

# Seeing and Not Seeing: Unexplained Phenomena in Science

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## Abstract

Why, beyond competitive and pecuniary interests, do scientists disagree with each other when presented with the same evidence. As they are also ordinary social beings much can be explained by their different socialization experiences and especially their professional education. To better understand these difficulties it is suggested here that a visual ethnographic approach might be of value. Metaphorically scientists are either unwilling or unable to “see” the validity of the evidence presented to them. Therefore in order to demonstrate such valid yet varying interpretations of the same data, this brief visually enhanced essay focuses on two photographs that might defy agreement among viewers as each depends upon either prior knowledge and/or different orientations to the subject/object.

## Keywords

visuality, vernacular landscapes, qualitative methods, quantitative methods

## Introduction

In my work I emphasize and accentuate those theories, methods, or simply ideas that are in one way or another “visual” and to weave them together in a sort of narrative. I argue that society, and therefore the study of society, is essentially dependent on the visible. As to visual ethnography of the unnumerable urban spaces and places that I have studied, I have concluded that:

“When we pass through urban spaces such as a residential neighborhood we haven’t visited before, we are like tourists using our eyes to decipher the clues and cues that loudly and quietly surround us. We might ask ourselves, Is this a safe or a dangerous place? Am I welcome here or should I leave before it is too late? What kind of neighborhood is it? Are

the people who live here rich or poor? What is their race, ethnicity, or religion and how (or why) does it matter? Some things are easy to tell on a street, such as whether there are things for sale. Legitimate merchants make it obvious that they are seeking customers with signs that compete for attention, but for the sale of illicit goods, the signs vendors give off are subtler. Yet it seems that for the knowledgeable customer they are in plain view. This reading of the "street signs," so to speak, is not merely an aesthetic exercise. What we see makes a difference in how we respond to the places and the people we encounter in our increasingly complex and changing urban surroundings"

(Krase, 2012, p. 1).

## Methodology

Although I have engaged in a wide variety of research methods to study cities around the globe, I believe that visual sociology offers some unique insights. For example, this brief visually enhanced essay discusses two photographs that engender different explanations that emanate from prior knowledge and/or different orientations to the subject/object. Most laypersons think scientists are a homogenous community of believers. While science, or the scientific method itself can be seen that way, scientists themselves are often ideologically and otherwise diverse that can lead to disagreements. The distinctions they most often make among themselves are based on their memberships in diverse disciplines and, even within the same discipline, the different research methods they employ in their work (Oevermann, et al. 1987; Williams, 2005; Russo, 2006). Of course political ideology is also equally divisive and can lead the rejection of otherwise valid scientific conclusions. For instance, my own field of Sociology almost disappeared in the Soviet Union as an independent discipline between the 1930s and 1960s as its honest pursuit would have been critical of the regimes. Similarly in the United States today polemical social science approaches like Critical Race Theory are under attack in several states (Ray & Gibbons, 2021).

As a visually oriented social scientist who studies urban life and cultures, I have long had to navigate disciplinary and methodological boundaries. The testy relationship between qualitative and quantitative research has historical, as well as logico-deductive, roots that continue to challenge agreement in the social sciences. My intention here is to argue for more attention to be paid to what social scientists do best as opposed to the labels they apply to each other and their trades. As the positivist founders of sociology would agree, social science is not exempt from the laws of social science. For almost a century there has been an intradisciplinary debate over the use of quantitative versus qualitative methods. For example, Follari referred to this schism as a "Paleozoic Debate" (Follari, 2014). Arguments over the relative value of qualitative and quantitative research is more social than logical. When we conduct research, we do it within shared social life worlds, with and among, as well as for, our peers as part of particular social organizations. I am not the first to argue that social research is itself a social act (See: Cicourel, 2004; Krase, 2018).

As in all socially organized systems, social science research is also hierarchical and "quants" or quantitative analysts, are at the top of the scale. Consequently, qualitative researchers in general, and ethnographers in particular, often feel the need to "justify" their practices to those seen as of a higher order. Within ethnography itself there is a rank order ranging downward from classical through auto-ethnography. At the bottom of the methodological barrel is the short-term visual auto-ethnography in which I often engage.

