

Visual Studies and Empirical Social Inquiry

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INTRODUCTION

Framing visual studies as empirical social inquiry is not a simple matter. Only some visual study approaches support empirical inquiry, and only some of those focus on culture and social life. Beyond that, asking where these fit together is to pose three questions in one. There's the ideological or moral query about where visual studies *should* fit with social scientific inquiry, the analytical query of where such studies *could* fit, and the empirical query of where they *appear to fit*. It's the last question I want explore here, for what it implies about visual studies and, by extension, other forms of empirical social inquiry.

The practice of visual studies and the landscape of empirical social inquiry are both evolving, so answers to this empirical question are evolving as well. But from the 1960s through the 1990s, the primary expression of visual studies appeared as an offshoot of other, more organized and well-established forms of scholarship – as a specialization within sociology or anthropology, for example, or an extension of work in art history,

design or communication studies. Beginning in the mid to late 1990s, some elements of these offshoots began coalescing around visual studies as a branch of empirical inquiry in its own right. Yet a third locus of visual studies attention emerged during that same period of time among the roots of empirical inquiry, not only in the social sciences and humanities but also in the physical and natural sciences and in the professions.

In this chapter I examine these three manifestations of visual studies and their implications for social inquiry. The framework and commentary I provide can hopefully clarify some contributions, promises, and challenges that characterize visual studies across all three contexts, but I will focus primarily on the second two – visual studies as a branch of social inquiry and as a root of empirical inquiry. A close look in this direction reveals the interface between visual studies, empirical inquiry and contemporary folk life as a dynamic seam along which new knowledge of culture and social life is forming for both researchers and the general public. As a prelude to explicating that seam in more detail, let me comment briefly on

empirical social inquiry from a visual studies point of view.

EMPIRICAL SOCIAL INQUIRY

For purposes of this chapter, I define empirical social inquiry as an effort to generate new knowledge of culture and social life through the systematic collection and analysis of sensory information and other forms of real-world evidence. This definition contrasts with the narrow view held by some social researchers that empirical studies are necessarily quantitative. It also contrasts with the idea that making photographs or video recordings in field settings is either necessary or sufficient to document culture and social life.

Consistent with this definition, work within individual social science disciplines may or may not take the form of empirical social inquiry, and that's true also for work in the arts or humanities. Some very thoughtful and systematic studies, for example, focus primarily on the internal coherence of theoretical arguments, semantic clarity of constructs and concepts, or the logical implications of different paradigms and experimental designs. These studies may reflect excellent scholarship, but they lack the kind of empirical warrant and complexities that I'm concerned with here. By the same token, other visual studies may be empirically sound – in the sense that they involve systematic collection and analysis of sensory evidence – but contribute little to our knowledge of culture and social life. Examples might include visual studies of printed circuit boards, freeway overpasses, or riparian ecosystems that lack attention to their social or cultural dimensions.

Of considerable significance to the visual studies issues examined in this chapter, a project or study could meet the criteria I've outlined for empirical social inquiry but be pursued or reported outside the boundaries of an academic discipline. Indeed, as both an

offshoot of traditional disciplines and a branch of empirical inquiry, visual studies is rife with examples of this sort. These extra-disciplinary studies can involve individuals from one research community communicating about their work to another – for example, anthropologists presenting their work to film study buffs, medical educators reporting research results to visual anthropologists, or semioticians reporting theirs to medical researchers – but they can also involve substantial interplay between academic and folk communities. Cultural re-enactments, museum exhibitions and catalogs, theater performances, trade publications, feature films, and various forms of media-rich reportage can – and sometimes do – reflect substantive integration of empirical social inquiry, mass media production and folk culture.

Interplay between academic disciplines, multi-disciplinary collaboration, interdisciplinary research and folk culture constitutes an important secondary theme of the discussion that follows. This kind of back-and-forth shapes the contexts within which individuals pursue visual studies as a form of empirical *social* inquiry. Beneath the particulars of these efforts, the conduct of empirical inquiry in general is also nourished through an expanding constellation of visual studies considerations and skills.

DISCIPLINARY OFFSHOOTS

During the first half of the twentieth century, most social researchers interested in camera work, visual data, visual perception, visual culture, and visual tools of analysis and representation typically regarded and presented their work as a specialized strand of their home discipline. For Gregory Bateson and Margaret Mead (1942), visual explorations in the field were integral to the research practices of anthropologists and ethnographers, and that was true also for George Spindler (2008) and Louise Spindler. For Kenneth and

Mamie Clark, whose black-and-white doll experiments contributed to the case against racially segregated schools in the USA, image-based inquiries were one of several techniques for conducting experimental research in social psychology (Clark, 1963). While drawing on his own experience as a documentary photographer, John Collier Jr's (1967) seminal account of camera-assisted fieldwork was framed explicitly by Collier, and by the Spindlers, who edited the series in which this book appeared, as first and foremost a contribution to anthropology.

Despite the disciplinary contexts in which this work was pursued and reported, visual studies within anthropology and sociology developed a readership during the second half of the century that began to cross disciplines and professions. I first heard about Collier's, *Visual Anthropology*, for example, in a darkroom conversation with a photography student at Chicago's Columbia College. A few years later, Howard Becker's (1986) essay on photography and sociology appeared in an early issue of *Studies in the Anthropology of Visual Communication*, but it came to me shortly thereafter via my subscription to *Afterimage*, a publication of Nathan Lyons' Visual Studies Workshop that focused on photography and the media arts. A year or so later, an interview by Stuart Brand with Margaret Mead and Gregory Bateson (Mead and Bateson, 1976) about contrasting strategies for filming culture and social life went the other way: first published in *Co-Evolution Quarterly*, it was reprinted shortly thereafter in *Studies in the Anthropology of Visual Communication*. The annual Conferences on Visual Anthropology that Jay Ruby organized from 1968 to 1980 attracted anthropologists, filmmakers, and photographers, but also sociologists, folklorists, journalists, media activists, visual artists, schoolteachers and musicologists.

Collier, Becker, and other sociologists and anthropologists such as Sol Worth, John Adair, Richard Chalfen, Jay Ruby, Paul Hockings, Karl Heider, and Deborah Barndt who were writing about visual inquiries in

the 1960s and 1970s, addressed members of their home disciplines as a primary audience, but their work attracted colleagues from other fields, some of whom became affiliated with visual anthropology or visual sociology. As these cross-disciplinary affiliations increased, they generated opportunities for examining visual studies as a focus of multi-disciplinary inquiry – a perspective apparent in a 1979 collection I edited called *Images of Information* (Wagner, 1979). As this multi-disciplinary perspective matured over the next few decades, it attracted other scholars and practitioners who extended both notions and questions about visual studies into a wide range of applications and settings.

