

PROPOSITIONS FOR THE TREATMENT OF ICONOGRAPHICAL INFORMATION

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Iconographic documentation includes a certain number of different documents: posters, postal cards, drawings, photographs, etc. I will limit this discussion to the photographic document much more for pragmatical reasons than conceptual ones: the photographic document is actually present in archives, libraries, museums, documentation or information centers, and generally in great number. The discussion that follows will focus on subject indexing of photographic documents.

1. THE PHOTOGRAPH AND THE 3 MARIES

The presence of photographic documents over the whole spectrum of "culture collecting institutions"¹ intensifies the importance of the discussion about their treatment, since the photograph raises very similar problems to all of them. Although each institution has its own goals and working methods it may be said that photographs cause indexing problems in all the institutions and that these problems are very similar, if not identical. Audiovisual documents found a brotherhood between the different institutions: this is the reason for calling this institutions the "3 Maries"². Photographs, besides helping us to see the bridge between the "3 Maries", have a rather anarchic role in connection with the definitions that guide our conceptions of the different institutions, disturbing solidly established traditions. The library, for example, maintains the habit of unitary treatment of documents, and feels

overwhelmed before enormous photographic collections and at this point comes to realize that the unitary treatment is not feasible. Archives, likewise, organized to treat the documents in series related to their functions, discover themselves juxtaposing the function of the photographic documents to the perception that they also bear images with an informational content. Finally, museums, dedicated to the treatment of objects feel uncomfortable facing documents that are objects, but objects that, at the same time, impose themselves as images. These examples are certainly caricatural and do not represent all the realities confronted by the information professional, but indicate the "anarchic character" of photographs. Photographs do not submit themselves to any existing logic but impose their *own* logic. The workers of the "culture collecting institutions" must try to understand the logic imposed by photographs, in order to return their treasure to society.

2 THE LOGIC OF PHOTOGRAPHS

If photographs impose themselves with their own logic, as I believe, what logic is this? This logic has its roots in the nature of a document that is not textual, but photographic. The photographic document is typified by a conjunction of factors that must be taken into account if we want to treat them pertinently:

- the photographic document exhibits an "**informational content**", in other words, "something" that has been photographed and appears in the image;
- but this "something" has been photographed in a certain way, according to the photographer's intentions: the frame, the choice of a certain lens, the light, etc... I will call the result of these choices the "**photographic expression**";

- in turn, the generated document may be preserved and retrieved in the future because it is recorded on a physical medium, introducing new variables to the question.

The two first parameters are essential to documentary treatment of photographs, although the third parameter cannot be forgotten.

Any photograph imposes itself by what it shows, this is its primordial function. The discussion about the relation between the photograph and the photographed object is very rich, and I will not repeat this discussion here³, but we cannot forget that, initially, the photograph competed with painting and has confirmed itself as a different art later on. According to Dubois, photographs were in the beginning associated with the photographed object: the photograph was equal to the object, a perfect mirror of this object. In a second moment photographs have been discussed as a manipulation of the reality and now we can consider that we are living a moment of equilibrium in which the two characteristics cohabit: photographs are not a mirror of reality anymore, and neither a total manipulation of it. In other words, the photograph always encloses an "image" of the photographed object (its referent⁴) but this "image" is not equal to the referent, since it is the result of a series of decisions taken by the photographer. This evidence, nowadays ascertained by photographers and semioticians alike, poses two essential questions for the information professional:

- why the literature of Information Science professes the treatment of photographs limited to what they show, or their informational content⁵? In other words, this literature assimilates subject indexing of photographs to the subject indexing of the photographed object, rejecting its expressive dimension. This expressive dimension is, nevertheless, totally relevant for the user of photographic archives. The efforts to list the questions posed by users searching for images show that a great part of them juxtapose the photographed object to some kind of expressive dimension⁶;
- how to abstract and/or index this informational content?

The two questions above indicate what seems to be the heart of the problem and, perhaps, also a possible explanation of the difficulties met by the professionals to organize photographic documents. The discomfort, often noticed among information professionals, when they have to deal with images, may be related to these questions and what they mean for the different professions involved. In other words, the double character of photographs - content **and** form - has to be incorporated. Finally, the second question may be considered as a development of the first one, since, according to the hypothesis here adopted, subject indexing of photographs has to join content data and expressive data.

The 3 parameters will be developed next. These parameters may be condensed by the expressions **WHAT** the photo shows (in other words, its informational content - item 3), **HOW** the photo shows (the form adopted to show the informational content, or the photographic expression - item 4) and **WHERE** the photo shows, devoted to the question of the photographic document as a physical object (item 5).

3 WHAT THE PHOTO SHOWS

As it is said: "an image is worth a thousand words"... and consequently the content analysis of images poses serious problems of information selection. If document analysis of textual documents searches for help in textual structure, which indicates "where each type of information ought be found"⁷, the analysis of images still works a case at a time, endangering its efficiency. Literature about image analysis with documentary purposes proposes procedures that remind the literature of analysis of textual documents with highly intuitive contents published up to the 60s⁸. The description of the informational content of images faces two central problems:

- the development of methodologies of information selection (item 3.1);
- the search for the increase in efficiency, and thus the abandonment of the logic "a case at a time" (item 6).

