# Social Psychology of Pictures

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Cambridge
Scholars
Publishing

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This book first published 2020

Cambridge Scholars Publishing

Lady Stephenson Library, Newcastle upon Tyne, NE6 2PA, UK

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library



ISBN (10): 1-5275-4624-1
ISBN (13): 978-1-5275-4624-0

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# INTRODUCTION

It would be easy to be tempted to begin a book on the social psychology of pictures with a long chapter in which the concepts of figuration, representation and symbolism would be discussed. The spotlight would be on specifying the relationships between the image and the idea, the form and the content or between the object, the word and the image of the object. Indeed, we could examine how these concepts and their relationships have been treated by philosophers throughout history. But this book isn't a philosophical one, even less a scholarly work. It is just trying to answer some simple questions: Is there a link between the images of certain objects that circulate in our society and the beliefs that we invest in these objects? Do we have empirical elements that point to the reality of such a link? To what extent do these beliefs influence the design, selection, diffusion and interpretation of these images?

To answer these questions it will, however, be necessary to clarify certain concepts[1] beginning with "image". We shall see that it is a somewhat ambiguous concept. But there's no need for the reader to worry as the images we shall be discussing in this book are familiar ones that we can all see on our TV screens, on the posters that line the walls of our towns or illustrate the books and newspapers we read. They can be defined as a combination of lines and colours that reproduce the objects and situations we meet in our everyday environment, those of the society in which we live. They are images of our social environment. Most of the time these images seem to us to be self-evident as they appear as reflections of reality. But they have been conceived or selected by people who have points of view or beliefs about this reality. So is it possible that these mental constructs affect the process producing images? Furthermore, as onlookers we too have opinions and beliefs about the world and it's worth asking what role these play in how we interpret the images that we see. In short, the present book poses a simple question: do these images show us the world as it is or as we believe it to be? Common sense tells us that a good example is worth a thousand explanations. As a professor and researcher in social psychology, I'm always a bit embarrassed by the evocation of this idea of common sense

[1] Readers who do not know much about social psychology can refer to the mini-glossary at the end of this book.

because I know that it leads to ways of reasoning that are filled with approximations and biases. But I also know that, to a certain extent, it fashions the world in which we live and in the end that's what makes it so useful to us. So, before going any further in this book can I ask you to carry out a small experiment?

Use your favourite internet web browser and type the words "male homosexual" in the search bar. Also ask your browser to display the images connected to this request. Then just have a look at the first twenty-five images which display, but make sure you note the type of images that appear. After that do the same thing with the words "lesbian". When you have finished we'll continue the theme of this book. Haven't you noticed something? Here is the same sexual orientation pursued by both sexes, which obviously doesn't evoke the same iconography when it comes to the sex in question. With "male homosexual" you get a majority of images showing a man by himself while with the search "lesbian" the majority of images you get show two women! You could well argue this is just a coincidence. But repeat the experiment using the French words "chef d'entreprise" (company chief) and "instituteur" (school teacher). You will see a surprising difference in the iconography that your search engine displays. In one case, you will get a majority of images showing easily identifiable people often photographed in close-up or in a medium-long shot; in the other, at best you will receive group photos and at worst drawings that do not refer to anybody in particular[2].

In searching for explanations of the phenomenon one immediately thinks of the diversity of sources on the internet. Is it possible, for example, that the sites which illustrate their contents of male homosexual are not the same as those that deal with lesbians? It is possible but some questions remain. Why have certain image providers to the net chosen to show lesbians in a couple and male homosexuals by themselves? And what is the meaning of these choices?

These questions bring us to the second concept that should be clarified. What exactly are these objects in the social environment? Why are they social objects? The answer is both simple and complex. One of my colleagues who has since retired gave a concise answer to this question. A social object is one around which an interaction between ourselves and

[2] It is possible that over time, all of these images have changed. But I am sure that by the time you read these pages, you will easily find other words and images that illustrate the phenomenon I am talking about.

others is organised. Despite everything, the answer is complex as it sometimes happens that others or ourselves are the object of this interaction. It's the case for example when meeting up with a friend we talk about how the Roms are treated in France. In such a conversation we say things about the Roms, but also about the French, thus about ourselves. To overcome this imprecision, it seems that progress can be made if an object is social when it concerns our identity or that of our interlocutor's. When you're travelling by train and the person sitting beside you gives you a long explanation as to why he prefers stools to chairs, you probably won't be able to come to many conclusions about him. It will be a very different kettle of fish if he explains to you at such length why he prefers the French to the Arabs. But if you're a carpenter then your conversation about stools and chairs may help you learn something about the person you're talking to. Bearing this in mind, a novel or a work of art can become a social object provided that their words or meaning resonate with the preoccupations of one or more social groups.

The last example brings us to one of the essential themes of this book. It suggests, in fact, that the ways we interpret our environment depend on our interactions with others and the contexts in which they unfold. These contexts take different forms such as a subject of conversation or a professional activity, as well as constraints linked to the situations in which we find ourselves or the social position of the people we're talking to, etc... It's through these complex systems of interactions that we integrate or construct our vision of the world, of ourselves and others. Social psychology is the science of these interactions and their effects on our behaviour and our beliefs. Up to the present, this science has never really taken an interest in the role played by these beliefs when we interpret an image or when, through drawings or photographs, we produce images of the world that surrounds us. This book is probably the first to tackle this question. Its aim is to try and give a clear picture of what we know about them; and at the same time it attempts to lay the foundations of a new field of research that can be called the social psychology of pictures.