Extra-disciplinary ways of thinking about visual studies developed in consort with the growth of scholarly communities defined as much by research method as by theoretical perspectives or objects of inquiry. In the 1950s, 1960s and 1970s this kind of methodological confluence occurred among social researchers working with numbers, surveys and experiments. Item analysis, control groups and multiple-regression analyses became topics that sociologists, anthropologists, psychologists, and political scientists could discuss within their own disciplines and also with each other. Beginning in the early 1980s, but accelerating thereafter, a similar kind of cross-disciplinary discourse emerged around the concept of 'qualitative research'. William Filstead (1970) edited a collection of essays under this title that was published in 1970, but the full force of this orienting term did not appear until the 1980s and 1990s. As it did, new journals, conferences and associations were established, and some existing research forums broadened their focus and readership. The *Journal of Urban Ethnography* became *Contemporary Ethnography*. *Cultural Anthropology Methods* was reconstituted, with the same editor, as a new journal called *Field Methods*.

Broadened discourse about both quantitative and qualitative methods brought scholars from different disciplines to new insights, not

only about methods but also about theory and reporting conventions. While the rhetoric of written sociology and anthropology had been critically examined throughout the disciplines' histories, these analyses rarely captured the attention of mainstream scholars. That changed in the 1980s, as sociologists, anthropologists, linguists, folklorists, cultural historians and literary critics joined in common cause to look at issues of 'representation'. (*Representations* was the title of another new journal emerging at this time.) One by-product of this attention to written representations was an increasing understanding of the implicit theories that social scientists embedded in their writing, knowingly or not, through metaphor, synecdoche, and both literal and figurative imagery (Gusfield, 1981; Clifford and Marcus, 1986; Hunter, 1990; Van Maanen, 1995; Becker, 1998).

Cross-disciplinary attention to methods and representations grew hand-in-hand with emergent areas of interdisciplinary inquiry such as media and communication studies, gender studies, peace studies, ethnic studies, and religious studies. In each case, scholarship that may have first appeared as a disciplinary offshoot became something more substantial. When enough disciplines had related offshoots, the offshoots could form an interdisciplinary, intellectual enterprise of their own.

One turning point for thinking about visual studies in this way occurred in 1998 with the publication of *Image-Based Research*. Edited by Jon Prosser, this collection included several articles with a disciplinary focus that, taken together, provided a multi-disciplinary perspective. But Prosser's introduction and commentary went beyond that to locate image-based research as a separate strand of qualitative inquiry. This prefigured visual studies as an interdisciplinary field of inquiry in its own right and catalyzed both a broad readership for the volume itself and new rounds of scholarly work. Additional visual studies statements, research reports, and collections appeared that linked disciplinary

topics and concepts to interdisciplinary inquiry (Banks, 1998; Emmison and Smith, 2000; Pink, 2001; Rose, 2001). These were followed by others that framed visual studies as an approach to social research in general (Banks, 2001; Stanczak, 2007). As another move in the same direction, when *Visual Sociology*, the official journal of the International Visual Sociology Association, moved to a new publisher (Taylor and Francis) in 2002, the increasingly interdisciplinary Editorial Board approved a proposal to rename the journal *Visual Studies*.

The result of these developments is that while visual studies remains a special topic within some academic disciplines, it is widely recognized as a topic with multi-disciplinary dimensions and has also become, in some important respects, an interdisciplinary enterprise in its own right. This gives individual scholars ample opportunity to fret about whether a particular project should be considered visual studies or visual sociology, visual anthropology, journalism, or the fine arts. However, as the center of gravity has shifted to include interdisciplinary visual inquiries – and as new generations of scholars have pursued visual studies projects in concert with other interdisciplinary approaches – the vitality of visual studies has itself stimulated two new kinds of boundary issues. The first focuses less on the lines between visual studies and its parent social science disciplines than on distinctions between different strands of work *within* visual studies. The second focuses on connecting different fields of study with each other along their common interface with visual studies – the arts and sciences, for example, or social documentary work and the humanities, literacy and civic education, and so on.

The challenge of identifying different approaches *within* the enterprise of visual studies is the central focus of the following section. Before taking that up, however, let me comment briefly on this second set of boundary issues by noting that, in addition to emerging as a branch of empirical social

inquiry – the focus of this chapter – visual studies also became a topic of considerable interest in the arts, humanities, education, and design. As a closely related matter, deliberations about the informational, expressive, aesthetic and persuasive potential of visual media framed ‘visual literacy’ as a focus of increasing pedagogic and research interest (Elkins, 2007). Over the past decade or so, this interest has moved visual literacy to an increasingly significant place in broad discussions of research, education, culture and social policy. In some sense, these developments position visual studies as a research complement to visual literacy, and visual literacy as a pedagogic and critical thinking complement to visual studies.

Concerns about visual literacy have found considerable traction in discussions about reforming liberal arts and professional education and in discussions about science reporting and civic culture. These discussions posit a tension between contemporary folk culture on the one hand and the demands of scholarship and informed civic participation on the other. As a matter I explore later, this tension – within which visual study skills play a dual role – has significant implications for visual studies and empirical inquiry.

DIMENSIONS OF THE BRANCH ITSELF

As a branch of empirical social inquiry, precursors of which formed within several different disciplines, what does visual studies look like? What kind of work do people do who associate themselves with this line of inquiry? What questions do they ask? What evidence do they call on for answers? And what methods and skills do they value?

The most straightforward answer to these questions is that visual studies scholars do quite varied things. However, they also usually attend to one or more visual objects of inquiry, visual research methods, or visual studies skills. Indeed, variations in visual

studies approaches appear to individual researchers as choices among different objects of inquiry, research methods and visual study skills. Key dimensions of visual studies as a collective enterprise are consequently defined by the range of objects, methods and skills that scholars choose between.

Objects of inquiry

Within visual studies as a branch of empirical social research, the most notable objects of inquiry include the following four areas.

Visually interesting materials and activities

The primary object of inquiry for many visual studies is a set of materials or activities that a scholar finds visually interesting. Some such phenomena are seen in primarily visual terms – for example, paintings, sculptures and other works of art; diagrams, signs and other elements of iconography (Mitchell, 1986); shop window mannequins (Schneider, 1996); or household altars (Salvo, 1997). Other phenomena of interest combine visual and other sensory dimensions more or less seamlessly (for example, television programming, vacation homes, motion pictures, food, clothing, human sexuality, automobiles, advertising, etc.). Studies that focus on material objects of inquiry – defined in this way – reflect a close correspondence between visual studies and studies of material culture (Banks, 1998). That’s much less the case, however, for studies of visually interesting *activities*, or for studies in which visual materials are examined primarily for what they reveal about other dimensions of culture and social life.

How people see things

Another common visual studies focus is how people see things. This phrasing implicates an extremely important, but also complex, object of inquiry (Grady, 1996). The term ‘seeing’ can refer to the neurophysiologic

process of vision, social-psychological dimensions of perception, sociological or anthropological takes on perspective and point of view, how people look at or think about environments and materials, or even their world view. It is difficult to consider this wide range of references as attributes of a single object of inquiry, but attention to how people see things is so fundamental to the concept of visual studies that many scholars draw darker lines around these different referents than between them.

The lives people live

A third cluster of visual studies work centers around core concerns of ethnography and ethnology to document and depict the lives of individuals or groups (Schwartz, 1989; Pink, 2001). These efforts diverge from the 'seeing things' approach in the same way that ethnography differs from oral history: subject perspectives and accounts are important in each approach, but ethnographic research typically extends to other dimensions of culture and social life, some of which only make sense to other researchers. Visual studies scholars working with an ethnographic intent are interested not only in how subjects themselves see things but also in etic points of view, or how their world looks to outsiders, including colleagues who fashion and follow social and cultural theory.

