The Development of Visual Sociology: A view from the inside

Douglas Harper

This paper is a reflection by one of the founding members of the IVSA (International Visual Sociology Association) about the events, ideas, social trends and revolutions within sociology that contributed to development of visual sociology. In 2016 the IVSA entered its 34th year and the author has been a participant in the organization for its full duration. The paper details the importance of documentary photography in the early era of visual sociology. During this era key papers by Howard Becker contributed to the intellectual movement's original intellectual definition and created a pedagogical model that has served as a model for teaching visual sociology to this day. Moving from visual sociology as a method based on black and white photography, the discipline embraced and developed collaborative methods including photo elicitation and photovoice. A parallel track of visual sociology focused on the analysis of the visual dimension of society, drawing on semiotics and cultural studies. More recently visual sociology has begun to explore the rapidly changing meaning and social function of photographic imagery, as cameras and images have become ubiquitous in the cell phone era.

Introduction

In 1983 eight or ten sociologists attending the American Sociological Association in Detroit responded to a query for those interested in visual sociology to meet at the University of Windsor. A small handful left the ASA meeting, crossed into Canada (thus creating the International aspect of our organization!) and had two meetings that proposed a minimal organizational structure to advance what was then a non-existent field. We felt like pioneers, and, actually we were.

Among those in attendance was John Grady, a filmmaker/sociologist, a visual sociologist who for decades contributed a stream of important research and who remains a mainstay in the organization. Others in that first meeting included Leonard Henny, a Dutch sociologist who produced the first publication of the fledgling organization, the *International Journal of Visual Sociology*, published for three or four year in the late 1980s. Vito Signorelli, a sociologist from the University of Windsor with an interest in semiotics, sponsored the

SOCIETÀMUTAMENTOPOLITICA, ISSN 2038-3150, vol. 7, n. 14, pp. 237-250, 2016 DOI: 10.13128/SMP-19704 www.fupress.com/smp – Firenze University Press

© 2016 Author(s). This is an open access article distributed under the terms of the <u>Creative Commons Attribution License (CC-BY-4.0)</u>, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

meeting. I came to the meeting with an interest in visual ethnography, having used photography in my Ph.D. dissertation that had just been published as *Good Company* (Harper 1982; 2015), the first visual sociological study to identify itself as such, at least in the US.

I remember this meeting well, because previously we were strangers waiting to be a community. Howard Becker's article 'Photography and Sociology' (Becker 1974) was common ground and I would go so far as to say that without Becker's article it is unlikely that we would have believed in ourselves sufficiently to rather brazenly found an organization and plan a meeting for the following year.

There were underlying reasons for our confidence. First we were all actually doing visual sociology, not just talking about it. Several had a strong interest and background in photography, and even had worked as photographers and filmmakers. For example, I had nearly completed an undergraduate in art before becoming a sociologist and approached graduate school with the goal of using photography as an essential part of how I did sociology. Grady had already co-directed several documentary films. We were not innocents hoping for a new sociology, we had already fought for our visions. By the time the IVSA had its first meeting I had just received tenure on the basis of my before mentioned visual ethnography of tramps, and my department and university's blessings had given my confidence.

Our brazen attitude was also a part of the sociological consciousness of the times. The late 60s and 70s, when visual sociology was germinating, was an era in which the monotheism of functionalism was successfully challenged by conflict theory. This was, of course, an era of profound social discord in the developed democracies in the Americas and Europe, and it was the era in which colonialism was finally 'on the table' because of the American war in Vietnam. It was remarkable to see Marx introduced to theory courses as the influence of Talcott Parsons waned. Sociology was following social change and the revolutions in society were reflected in how sociology was defined and done. The methodological god of quantitative methods had been coincidentally challenged by emerging qualitative methods and visual sociology became a small part of that movement.

Of course the struggles between theoretical and methodological approaches were as old as the discipline itself. My dissertation advisor, Everett Hughes, understood the discipline as a series of intellectual social movements. As an early member of the Chicago School, earning his Ph.D. in 1927, he had unhappily witnessed the transformation of multi-dimensional methods in the 1920s Chicago sociology to a singular emphasis on surveys, secondary research, and ever more advanced statistical analysis in the 1930s. Photography

had been used briefly in the 1920s Chicago sociology, so Hughes treated my interest in photography as a part of my dissertation as reasonable and he encouraged it unfussily.