Recently, I was talking to a young female graduate in social psychology. She explained to me that in discovering this discipline she felt that it was the science of "real truths." What she meant was that very often the results issuing from this discipline only served to confirm common sense. Obviously, it wasn't very flattering, but it wasn't too far off the mark either. Social psychology explains to us how we form our beliefs about the world that surrounds us, how we use them and how they sometimes influence our behaviour. Now, we're going to try and understand how they influence the production and interpretation of the images of our society.

# CHAPTER 1

# IMAGES

One can only agree with Mitchell (2005) the man behind visual studies who says that the word "image" signifies a very wide variety of phenomena. As an introduction to this variety he suggests a distinction between two terms in the English language: picture and image. To sum up this distinction we can say that pictures are iconographic representations and that they are only a particular type of image. We could also say that pictures, and we'll see that they can assume various forms, are concrete objects to be absorbed by our perception. And finally we can add that objects exist in their own right independently of our perception. Clearly, these are the objects that are the subject of the present book. But before specifying their functions and their use in the field of human and social sciences it is necessary to look at the phenomenological diversity of the image.

## Typology of images

Mitchell (1986) says that five families of images exist (see table 1.1). Graphic images that rely on concrete supports that we can look at, optical images on technical supports (flat or deforming mirror, cinema projection, etc.…), perceptual images springing from information gathered by our eyes, mental and verbal images generated by cognitive activity. To this typology we can add that graphic and optical images are objects present in the outer environment in relation to the subject. On the other hand, perceptual, mental and verbal images belong to the subject's inner world. Obviously, our ability to grasp and understand graphic and optical images is closely related to our perceptive and cognitive activities. In particular, this is the case of mental and verbal images that enable us to evoke absent and non-perceptible objects. And even if the perceptual images correspond to objects around us, they are the result of selective cognition and processing of sensorial data, which make them more than just simple reflections of reality. In the 1950s, the "new look"` theorists (Bruner, 1958) understood this and optical illusions are a striking demonstration of this.

Table 1.1: Typology of images according to Mitchell (1986)

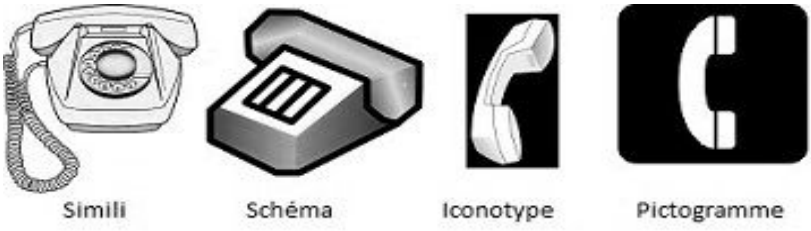
| IMAGES | | | | |
|---|---|---|---|---|
| Physical environment | | | Cognitive environment | |
| Graphic | Optical | Perceptual | Mental | Verbal |
| Pictures, statues, designs, photographs | Mirror, projections | Sens data | Dreams, memories, ideas | Metaphors, descriptions |

Finally, it's worth pointing out that in this kind of typology the perceptual and mental images can only be created by the subject himself, while the graphic, optic and verbal images can be produced by people other than the one who receives them. This point is particularly important as it helps us understand that these images can be situated in a communication process.

In addition to Mitchell's proposition the typology put forward by Darras (1998) provides interesting clarifications. This author suggests categorising images (graphic or optical) according to the more or less greater similarity they have to their objects. Darras goes on to distinguish four types of images:

- *Simili* are images that have the strongest analogical relationship to their object. The *simili* portrays itself as a realistic representation of the object. The photograph is thus the most accomplished example of the *simili*.
- *Schemas* are images that include one or several figurative characteristics of the object. They evoke the object from some of its elements without it being necessary to show all the details that characterise it.
- The *iconotypes* are typical schemas of the object. They result from the repetitive and recognised use of a given schema.
- Finally, *pictograms* are iconotypes validated by a community of users (Darras 1998, p.92). They recreate in a permanent manner some of the figurative characters of the object and are recognised above and beyond the sociological or cultural specificities of individuals.

Figure 1.1: From simili to pictograms according Darras (1998)




Here it should be added that objects represented by a schema, an iconotype or a pictogram do not necessarily belong to the visually perceptible physical world. This is true, for example, of the graphic representation of a process (e.g. the stages of transformation of a product), of a system of relations (e.g. of an organization chart) or of a phenomenon (e.g. a sales curve). In all these cases the schema remains the only possible way of producing an image of the object as it seems difficult to produce an analogous image (a simili in Darras's terminology).

Let's add to Darras's words that certain images have no analogous relationship with their object. So they are symbolic images that show one thing while meaning another. Unlike a pictogram, whose relationship to the object is founded on the consensual recognition of certain figurative lines, the meaning of the symbolic image comes from a system of correspondences that go way beyond the context of figuration.

At this stage it becomes possible to qualify the images that will be discussed in this book. First of all, graphic or optical images that may take the form of simili, schemas, iconotypes or pictograms. These qualifications cover drawings, schemas, photographs and films. About these types of images, I will further use the term of "picture".