3.1 The indexing of the photographic image

There are interesting propositions of methodologies to select the components of the image. These propositions, in the beginning still very close to textual universe, have been adapted in order to integrate the specificity of the image contents. Starting, as always, from Panofsky's propositions for the analysis of paintings, image analysis for documentary purposes may be now systematized into informational categories (3.1.1), discriminating between generic and specific aspects (3.1.2) as well as the denotative and connotative levels (3.1.3).

3.1.1 Informational categories

The subject indexing of images recovers the informational categories WHO, WHERE, WHEN, and WHAT also employed for textual analysis, but adapted to the iconographical universe⁹. The categories may be defined as follows:

WHO	identification of the “photographed object”: living beings, artifacts, mountains, rivers, etc.
WHERE	spatial location of the image: geographical space or space of the image (ex.: São Paulo or the interior of a pub)
WHEN	temporal location of the image: chronological time or moment of the image (ex.: June 1997 or a summer day)
WHAT	description of attitudes or details related to the “photographed object” when this object is a living being (ex.: child wearing clothes of the XVIII century, horse running)

3.1.2 Generic and specific aspects

The photographic image is, simultaneously and obligatorily, generic (a photograph of a bridge) and specific (a photograph of the Eusebio Matoso Bridge in São Paulo)¹⁰.

The coexistence of these two aspects leads to the discussion about the indexing politics to be adopted, according to the needs of the users. A user with a generic iconographical need will be satisfied with the image of any bridge, including the Eusebio Matoso Bridge. However, the user searching for an image of the Eusebio Matoso Bridge will not feel happy with photographs of other bridges... Both

experience and literature prove that the user switches from generic to specific needs, and again to generic ones: indexing images by both aspects is thus the ideal. In addition, the description of the specific aspect of the photographed objects supposes access to information that normally is not in the image but may be present (and often is) in the legend. If the indexing of images has to be made by both the generic and specific aspects, as already said, the relation between image and legend has to be introduced in the discussion. The legend is a great carrier of specific information, naming and/or dating persons, places or events. The relation between image and legend is not an easy one: on one hand the legend bears essential information, on the other hand there are countless examples of legends conducting the interpretation of the image or even pointing out something absent from the image¹¹.

3.1.3 Denotative and connotative levels

Finally, the discrimination between denotative and connotative levels (Panofsky's pre-iconographical and iconographical levels, respectively) makes the last point of the adaptation of the analysis procedures to the iconographical universe. Culturally, the analysis of the image has a tendency to pass from one level to the other while the authors of these analysis are not aware of these changes. In this case, too, the indexing politics has to be anchored to the use. However interesting the restriction of the indexing to the description of the elements that compose the image - the denotative level (ex.: man, woman and child) - may seem, this composition may also be named, forming the connotative level (family or familiar union, for example). The

image may be searched by both levels, according to the user's needs at a particular moment.

If naming the elements that compose an image on the denotative level is not easy, the identification of abstract concepts and the naming of compositions is surely more difficult and subjective.

3.1.4 Analysis grid

The representation of the informational content of the image may be systematized on a grid, adapted from literature¹²:

category	denotative level		connotative level
	generic aspect	specific aspect	
WHO			
WHERE			
WHEN			
WHAT			

4 HOW THE PHOTO SHOWS

Incorporating the photographic expression with the analysis of images requires a selection of which categories will be employed for documentary purposes. The data involved in the obtention of photographs must be preliminarily divided into 2 groups:

- even being very important to the production of the photograph, the data that compounds it is not perceived with the naked eye of the user, therefore, it does

not impart the goals of photographic archives. The sensitivity of a film, or the kind of lenses employed, for example, are categories disdained by archives since they are of difficult identification, as well as not decisive for the future utilization of the images¹³;

- data visible to the user of photographic archives must be considered, since it has been proved that they are decisive in the reading, and future utilization of the image. The “normal” portrait of Mrs Silva, for instance, will not be equal to the same portrait in high contrast, in which intermediate colours are removed, and only black and white remain. Another example: the image of the façade of a building photographed with a normal lens will be different from the image of the same building, photographed with a fish-eye lens, that opens around 180° and inevitably deforms the image. The examples above show clearly that we may have two different images for the same informational content (portrait of Mrs Silva, façade of building). If we assume that we are organizing images (which include but do not restrict themselves to the informational content) the question is completely pertinent.