## Results and Discussion

Over the many decades of study I have concluded that academic disciplines and their internal sub-denominations serve more political as opposed to hermeneutic ends. That is, I need not be a certified anthropologist or sociologist to employ the methods, theories, and techniques of either discipline, yet the importance of these labels persists. The phenomenological sociology in which I

engage emphasizes, if not exaggerates, the requirement that understanding social events requires an understanding of how the participant/creators themselves understand them (Psathas, 1973). Therefore, the question of how social and other scientists understand their own activities is critical.

As Gadamer argued —“truth” and “method” were in conflict because approaches to the humanities were in conflict. One approach to understanding a particular text was modeled upon the natural sciences, and the other implied that its interpretation of required knowledge of the original intention of its author. For him, although meaning cannot be reduced to the author’s intentions, it is however dependent on the context of the interpretation. For Gadamer people have “historically-effected” consciousness and are embedded in the particular history and culture that shaped them. These “prejudices” affect their interpretations, but rather than being a hindrance he argued they are prerequisites to interpretation. That is, the scholar interprets the history of a text by connecting it to his own background (Gadamer, 1996). According to Malpas, Gadamer’s work, in conjunction with that of Heidegger, was “...not a rejection of the importance of methodological concerns, but rather an insistence on the limited role of method and the priority of understanding as a dialogic, practical, situated activity” (Malpas, 2013).

The social construction of my academic own life world is informative in this regard. I was introduced to the twin sister disciplines of anthropology and sociology in 1961 at the Anthropology-Sociology or Sociology-Anthropology Department at Indiana University. In the freshman year sequence the first introductory course was Anthropology and the second was Sociology. The primary distinction was that anthropologists studied culture, such as norms, or ways of acting, while for sociologists it was the statuses, or positions, and their relations in social structures. When the department split, the defining characteristic of the Sociology Department was its quantitative, statistical emphasis and for Anthropology it was ethnography.

Sorokin wrote in *Fads and Foibles of Modern Sociology*:

The younger generation of sociologists and psychologists explicitly claims that nothing important has been discovered in their fields during all the preceding centuries; that there were only some vague “arm-chair philosophies”; and that the real scientific era in these disciplines began only in the last two or three decades with the publication of their own researches and those of members of their clique. Claiming to be particularly objective, precise, and scientific, our sociological and psychological Columbuses tirelessly repeat this delusion as scientific truth. Accordingly, they rarely make any references to the social and psychological thinkers of the past. When they do, they hardly veil the sense of their own superiority over the unscientific old fogies.”

(Sorokin, 1956, pp. 3-4, Citation from Haney, 2008, p. 129)

In addition to the too often referenced Qualitative-Quantitative divide, another methodological dichotomy that is often misrepresented is that between Descriptive as opposed to Analytic studies. In general, analytic scholarship is given higher “scientific” status because it implies the need for quantification; that is, its validity and reliability are dependent on the employment of formulae and/or numbers. “Analytic” studies create new knowledge from data as opposed to merely describing it. Deduction and Induction are also commonly presented as mutually exclusive dichotomies without taking note of its valuable synthesis of Analytic Induction. The disciplinary separation of anthropology from sociology reflected the evolution of Znaniecki’s (Znaniecki, 1934; see also Denzin, 2007) version of analytic induction as at first a quantitative (enumerative) methodological and theoretical innovation into Glaser and Strauss’s thoroughly qualitatively “Grounded Theory” (Glaser & Strauss, 1967). At the time, quantitative testing of hypotheses logico-deductively drawn from established theories was becoming *de rigueur* for doctoral candidates; with minor adjustments necessary for those willing to employ those of Merton’s “middle range” (Merton, 1968). The result was that social scientists were defined more by the methods that they used than the subjects that they studied. According to Key:

