

## Epistemology and Practical Applications of Anthropological Photography

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The purpose of this article is to determine the epistemological specificity of the photographic image and its relationship to anthropology; and at the same time to attempt a synthesis of the several practical uses of photography in the discipline.

### INTRODUCTION

It is evident that photography is not highly valued in social and cultural anthropology as a basis for information or a research tool, whereas such other disciplines as geology, archaeology and astronomy or even medicine have an indispensable tool in photographic images and use them according to well codified methodology: for example, the aerial survey of underground structures and of prehistoric sites when seen under particular lighting conditions; the discovery of hidden features of painting which allow one to reconstruct the stages and the rhythm of a picture's composition; a new perception of the solar system based on the transmission of space pictures from nearby planets and their satellites; endoscopy relying on optical fibers and photography to make medical diagnoses. Given such instances, why then the negligence in our social sciences, a negligence which implies a total absence of any consensus about methods? Why such inertia in the face of an intellectual tradition that has always favored the written document? Why such legitimate distrust or false shame about images deemed too close to aesthetic experience or too steeped in subjectivity?

Thus the theoretical and epistemological reflections capable of giving photography a foundation have been rare and, despite the new scientific sensibility to be found in the "civilization of the image", they remain secondary and marginal. With scriptural-like sources that were not however necessarily the first ones, and after the spectacular but already old-fashioned essays of a Bateson or a Collier which have had almost no follow-

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up, ethnology should have been able to develop a broader place for photography than just the systematic recording of behavior in the realm of nonverbal communication.

Beginning with the principle that the photographic methodology used should be consonant with the methodology of the discipline concerned, it is still more surprising that in most instances a photographic methodology cannot be extracted—at any rate more systematically and regularly—from its epistemological specificity. For is there not in fact a certain harmony between ethnological knowledge and photography as a specific kind of knowledge? Would it not be useful to spell out this rapprochement which has been natural, implicit for the rare users of photography?

Let us at the outset be clear about this ethnological knowledge, which can be broken down into five points which reflect two broad orientations: on the one hand, the recognized importance of the position selected by the observer within the situation under study for the collection of data (and afterwards for the “artistic” presentation of the data) and, on the other hand, the attention given to detail and to recording the natural opaqueness that one is seeking to unveil. The five points mentioned are the following.

1. Full recognition of the personal investment of the observer according to his subjective and sociocultural position, his choice of interpretational categories which will modify the nature of the observation and of the object observed; but also according to his own observation, stimulated by the presence of another person, as if ethnological knowledge were associated with a funnelling of the individual who is discovering himself.
2. Subordination of ethnological inquiry to the dialogue practiced between the researcher and the natives and their spokesmen, thus producing knowledge from the very presence of the ethnologist within the communicative space shared by the group under study.
3. Particular attention given to the “details” of the micro-social reality, which is precisely favored by a long stay in the field. Written over a century apart, the methodological principles of de Gérando and Malinowski show the same interesting detail. The former, writing his advice to travellers in 1800, indicates that observations “are not altogether complete unless they present us in detail with the facts to which they refer” [de Gérando 1969]. As for Malinowski, his insistence on “the imponderables of daily life” [1922] implies the same attention to details of daily life; the work routine, care of the body, the method of getting and preparing food . . . .
4. The very object of ethnological study is other people, not necessarily assimilated into other societies either in an ethnic otherness, or else in an “interior exoticism” in a modern society yielding the unknown or

the unpublished through its permanent movement and disorder, but even more, we suggest, in the very opaqueness of different codes which are not directly observable and which either emanate from the natives or are hidden by them. "Every society is opaque in regard to the foreigner but also opaque in its own view," wrote E. Zonabend. "The ethnologist has to agree to the lifting of this opaqueness which all societies are enveloped with, while keeping account, it is true, of the conscious models offered by the group; but also while twisting them, in other respects, by submitting them to ethnological analysis" [Zonabend 1985:37].