The Impact of Documentary Photography

Many early visual sociologists, myself included, took our inspiration from documentary photography. Some of these projects were a part of what was called The New Journalism, where photographers embraced involvement with their subjects. Two important examples are Danny Lyon's project, extending over several years, on the American civil rights movement (Hansberry 1964) and John Kerry's (now the US Secretary of State), edited book documenting the anti-war movement among vets (Kerry 1971). Several documentary projects could be seen as phenomenological studies of the photographer's own communities and circumstances. These included Peter Simon photographs of the hippie communard movement (1975), Bill Owens study of his own suburbia (1972), Mary Lloyd Estrin's portrait of the economic and social elite (1979) Larry Clark's study of suburban drug addicts (1971), to name but a few.

Other's crossed cultural borders and used the camera to explore communities, social movements, and other typical sociological topics. Bruce Davidson, a white man, crossed the class, ethnicity and racial boundaries to photograph African American and Hispanic culture in Harlem with a tripod mounted view camera (1970). W. Eugene and Ailene Smith portrayed Japanese fisherman and their communities poisoned by mercury dumped by a Japanese corporation (1975). While photographing, then an elderly man, he was beaten by company goons and temporarily lost his sight.

These and other projects reflected intense involvement with complex topics and often introduced new ways of seeing a society that was both in trouble and also looking inward. John Kerry returned from Vietnam, where he had served in front line positions, to involvement with the Vietnam Veterans Against the War, and his photo book on that movement made the case that those who have the most to the war, often their lives or severe injury, were leading the cause to end it. Owens, a photojournalist for a local newspaper, took a course in visual anthropology from John Collier at San Francisco State, and took seriously the assignment to see his own community as though he'd departed from a spaceship. Smith, a WWII photojournalist and later a LIFE photographer, resigned from the best job a photographer could have in the 1950s to do private and precariously funded work in which his politics were not compromised.

Very likely a single book, Robert Frank's The Americans (1958, 1968) influenced those who became visual sociologists more than any other. Frank, a Swiss photographer with a Guggenheim grant, travelled across America over two years photographing routine moments and places in grainy black and white Tri-X film. He used an unobtrusive Leica and a 50 mm lens, which frames the world as one sees with one eye closed. This lens produces a familiar visual perspective while cropping it in half, creating a strong sense of verisimilitude. Frank's photographs, taken on the street, in cafes, at political rallies, on Hollywood sets and other mundane settings show details of peoples' normal actions, expressions, surrounding objects and their social contexts. The objects and expressions captured communicate a sense of loneliness, racial tension, political vacuousness and alienation that challenge then prevailing myths of the 'end of ideology,' the social integration of post WWII America, and the promise of happiness in a materialistic society. Rejected by several American publishers, The Americans was published in France in 1958 and then, in the late 1950s in America, where it met with criticism for it's 'sloppy framing,' 'random focusing,' and allegedly facile criticism of America. In 1968 it was republished by Aperture, a leading publisher of photography, and became an instant classic, appearing in a new edition in 2009. For emerging visual sociologists the book seemed to be a visual parallel to social criticism of American society by David Riesman, Christopher Lasch and others. The book made the convincing point that seeing a society through a certain frame (in this case Frank's personal vision) was not so different than drawing conclusions about it from non-visual data.

As visual sociology developed, inspiration from documentarians has continued. One example is in the work of Susan Meiselas. Her first book, *Carnival Strippers* (1976), showed a tawdry aspect to small town life as well as solidarity among the strippers that titillated the farmers and other locals who snuck away for temporary sin. Her subsequent work on the Nicaraguan insurrection and the Sandinista revolution (1981) portrayed the underdog military uprising against US armed troops from the inside. A photograph from this project came to be called 'Molotov Man,' (the subject is throwing a Molotov made from a Pepsi bottle while holding a rifle in the other hand) became a symbol of the revolution and was recontextualized in several galleries, articles, and other exhibitions. Finally, her recent magnum opus on Kurdistan (2008) combines her own photography of contemporary struggles with a vast archive of personal, journalistic and family photos from the inside of the cultural and military struggle of the Kurds.

Becker, in his seminal article on photography and sociology (1974), suggested that visual sociology work with the intensity, commitment and photographic skill of the documentarians, but to connect that work to sociological ideas, methods and assumptions. While many of us have tried to live up to this ideal, few if any have achieved it.