Qualitative research is a generic term for investigative methodologies described as ethnographic, naturalistic, anthropological, field, or participant observer research. It emphasizes the importance of looking at variables in the natural setting in which they are found. Interaction between variables is important. Detailed data is gathered through open-ended questions that provide direct quotations. The interviewer is an integral part of the investigation [...]. This differs from quantitative research which attempts to gather data by objective methods to provide information about relations, comparisons, and predictions and attempts to remove the investigator from the investigation. (Key, 1997)

In the "hard" sciences such as analytic chemistry that some social scientists wish to emulate, things are a bit more direct. Qualitative analysis is designed to identify the elements or compounds in an unknown substance; "What is in this sample?" answers usually simple yes/no questions. Quantitative analysis determines the quantity of particular chemicals in a substance. It asks "How much?" The modeling of qualitative analysis on the quantitative norms is typical and even the best arguments for ethnography – such as that by Small (2009) who playfully asked "How many cases do I need?" – are defensive. However, Small strongly cautioned ethnographers against retreating toward models designed for statistical descriptive research and enjoined them to enhance their own.

Generally, the [qualitative] approaches call for logical rather than statistical inference, for case rather than sample-based logic, for saturation rather than representation as the stated aims of research. The approaches produce more logically sensible hypotheses and more transparent types of empirical statements. Regardless of the method, ethnographers facing today's cross-methods discourse and critiques should pursue alternative epistemological assumptions better suited to their unique questions, rather than retreat toward models designed for statistical descriptive research."

(Small, 2009, p. 28)

While some qualitative researchers offer excuses for being qualitative, Cicourel had shown decades ago that the findings of quantitative researchers are also impacted by the social and psychological contexts in which the craft is practiced. He was not opposed to quantification but "My concern has been with the way social scientists often ignore biases introduced by the variations in the way different research analysts USE methods. There is no way to avoid such biases. The best we can do is to try and identify such biases and take them into account when we discuss our results" (Cicourel, 2004, p. 5). The COVID-19 pandemic and the scientific uncertainties that accompanied it in our Risk Society (Adam, Beck & Loon, 2000) are a tragically recent example the lack of agreement between not only scientists but government agencies. The differences were both scientific and ideological (Krase & DeSena, 2023). The result in the United States was the unnecessary loss of more than 450,00 lives (Bor et al, 2021). In all these cases of scientific disagreement, I argue that they were due to a lack of knowledge and, metaphorically a lack of willingness or ability to see. Allow me to turn now to two examples from my extensive visual research on vernacular landscapes (Jackson, 1984) that I hope will show these differences.

## Looking the Other Way in Germany

My late colleague, Elmer Luchterhand (1911–1996) served as an officer in the US Army in Germany (1943–1946) and while there helped to liberate a forced labor camp. He told me that what he saw there compelled him to try to understand how people could deny "knowing" what they could "see" going on around them in what appeared to him as an attractive small town nestled in the Harz Mountains. As to seeing, I must note in this regard that the Nazis tried to re-create the





Figure 1. Streetscape of Herzberg, Germany

atmosphere of *Gemeinschaft*, and the nation's homier past. They preferred to use traditional materials and building methods to create a comfortable setting for traditional family life. In this way, National Socialism sought to establish the family with all its sacred traditional accompaniments in fecundity and perpetuity. "German housing officials put first on the list: *the people hate a flat roof*. ... And everywhere — around Berlin, near big industrial cities, outside Munich, Nuremberg, Frankfurt and Cologne-- you see, as a reflection of these homely ideas, the little warm-roofed dwelling which are stopping the *landflucht*, spreading contentment and checking the growth of unconventional ideas" (Gloag, 1939, pp. 56, 58-59, 61-62; see also de Grazia, 1948, pp. 179-80).

The pleasant streetscape of Herzberg, Germany shown in the 2001 photograph below belies its wartime history. It also belies the presumption of moral *Gemeinschaft* as it provided the backdrop for unspeakable horrors.