Visual representations

Yet a fourth visual study approach directs research attention to the content, form, production and reception of visual representations themselves. As a methodological concern, many field researchers puzzle over the relationships their work instantiates between photographs, moving pictures, audio recording and text. For other scholars, however, phenomena of visual representation are less a methodological or technical sidelight than a central intellectual focus. Studies of optical technologies, visual signs and symbol systems, visual media and communication, the relationship of images to text and touch,

graphic design syntax and art histories fall within this approach. The same is true for formal and semiotic studies of traffic signs and flags, visual literacy development (Messaris, 1994; Elkins, 2007), forensic evidence (Wakefield and Underwager, 1998) and the imagery of science and technology (Lynch, 1998; Lynch and Woolgar, 1990; Pauwels, 2006) and for empirical analyses of imagery appearing as journalism (Hagaman, 1993, 1996; Schwartz, 1999), advertising (Seiter, 1993; Grady, 2009), memorial photographs (Lesy, 1973; Ruby, 1995), and so on.

Methods of inquiry

In addition to choosing among objects of inquiry such as those noted above, visual studies scholars have tapped into a diverse array of research methods. These include elements that have made their way into visual studies from the wide beyond (for example, focus group protocols or documentary styles of work) as well as approaches imported in full from specific disciplines and professions (componential analysis, projective interviewing, or consumer satisfaction surveys). For purposes of this analysis, I'll focus on six meta-methods, one or more of which characterize most visual studies.

Artifact acquisition and analysis

For empirical research, perhaps the most long-standing strand of visual research is the observation, acquisition, collection and analysis of material artifacts. Though frequently practiced alongside – or in conjunction with – various forms of conquest, imperialism and subjugation, intellectual interest in materials from other cultures has a long, rich and continuous history. Contemporary projects include not only archaeological excavations but also efforts to archive materials of potential historical interest and to preserve varied social and cultural documents (for example, family photographic albums, websites, presidential speeches and conversations, holiday ephemera, and so on).

Collections of ‘native image-making’ have a double life within this acquisition and analysis approach: as artifacts of a particular time and place and as representations of how the individuals who made them saw things.

Photo and video documentation

Visual documentation and image recording defines a second strand of visual studies methods. On the one hand, this is a direct extension of millennia-long traditions of artifact acquisition and analysis. It goes beyond that, however, in the potential of photo and video recording to create de nouveau artifacts of cultural practices and materials that are impossible to ‘collect’ in other ways. Good examples of the latter include photo inventories of arranged materials; panoramas of sites, settings and environments; video recordings of formal and informal performances, including conversations, dance and other rituals (Rhythms of Earth, 2009); handicraft production (Greenfield, 2004); and so on.

Both artifact acquisition and photo documentation have been insinuated so deeply into the ethos of contemporary cultures that they are frequently overlooked as tools and methods of empirical research. But taken-for-granted practices of ‘collecting’ and ‘taking pictures’ involve some of the same technical and representational processes that many researchers rely on to support empirical work in the physical and natural sciences, medicine, engineering, history, the social sciences and some forms of the humanities.

Researcher-guided image-elicitation protocols

A third set of visual inquiry methods clusters around researcher-guided image-elicitation protocols that encourage subjects to disclose their perceptions, sentiments and ideas. In some versions of this method, researchers invite (or instruct) subjects to make drawings, photographs or videotape recordings that reveal how they think or feel about matters. In others, researchers present visual artifacts of this sort – made or acquired by

researchers or subjects – as prompts for subject interviews and focus groups.

As noted by Collier (1967) in his presentation of the photo-elicitation interview, these methods extend earlier work in psychology with the Thematic Apperception and Rorschach tests to investigate culture and social life (Wagner, 2010). Artifacts, dramatizations and other visible materials have also been used in much the same way (Hoskins, 1998; Wakefield and Underwager, 1998), but the convenience of using photographs or videotape recordings as ‘records’ of artifacts, activities and environments has given elicitation approaches making use of these materials great contemporary vitality (Harper, 1987; Tobin et al., 1989; Clark, 1999; Clark-Ibanez, 2009).

Image-based ethnography

Ethnography constitutes yet a fourth approach to visual studies. Following Bateson and Mead’s photographic study of Balinese culture (1942), other scholars have combined still images and text in preparing ethnographic accounts of culture and social life in a wide range of other settings. Notable book-length examples include works by Douglas Harper (1982, 1987, 2001, 2010), Dona Schwartz (1998), Cathy Greenblat (2004), Roby Page (2005) and Patricia Greenfield (2004). Similar approaches have been used to good effect in countless smaller-scale studies.

Still photography, video recording, artifact collection, audio recording and text can be combined to good effect in conducting image-based ethnographies, but the different presentation formats required of each medium have stimulated somewhat separate genres of research reporting. This is less true for photographs and text, both of which can be accommodated by the printed page, than for text and motion pictures. These contrasts make ethnographic filmmaking a somewhat distinct form of social inquiry, with its own literature, lore and craft (Heider, 1976; Biella, 1988; Rosenthal, 1988; Hocking, 1995; Ruby, 2000). Filmmakers and researchers

AQ2: Should be Douglas Harper and Patrizia Faccioli 2010

taking this approach have produced extraordinary depictions of culture and social life in a wide range of circumstances. The balance between visual detail and interpretive commentary, however, is a world apart in film from what social researchers have come to expect in written ethnographies – even those replete with still photographs.

One consequence of their different presentation requirements is that moving pictures, photographic, audio and text media used to collect data may or may not appear in research reports. This kind of asymmetry presents special challenges for ethnographic filmmaking. Audiences eager to immerse themselves in viewing other cultures may prefer presentations that conceal the circumstances in which films are made. From this point of view, a researcher's commentary disrupts the audience's viewing experience or, at worst, diminishes the culture and humanity of peoples depicted. On the other hand, scholars who care about the provenance of visual depictions may question the research value of films and photo sets that lack circumstantial and production details. These contrasting points of view implicate both the theory and practice of ethnographic filmmaking (Biella, 1988).

Neuropsychological measurements of visual perception

As a close companion to one version of 'how people see,' a fifth cluster of visual research meta-methods has been developed to examine the neurophysiology of human perception. Contemporary research of this sort includes magnetic resonance imaging (MRI) studies of brain activity linked to different perceptual and visual imaging tasks and eye-tracking studies (see Chapter 23) of how people decode text-on-screen, text-on-paper, photo and graphic imagery, or even complex natural world environments. These highly instrumented studies differ substantially from other approaches to investigating how people see things, including interviews or surveys of what people have to say about their surroundings (or photographs that depict

them) and the analysis of native image-making.