In fact, it concerns pictures in the context of a communications relationship: namely, those produced or selected by individuals to those at whom they are aimed.

## Semiotics and rhetoric of the pictures

Semiotics is the science of signs. It studies the links uniting forms to meanings as well as the use of these signs in communication. Rhetoric is the science of discourse. It studies its contents and its structure as well as how these aspects contribute to the persuasiveness of the argument. Although the

notion of the iconic sign is quite old (Peirce 1931-1935), Barthes was probably the first (1964) to envisage the image as a discourse composed of signs. Since then much work has been devoted to this issue. Among them are those of Eco (1970) or the productions of "Group μ" (Groupe Mu, 1992). My intention isn't to make a presentation here, however short, of the authors' propositions. I'm not even certain that I could! In fact, I would just like to single out some points on which, it seems to me, they find common ground.

The first is the idea that a picture envisaged as a unique combination of iconic signs (form/meaning) and sometimes verbal (text) signs carries a message, or even a discourse. In other words, from the combination of signs comes a more or less exact meaning that could be assigned to the picture.

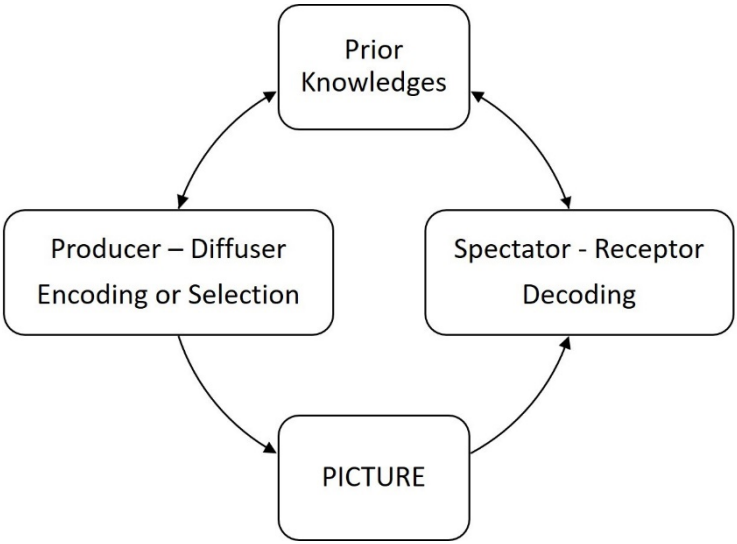
The second comes from the explanations put forward to point to the way in which the spectator can grasp the meaning of the picture. When Barthes evokes the idea of a coded iconic meaning he describes signs which, in order to be interpreted, require the mobilisation of cultural knowledge. When Eco talks about the notion of code, he supposes the existence of knowledge prior to the meeting between the observer and the picture. Furthermore, by referring to Gombrich (1960) he says that the codes are as much used by the producer of the picture (e.g. the painter) as the viewer and raises the possibility that the codes are historically determined. Finally, when the partisans of Group μ put forward a new way of defining the notion of sign, they introduce the notion of referent and type by pointing out: "the referent of the iconic sign **cat** is a particular object, of which I can have experience, visual or otherwise, but it is only referent as this object can be associated with a permanent category: the cat-being" (*op. cit*., p. 36). The type corresponds to this permanent category defined as a conceptual class. Yet again, in this context the existence of prior knowledge is necessary to understand the iconic sign.

To my mind this convergence is remarkable because it shows that any picture in a communications relationship requires a decoding system based on previous knowledge to be understood. But, with Eco, you can say that the production of a picture also rests on the mobilisation of prior knowledge which guarantees its future understanding.

Without achieving the finesse of the analysis of specialists in semiotics, I can now lay the foundation stone of my thesis by using a simple schema, which will sum up my words for the time being (see figure 1.2). According to this schema we suppose that the producer/disseminator of pictures is

going to be inspired by prior knowledge that will allow the person to carry out encoding operations (elaboration of the picture), or selection that will give him the best chance of being understood by the viewer. In addition, we suppose that the viewer/receiver of a picture is also going to be inspired by prior knowledge to decode the picture and give it meaning.

Figure 1.2: Encoding and decoding of the picture in terms of prior knowledge




We will see further on in this book that previous knowledge, which is what we are talking about here, does not concern iconographic conventions or classes of objects. In certain cases they refer to beliefs or opinions about our social environment.

## Functions of pictures

In a previous book (Moliner, 1996), I touched on some of the properties that can be attributed to pictures. At the time I distinguished three aspects. The capacity for figuration of the picture means that it can substitute itself for the object and take its place when the latter is absent or inaccessible. The capacity to generate emotion lies in the faculties of representation of the picture. When looking at it we can feel the emotion caused by the object it represents. Finally, the polysemy of the picture is explained by the decoding

work that its understanding implies. Depending on the individuals and the contexts this cognitive work does not always lead to the same results.

I will not withdraw anything that I put forward almost twenty years ago, but here I would like to insist even more on the functions of the picture in a communications relation. In fact, I believe that these functions can be reduced to three: show, suggest and provoke. To clarify my comments I will address them separately even though I'll probably have to admit that in numerous cases they are undoubtedly closely entwined.