5. The closeness of ethnology and artistic activity in particular through recourse to descriptive and narrative texts as a source of scientific knowledge necessarily implies an important piece of writing with different textual strategies that constitute a "fictional" society [Clifford and Marcus 1986; Marcus and Cushman 1982]. Various categories of ethnographic text such as the monograph and the film have been noted, but also the novel, the humanistic ethnography, short stories and anecdotes, life-histories, etc. [Edgerton and Langness 1977:57–87]; or still different traditionalities of textual organization such as natural history (following a process of discovery in the field), chronology (of actors and events), the compression or extension of themes, the separation of narration from analysis, or else a thematic presentation [Hammersley and Atkinson 1985:215–227]. But even on this side of the labor of description, the ethnological work can be compared with that of a novel: "Their texts are based on immersion and participation in a given situation which they have both known and been detached from" [Powdermaker 1966:296].

Photography would seem to be a genuine category of thought or a means towards particular knowledge involving a special relationship with things, that is altogether different from painting or writing. This relation between the photographic image and its external referent may be characterized by seven principles which are as much the limits of photographic support as assets for knowing and valuing in a pertinent way. It matters that each epistemological principle of photography note the practical uses which are their corollary, and at the same time notice their complete integration in the two major orientations of ethnological know-how that we have just outlined. We shall distinguish these practical uses of photography according to how they affect the development of research, the collection of data and also the analysis of theses (with the criteria of sufficiency assuring the validity and representativeness of the images). For each theoretical principle, we will select (it's not an exhaustive list . . .) different instances of photographic work to illustrate its pertinence.

## EXPLORATORY WORK

## Principle I: Index

The photograph is basically an indexical image, that is to say, relating to the order of the index, according to the linguistic terminology of Peirce, but not in the first place to the order of the icon (a representation through resemblance) or of the symbol (a representation through convention). Thus the photograph, through the physical-chemical mechanism it uses for referent, traces something real, just as smoke does for fire or shadow does for a tangible object [Peirce II, 248, 281; III, 361]. As irrefutable evidence of the existence of the object photographed, the photographic image thus contains a power to designate which assures it its heuristic fundamental quality: to show, to draw our attention to an object, a theme, etc.

Thus, for example, on a practical level the photographic image can be a means of orientation in a broad piece of fieldwork, and even more easily so if this image contrasts with certain prejudices or common opinions: a stack of data to be used later, locating the situation, the originality of the first glimpses of a "foreign" situation, support for a discussion with a native, and a source of new information [Collier 1967:7–16]. To be useful in these ways, an image has to be informative, taken in a relatively uncertain and informal way. In a similar perspective of orientation and discovery, photographs of features deemed "important" for the native or building up his dignity can become items of negotiation, contact, and access to other informants and further sources of information. In another respect the photographic image can also help in revealing and constructing a new thematic which up to that point was unperceived or unimagined, still too intuitive or poorly delineated. Thus, from a simple affirmation of its existence, the "feeling" or the "remarkableness" would burst forth from the collection of several suggested photos capable of prompting an initial hypothesis or some idea of a correlation between the different elements (whether they fill the points along a scale between two extremes, or all possess some common trait, or mark the sequence of successive acts of some identical phenomena). The expressive or "expressionistic" quality of a single photograph can also prompt the choice of a theme, especially if the promise of the proposed photo is greater than the promise of the original and if the polysemy of the images is reduced in favor of a single meaning [Moles 1981:195–214].

