizing a geographic information system (GIS)*. Cincinnati, OH: Technology Transfer and Support Division, Office of Research and Development. EPA/625/R-98/003
- Healey, P. 2002. On creating the 'city' as a collective resource. *Urban Studies* 39(10): 1777-1792.
- Helling, A. 1998. Collaborative visioning: proceed with caution! *Journal of the American Planning Association* 64(3): 335-349.
- McCann, E. 2001. Collaborative visioning or urban planning as therapy? The politics of public-private policy making. *The Professional Geographer* 53(2): 207-217.
- Pløger, J. 2004. Strife: urban planning and agonism. *Planning Theory* 3(1): 71-92.
- Rose, G. 2001. *Visual methodologies: an introduction to the interpretation of visual materials*. London: Sage.
- Shiple, R. and R. Newkirk. 1999. Vision and visioning in planning: what do these terms really mean? *Environment and Planning B: Planning and Design* 26: 573-591.
- Sullivan, G. 2003. Seeing visual culture. *Studies in Art Education* 44(3): 195-196.
- Tooke, J. 2003. Spaces for community involvement: processes of disciplining and appropriation. *Space and Polity* 7(3): 233-246.

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