## *Show: from illustration to demonstration*

It may sound rather trite to say that the first function of the picture is to show its object. But the object of the picture is not always the one you think it is. It's obvious through the photographs the journalist brings back from the field that he shows the situation he witnessed. Through the paintings he produces the painter shows as much his subject as his own sensibility; and the film maker through the film he makes can also show his own vision of the world. Thus, through these few examples you can understand that behind the open door several differences are hidden. But perhaps that's not the main thing. In fact, whether it's fictional or informative, it is very rare that the picture isn't accompanied by a comment, however incomplete it may be, that specifies its meaning or context. It may be a title in the case of a painting, an article of several hundred words in the case of a press photo or the outlines of a scenario in the case of a film.

The question arises of the relationship of the picture to the words or as educationalists and linguists would say the relationship of the text to the para text (Peraya, 1995). Behind this question lies the intentionality. Thenceforth the intentionality of the picture can be understood on a scale ranging from a simple illustration to that of a demonstration. At the lowest end of this scale, the illustration, the picture is at best an embellishment, at worst, a distraction. At the topmost level, that of the demonstration, the picture is a proof. In between, intention of the picture may for example correspond to didactic objectives (explain, inform, etc...), and also for the purpose of evidence.

## *Suggest: from evocation to influence*

Let's consider this situation, unfortunately all too frequent, when a leading politician is involved in an "affair." Let's imagine a press article that sticks to the facts and lays out, for example, the time-line of the facts from the

earliest whispers of suspicion until an investigation is launched. And finally, let's imagine the photograph that illustrates the article. This photo could be that of the politician in question showing his face with a fairly neutral expression or on the other hand looking particularly worried or cheerful. Here we are once more up against the question of the intentionality of the picture. In the first case, in keeping with the factual tone of the article it is just an evocation of the person and participates in putting the news in context. In the other cases, it is an influential factor that suggest to the reader a way of interpreting the information in the article.

### *Provoke: from emotion to action*

As I said at the beginning of this section pictures are vectors of emotions. But according to the evolutionist perspective put forward by Darwin (1872) emotions are considered to play an adaptive role. For example, the fear felt in the presence of danger causes the individual to flee, which saves him from being exposed to the danger in question and its consequences. More recently, emotion theorists (see Nugier, 2009; Tcherkassof and Frijda, 2014) now consider that the emotional experience is accompanied by a preparatory state prior to action (a tendency to action that doesn't necessarily manifest itself), and also sometimes effective behavioural responses. In other words, if the picture is a vector of emotion it may lead to action.

Let's add here that if the phenomenon of emotional contagion is still poorly explained even today it is nevertheless borne out. Some say that it is based on a conscious process of empathy that enables each one to feel the other's emotions. But for others it is based on an unconscious process of imitation motivated by an urge to fit in. Whatever the case the effects of emotional contagion can also find their source in the phenomenon of social sharing of emotions. Whenever an individual experiences an emotional episode he remains in a state of "remanence" which can last from several hours to several weeks depending on the intensity of the emotion experienced (Rimé, 1989, 2005). This state has cognitive, (ruminations, intrusive thoughts, etc.…), emotional (reactivation of the emotion each time the episode is evoked), and social (a need to talk about the emotional episode) consequences. Thus social sharing of emotions leads to social consequences of the state of the influence. It is observed in 80% to 95% of cases and contributes to the spreading of the emotion among those who are nearest to the experiencer (Christophe and Rimé, 1997).

Given the links between emotion and behaviour and the phenomenon of contagion the question can be asked about the impact that strongly emotive pictures can have when they circulate in mass communication channels[3].

## Dissemination, propagation and propaganda

As I have chosen to deal with pictures in communication relationships we now have to examine the forms these rapports can have when they involve sources and audiences. In collective communication situations the source can be a press outlet (a newspaper, a TV channel, an internet site) while the audience consists of all the individuals reached by this source. Moscovici's works (1961, 1976) will be very useful to us here. This author distinguishes three major systems of the relations between the sources and their audience: dissemination, propagation and propaganda.

### *Dissemination*

In the first system the aim of the sources is to reach the largest possible audience for diverse motivations. It may be to serve the general interest (public information service), but also to serve the source's own economic interest (sell as many newspapers as possible to attract advertisers). These motivations are obviously not exclusive. The aim of reaching the biggest possible audience has consequences on the positioning of the source as well as how its messages are framed.

Concerning positioning, a source that disseminates continually tries to remain neutral. So it never takes sides in a debate and gives equal coverage to contradictory points of view. It also avoids giving the impression that it aims at a particular sub-group whether this particularity is based on socio-economic, cultural or ideological criteria. And finally, the source will try to maintain a close relationship with, or resemblance to, its audience. It will not claim any distinctions other than its capacity to access information that the audience cannot obtain directly. Thus, in terms of dissemination the source positions itself as a neutral intermediary capable of sending content to a large number of relatively undifferentiated people.

[3] Remember the photograph of little Kim Phuc in Vietnam, which is said to have triggered a movement in public opinion leading to the end of the war in 1973. Recently, the photo of little Aylan lying on a beach in Turkey after drowning springs to mind.