Formal and semiotic analyses of visual representations

Visual studies aimed in this sixth direction have focused on the formal properties of signs and symbols (viewing size, apparent propinquity and sequence, etc.), relations between different signing systems, and the visual constraints and opportunities inherent in different media and presentation formats. One strand of this kind of work intersects with ethnographic projects by examining parallels between the formal structure of visual representations and the organization of cultural values and beliefs, an approach pursued to notable effect by anthropologists such as Franz Boas (1955) and Claude Levi-Strauss (1958). Visual studies scholars interested in how signs and symbols are developed and used by particular populations have worked along a similar seam between semiotics and ethnography. Beyond these hybrid approaches, however, a significant population of visual studies scholars approach signs and symbols as formal systems that can be examined independent of their origins and practical application.

Objects, methods and skills

Some combinations of the objects and methods noted above have received much more attention than others, and the balance of potential and popular approaches reflects several additional considerations. One of these is that visual studies approaches may or may not emphasize visual phenomena that matter to research subjects, and studies that do may or may not employ visual research materials and methods.

In the first instance, many studies of visually interesting materials – including studies of films, paintings, architecture, clothing, cuisine and product design – have framed these objects of inquiry within perspectives of history, economy, technology, personal

taste or prior scholarship that neglect or exclude the phenomenal world of people who make or use them. In the second instance, studies may focus on the visual dimensions of subject worlds but rely on text or speech as data instead of more explicitly visual research materials. Interviews, surveys and conversations with residents about how they perceive (or receive) films, paintings, clothing, cuisine, or features of the communities in which they live, may or may not involve visual materials or methods of inquiry. Indeed, many studies of how individuals think about materials of this sort feature text-only (or telephone) survey questions and answers.

Asymmetries of this sort can also appear between visual methods and non-visual objects of inquiry. Interviews with residents that are videotaped or make use of photographs as interview prompts – or reflect other visual studies meta-methods – may focus on issues that have little or nothing to do with how subjects literally ‘see things.’ This is true historically for Thematic Apperception and Rorschach testing, both of which used visual imagery as a trigger for mapping a psychodynamic profile of individual subjects. It’s also true for some forms of polling or market research in which videotaped subject responses are examined for clues about the upside or downside of a political or advertising campaign.

Some objects and methods noted above are pursued separately in practice (for example, within the ethos of one visual studies community or another) but are analytically or functionally interdependent. The term ‘native imagery,’ for example, usually refers to artifacts made by the subjects of a researcher’s study, but it could refer – and has been pursued as such with studies in the sociology or history of science – to the native imagery of researchers themselves (Latour and Woolgar, 1986; Lynch, 1998; Pauwels, 2006; Wagner, 2006a, 2006b). Similarly, image-elicitation studies of how people see things are typically tied to investigations in which researchers present photos, drawings or video

documents to subjects as part of an interview or focus group protocol. But the same elements – for example, subjects responding to visual stimuli and researchers observing and assessing their comments – can characterize reception studies of mass media events, studies of materials that are visually interesting in their own right, or, for that matter, studies of how scholars view visual research materials in their own field.

An important consideration in sorting out these variations in approach is that the conduct of visual studies also depends on the skills required to follow through with a chosen method and object of inquiry. Indeed, when visual studies scholars talk about their research and teaching, they frequently refer to skills that are both more general and more specific than the meta-methods described above. These skills are more general in their applicability to a wide range of situations and tasks, only some of which involve empirical social inquiry. Photographic or videographic skills, for example, might be valuable in conducting an ethnographic study of community life, but also could be useful in recording a friend’s wedding or taking vacation pictures. As a reciprocal consideration, visual studies skills can be more specific than a method by focusing on particular kinds of materials – photographs taken by children, for example, the imagery of political cartoons published in a mass market magazine, or facades of nineteenth-century Canadian churches – each of which presents distinctive challenges for empirical inquiry.

Following these examples, a shortlist of the kind of skills noted by visual studies scholars in connection with their work would include the ability, technical expertise and wherewithal to perform the following tasks, as these apply to particular images, visual representation and other visible evidence required for a specific study:

- collecting and acquiring images and other visual representations
- creating or making images

- modifying or editing images
- reading and decoding images
- interpreting and analyzing images
- presenting and displaying images
- examining social and cultural contexts that shape the skills and tasks listed above.

Depending on the design of a specific study, the imagery associated with these tasks could take the form of physical artifacts and settings; photographs or video recordings; drawings, diagrams or paintings; direct observation of activities and settings; visualizations inferred through observations of speech, gesture and movement; visualizations manifest in other materials or reported directly through the comments of research subjects or other researchers; or other patterns of embodied culture and social life. Though this list is incomplete, reference to skills in working with one or more of these image forms is a defining dimension of most, if not all, visual studies projects.

Intersections of some of these skills and the objects and methods noted above correspond closely to boundaries of a relatively distinct research community. Connections between neurophysiologic objects of inquiry and neurophysiologic research methods, skills and instruments, for example, are relatively well defined. That's much less the case for studies of visually interesting materials or for collecting artifacts (as I examine later in this handbook). In terms of backgrounds, skills, instrument sets, and career paths, individuals engaged in these pursuits are an extremely diverse lot. Only some of them are interested in empirical research, and those who are support a wide range of research networks, many of which have little or nothing to do with each other.

From within the context of visual studies as a branch of empirical inquiry, this kind of diversity increases intellectual vitality while simultaneously narrowing or diminishing the apparent strength of disciplinary ties (Wagner, 2001, 2002). Viewed from within an academic discipline or profession, however, the diversity of visual studies scholars and

approaches can appear fragmented, theoretically undeveloped or undisciplined.

These contrasting perceptions of visual studies fuel continuing concerns about where the work of individual scholars fits, how it can best be assessed, and optimal trajectories for future research. Those concerns can displace attention to basic questions about where and how visual studies intersect with empirical inquiry. Understanding that intersection, however, requires inspection of not only the branches of empirical inquiry, among which visual studies may or may not hold its own, but also its roots.

VISUAL ROOTS

Many characterizations of empirical research refer, at least loosely, to three somewhat distinct activity sets: observation and data collection; data analysis and interpretation; and writing and reporting. There's nothing about this tripartite formulation that grants special distinctions to social or cultural studies that focus on visual objects of inquiry or make use of visual research methods or study skills. Distinctions of just that sort, however, appear if we unpack these three sets into the challenges they present to researchers in managing the material dimensions of their work.

Material challenges of empirical inquiry

For purposes of this analysis, I'll comment on five of these challenges, each defined by the need to convert one set of research materials into another. As displayed in Table 3.1, the material challenges for observation and data collection appear as researchers try to convert observations to records and records to artifacts. Data analysis and interpretation are linked to two other material transformations and challenges: converting artifacts to data sets and data sets

Table 3.1 Stages of empirical research: activity sets and material challenges

<i>Stages/activity set</i>	<i>Material challenges</i>			<i>Generation removed (from phenomena)</i>
	<i>From</i>	<i>To</i>		
1 Observation and data collection	Observations of phenomena	Records of individual observations (durable materials, one step removed from phenomena)	1	
	Records of individual observations	Artifact collection (multiple records that include provenance information, meta-data, etc.)	2	
2 Data analysis and interpretation	Artifact collection (records organized as collection)	Data set (i.e. artifact collection organized as evidence for examining specific research question)	3	
	Data set (artifact collection organized as evidence)	Data-display patterns (data sets organized to make visible patterns of evidence salient to research questions)	4	
3 Writing and reporting	Data-display patterns (data set organized to display patterns)	Lesson (data-display pattern organized to communicate with specific audience)	5+	

to data-display patterns. Restated within the same typology, writing and reporting entails the challenge of converting data-display patterns to lessons for teaching research results to researchers, journalists, policymakers, the public, and so on.