The Development of Pedagogy

The early visual sociology movement in the U.S. gathered several important recruits from workshops Howard Becker taught every summer in the early 1980s at the Visual Studies Workshop in Rochester, New York, a small educational institution organized by Nathan Lyons. Indeed this was an interesting and fortunate connection for visual sociology: Lyons was an influential photographer, curator and organizational wizard (founding the Society for Photographic Education, for example, which legitimated photography in fine arts curricula in the US). As a curator he brought the work of Lee Friendlander, Garry Winogrand other street photographers of great interest to visual sociology into the public eye in exhibitions, publications and reviews. As a friend of Becker's, Lyons likely welcomed yet another interesting development of photography in the workshops, and later, in his sponsorship of several IVSA meetings (1984, 1985, 1988, 1991, 1993). Having attended all of these meetings I remember the remarkable sense of community fostered by small, intensive interaction of visual sociology pioneers in the sweltering non-air conditioned rooms of the Lyons' wonderful institute.

In these workshops Becker assigned students to explore typical sociological ideas – the same ones he might assign in a field methods class – by making photographs. The film was developed and printed in Lyons' darkrooms, as the more experienced taught the less experienced. In this way early visual sociology adopted a craft orientation centered on photography itself, which prevailed until the digital age, and even now represents powerful memories. For example, in 1993 Patrizia Faccioli and I moved an entire darkroom from Bologna to a small town near Rome, where we built a darkroom in a 3 star hotel, to teach a workshop to Italian students. The project, organized by Francesco Mattioli, showed that a workshop based on making black and white photographs could produce extensive results in one short week.

Becker's pedagogy, which we copied and developed, was based on the critique method used in fine arts courses. Class members had to learn to publically question the work of their peers, and to have one's own work dissected and critically analyzed by one's student colleagues and their professor. We taught students to ask the questions: 'What sociological idea do these photos explore?' and 'How might we explore them more effectively?' rather than offering statements such as: 'I like that photograph because...' While these are easy questions to express, they are often extremely challenging to answer.

Thus visual sociology began with a strong methodological focus, based on black and white photography. We taught students to see in a sociological way as they developed skills as a photographer. Added to craft orientation of this era was a kind of camera snobbery. We compared our Leicas and Nikons and two-dollar plastic Diana cameras and argued over which lens saw in the most sociological way and which cameras worked best in particular settings. Those of us who became proficient at black and white photography and printing often had exhibitions of our work in conferences or art galleries. Early examples were the two Conferences on Visual Anthropology (COVA) in the late 1970s, leading to Becker's catalogue with the title *Exploring Society Photographically* (1979).

The IVSA becomes international

The IVSA met at the University of Bielefeld in Germany in 1986, and twice at the University of Amsterdam in 1989 and 1992. The Amsterdam conferences, named 'Eyes Across the Water' (I and II) were each drew more than three hundred participants from around the world, with travel funded by a generous grant from the a Dutch ministry of culture. The conferences were also multi disciplinary, and featured the work of important visual anthropologists including Timothy Asch and others. For the first time film screenings were integrated into the extensive program, and books with papers selected from the conference were published and widely distributed.

Professor Patrizia Faccioli of the Sociology Department of the University of Bologna dispatched a student to the second Amsterdam conference to evaluate its potential relevance for Italian sociology. As a result, Dick Chalfen, an expert in home mode photography and I were invited to Bologna the following year to deliver lectures and workshops. An Italian version of visual sociology gained new energy, adding impetus to long-standing research efforts in visual sociology underway by Francesco Mattioli and later by Marina Ciampi at the University of Rome. Faccioli and Giuseppe Losacco began teaching and doing research in visual sociology at the University of Bologna, and many Italian sociologists followed in their footsteps. In 1996 and again in 2010 the IVSA held its annual meeting at the University of Bologna, and in 2006 at the University of Urbino, and in these conferences a distinctively Italian version of the discipline emerged. A recent example is Mattioli and my study of the social meanings of symbols remaining from the fascist era in Rome (Harper and Mattioli 2014) where 600 randomly chosen people on the street were interviewed to determine their recognition and evaluation of fascist symbols, structures and even neighborhood designs created in the 20 year fascist regime. The research is both visual, semiotic and quantitative.