Concerning the packaging of the messages - their style if you prefer - the dissemination is characterised by a desire to make its content both attractive and simple as the idea is to attract the biggest possible audience while being understood by everybody. For example, in the case of a technical innovation or a medical discovery, a very pedagogical tone is adopted and the emphasis is on its most spectacular applications that could modify our daily lives.

## *Propagation*

Concerning the propagation the sources claim an ideological orientation. They appeal to audiences that are smaller than those reached by dissemination. In fact, they aim at a public composed of individuals who share the orientations they claim to represent. Thus, their main aim is to deliver a content respecting the principles and the values dictated by the ideological orientation they profess. So the positioning of the source is quite clear; it does not pretend to be neutral and its audience knows this. For example, readers of a daily newspaper that has clear-cut right- or left-wing affiliations read it because they know they will find a right- or left-wing point of view expressed in the newspaper in question.

As for the form of the message, the propagation is characterised by regular reminders of the principles and values of the professed ideological orientation. And also in the selection made in terms of content as it generally ignores content that might contradict or call into question the principles and values it shares with its readers. For example, a newspaper favourable to such and such a political party will not talk about the possible judicial problems of the head of the party or will tend to play them down, etc.…

## *Propaganda*

In propaganda, the sources also claim an ideological orientation and their readers share it, but their aims are different from those of propagation. First of all, propaganda aims at reinforcing the cohesion of its readers. It exalts a feeling of belonging among the individuals who compose the target group. Secondly, it tries to provoke action. In other words, it aims at encouraging individuals to take action.

From the point of view of the positioning of the source, these aims force it to adopt an authoritative stance.

As for the packaging of messages, propaganda is characterised by its adversarial style. It is about denouncing, scapegoating, fighting. This style

can be understood in view of the first objective of propaganda because one of the surest ways of reinforcing the cohesion of a group is to designate an external enemy. But propaganda is also characterised by the way it transforms its contents. This reformatting can be understood in view of the second aim: namely, as it is a question of inspiring action it should give the world a picture that legitimises this action. If, for example, the aim is to encourage voters to vote for a candidate who advocates a high-security policy the emphasis is on crime figures while taking a few liberties with the statistics.

Early on, Moscovici took an interest in the press and his proposal concerned above all the relationships between the media sources and their readers. However, the description of the three systems above can be extended with a few modifications taking into account two variables raised by the author:

- The principles, values or ideology claimed by the source. Thus, the sources which proclaim these principles, values or ideology can be distinguished from those that do not, while admitting that in the second case the absence of the above-mentioned does not necessarily mean that the source does not adhere to some of them.
- The targeting of the readers or the desire of the source to speak to a specific audience; thus we can distinguish between sources that address a non-targeted audience and those that address a specific audience.

So as can be seen in table 1.2 the taking into account of these two variables and their intersection means we can envisage a wide variety of forms of collective communication. In this table, we have retained the terms initially put forward by Moscovici reserving them for media sources, the sources clearly identified as journalistic.

Table 1.2: The different forms of collective communication

| | | Principles, values, ideology: No | Principles, values, ideology: Yes |
|---|---|---|---|
| Targeting | No | Dissemination, advertising, fiction | institutional communication, political advertising, fiction |
| | Yes | Information, advertising | Propagation, propaganda |

When the source does not claim any principle, value or particular ideology and it addresses a non-targeted audience (upper left-hand box) we find the same dissemination as evoked previously as well as advertising when it concerns goods or services aimed at the public as a whole. Fiction like comic strips and films is also included in this category of works.

If, on the other hand, the source claims principles, values or an ideology while aiming at an unspecified audience (upper right-hand box) we find institutional communication (a company or a brand that communicates on its values) as well as political advertising and certain works of fiction. Indeed, political advertising corresponds to messages clearly associated with a source claiming principles or values (e.g., a political party), but aimed at audiences which do not share them. As for fiction, it can be underpinned by an ideological orientation or a claim clearly expressed by those who produce it (a militant work).

In the bottom left-hand box is a source that claims neither principles, values nor an ideology aims at a targeted audience. There we find the first form of collective communication that could be qualified as information. Indeed, here it is the transmission of a content aimed at a given public; this covers, for example, the annual report of a company for its shareholders. In this box we also find certain forms of advertising aimed at a specific public.

Finally, the two forms evoked by Moscovici, propagation and propaganda, are in the last box.

## Pictures in the human and social sciences

A whole book could be devoted to the different ways in which pictures have been studied or used in the human and social sciences. In the present context my intention is not to make an exhaustive summary of the current state concerning this question. Nonetheless, it seems necessary to me to address it starting from the three disciplines which, as we will see, have developed the same hypothesis and likewise find themselves up against a flaw in the methodology.

At the end of the 1970s researchers began extending their investigations in the domain of history to iconographic material which, up till then, had been left to art historians (Vovelle, 1979). In the 1990s, this material was considered as a plethora of documentary sources that were worthy of interest (Marin, 1993), starting from the principle that "the picture does not represent reality but gives a point of view based on the conscious choice - or not - of its author over determined by his era," Duprat (1997, p 109). So the aim of the project is to identify the standards, values and beliefs of a society in a given epoch through its iconography.