Each activity set listed in the left column of Table 3.1 builds on the preceding, as does each material transformation listed on the right. Moving down the rows of Table 3.1 thus corresponds, on both sides, with a shift in attention from source phenomena and observation protocols to audience characteristics and reporting protocols. As noted in the far right column, research materials resulting from each transformation are one additional generation removed from the source phenomena.

The material transformations listed in Table 3.1 are distinctive to empirical research. Other forms of inquiry, such as speculation, spiritualism, meditation, projective expression and fantasy, can generate insights and new ideas independent of material realities. Practitioners of these approaches have no need to wrestle with the challenges

of converting research evidence from one material form to another. Within empirical investigations, however, materiality – and, by extension, research materials – play an essential and somewhat inviolate role. Lacking material representations of phenomena and observations, investigations lack empirical warrant.

Recognizing that empirical research is grounded in various forms of material evidence has several implications. One of these is to define a common ground between the physical, natural and social sciences – all of which value strategies and instruments that can read, measure or otherwise sense the materiality of their focal phenomena. Another is to feature and foreground the logistics of managing research materials as a key element of research practice. Yet another is to represent the material culture of scientific inquiry as a key context shaping research conduct and new knowledge. The material culture of empirical inquiry thus links the material foundations of scientific theorizing with the material circumstances in which researchers exercise their craft.

Empirical researchers exercise the specifics of this craft when they convert transitory observations into durable records, when they manage those records as evidence, and when they communicate evidence patterns to others. In pragmatic terms, this kind of conversion, management and communication requires researchers to link ideas and things.

Visual symbols, signs, cues, figures, representations, illustrations and media can function as a kind of flux that broadens and deepens potential contacts between ideas and things. By attending to these visual props and properties, researchers can be more precise and complete in how they articulate research ideas with research things – for example, how they specify the significance of empirical evidence for challenging or supporting research propositions, concepts and models. With this in mind, skills in working with visual props and properties can help researchers achieve what Ragin characterizes as the goal of empirical inquiry: ‘to link the empirical and the theoretical – to use theory to make sense of evidence and to use evidence to sharpen and refine theory’ (1992: 224–225). As a preface for examining what this assistance can entail for empirical *social* inquiry, let me describe how it works for empirical inquiry in general.

Converting materials step by step

A more complete picture of how skills in working with visual materials and representations – for example, ‘visual study skills’ – can help researchers move from empirical observation through analysis and research reporting appears as answers to questions about the material transformations listed in Table 3.1. What tools and strategies are valued by researchers in effecting each transformation? What potential problems and solutions do these entail for addressing material challenges farther down the line? And where might the crafts of making such

transformations take a researcher closer to or farther away from initial objects of inquiry?

Observation to records

As a collective enterprise, the empirical sciences require evidence that is durable, stable, portable and communicable. Memories of sensory observations – what I saw or heard, tasted or smelled a short or long moment ago – represent only a small step in the desired direction. Written notes and drawings go farther, as do audio or visual recordings and other instrumented record making. Research strategies that make use of these tools and technologies convert transitory *acts of observation* to the more durable materiality of *observation records*.

Visual study skills can play an important role in many conversions of this sort, and not just those that involve optical recording. It’s through visual inspection that naturalists determine what specimens and samples are available and which of these are most feasible to collect. Visual representations on measuring devices and display screens are key in recording material specifications, including those that place specimens in contexts of time, space and physical circumstances. Visual cues are also useful to social scientists in judging physical and social boundaries and tie-signs (for example, visual indications of what goes with what), tracking activities and conversations over time, noticing social and environmental change (Rieger, 2003), and reviewing research records in the field – on their own or in consultation with research subjects. As a visual study skill relevant to studying a wide range of phenomena, ‘looking closely’ is also valued in converting observations to records.

Above and beyond looking closely, other visual study skills can be put to good use in converting observations to records. These include documentary applications of visual recording media, the analysis of visual materials, and the production and analysis of visual representations. These skills are useful to studies of artifacts, activities and symbolic cultural phenomena. For artifacts

and activities, researchers can use photography and videography to create visual records of what they see in the field. For aspects of culture that cannot be observed directly, researchers can use visual materials to elicit or crystallize subject commentaries.

Scholars who investigate some forms of material culture can make the shift from observation to record by collecting the materials they are observing – the stock in trade of botanists, archaeologists, geologists, and so on. However, collecting is only feasible for materials small enough to transport and store and for those the researcher can legitimately acquire. For larger materials and those that have to stay put – by reason of law, ethics, scholarly integrity or good sense – researchers must convert what they can see, hear, taste or feel to notes and drawings, specifications (for example, measurements of volume, color, dimension, specific gravity, radioactivity, and so on) or analog depictions such as those created through evocative writing or audio or visual recordings. Visual study skills are essential to this process.

Record to artifact

Empirical researchers are expected to document and make explicit the circumstances in which phenomena are observed and observations recorded. Through this kind of documentation, individual records become artifacts wedded to the contextual information necessary to understand and appreciate them as evidence for empirical inquiries. For archaeological collections, this information, or meta-data, is used to classify materials by time, place, function, associated materials, collection/collector, and so on. Similar kinds of information are required to make good use of interview transcripts and field notes, survey responses, focus group interviews, code sheets and audio-visual recordings.

Some materials are better than others in recording or preserving contextual information. Audio and video recordings, for example, can capture collateral information about the material surround that observers

might leave out of notes and drawings. When records themselves lack contextual information, researchers have to obtain this from other sources – through additional observation or from commentary by subjects and other researchers about records already in hand. Records that can be retained and presented in the form of visual imagery are particularly well suited to this process.

A host of visual cues and icons are also available to researchers in attaching meta-data to records and marking conversion of records to artifacts. At the most mundane level these involve labels and tags for paper or digital folders, blank or populated boxes in database screen views, and other forms of materials processing.

Beyond the task of linking individual records and meta-data, the shift from record to artifact presents researchers with the challenge of visualizing relationships between the theoretical focus and boundaries of a study and the adequacy of their empirical evidence. Many researchers have found graphic organizers such as diagrams, charts, tables and other figures to be extremely helpful in this process – see Miles and Huberman (1994) for a rich collection of examples. Knowing how to create visual representations of objects and ideas can be extremely useful in this regard, including skills in drawing figures, creating digital flow charts and animations and displaying multiple images for comparative analysis. While some of these skills can be acquired through formal programs of study, many are also available through popular folk practices and consumer-level software applications.

Artifact to dataset

Artifact collections include records organized by attribute, meta-data and provenance, including information about where they came from and what they entail. A data set is composed of artifacts organized by their relevance to specific research questions and hypotheses. Data are always a set defined by the research questions for which the set might provide empirical answers. Lacking the

organizing principle of a research question, records and artifacts remain just that.