## THE COLLECTION OF DATA

## Principle II: Isomorphism

Not only does a photographic image allow direct rediscovery of its object, and no longer mediated through the medium of writing (from note-taking

to the ultimate description), but furthermore this direct discovery of the object is all the more interesting for being based on the principle of isomorphism. This means in effect that the act of photographing, being done at a single stroke and thus not resulting from multiple choices shading into or correcting each other as in a pictorial composition, implies an isomorphic presence in the image of all the features that have received the touch of light, whether they be intentional or not, important or incidental, whether they relate to a focal element or some detail. This perception of the entirety of the framed situation allows access to more details than would the naked eye, i.e., to unexpected, hidden or unconscious features that may help one to develop a new point of view, as far as the profane limits of the subject under study: the transience of movement, gestural and insignificant excesses, in the wings as well as on the stage, during weak periods and strong, etc.; from a too-selective naked eye, slipping easily from one object to another, avoiding what disturbs it and necessarily taking note of things very rapidly, there often emerges a faceless man, with no emotion, no movement, no clothes. Doesn't photography to a certain extent allow for potential note-taking on whatever is in the world and from all possible angles? And all secondary or marginal elements (gestures, objects or people external to the central action) indicate to the researcher a collection of unspoken facts which can be very rich in their meaning, and can give a different sense to ethnographic description [cf. Collier 1967: 1-2 and de France 1982 for the use of film].

But surely the reading of pertinent data in images that are most often overcrowded cannot be done except according to some specific methods. This requires certain principles:

1. The thread previously established by the researcher: a precise theme, a hypothesis to be demonstrated, a theoretical position to be tested—something capable of establishing a lucid and discriminating view. The relevance of photographs is directly connected with the very effectiveness of a chosen theoretical model [Becker 1986: 242; Byers 1964; Caldarola 1985; Worth 1981].
2. To pose questions, either general or specific, to which photographs are capable of giving answers. We should follow the example of Howard Becker, who asks us to leave aside the question of truth — not “is this a genuine image of the way ‘they’ practice such a rite?” but rather “do they adopt a serious attitude to practice their religious rituals?” These questions, guided by the theme of the research, were raised before taking any photos and before seeing the images themselves [Becker 1986:276-279].
3. To use a method of visualizing the relevant features. First, for example, by a grid one made up of  $1 \times 2$  cm. boxes drawn on a transparency which allows one to retrieve the optically “strong” points of the

document, as though one's gaze were naturally directed towards these points from a systematic scanning of the boxes. "Negative" points which distract the gaze towards uninformative areas can be eliminated from consideration, but the details which may have been overlooked can be discovered [Mounin 1974; Zoller 1987:347]. Secondly, one might use a grapho-photographic method which compensates for the neutralizing or standardizing tendency of photography by bringing into views the patterning of essential features. This method adds to photography, as the visual trace of a fact, the strength of the intellectual act of schematising: it makes hierarchies, determines and eliminates what is ancillary in favor of what is essential. Starting with a tracing paper placed on the photograph, it becomes necessary to make a silhouette; that is, to follow the traits that are recognized to be the principal ones, and the contours of what one wants to focus on [Leeds-Hurwitz and Winkin, n.d.]. Thirdly, through reading the image according to a particular code that could for example be:

- (i) semiotic; that is to say, looking for "iconemes", recognizable elements within the image that are associated with predefined significands (according to a determined thematic system), or to other elements that attach themselves to these [Ball and Smith 1992: ch. 3].
  - (ii) "somato-tactical" or "proxetic" features looking to discourage the different modalities from interpersonal movements, from bodily engagement, from the position of the body, but also gestural movements and types of gaze [Spiegel and Machotka 1974:113-146; Hall 1974:57-62; Mead and Byers 1968].
4. to present photographic images to the native people so that they can help in identifying certain features which they show (precise descriptions, identifications of people, or events, or objects, explanation of a certain mechanism, etc.), in such a way that these images thus become, through an extended interaction, the object of discussion and a source of information which the sometimes inhibitory effect of the questionnaire and even of the semi-directed interview may make it impossible to collect [Collier 1967:46-49].
  5. if possible, to ensure a reading of the images by several researchers, thus having a certain guarantee for an identical interpretation, and thus implying a deeper research and discussion which provide in both cases a corrective to all personal bias.
  6. to present in an altogether indispensable way the legend which the reader needs to help identify the object represented in a photograph, and so give him a means of reading and at the same time feeling how to reduce the polysemy inherent in the image [Bateson and Mead 1942; Worth 1981: 34].