In sociology, Bourdieu (1968) spoke at length on the idea of a code common to the producer and viewer of a work that allows the former to develop an iconographic representation that the latter can accept and understand. A little later on, the trend in visual sociology (Becker, 1974) endowed the picture with two types of status or uses; as a means of collecting and recording information as well as a way of analysing the culture or the social relations of a given group (Grady, 2001, Harper, 2000).

In anthropology, the use of iconographic materials is almost contemporary with the invention of photography. The picture is first of all considered as a more objective documentary medium than written descriptions. Bateson's and Mead's work (1942) on Balinese society is generally seen as the founding text on "visual anthropology." In it the authors advance a methodology based on data collection in which photography occupies a central place. But a new method, making ethnographic films, also developed and this allowed the researcher to record a mass of information about the places, practices and rituals he was studying. Frenchman Jean Rouch is one of the main contributors to this development. Worth and Adair (1972) opened up another avenue by entrusting a camera to Navajo Indians in order

to explore their concepts of the world. Alongside this trend, much more recently in fact, the anthropology of art has also developed from an interest in the productions of so-called primitive societies. Gradually the idea that the aesthetic production reflects the concepts of the world of its authors to a certain extent has become entrenched. Even though Descola (2005) would probably not include his work in this discipline it appears to be one of the most remarkable successes of this idea. In fact, he puts forward the idea that in four major belief systems on the essence of beings and things, which he calls ontologies, correspond particular types of representation of man and nature.

Animism is an ontology that is established on the generalisation of the attribution of a human "interiority" (soul, spirit) to the non-human. According to Descola it determines the kind of figuration or representation of the non-human (animals, plants, objects) that includes human elements suggesting the presence of an interiority.

Naturalism, on the other hand, is an ontology that supposes a radical difference between the human and the non-human. A difference rightfully based on the presence of an interiority for the human and its absence in the non-human. Consequently, the modes of naturalistic figuration of the human privilege the representation of a distinctive interiority for each human while maintaining the signs that demonstrate the physical continuity of beings. This is how modes of figuration of the human appeared in Europe in the XVth century characterised by the individuation of the person represented (i.e. portraits).

Totemist ontology is organised into classes that can regroup humans and non-humans considered as sharing certain physical or moral characteristics of the same essence. This line of belief leads to modes of representation prototypical of the existence of the same class of humans or non-human beings. Examples can be found in Australian aboriginal society.

Finally, in analogical ontologies, the uniqueness of humans and things is emphasized so that the forms of representation they create are characterised by a host of details and particularities between which there are supposed to be networks of relations that overcome the apparent diversity. According to Descola, the aesthetics of traditional Chinese painting display this type of representation.

After this brief roundup you will certainly have guessed the hypothesis to which I alluded earlier. In fact, as much as in anthropology as in sociology or in history lines of research can be found that suppose the existence of a

link or a correspondence between forms of thought, systems of belief concerning the world and iconographic representations of this world or some of its aspects. Basically, the "hypothesis" puts forward the idea that individuals represent ichnographically the world that surrounds them not as it is but rather as they think or believe it to be. Why though put inverted commas around the word hypothesis? Quite simply because in the framework of these disciplines it is not a hypothesis in the scientific sense of the word.

Remember that according to Popper (1973), a proposition can be considered as a scientific hypothesis if it defines the conditions in which it is true (corroboration) and also the conditions in which it is false (falsification or refutability). This supposes that it is possible to set up an operation to test the conditions of corroboration or refutability. From a scientific point of view this system corresponds to what is called experimentation. But for many reasons often linked to what they study anthropology, sociology and history do not have an experimental tradition. Of course, they should not be reproached for this, but it is a fact. The result is that in these disciplines the possibility of the existence of a link between beliefs about the world and its iconographic representation is much more a postulate than a hypothesis. It is certainly a very attractive and interesting postulate, but unfortunately it does not have any value as a scientific proposition. In other words, anthropology, sociology and history postulate a link between beliefs and iconography without being able to prove it. Here we find the methodological flaw mentioned above.

It is astonishing to see that as soon as psychology began to structure itself as a scientific discipline it took a great interest in pictures, in particular through gestalt theory (psychology of form, Von Ehrenfels, 1890, Köhler 1929). It is just as astonishing to see that when this discipline – in particular in the current of social psychology – took an interest in the eventual links between beliefs and iconography, it adhered in general to the postulate adopted by anthropology, sociology and history (e.g. De Rosa and Farr, 2001). It is all the more paradoxical because among the human and social sciences psychology is incontestably the discipline that has the oldest and most firmly anchored experimental tradition.

In the chapters that follow we shall see that social psychology can tell us about beliefs that could be involved in the phenomenon that concerns us. We will also see the contribution of cognitive psychology to this issue. And finally, we will see how it is possible to tackle this question in an experimental perspective.

# CHAPTER 2

# CONCEIVING THE SOCIAL ENVIRONMENT

Since the 1950s, social psychology has tried to understand how we conceive and interpret our social environment. This scientific project has progressively structured itself around an object that is now usually called *social cognition*. The study of social cognition focuses on attempting to describe the cognitive processes involved in the way we deal with social information understood as information directly or indirectly related to oneself or others. On the other hand, it postulates that these processes are socially determined (Beauvois, Joule, Monteil, 1989). Namely, they do not necessarily achieve the same results depending on the social status of the person who applies them and depending on the social status of the people (or the social valorisation of these objects) they concern. This line of research has given rise to thousands of scientific publications in many domains, but here I am only going to talk about the areas most directly linked to the question of pictures. But first of all, the epistemic framework in which the processes of social cognition are triggered should be presented.