In converting a collection of artifacts to a data set, researchers can use some of the same tools and strategies that work for converting records to artifacts. However, datasets also require researchers to explicate the focus of a study in terms that interest other researchers – not just documentarian or folk communities whose members care only about recording culture and social life, and for whom a project's final form may be an artifact collection.

New media and evolving computing resources have radically enriched the crafts through which social researchers can transform artifact collections into data sets in two key respects. First, the transition from artifact to data set can now be approached dynamically, as a real-time exploration of multi-dimensional records and artifacts. Though inductive approaches of this sort have characterized fieldwork for decades, the analytical tools for supporting them have increased significantly as databases developed a capacity to incorporate multi-dimensional and multi-media records. Secondly, and closely related to dynamic analysis tools, computing software and new media forms have expanded the potential for visual inspection and design of scientific data sets. An obvious resource in this regard is the kind of articulation now common between graphic display applications and quantitative and qualitative record keeping. With a few keystrokes, graphs and figures can be created from quantitative relationships. Current generation 'search and find' applications can just as easily create visual displays of text string frequencies and distributions. Computer software also makes it relatively easy to compare, scan, sort, cluster and sequence a wide range of multi-media artifacts – including image and audio files – and to format the results to facilitate direct visual inspection.

Dynamic analyses of high bandwidth databases and tools that facilitate visual database inspection have had a substantial impact in the physical and social sciences and in

the humanities. They also have special significance for researchers working with audio or visual materials. By incorporating and retaining multi-media records in their original form, these tools allow researchers to work directly with high-fidelity representations of social and cultural phenomena – and to do so from observation to record to artifact and dataset, or even beyond. For investigations of source phenomena that are themselves audio or visual materials – family photographs, scientific diagrams, television or motion pictures, magazine advertisements, etc. – this eidetic correspondence can continue from the beginning to the end of the inquiry process.

Dataset to data-display pattern

A data set links records of known provenance (artifacts) to research questions. Making these links explicit creates a kind of virtual laboratory within which researchers can use patterns of empirical evidence to frame, clarify and answer research questions. However, while the patterns are inherent to the data set, they become visible only when the data set is organized and formatted to reveal them. Data-set design is thus a significant challenge for the conduct of empirical inquiry and the craft of creating, and managing different kinds of data sets is a resource of considerable value, within which visual study skills are a key ingredient.

Inspecting either source phenomena or a data set is a transitory act. To move beyond what the researcher *notices*, observations must also be *noted*. Conversions of this kind require researchers to create cognate representations that weld the idea of a data-display pattern to a particular material form.

Charts, graphs, figures, flowcharts, two- and three-dimensional models, tables and catalytic images, animations, texts and artifacts can all come into play as researchers try to convert observed data-display patterns to material form. So, too, can skills in editing such representations in different media and presentation formats. Some scholars have examined the form and syntax of this kind of

datadisplay as natural phenomena in their own right, and some of those (Tukey, 1977; Tufte, 1983, 1990, 1997) have offered guidelines for how to use displays of this sort more effectively.

Depending on how artifacts and databases are constructed, converting patterns observed to durable displays can be managed within the database itself. A computer database can convert a table of frequencies to a printed pie chart or bar chart, for example, or find and display a video recording corresponding to a particular configuration of meta-data. But these features are limited to the kinds of records and artifacts they include. The frequency tables won't generate video output unless the video files have been incorporated earlier on, and a database of video artifacts won't generate frequencies unless meta-data for those artifacts are formatted so they can be counted and summed.

As a more general rule, the fidelity of data-display representations to source phenomena is a matter of continuing concern. Richly detailed and visually engaging displays can be a great resource in communicating about research to diverse audiences. However, they can also be generated through artifacts and data sets that differ profoundly from the source phenomena they are supposed to represent.

Dynamic, visually arresting and engaging displays of summative indicators are part and parcel of contemporary research presentations and policy discourse. When their attractions encourage misperceptions of source phenomena, however, they compromise empirical inquiry. The prevalence of high-impact data displays in contemporary journalism and policymaking is an important reminder that converting research materials from record to artifact to dataset, and so on, shapes both research and public knowledge of culture and social life.

Data-display pattern to lesson

If a given data set is extremely well aligned with those used by other researchers, reporting a new pattern can challenge or support

existing theories. The more common situation, however, is one in which a researcher must make the case that data patterns are significant for understanding a particular set of phenomena. The shorthand version of this challenge is the need to 'publish' research, but a more felicitous perspective is that researchers have to 'teach' their colleagues something significant for which their research data sets provide relevant, new information (Wagner, 1987). Publications can certainly work well for this kind of teaching, but so can presentation in other formats, including lectures, workshops, websites and interactive DVDs (that allow other scholars to explore data and to discern, on their own, the same data-set patterns), handbooks, individual consultations, television programs, exhibits, and so on.

Considered within the full compass of their professional lives – writing research proposals and reports, preparing memos to request additional funding or personnel, evaluating programs, teaching and mentoring students, and so on – most academic researchers approach these broadly defined 'teaching' challenges with a variety of visual media and presentation tools. These require skills in creating and editing visual representations, using visual materials (including representations of this sort) to stimulate questions and comments from others, and examining how people are likely to 'see things' as a context in which new concepts and insights can be taught more or less effectively. Visual study skills become especially important when researchers try to teach public or lay audiences about their work, audiences that may have political, social or personal concerns that overlap only in part with a researcher's disciplinary community.

As these comments hopefully illustrate, the skills researchers bring to bear as they construct, organize, analyze and present evidence for projects of empirical inquiry insinuate significant visual dimensions into their research, even when their objects and methods of inquiry have nothing to do with visual studies. These visual dimensions

derive from the emphasis empirical inquiry places on using material evidence to challenge or support concepts, theories and models and from the value of visual study skills in helping researchers to link ideas and things.

Considered across the material transformations noted above, the visual study skills valuable to researchers correspond in important respects to the skills listed earlier as a defining dimension of visual studies as a branch of empirical social inquiry. This correspondence between roots and branch has critical and reflexive implications that are worth exploring further through visual studies of the practice of empirical inquiry and empirical studies of visual studies practice. As a small step in the second direction, it's worth considering whether some forms of material evidence present special challenges and opportunities for visual studies in supporting empirical *social* inquiry.

VISUAL MATERIALS AND SOCIAL INQUIRY

Compared to other resources for converting observations to records, artifacts and data sets, visual media and materials have some distinctive strengths and weaknesses when standing in for evidence of culture and social life. Strengths include their analog fidelity to the visual, spatial and (for videotape) temporal dimensions of source phenomena, a capacity to materialize perceptions of researchers and research subjects and to generate eidetic representation of other visual materials. As an extension of these special features, visual recording media are also well suited to elicit and capture collateral and contextual data.

The weaknesses of visual media and materials for purposes of empirical social inquiry include the potential for a kind of commodity fetishism (in which the *sui generis* attractions of visual materials displace attention to the phenomena they are intended to represent),

the power to generate more collateral and contextual data than researchers can analyze, and the technical demands of visual technologies appropriate to a given area of research activity. To clarify the scope of these strengths and weaknesses, and their significance for visual studies as both branch and root of empirical inquiry, let me comment on each in turn.