Collaborative methods

In the late 1980s visual sociology discovered reflexivity. That is, researchers began to use images to elicit understandings in a collaborative research process, rather than simply document social life. John Collier, a visual anthropologist, had first defined the method, called 'photo elicitation,' in his seminal text on visual anthropology (Collier 1967). It seemed to me a reasonable way to study the cultural world of an auto mechanic/bricoleur when the documentary method proved unable to probe beneath the surface of my subject's life. In this project and a subsequent study of the social meaning of agricultural mechanization images worked as a bridge between my research partners and me and in fact reversed the roles of teacher and learner in the interview process. In Working Knowledge (Harper 1987) Willie reflected in depth on images of 'junk' to show how his work and his social relationships emerged from the management of material debris, old machines fixed for poor neighbors, and the objects from which he build his own material and social existence. He also explored his own knowledge and skill from studying photos I made of his routine work. In the study of agricultural mechanization (Harper 2001) elderly farmers reflected on photographs made nearly four decades before as part of a WWII era documentary project on the impact of oil on American society. The photographs used in the interviews (200 chosen from an archive of 67,000) showed the routines of farm work that was about to undergo profound redefinition with post-WWII machinery; which I argued was a case study of organic solidarity evolving to mechanical solidarity. The images led the farmers to remember life before these changes and to reflect on what had been sociologically altered with the coming of the modern machine age to agriculture.

In this project I encouraged farmers to 'tell a story'; the facts of the moment were easy to understand (a horse pulling a mower, for example); I wanted to know what it had meant to participate in the specific events shown in each image. Because of the richness of the photo archive—created by photographers including Gordon Parks, Saul Libson and Charlotte Brooks, and overseen by Roy Stryker, famous for his mentorship under sociologists Robert and Helen Lynd—the farmers could time travel into a reflective space in which the very meaning of their identify of farmers were deconstructed. In the meantime photo elicitation has become common in many disciplines in the social sciences and, significantly in public health and other communitybased practice-based disciplines, with varying degrees of success and depth (see Harper 2012: 155-187).

A more radical version of collaborative visual sociology, named 'photovoice,' places cameras in the hands of research subjects, to hopefully capture their unstated points of view, and then, for this new self-awareness to become the basis of imagined or actual social emancipation.

The more purely phenomenological version of photovoice originated in the work of Wendy Ewald, who gave young students in Appalachia instructions in photography and then oversaw their explorations of their worlds through photography and writing. Her first book, *Portraits and Dreams* (Ewald 1985) led to a virtual industry of similar studies, only a few that approached the depth and subtlety of the first project. I suggested in a critical overview (Harper 2012: 188-206) that while it is easy to put cameras into people's hands the resulting photographs are not a guarantee of phenomenological insight or personal or social liberation that is claimed to follow. The outstanding examples, such as Ewald's first study, have seldom been matched.

The 'collaborative approach' as it was referred to, became a cornerstone of visual sociology to the point that the 2011 IVSA conference at the University of British Columbia featured it as a theme. Collaborative approaches continue to be among the most vital areas in visual sociology though, as is the case with many popular approaches, the results only rarely match their lofty claims, and in many instances the method has become diluted and simplified.

The Visual Dimension of Society

From the beginning visual sociology has had a dual character; one, described above, relied on photography to study the social world. This paper is a personal narrative, and thus I've stressed this orientation to visual sociology, because it has been my path. We have used photography because it has provided a way to explore concepts in new and powerful ways. For example, my understanding of railroad tramps (Harper 1982; 2016) developed from extensive participant observation research, and the photos I made on location communicated my understanding of tramp identity, culture and ideology. In this project the images and words worked in tandem to mutually explain and reinforce each other. Traveling with a single tramp for five weeks allowed me to see (and photograph) his transformation from a homeless drunk to a master of the freight train (a dangerous and difficult way to move the nearly 2,000 miles from Minneapolis to the apple harvest in Washington state), finally to a migrant worker: self-sufficient, sober and purposeful. The photos documented the life in the context of sociological ideas about identity, culture and migrant work and details in the photos as well as their contexts and settings, nuanced concepts such as 'identity' or 'transformation.' My most recent study, on the meaning of fascist symbols in Rome, relied on photographs as documentary evidence of sculptures, bas reliefs, mosaics, building design and neighborhood organization; phenomena that can, of course, be described in words, but allow for deeper understanding via the photographic images. All images are both denotations of objects in time, but they are also interpretations. For example, in my photographic research in Italy I photographed in early weekend hours to 'declutter' the symbols from human habitation and I framed objects to highlight their intended messages. In my current research on public art I am interested in precisely the opposite, that is, the way the public interacts with public art projects, and so I attempt to make photos of social life swirling around these objects and panels.