## Scientific thinking and social thinking

Rouquette (1973) was the first to introduce the notion of social thinking into our field, in France anyway. It is true to say that he was inspired by the works of Abelson and Rosenberg (1958) who, at the time, tried to formalise a psycho-logic different to formal logic. Rouquette also drew inspiration from Heider's reflections (1944) and those of McGuire (1968). Moscovici too (1961) investigated the question and put forward descriptions of naïve thinking. But it was Rouquette who developed these reflections and defined the concept of social thinking in a very general perspective. Rouquette (2009) first of all focused on defining the specific aspects of scientific thinking and came up with four:

The logic of canonical reasoning: this aspect points to the rules of hypothetic-deductive logic, which postulates that, for example, an event considered as a cause must, in principle, happen before (in the chronological sense) an event considered as a consequence of the former. Moscovici (*op.*

*cit.*) had already underlined that curiously, naïve reasoning has a tendency to ignore this fundamental rule. He talked about "causal dualism" to describe how events sometimes considered as consequences could happen prior to the causes that triggered them.

Submission to the test of facts: in principle when the scientist is confronted with facts that completely contradict his theory, he amends the latter to ensure that it evolves. But it is impossible to count the number of works which, in social psychology, show that when individuals are confronted by this type of contradictions, they on the contrary, tend to modify their perception of facts to make them correspond to their beliefs, in short, to their theories. For example, concerning the categorization of people, Weber and Crocker (1983) explain that we develop subtyping strategies which, when we are confronted with contra-stereotypical examples, enable us to see special cases that do not call into question the initial stereotype. If you are convinced that most French people wear berets and when you are travelling you are confronted with a bus load of Alsatian[4] tourists who do not wear any, you explain this distortion by thinking that basically Alsatians are more German than French !

Institutional regulation: the products of scientific thinking are controlled by institutions (universities, committees of experts, etc.…), which check that they were obtained respecting the rules evoked in the first point. This ensures that the validation of the soundness of an idea or a hypothesis does not rest on the judgement of its author alone. The inventions of naïve thinking are also validated. But the latter are not the result of checking that the rules governing reasoning or methods have been validated. Here it is a question of social validation resulting from the law of consensus. An idea, a hypothesis is considered as true because the majority subscribe to them and not because the elements that confirm them have been produced by canonical rules (Moliner, 2001). This validation can also reside in the fact of belonging and differentiations (see below).

Need for reproducibility: the scientists who develop a form of reasoning and use a methodology to reach their conclusions always ensure that their results can be reproduced by others. So in principle, they must refrain from reasoning from unique cases that are inaccessible to their peer-scientists and explain exactly how they have reached their conclusions. In naïve reasoning, all you have to do is to frequent cafes when it is time for an

[4] An Alsatian is a french inhabitant of Alsace, a geographical area close to the German border.

aperitif to realise how easily we can draw general conclusions from particular cases!

Rouquette used all these considerations to sum up social thought under three headings:

The multi qualification of relations (and objects)[5]: one of the most important aspects of scientific thought resides in the accuracy of the concepts that it develops and the rigorous description it puts forward of their relations. In the proposition according to which the surface of a container filled with water is covered with ice when the temperature of the surrounding air is equal to or below 0°, we know that the term water refers to an object that can be qualified very accurately. In the same way, the concepts of ice or temperature refer to very precise phenomena that can be measured and qualified without ambiguity. To paraphrase Rouquette this proposition can be summed up in the formula A r B where A designates the temperature of the air, B the appearance of ice and r a causal relationship that can be described and explained. However, this single meaning of concepts and their relations is mostly absent from naïve thinking. Thus, as Rouquette explains, the statement "democracy is liberty" can mean that democracy is the condition for liberty as well as its guarantor. In addition, in such a statement questions can also be asked about the meaning of the terms democracy and liberty. According to the author this conceptual plasticity is at the origin of the grip in which we are held by social thought. By "compiling different interpretations and making them fluctuate as partners and situations change" (Rouquette 2009, p. 9), it contributes to the fluidity of our social interactions.

Let us add here that this conceptual plasticity is probably linked to the principle of analogy that often guides naive reasoning (Moscovici, 1961). Very often "comparaison vaut raison" and according to this principle naïve thinking is continually on the lookout for correspondences between the different compartments of the physical and social worlds. But these analogies are not possible except at the cost of re-arranging the objective reality of phenomena. These arrangements lead certain people to think for example that sticking a needle into a photograph can have an effect on the person in the picture.