Phenomenal fidelity

Depending on the media through which they are materialized, some research records, artifacts and data sets can be examined as an analog of their associated source phenomena while others cannot. Media formatted to record the passage of time, for example, such as audiotapes and videotapes, can reflect analog fidelity to how time passes within social and cultural processes. Media formatted to display spatial relationships (three-dimensional modeling, photographs and maps) can provide analogous representations of the spatial organization of social and cultural activities. Media that support written or spoken language (text on paper or audio recordings) provide analog fidelity for different forms of spoken or written discourse that represent, in turn, an analog of how people think. Drawings, photographs and videotapes can achieve something similar for how they see.

The potential for analogical analysis depends on the homology of research materials and source phenomena. In much the same way, the extent to which material transformations noted in Table 3.1 reduce fidelity depends on the homology of materials from one stage or generation to the next. For example, a researcher could take a video recording of an interview (a 'record' in the typology described in the preceding section) and convert it to an annotated written transcript (an 'artifact'). But the researcher could also effect the record-to-artifact transition by simply annotating the video recording. The first approach generates artifacts that lend

themselves to text analysis tools and strategies, but forgoes nuances of the subject's gestures and voice and thereby reduces fidelity. By retaining voice and gesture, the second approach maintains greater fidelity to the source interview, but can leave the researcher with multi-media artifacts that are more complex than artifacts limited to text alone.

Trade-offs such as these reflect an abiding tension within empirical research between phenomenal fidelity and data reduction. Investigators who value phenomenal fidelity would like material transformations leading through a research project to subtract or add as little as possible to salient features of source phenomena. Preserving phenomenal fidelity at all costs, however, can leave researchers with multi-dimensional records, artifacts and data sets that exceed the capacity of their most efficient analysis tools, quantitative tools in particular. Investigators intent on using these analysis tools must be willing to simplify and condense the complexity of research materials and live with the loss of empirical fidelity that entails.

Correspondence with source phenomena can be enhanced by creating data sets that *specify* relationships between different aspects, dimensions and features of source phenomena or that *depict* source phenomena analogically. A continuous video recording of a wedding, assassination or child development class, for example, will display activities in the same sequence and duration as they occurred in the event itself. Because they are linked mechanically to the materiality, time and space occupied by the source phenomena, recordings exhibit a kind of homology (on these dimensions, at least) for which inspection of the data set can generate more detailed information about source phenomena themselves.

As a special case of phenomenal fidelity, visual (and audio) research materials can play a special role in studies of artifacts that are themselves visual (or audio) materials. Researchers who study family photographs,

websites, Hollywood films, political buttons and posters, radio programs, fashion design, storytelling or security camera videos can work routinely with extremely high-fidelity copies of their focal source phenomena. These copies allow both researchers and audiences to view (or hear) phenomena in the same material form – though not the same social contexts – as they could be apprehended in the field. This enables researchers to retain intimate contact with source phenomena throughout the inquiry process, or even to invite research colleagues and other audiences to examine directly the source phenomena at the center of their studies.

This special feature of multi-media recordings does not mean that scholarship about visual materials can only proceed as a series of visual studies projects. Nor does it mean that all photo- or videographic research records have the same epistemological status. Photo and video records that appear in social and cultural inquiry may or may not constitute source data. But when source phenomena are themselves audio-visual materials, they *can* be presented to other scholars (and lay audiences) in ways that are not possible for other elements of culture and social life.

The source phenomena observed by Erving Goffman for the analysis reported in *Asylums* (1963) or *The Presentation of Self in Everyday Life* (1959), for example, were recorded as field notes that very few people have ever seen. These differ in form and content from the mass media photographs Goffman examined in writing *Gender Advertisements* (1976). Within that publication, Goffman included a good sample of the image artifacts he collected. These do not just depict, but actually constitute source phenomena for his study. As such, they also define a class of imagery – representations of how producers and consumers visualized images of men, women, adults and children in mid-twentieth century American culture – that many readers can access on their own.

The photographs in *Gender Advertisements* thus provide a different kind of empirical

warrant than the photographs through which Margaret Mead and Gregory Bateson examined cultural practices (including gender display) in Balinese culture (1942). Bateson and Mead made photographs as records of other phenomena that interested them. Their images might do a good job of *depicting* culture and social life, but did not *constitute* the phenomena at the center of their interests – though the same photographs have constituted just that for subsequent examinations of Mead and Bateson's work (Sullivan, 1999).

Contextual and collateral evidence

In materializing observations, a key difference between a drawing or written note and a photograph or video recording is that the drawing or note will include only those details noticed and added by the observer. In contrast to this wholly deliberative process, the photograph or video record will quite likely include visible details that fell within the camera's field of view that, at the time, escaped the attention and interest of the photographer. This contrast makes machine records, such as photographs and audio or video recordings, extremely useful in collecting contextual evidence related to the focal phenomena of a study, the circumstances in which artifacts are found or collected, or otherwise acquired, and the terms by which researchers participated in a field setting.

The contributions of audio-visual recording in collecting contextual and collateral evidence include the opportunity such materials provide to stimulate the remembered experience of both researcher and research subjects. This can occur for researchers in reviewing and logging their recordings and for research subjects through various image-elicitation protocols. In both cases, the mix of focal and collateral information contained in machine-recorded artifacts can prompt discussions that help place focal phenomena within a context of broader social and cultural interchange.

If one upside of photographs, videotapes and other machine recordings is their power to capture, represent, depict or even constitute data that can contextualize focal phenomena, a downside is the cost in research time and attention of sorting through rivers of information when a small stream might suffice. These trade-offs, however, are neither inevitable nor straightforward. Most researchers have to keep at least one eye open for ways to finish projects, not just start them, and reducing the gross quantity of data that needs to be processed can be a valuable step in that direction. But avoiding, simplifying and reducing multi-media data for convenience's sake alone is somewhat suspect, in part because convenience varies with both the researcher's experience and technical skill.

Tools, skills and multi-media seductions

In trying to achieve both phenomenal fidelity and efficient data reduction, researchers can benefit greatly from strategies and tool-kits for working with complex, multi-dimensional records, artifacts and data sets. As a loose corollary, a lack of either experience or tools has discouraged more than a few researchers from working with forms of data – including audio and video recordings – that seem inherently messy.

Relative to texts and numbers, multi-media research records and artifacts do present distinctive challenges. These warrant respect, but not fear or dread, for at least two reasons. First, multi-media records can be wrestled into shape by applying the same observation strategies researchers have used for decades to structure direct observations in the field – looking closely, taking good notes and coding for key dimensions and variables. Secondly, beyond those traditional approaches, researchers can also call on a wide range of computer-assisted database, record keeping, logging, editing and store-and-retrieve software.

In times past, tools needed to work with multi-media materials were expensive and the requisite skills considerable – and perhaps best acquired through advanced technical training. Increasingly, however, practical understanding of how to make, edit and organize multi-media materials has become a routine feature of generalized computer literacy. Folk practices of photo and video documentation – including the collection, annotation and organization of image, sound and video files – have evolved in both technical and conceptual complexity; these currently represent a resource that researchers can draw upon to support their own empirical inquiries.