"On the eastern outskirts of Hersbruck, beside the road to Nuremberg, was Hersbruck Concentration Camp. An outcamp of Flossenbürg, it had at its height nearly 6,000 prisoners crowded into its twenty barracks. They were divided into three shifts for round-the-clock work, digging tunnels for the underground armaments plant in the mountain at the edge of Happurg. Although the shifts were sometimes transported by train, more often they marched under SS guard, sometimes assisted by dogs, to and from work in their 'zebra uniforms' and clogs, through residential streets of Hersbruck, and the full length of Happurg. The *Geisterzug* (processions of ghosts), was what local people called these prisoner formations travelling their streets, six times in a day and night" (Luchterhand, 1982, p. 255).

In 2001, I retraced and photographed the route of the *Geisterzug* from which Figure 1 is taken.

During one of our many conversations in the Brooklyn College Department of Sociology Luchterhand related to me that the people who he interviewed that lived along the route said that they "did not see" what was happening as if that meant, they did not know or were not responsible. While in the area, I also photographed the crematorium where the bodies of overworked slave laborers were disposed of and imagine that, if asked, they would say that their olfactory senses



Figure 2. Little Italy in North Denver Colorado

were also similarly impaired. In this unsettling instance, as in many of my other visual and non-visual works on bias, Racism, anti-Semitism, and other equally noxious attitudes can impede the recognition of community, as every imagined nation seems to have its own version of intolerance (Krase & Shortell, 2013; Krase, 2013).

### Little Italy in North Denver Colorado

While in Hersbruck, local people obviously did not wish to see the atrocities occurring in front of them, in the Italian American ethnic enclave in Denver, Colorado the invisibility of what was in front of my eyes was due to my own ignorance. My study of Italian American enclaves (Krase, 1982a, 1982b, 1983a, 1983b) settlements and in Italy itself should have prevented my visual error. In the summer of 1983, I drove with my family from Brooklyn, New York to visit the Grand Canyon. On the return trip we stopped in Denver, Colorado. While in the city, I came across a column in *The Rocky Mountain News* entitled "Spicy Meatballs Order of the Day." The writer playfully and stereotypically described the Highlands neighborhood of North Denver as a place "... where old Italian men play bocce in the park, and where geraniums still bloom in window boxes" (Amole, 1983). Following his street references and bolstered by my discovery of Our Lady of Mount Carmel Church that offered masses in Italian I discovered the remnants of the original Italian immigrant settlement in an area called "The Bottoms," which was then occupied by Mexican Americans. Most of the Italians had moved up the hill from The Bottoms to a "better neighborhood" where, the vernacular landscape was so un-stereotypical of Little Italy that the mail carrier told me that it was not an "Italian" neighborhood despite all the Italian names on the mailboxes. Despite his misinformation, I decided to travel block by block around the neighborhood and visually document the vernacular landscape as I had in many other venues. In the process, I came across several commercial establishments such as Baldi's Grocery store, an Italian restaurant and other establishments sporting the names of what I assumed were their Italian American owners. Only a few of the single-family houses visually exuded the cues found in well-known Little Italies in cities like New York and Boston.



Figure 2 is a photo of one of the houses I assumed was owned by an Italian American because of the tricolor flag painted on the board outside the fence. However, a year later when I was giving a visual presentation of Italian and Italian American neighborhoods across the country to a group of Italian immigrants, I showed this photograph and gave my reason for choosing it. In response, a member of the audience informed me that I had missed seeing the small grotto containing a statue of the Virgin Mary in the corner of the brick house. They told me that this was a common practice for such structures in Italy and obviously the custom was carried to the United States. since that revelation I have seen them in many other Italian enclaves.

## Summary

In this visually enhanced essay I have attempted to demonstrate why scientists might disagree with each other's interpretations when presented with the same evidence by looking closely at two photographs. I have argued that scientists are social beings and therefore much can be explained by their different socialization experiences and especially their professional education. Similarly, understanding Italian American ethnic vernacular landscape in the Highlands neighborhood of North Denver depended upon prior knowledge of the culture that produced it. An accurate interpretation of the pleasant vernacular landscape in Herzberg, Germany however, required not only an understanding of German residential architecture but the historical events that belied its congenial appearance. Even more important was the reluctance or psychological inability of its residents to see the horrors that passed in front of their eyes. Analogously, scientists are sometimes either unwilling or unable to "see" the validity of the evidence presented to them.

## Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

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