The other dominant orientation in visual sociology, overlapping with cultural and visual studies, used the world seen or recorded visually as sociological subject matter. Studies ranged from semiotic analysis of graphic novels to the sociology of architecture and landscape. Several IVSA conferences developed with these themes, particularly the 2009 meeting at the University of Carlisle, in the UK, and the 2014 conference at Duquesne University in Pittsburgh. The origin of the photographs or other images used as evidence is not important (and the researchers seldom make them); rather the issue is to understand, deconstruct and problematize the visual universe. An early example was Goffman's study of gender display in visual ads (1979) that inaugurated a spate of continuing studies. But as suggested above, ideology and other forms of meaning are inscribed in virtually any visual universe, from medieval maps to fascist architecture. As noted this form of visual sociology overlaps with cultural and visual studies, but the distinctive aspect brought by sociology is the study of how audiences (either in the formal sense of watching a play or movie, or in the informal sense of walking down a street and experiencing architecture) actually experience and define these aspects of social life. Thus Mattioli and my study of fascist semiotics was not simply a rendering of images, and their histories and intended meanings, but it was an attempt to understand how the 'public' (in this case 600 randomly chosen Romans) defined and evaluated these symbols. Of course cultural studies research has sometimes dealt with audience reactions so the overlaps continue.

Technology

Sociologists have always observed the world, but the transformation of what we see into sociological ideas was implicit before visual sociology. As noted the first visual sociologists used still cameras and black and white film and this produced a guild-like structure for several years that influenced our research as well as our teaching. In fact it was not easy or routine to show images in class, just a few years ago. We made slides of our photographs with copy stands and macro lenses, organized our images like art history professors, and projected them through the same slide projectors our fathers used to entertain and bore the neighbors with images of the family vacation. I often used several projectors to simultaneously project images allowing me to compare and contrast images. Making and cataloguing these images required skill and funds. Showing images in classrooms or conferences required slide projectors, which were not always available.

Much of that was lost in the transition to the digital, especially in the early days, when our wall-sized images of silvery wonder were replaced by the dreadful quality of low contrast images projected by video projectors. Only in the past few years have the digital projectors begun to approach our old fashioned slides but the upside is that adding images via downloads and PowerPoint has become almost too easy; that is because it is so easy to do, it is often done sloppily.

The digital revolution, however, could not be turned back. Digital technologies not only revolutionized how we did research, but more fundamentally redefined how images operate in society. The first digital camera appeared in 1975 but it was not until twenty years later that digital image making became ubiquitous. A few key dates allow us to realize the speed of the transformation. In 1995 Apple designed the Quicktake camera that allowed a digital image to be shown directly on a computer via a cable. The 1994 Kodak AP camera, an awkward, multi-part machine that cost \$17,970, was introduced as the first professional quality camera. But despite the cost and the awkwardness of the camera the Vancouver Sun newspaper immediately converted to this technology; the first major institution to make the switch in the inevitable movement from film (analogue) to digital. In 1997 an image was first sent via a cellular radio and a mere seven years later Flickr and Facebook came into existence. By the year 2000 cell phones with cameras were common but in 2007 the IPhone was launched and very quickly surprisingly high quality camera phones became everyday objects through much of the world. The world-wide distribution of instant cameras coincided with the full development of the web, and many websites dedicated to photo sharing.

This technological revolution has had profound consequences, from 'citizen journalism' (the 2004 earthquake in the Indian ocean was regarded as the first world event photographed primarily by normal people with their cell phones) to the free distribution of photographic work via websites and blogs to public and private shaming and humiliation via web postings.

The coincidental development of cell phone cameras, the internet, photo sharing websites and social media has meant that photography and video, once requiring a great deal of investment, skill and patience, is suddenly in virtually everyone's hands. Some of the implications are ironic; it is estimated that more than 300 billion photographs are made annually (and this number is continually increased) but most are glanced at for a millisecond if at all and then assigned to the digital junk pile. The digital systems that produce the images and are used to store them evolve continually into obsolesce in increasingly brief periods. Images made and stored by state of the art technologies can become unreadable (if not updated and moved to ever new storage systems) in a very few years. Thus as powerful as the new technology is, it is also weak and vulnerable, and has the potential to dilute the impact of the same visuality it promotes.