### Principle III: Distance

Photography involves a certain contiguity with the referent, a certain spatial and temporal distance from it. The spatial separation between the sign and the object implies an existential absence of the second just as the separation between the now of the glance and the then of the shot-taking shows the delay in relation to a reality which is impossible to verify. Shading into the indexical principle of physical proximity, the principle of spatio-temporal distance and the separation between reality and image, has the benefit of playing on the potential effect of astonishment and revelation which this is going to call forth in relation to that: "something which we have seen and which is there" [Dubois 1983:90].

From this principle of distance and this astonishing effect, there follows a double practical consequence: on the one hand the researcher becomes involved in a sort of to-and-fro—which can be spaced out in time—between the various images that he has been able to collect and within the realm of the possible, from image to object, and from object to image, always with a view to seeing more, seeing better and in another way; on the other hand, the native person looking at photographs is likely to experience the same astonishment, to reawaken the consciousness of a certain situation, even to have an emotional jolt, all of which will stimulate him towards a projective interpretation thus yielding a comprehensive view of the culture (values system, adaptation to the society, to changes, etc.) which can take more or less profound forms (concrete impressions of reality, free associations, expression of personal sentiments, etc.) [Collier 1967: ch. 6].

### Principle IV: Cut

Photography also consists of a temporal and spatial cut in the continuity of reality. The temporal cut, which is accomplished at a single blow, as we have seen, implies the passage of a moment of time cut by the act of photographing to a set temporality which is immobile and unchanging in its image; while the spatial cut presumes the extraction of a bit of space from the full and continuous space of reality. In part, the space photographed implies there is also a remainder (outside the field of view) with which this space maintains a relationship that necessarily relates the photograph to an invisible presence: the decor, the signs of movement, the glances, are as much indices of what is beyond the field of view as of the position and presence of the photographer—a critical point for ethnological epistemology.

Following from this principle, and depending on the rhythm and choice of shots, collected photographic images will on the one hand allow a narrative understanding of an event, an individual, or of a group, that will develop in the course of the situation [for example, Bateson & Mead 1942;

Mead & Byers 1968]; and on the other hand a precise sequential reading of an interaction (the organization of space, postures, gesturing or mimicry) according to particular methods, within spaces and times that are quite precise, and according to a determined rhythm of view-taking. An example of this perspective might be inspired by the scenological analysis developed by J.-P. Terrenoire, which integrates both topological analysis (the study of starting and finishing positions, of movements between the two, analysis of relations between places, etc.), and a kinesiological analysis, that is to say, one of gestural and postural movements, passing from one scene to another, each scene being associated with the stability of elements that are considered to be significative and the relations between these [Terrenoire 1981–1982:4–9]. On this matter the “frame analysis” developed to a scriptural plane by Goffman could prompt a photographic proceeding that would form a complement to this scenological analysis, using an image-by-image study of the great vulnerability and of the multiple transformations which a chosen scene undergoes in its “primary frame”, that is to say, in what gives it its basic signification. This vulnerability is expressed in pretence, in gestures beyond the frame (various bodily actions such as sweeping), or in breaking the frame (with an implication of disengagement), in moments of pause and moments of action [Goffman 1974].

#### ANALYSIS OF THE DATA

##### Principle V: The Platitude

The photograph is a flat and uniform support which transposes three-dimensional objects situated at some distance onto a two-dimensional surface which still allows one, thanks to principles of focussing and depth of field, to see a stratified and modulated setting. As well as indicating its correct limit in relation to the filmed image, this characteristic of photography offers some practical advantages that are not to be sneezed at:

1. a possibility of presenting the image in proximity to and relationship with the written text;
2. easy manipulation of the equipment in the field, a thing that is not very exacting and can be quite discreet;
3. relatively low costs;
4. a simple stock of gathered data, with direct access to them.