Restricting the area of reasoning: using his observations or experiments the scientist's aim is always to identify universal laws that govern the nature of

[5] I added this parenthesis.

society. In contrast, social thought is a daily one and this limits its range of action to temporalities and limited spaces. When for example, ordinary people like you or me as I evoked previously meet up at the bar for an aperitif they are not terribly worried about the universal impact of the observations, hypotheses and inferences they make on the reality that surrounds them. The most important is most often the here and now. I personally have often experienced situations in which the reasoning space was limited. As it happens I am of mixed origins (my grandmother was African from Benin and my grandfather was from Normandy). I often found myself in situations in which I knew that I was dealing with openly racist people. However, in these situations I never suffered even the slightest unpleasant remark. This did not prevent the others from making a few jokes in bad taste, but they were never aimed at me. In fact, at times the aim of these jokes was to make me laugh as if I had a perfectly white skin like them! My status as a university professor probably contributed to these situations. But the fact remains that at the time they considered me as one of them, someone who was supposed to laugh with them at their racist jokes. This personal experience illustrates an observation made by LaPiere (1934). This author came up with the idea of sending a questionnaire to the owners of 250 hotels across the United States. He asked them if they would accept Chinese guests in their hotel and 91% clearly said no. It should be pointed out that at the time the Chinese were stereotyped in a very negative fashion in the United States. But LaPiere had travelled across the country with a couple of Chinese friends and they had visited the hotels in question and only one had refused them entry. This result shows that our beliefs about the social environment have a very limited scope. In the immediacy of concrete situations they can be adapted for better or for worse (see Jussim & al., 2009)

Tautological checking: perhaps it is better to talk about social validation here. According to scientific reasoning the validation we give to a statement is usually independent of the relationship we have with the speaker. First of all, it depends on what we may know about the operations (of thought or methods), which have shown that this statement is accurate. If we have good reason to think that these operations have been correctly carried out we reach the conclusion that the statement is accurate. In social thinking it is completely different. The validity we give to a statement essentially depends on the relationship we have with the speaker. If we feel that the latter resembles us (sociologically and above all ideologically) we will tend to think that the statement is valid. Ultimately, in social thinking the principles of true and false are over-determined by the complex game of differentiations and identifications that link us to others.

Here are the main outlines of the context in which the process of social cognition plays out. For a long time it was considered that because of its differences with scientific reasoning, social thinking was a biased form of thought; and that as a result the socio-cognitive processes that underlie it were tainted by errors and approximations. From the point of view of formal logic, they certainly are. But if you think that they serve to interpret the environment in terms of social objectives, and if one adds that the errors of which they are the cause are most often the object of social norms, one can ask oneself if they are still errors (see Beauvois, Deschamps and Schadron's excellent text, 2005 on this subject). So the problem is not measuring the gaps between a so-called objective social "reality" and the approximations or errors incurred by the processes of social cognition. It is to accept the idea that the objective reality of individuals and social groups is the one they construct by means of these processes.

## The process of categorization

For the human being one of the first moments of knowledge is the possibility to name and to organise the different components of the phenomena with which they are confronted. From a cognitive point of view, these operations are based on a process of categorization that results in the division of the environment. This process consists of assembling the objects that are – or seem – similar to one another in certain dimensions. In the early stages, the psychologists understood that the process concerned our perceptive activities first of all (Bruner, 1958), but that it could also affect certain of our activities when we process information. Thus, Miller (1956) showed that in terms of memory we can on average memorise seven pieces of information (for example, seven words on a list) with a variation of +2 or – 2. This means that when having to memorise words from a list shown to us the best would remember nine while the worst would remember five. But Bower and his collaborators (1969) showed that in suggesting a categorization system to the subjects, the latter were capable of multiplying by ten the initial figure given by Miller. Our ability to categorise enables us to optimise our other cognitive functions as they give us the means to simplify and find patterns in our environment. In addition, establishing categories allows us to have general features we can make use of when faced with particular examples that are unfamiliar.

For example, knowing that birds are creatures that have feathers enables us to reduce our uncertainty when we come upon a species that we have never encountered before. All these characteristics of the categorization process

lead us to suppose that this is a fundamental process that underlies all our activities in the domain of language and thought (Quine 1969). Let's also add that as we live in society a categorization system is not really useful unless it is shared. If your neighbour thinks according to his categorization system that hamsters and cats co-habit without problems, you risk having serious issues when you entrust him with looking after your children's favourite hamster when you go on holiday!

In theory, it is possible to distinguish two stages in the process: one is developing or learning a categorization system the other is using it.

Learning refers to various forms of socialisation (family, school, etc...) while the development of a categorization system can be based on three different strategies. One established on the object supposes that individuals will take into account the properties common to objects thus enabling them to create categories. One based on the subject suggests that individuals choose the common characteristics of objects in the same category. And finally, the one based on the interaction between the subject and the object proposes a way of considering a category as being the "fruit of the interaction between the nature of the object perceived and the naive theories of the perceiver" (Corneille and Leyens 1994, pp. 52-53). In this latter case it is a compromise between the objective aspects of the reality and the subjectivity of individuals.

When a category system is stabilised, the categorization process merges with the assignment of an example to a class. This operation supposes that from certain perceived characteristics of the example we are able to identify its category. This is the inductive aspect of the process. But when the assignment has been done we speak of its deductive character as it leads us to associate with the example the properties of the class to which we have assigned it.

Although the categorization process is extremely useful in helping us to grasp the world it does have a few flaws. First of all, it sometimes implies an exaggerated simplification of our perception of surrounding objects. Being convinced of the utility of our categorization systems, we have a tendency to consider them as having priority in relation to the objects we assign to them even if this sometimes means modifying our perception of these objects so that they better correspond to the category to which we have assigned them. But it also happens that the assignation of an object to a category leads us to attribute characteristics to this object that it does not necessarily have.