4.1 Analysis grid

It will be necessary to select, among all the resources to obtain, compose and produce a photographic image, those that are considered pertinent for documentary purposes. I suggest the adoption of the following categorization, based on Bléry 1981 and Lacerda 1993¹⁴:

category	variables
image	<p>"portrait", "landscape"</p> <p>photomontage</p> <p>special effects (stroboscopic photographs, high contrast, etc.)</p>
optics	<p>utilization of lenses (fish-eye, wide-angle, etc.)</p> <p>utilization of filters (infrared, ultraviolet, etc.)</p>
exposure time	instantaneous, pose, long exposure
luminosity	daylight, night, counterlight
framing and position of the camera	<p>framing of the photographed object (general or partial views)</p> <p>framing of living beings (general, medium ou american plans, close, detail, etc.)</p> <p>position of the camera (aerial, submarine, subterranean photographs, etc.)</p>

Content analysis of photographic documents presumes, consequently, the analysis on two levels (WHAT and HOW), which means that we consider that the image cannot be reduced to the photographed object (the informational content) and that the utilization of the images is also commanded by the photographic expression.

5 WHERE THE PHOTO SHOWS

From what has been said till now, I believe that it is already clear that the third parameter has less importance for the indexing of photographic images, but nevertheless cannot be forgotten. Information about the medium and the techniques employed to obtain the photograph can help us to date the document, but it will mainly help us to understand the limits of a particular technique. For instance, the mention to a "posed portrait" only has meaning from the moment that instantaneous photographs were made possible. Till that moment the obtention of a photograph was a technically long operation and meant that the portrayed persons had to "hold their breaths" so they would not shake. This detail explains why the portrayed persons seemed so severe or formal: the knowledge of basic technical information may avoid a series of misunderstandings.

6 CONCLUSION: THE ADOPTION OF AN IMAGE TYPOLOGY FOR DOCUMENTARY PURPOSES

Although the research is in progress, the parameters proposed for the content analysis of photographs have been tested in various situations and were considered satisfactorily operant. However, even if the incorporation of the "photographic expression" has brought the content analysis closer to the universe of images, we still work in the logic of "a case at a time", endangering its efficiency. It seems desirable to abandon the "a case at a time" logic: we will have to search for the solution by adopting an image typology for documentary purposes. We will have to adapt the existing typologies (portrait, landscape, still life, etc.) to our purposes and consequently develop analysis strategies for each type of image: this will render our analysis processes more efficient and consistent.

NOTES

¹ Homulos 1990 discusses the function of archives, libraries and museums, associating these institutions under the collective noun "culture collecting institutions". These institutions, according to Homulos, are not separated by rigid frontiers but form a continuum in which each institution places itself accordingly to moments, specific goals and services offered.

² I tried to develop this question in Smit 1993, characterizing audiovisual documents as a professional "no man's land".

³ Aumont 1993, Dubois 1994, Joly 1996, Barthes 1989, Panofsky 1979, for instance.

⁴ Barthes 1989 says textually that this referent *adheres* to the image and that it is very difficult, almost impossible, to release the reading of an image from the awareness of the presence of the referent. This referent insinuates itself in an inelegant way: although not invited the referent is always present...

⁵ Since literature about treatment of iconographical information is scattered among 3 different bibliographic universes (the universes of archives, museums and libraries/documentation centers), it is difficult to make peremptory affirmations. Information retrieval seems always fragmentary, uncompleted. Nevertheless, in spite of this bibliographic problem, the rate of documents limiting the treatment of images to their informational content is striking. A few exceptions may be named: Bléry 1981, Documentation Française 1984, Lacerda 1993, Shatford Layne 1994 and Svenonius 1994.

⁶ A few examples to clarify this point: pretty photos of Mr X, a moving locomotive, an image of a certain building from the entrance gate, a photo of Mrs Y looking severe, etc. These examples distinguish, besides the identification of the photographed object (Mr X, locomotive, a building or Mrs Y) aesthetic questions (a pretty photo), framing or illumination decisions (to give a severe air to a portrayed person), camera positioning (for the photo of the building) or the loss of sharpness to transmit the impression of the locomotive's movement.

⁷ A proposal of abstracting and indexing procedures based on textual typologies may be found in Kobashi 1994.

⁸ The highly intuitive character of abstracting and indexing procedures becomes manifest in expressions such as "selection of the principal information contained in the text".

⁹ Bléry 1981, Documentation Française 1984 and Shatford 1986.

¹⁰ Shatford 1986 and Leung et al 1992.

¹¹ Due to the lack of space it is not possible to develop this question here. My affirmation may seem a little forced but the problem happens frequently. Brazilian press, for example, not long ago, published a photo of an indian woman holding flowers (daisies?) while the legend identified this flowers as roses.

¹² Bléry 1981, Documentation Française 1984, Shatford 1986 and Leung et al. 1992.

¹³ If the archive receives negatives it is possible to identify the sensitivity, printed on the border of the film strip (ex: 400 ASA) but not all archives receive negatives... On the other hand, the utilization of special filters is not always "visible" and if this kind of information is considered essential, we will have to assume that the photographer has to deliver his "secrets", which will not be always possible or easy...

¹⁴ The list proposes an operant systematization of variables for the information professional and does not have any aspiration to the categorization of photographic techniques and processes.

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