The shift to the digital universe has been so rapid and so nearly complete that it is almost difficult to some of the consequences in a clear light. In the old system, the intellectual control over research was in the hands of gatekeepers including editors and peer reviewers. However responsibly produced academic books and articles are expensive to produce and consumed in small numbers and thus their social impact is seldom significant. The digital world is generally not under the control of such gatekeepers and thus there is no guarantee that work produced in these settings have been reviewed and otherwise evaluated, even to confirm the simple truthfulness of what is said and portrayed. However accurate, true or convincing the work produced for the web is usually done for no expense and has potential distribution to millions around the world; images, videos and commentary can go viral in an instant, creating one's fifteen minutes of fame when based on slander, untruths or distortions.

Thus visual sociology is beginning to confront these fundamental and revolutionary trends in image making and image distribution, particularly in papers presented by at the 2015 conference in Tinos, Greece.

Final Thoughts

I would sum up this informal and personal survey by saying that visual sociology has proven to be an extremely elastic and yet durable intellectual movement. It has offered a new way to do sociology and a new way to imagine society. Visual sociology has also confronted one of the most exciting and problematical technological revolutions in history, because the digital turn, social media and camera ubiquity are our natural subject matter. Visual sociology has developed rapidly but it has not left earlier aspects behind; there are still those who use the documentary tradition to do visual ethnography (both in photography and film); study of semiotics and the built and unbuild landscape are increasing in scope; collaborative visual methods are used in an expanding number of disciplines, and the critical analysis of images themselves; their social power, creation and distribution, remains a central focus. Visual sociologists have been almost conventional in many studies, and have also ventured into topics, methods and approaches that are otherwise not found in sociology. The movement empowered the careers of those handful of us who met in Windsor, Canada so many decades ago, and created an intellectual movement that has reached around the world.

Sources

- Becker H.S. (1974), *Photography and Sociology*, in «Studies in the Anthropology of Visual Communication», 1: 3-26.
- Becker H.S. (1979), *Exploring Society Photographically*, University of Chicago Press, Chicago.
- Clark L. (1971), Tulsa, Lustrum Press, New York.
- Collier J. (1967), Visual Anthropology, Holt, Rinehart and Winston, New York.
- Davidson B. (1970), E100 Street, Harvard University Press, Cambridge.
- Estrin M.L. (1979), To the Manor Born, New York Graphic Society, New York.
- Ewald W. (1985), Portrait and Dreams: Photographs and Stories by Children of the Appalachians, Writers and Readers Publishing, New York.
- Frank R. (1968), The Americans, Aperture, Millertown, New York.
- Goffman E. (1979), Gender advertisements, Harvard University Press, Cambridge MA.
- Hansberry L. (1964), *The Movement: Documentary of a struggle for equality*, Simon and Schuster, New York.
- Harper D. (1982), Good Company, University of Chicago Press, Chicago. Third edition (2015), Good Company: a Tramp Life, Routledge, London.
- Harper D. (1987), Working Knowledge: Skill and Community in a Small Shop, University of Chicago Press, Chicago.
- Harper D. (2001), *Changing Works: Visions of a Lost Agriculture*, University of Chicago Press, Chicago.
- Harper D. (2012), Visual Sociology, Routledge, London.
- Harper D. and Mattioli F. (2014), I Simboli del fascismo nella Roma del XXI secolo, cronache di un oblio, Bonanno, Acireale-Roma.
- Kerry J. (1971), The New Soldier: View Veterans Against the War, Collier, New York.
- Meiselas S. (1976), Carnival Strippers, Farrar, Straus and Giroux, New York.

Meiselas S. (1981), Nicaragua, Pantheon, New York.

Meiselas S. (2008), Kurdistan: In the shadow of History, University of Chicago Press, Chicago.

Owens B. (1972), Suburbia, Straight Arrow Books, San Francisco.

Simon P. and Raymond M. (1972), Moving on Standing Still, Grossman, New York.

Smith, E. and A. (1975), Minamata, Rinehart and Winston, New York.