##### Principle VI: Singularity

While it does attest to the necessary existence of the photographed referent through its indexical quality, each image also shows, apart from any conceptual abstraction, the uniqueness of the referent as being a particular individual or object.



As the photograph is associated with a single value, various techniques should tend to assure the validity and representativeness of the discoveries which it permits [Becker 1986: 252–255]:

1. Precise identification of each photograph—of the scene presented, the place and moment of the shot—as part of a comparative analysis of the similarities and differences that can be noted.
2. Photographic sampling, consisting not of waiting to photograph what could be interesting and so of risking always getting the same features; but rather of favoring different shots according to methods determined for all events and all spaces. For example, a systematic photographic investigation of the paths used in a public space might consist of successively photographing the several parts of the space, always from the same angle, starting from the same viewpoint the choice of which could be relevant, observing regular time intervals, and then if necessary using other angles of view in order to cover the total observable space. A large number of usable photographs allows one to identify individuals (thus, for example, from 17 films and 523 stills of a public space, 6806 individuals were visible and 5043 could be identified according to their gender, age, and type of activity, whether walking, looking, eating, talking, or waiting). The photographic work of John Collier is equally built on a sampling idea (determined by chance: for example, photographing the interiors of every third house, or selecting the sample according to socioeconomic criteria) for photographed situations from which he goes on to make a rigorous inventory of the data provided by the images, to produce a quantitative database of the visualized features, and then to a content analysis and correlation between certain variables leading eventually to a final presentation of the visual data in the form of statistics or diagrams [Collier 1967:67–76; 1975:211–302].
3. The juxtaposition of photographs against a general commentary. It allows on the one hand for each one of them to preserve its identity with a specific description of its contents, and on the other hand a review from one to another on a single sheet or going from one sheet to another in order to visualize the interplay between identity and contrast, to improve the legibility of images brought together in this way, and at the same time to ensure a degree of implicit generalization. In this case, we get from each image some information that is of value to the whole collection. This is the method that was used by Gregory Bateson and Margaret Mead in their book, *Balinese Character* [1942], which contains 759 photos selected from 25,000 that they had taken in the course of their research—and taken in a spontaneous manner, quite often during the routines and chances of daily life, particularly while looking at family life. The pictures are represented in this

volume in 100 plates, each of them holding 6–11 prints, in order to understand Balinese culture by means of small details of behavior.

4. The cycle of photographic observation, with its characteristic of repeating and systematically ensuring the validity of collected data. The several stages of this cycle of observation are, according to Caldarola [1985]:
  - (i) preliminary knowledge of the context from which one selects and identifies a specific event;
  - (ii) the reference of a particular point of measuring used to direct observation according to determined physical, spatial or temporal limits;
  - (iii) the photographic act itself, coming between the focal point and the events of the scene that lies inside these limits;
  - (iv) a written note specifying the circumstances and a description of the photograph, the intention of the photographer but also of the persons involved in the event, the observations and discussions at the scene in question;
  - (v) the grouping of the photographs and their sorting according to the events they present;
  - (vi) the re-observation of these photographic groups which will allow contrastive features to emerge and cause diverse questions to arise;
  - (vii) interview of informants on the basis of images capable of confirming one's initial hypotheses, but also of stimulating new facts which will prompt a new cycle of observation, starting from another event connected with the first one, and so to ensure the systematic aspect of the research.

#### Principle VII: The Act

It is an important point: being tied to the uniqueness of the situation, photography at the same time implies the presence of a subject/photographer who is engaged in an experience which rules him out from thinking about it except in reference to his relationship with that subject. This absence of any neutrality is expressed in particular by choice of camera position, the distance of the object, and the framing. And in his analysis of the "photographic message," Roland Barthes [1961, 1980] has identified six "codes of connotation": faking, pose, object, photogenicity, aesthetics, and syntax. Thus the act of taking a photo necessarily implies a selection from among the facts of reality, revealing certain elements while leaving others outside the frame. Photography is not copying, nor an imitation of reality, created thanks to the neutrality of an apparatus which operates independently of the selective interpretation of the photographer. We know it's not the equipment that takes the photos, but rather the observing

photographer who allows his manner of looking to get out, and who constructs a world according to his subjective determinations—but also according to ideological, cultural and technical factors too. In brief, the image is not reality. Most authors have insisted on this point [Becker 1986; Goffman 1974; Ruby 1976; Wagner 1979; Worth 1981].