The downside of having these tools and skills readily available is that researchers may be tempted to use them even when they are inappropriate to a particular study or line of inquiry. Indeed, the potential for commodity fetishism, in which the aesthetic and symbolic attractions of particular tools and materials displace and override attention to the phenomena they are intended to represent, is a persistent concern among social researchers. Photographs, video recordings, three-color charts and graphs, pull quotes and catchy titles, correlation coefficients and confidence levels, evocative prose and detailed spreadsheets can all be invoked to make an empirical study seem more vital, thorough or credible than it is. And, while good editing and presentation may depend on technical, as well as substantive, knowledge, scholars who oversell the significance of particular tools or materials court the suspicion and disdain of other researchers.

Within the social sciences, concerns about this kind of fetishism have fueled more challenges to photographs and video recordings than to other kinds of research materials. On the one hand, this is understandable. Many people make photographs and videos that celebrate the image as a commodity in its own right (for example, fine art photographs and feature films) or that advertise the attractions of specific products, perspectives and ideas. Against the backdrop of this

persuasion-oriented mediascape, it's worth considering how a particular photograph or video recording might or might not serve as evidence for social inquiry. But those questions are also worth asking about numbers and texts, as all three forms of representation can be manipulated, hijacked or fetishized to diminish rather than increase our understanding of culture and social life. In general, looking for good data and determining how good the data look involves a delicate balance between phenomenal fidelity, data reduction and what it takes to communicate findings to colleagues and other audiences: that's as true for visual materials as it is for numbers and texts, but not any more so.

FORMING NEW KNOWLEDGE

Visual studies scholars have no monopoly on developing new knowledge of culture and social life. Imagery is not the only game in town and perspectives that emphasize other dimensions are equally important to empirical social inquiry. However, familiarity with visual studies objects of inquiry, methods and skills can prepare researchers to make more rational and effective methodological choices. Whether or not scholars who develop this familiarity come to see their discipline or the world differently, there's a good chance they'll be more skilled in developing empirically sound accounts of what they notice and have to say.

This prospect is both enriched and complicated, however, by the linked growth of interdisciplinary work with computer literacy and skills in multi-media production. Taken together, these have fostered an increasingly vital relationship between the media and methods of empirical inquiry – defined by the material transformations described above – and contemporary folk life. New media tools that have made it much easier for researchers to create multi-media records of culture and social life have also increased exponentially the range of related

folk materials that are now available to researchers. Whether or not researchers incorporate these materials into their own research, they point to folk practices that overlap in part with some visual study objects and methods of inquiry, particularly as these reflect interdisciplinary approaches. This kind of overlap may increase opportunities for researchers to share visual studies projects with students, subjects and lay audiences, but they also heighten the challenge of distinguishing visual studies that warrant serious scholarly attention from those that don't.

Jay Ruby (1973) worried over this issue some decades ago as a concern that anthropologists' photographs were more likely to reflect the conventions of 'home mode' (Chalfen, 1987) family snapshots than the research tenets of their own discipline. This generalization may or may not have been true – and may be more or less true now than it was when Ruby first wrote about it. However, it rests on a notion of the home mode that is too simple to account for the visual documents of culture and social life that have been created in recent years by consumers with no obvious research background in the social sciences. In this respect, it may be less telling that some field researchers have a tendency to make images in the home mode than that some home-mode enthusiasts – including children, artists and activists – have taken up audio and visual recording with imagination enough to support significant social and visual inquiries.

Along those lines, my own reviews of image-sharing websites such as *YouTube*®, *flickr*®, *vimeo*™ and *Facebook*® reveal a wealth of vernacular visual study projects that could enrich the collective enterprise of social scientific inquiry. Prominent among these are photo and video documents of social activities, cultural events and rituals, artifact collections and archives, 'think-aloud' accounts that range in focus from learning to use a new software program to shooting a wild turkey with a bow and arrow (and include pretty much everything in between) and projects to explicitly compare

different elements of culture and social life (personal appearance, arrangements of household possessions, individual and group construction projects at different stages of development, urban or rural landscapes, changing family structures, and so on). Some of these folk materials have such strong expressive dimensions that they are best viewed as evidence about the vision and skills of the individuals who put them together – and not much more. But others seem to give a good account of the subjects in front of the camera, not just behind it, and mirror the kind of content and provenance that researchers look for in artifacts and records that can support empirical social inquiry (Wagner, 2007).

Most folk products that achieve this kind of evidentiary standard present photographs or video recordings without the kind of analysis we've come to expect from academic social research. In terms of the research materials' typology reviewed earlier, they are best described as collections of records and artifacts. In some cases, however, these collections achieve high levels of phenomenal fidelity and come with enough contextual or meta-data to support additional analysis. And a few folk projects include evidence and analysis that are both visually intriguing and significant (see, for example, the *oktrends* blog for the online dating site *OkCupid*: <http://blog.okcupid.com/>).

Within Ruby's reasoning about this matter, these online collections of visual folk documents might be of interest to social researchers, but they would fall short of constituting social scientific inquiry in their own right. I'm inclined to agree, but only up to a point. An increasing number of social scientists – and I include myself among them – have found these vernacular visual studies projects of value to disciplinary research and teaching: as illustrations, data sets, catalytic cases, evidence of natural variation, counter examples, existence proofs, and so on. And an increasing number of scholars, museums, galleries and agencies have uploaded research and teaching materials of their own to some

of the same sites that support vernacular image sharing. Searching on these sites for terms such as ritual, material culture, social reproduction, technology, or the name of a particular culture or social group can frequently bring up visual imagery (photographs, drawings, charts and video recordings) from both folk producers and academics. This confluence does not equate folk projects of visual documentation with systematic social research, but the parallels are strong enough to consider the contributions of each to new knowledge of culture and social life – for both research communities and the public.

When viewed as an emerging interface between social scientific and folk inquiries, visual studies also seems to highlight a seam between what Marx regarded as the means and modes of production – in this case, the production of knowledge about culture and social life. As the technological means and tools of knowledge production change, they can become more or less at odds with existing modes of knowledge production, including relationships between those whose labor produces knowledge and those who control its valuation, exchange and distribution. In terms of participation, visual referents and the ambiguity of material and virtual interchange, a shift of just this sort has increasingly challenged the dominant nodes and protocols of knowledge production, within which research universities and scientific disciplines have played a central role.

A growing rift between knowledge-production technologies and traditional modes of knowledge control is apparent in the increasingly unsettled role of universities, libraries and media industries and in the conflict over state provisions for managing intellectual and cultural property. These developments may not be a revolution in the making, but they represent at least the possibility of continuing change and substantial dislocation within and around knowledge production and distribution. Within these dislocations, ideas about the ownership, control, distribution, attribution and meaning of

visual representations are highly contested, with significant consequences for scholarship, individual expression and community life.

Because of its continuities with the fault line between means and modes of knowledge production, visual studies represents a site of considerable vitality and flux. As offshoot, branch and root, it has framed significant empirical inquiries of culture and social life for a century or more now, some of which may well extend to the next.

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