To avoid a maximum of errors and bias in making a photograph, it is thus necessary:

1. to spell out and justify the several criteria which came into play in the choosing of objects and in methods of taking the shot.
2. to foresee the presence of several photographers working on the same subject over a long period, so as to compare the images accumulated by them and to neutralise the interference of personal idiosyncrasies in the composition and lighting. A simpler way of proceeding would be to work as a pair like the Bateson-Mead couple, one taking the shots and the other taking notes.
3. to compare the visual data with data coming from other sources: personal notes, verbal commentaries, written documents, etc., all when gathered together being perhaps able to provide more certain data.
4. to be aware of certain dangers;
  - (i) the reading of a photo either because it has been set up in advance or because it has been retouched afterwards;
  - (ii) the dependence on technical or aesthetic standards which are no more necessary to a photographer than is literary genius to a sociologist or anthropologist, and which increases the risk of suppressing or exaggerating certain features, thus causing too severe a manipulation of reality.
  - (iii) poor sampling which might have excluded certain data, for example because of a too brief fieldtrip, or of certain blockages, or of a blindness due to theoretical presuppositions, or even of censoring (local censoring for ethical, political or other reasons).
  - (iv) to measure the degree of influence of the photographer over the subjects photographed. The intrusion or even invasion of that person into a given situation is in fact capable of modifying the behavior to be photographed. One can distinguish at least four situations where this might be so:
    - (a) objects or people photographed in their natural setting, that is to say a setting unmodified by the camera's presence. It is particularly human beings who are not conscious of its presence or who are so taken up with their activities that they give no importance to it, and in any case they cannot change their postures. The presence of additional photographers is how-

ever possible, but would not change the situation at all; on the contrary, these other people would become part of the situation.

- (b) human beings who do not seem disturbed by the equipment, behaving as though they had forgotten it was pointed towards them, but all along adopting an attitude that is not really "natural" and in any case being unable to conceal some modifications of their behavior.
- (c) figures visibly influenced by the presence of the photographer (having an expression of hindrance, fear, withdrawal, etc.).
- (d) a situation that is modified and manipulated by the observer-photographer, for whom their revealing reaction becomes the object of analysis.

In fact in the second and third of these situations, only a step-by-step introduction of the photographer and repeated observations will allow a very good knowledge of the natural dimension of photographically recorded behavior and also a better acceptance of the photographer's presence in the group being observed.

Most often, therefore, the act of taking a photograph is tied directly to a principle of uncertainty which brings with it a risk of reaction on the part of the observed towards the observer. But this aspect could be altogether incorporated in anthropological practice, insofar as taking a picture is considered an event of communication, a reciprocal relationship in which the subjects as much as the photographer participate openly, and from which the latter must derive his information.<sup>1</sup>

#### NOTES

1. This paper has been translated from French by Paul Hockings.

#### REFERENCES

- Ball, Michael S., and Gregory W. H. Smith  
1992 *Analyzing Visual Data*. Newbury Park, Cal.: Sage Publications.
- Barthes, Roland  
1961 Le message photographique. *Communications* 1: 127-138.  
1980 *La chambre claire: note sur la photographie*. Paris: Éditions de l'Étoile-Gallimard-Seuil.
- Bateson, Gregory, and Margaret Mead  
1942 *Balinese Character: a photographic analysis*. New York: New York Academy of Sciences.
- Becker, Howard Saul  
1986 *Doing Things Together: Selected Papers*. Evanston: Northwestern University Press.
- Byers, Paul  
1964 Still Photography in the Systematic Recording and Analysis of Behavioral Data. *Human Organization*, 23(1):78-84.

- Caldarola, Victor J.  
 1985 Visual Contexts: a Photographic Research Method in Anthropology. *Studies in Visual Communication* 11(3):33–53.
- Clifford, James, and George E. Marcus (eds.)  
 1986 *Writing Culture*. Berkeley & Los Angeles: University of California Press.
- Collier, John, Jr.  
 1967 *Visual Anthropology: Photography as a Research Method*. New York: Holt, Rinehart and Winston.  
 1975 Photography and Visual Anthropology. In *Principles of Visual Anthropology*, Paul Hockings, ed. Pp. 211–230. The Hague and Paris: Mouton Publishers.
- Dubois, Philippe  
 1983 *L'Acte photographique*. Paris: F Nathan; Brussels: Éditions Labor.
- Edgerton, Robert B., and L. L. Langness  
 1977 *Methods and Styles in the Study of Culture*. Second edition. San Francisco: Chandler & Sharp Publishers.
- de France, Claudine  
 1982 *Cinéma et anthropologie*. Paris: Éditions de la Maison des Sciences Humaines.
- de Gérando, Joseph-Marie  
 1969 [1800] *The Observation of Savage Peoples*. (F G. I. Moore, trans.) London: Routledge & Kegan Paul.
- Goffman, Erving  
 1974 *Frame Analysis: An Essay on the Organization of Experience*. New York: Harper and Row.
- Hall, Edward  
 1974 *Handbook of Proxemic Research*. Washington: Society for the Anthropology of Visual Communication; American Anthropological Association.
- Hammersley, Martyn, and Paul Atkinson  
 1985 *Ethnography, Principles in Practice*. London and New York: Tavistock Publications.
- Leeds-Hurwitz, Wendy, and Yves Winkin  
 n.d. Learning to See the Ordinary: The Uses of Silhouettes in Teaching Interpersonal Communication. (Unpublished ms.).
- Malinowski, Bronislaw Kaspar  
 1922 *Argonauts of the Western Pacific*. New York: E. P. Dutton.
- Marcus, George E., and Dick Cushman  
 1982 Ethnographies as Texts. *Annual Review of Anthropology* 11:25–69.
- Mead, Margaret, and Paul Byers  
 1968 *The Small Conference*. The Hague and Paris: Mouton Publishers.
- Moles, Abraham A.  
 1981 *L'Image, communication fonctionnelle*. Tournai: Casterman.
- Mounin, G.  
 1974 La Sémiotique de l'image. *Communication et langage* 22:48–55.
- Peirce, Charles Sanders  
 1931–1958 *Collected Papers*. Cambridge, Mass.: Harvard University Press; 8 vols.
- Powdermaker, Hortense  
 1966 *Stranger and Friend: the Way of the Anthropologist*. New York: W. W. Norton.
- Ruby, Jay  
 1976 In a Pic's eye: Interpretive Strategies for Deriving Meaning and Signification from Photographs. *Afterimage*, 2(9):5–7.
- Spiegel, John Paul, and Pavel Machotka  
 1974 *Messages of the Body*. New York: The Free Press.

Terrenoire, J.-P.

1981-82 Analyse scénologique. Analyse sociologique de l'image. *Sociologie de l'image*, no. 2:4-15.

Wagner, Jon (ed.)

1979 *Images of Information: Still Photography in the Social Sciences*. Beverly Hills and London: Sage Publications.

Worth, Sol

1981 *Studying Visual Communication*. Philadelphia: University of Pennsylvania Press.

Zoller, P. H.

1987 Photographies et mouvements sociaux. *Revue Suisse de Sociologie* 13:337-354.

Zonabend, Françoise

1985 Du Texte au prétexte. *Études rurales* 97-98:33-38.