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Crafting Blindness: Its Organizational Construction in a First Grade School

Abstract

This article is based on a case study conducted in an Italian primary school where the interactions between a sightless girl (named Jasmine, aged 8) and her classmates were extensively observed. The initial aim was to understand and describe the problems encountered by the sightless pupil, who acted in a social, organizational and physical environment which was not designed for handicapped people. However, other theoretical issues emerged during the research. The main finding was that sightlessness seems socially and organizationally constructed before it becomes a biological/physical handicap. The organizational processes through which the blindness is slowly and routinely constructed were extensively described.

Keywords

Blindness; Social construction; Disability studies; Organization; Grounded theory; Ethnomethodology; Ethnography; Ergonomics

More than fifty years of sociological literature have shown that many of the problems afflicting societies are "socially constructed". This statement is by now obvious in sociology, and numerous researchers have documented it with historical inquiries. For instance, the concept of alcoholism as a "social disease" requiring specialist treatment by professionals like doctors, psychiatrists, psychologists, therapists and social workers has been current for fewer than fifty years. As Harlan Lane (1997) writes:

> The Temperance Movement of the last century viewed excessive drinking not as a disease but as an act of the will; alcoholics victimized their families and imposed on the rest of society. The movement advocated not treatment but prohibition. (p. 153)

Gusfield (1982) was one of the first to document this change.

Likewise, child abuse as a social problem dates from the 1950s. Hence for every issue, from sexuality to disability, from race to illness, from deviance to academic performance, the social and political bases of their construction have been uncovered.

The work of sociologists has often been to deconstruct or reconstruct the diverse approaches (social, ideological, political, cultural, etc.) that compete with each other

to impose a certain vision and version of a problem. For instance, in his study on deafness, Lane (1997) shows that:

> two constructions of deafness in particular are dominant and compete for shaping deaf peoples' destinies. The one construes deaf as a category of disability; the other one construes deaf as designating a member of a linguistic minority. (p.154)

Although this article recognizes and draws upon all these contributions, it nevertheless seeks to go beyond them by moving in the following four directions. Firstly, the aim is to show the birth and development of a concept (in this case that of blindness) through direct observation of the micro-interactions which turn a body into a sighted person. The study will therefore not be historical, but rather phenomenological and ethnomethodological.

Secondly, the article does not describe how the sightless girl perceived the world around her. There are already several studies which have done this work brilliantly: for instance, those by David Goode (1979 and 1994), who studied deaf-blind children affected by rubella syndrome. Unlike these studies, this one concentrates on the sightless girl's relationships with her schoolmates, the teaching assistant, and the class teacher. This focus and methodological choice have been partly dictated by circumstances because, as we shall see, the school's headmaster refused to give permission for Jasmine's schoolmates to be interviewed.

Thirdly, the article also bears in mind the role performed by artifacts in the organizational construction of blindness. Disabilities studies do not usually give much importance to technologies and to artifacts in general, concentrating instead on relations among social actors. The Actor-Network Theory of Bruno Latour, Michel Callon, John Law and others, with its well-known concept of "actant" and its attention to relations between non-humans and humans, has therefore been of assistance in this regard.

Fourthly, disability studies often lack actionable proposals; at times because of an ideological prejudice (as in the case of ethnomethodology, which with its concept of "methodological indifference", prefers not to go beyond descriptions); more often because of a general inattentiveness which stops at description of the phenomenon and fails to make operational proposals prompted by observation of the phenomenon.

Obviously none of these tasks is an easy one: not least because of the theoretical approaches adopted by these studies (interactionism, postmodernism, constructivism, etc.), which are more interested in discovering problems than in proposing solutions for them – apart from a call for such unlikely macro remedies as reform of the social services, change in professional styles, or changes in social arrangements.

This study seeks to go beyond the (nevertheless useful) reconstruction of the perspectives of the participants in the field by taking a step forward towards operationality. To this end, it will draw on ergonomics, which is a discipline that (if ethnographically oriented) can be of great help both to sociology and in the solution of practical problems.

The literature

Sightless persons have been widely studied by sociologists. Since Robert A. Scott's seminal work (1969) on the social construction of blindness, several studies have been conducted on such subjects. C. Olson (1977 and 1981) showed that blindness is overestimated as a communicative and rational obstacle; David Goode (1979 and 1994), stimulated by his mentors Harold Garfinkel and Melvin Pollner, observed ethnographically the richness of the social and symbolic world of deaf-blind children affected by rubella syndrome, discovering that they had communicative skills unknown even to the doctors and nurses who treated them. Edwin C. Vaughan (1991, 1993, 1998) documented the conflicts between blind people and agents of rehabilitation, and the difficulties encountered by blind people in emancipating themselves from the constraints imposed by the latter. In this regard, Vaughan and Omvig (2005) sought alternatives that would give empowerment to blind people.

These and many other studies have amply documented how:

> deaf-blind children were socially constructed in the sense that their very bodies and actions were given life, form, and meaning through immediate social relations and practices that surrounded them and in which they participated. (Goode 1994: 9)

However, it is necessary to clear up a possible misunderstanding: when it is said that deafness or blindness are socially constructed, the intention is not to argue that the two phenomena do not exist, that they are myths constructed out of nothing. For these phenomena are certainly more palpable and ostensible than schizophrenia or depression, or other psychoses. The intention is instead to argue that the characteristics attributed to subjects with these physical disabilities are culturally determined, and that they have little or nothing to do with the physiological characteristics of the differently abled. In other words, what sightless persons can or cannot do depends only to a minimal extent on their intrinsic characteristics. Thus Merleau-Ponty describes the body as a unity that is "always implicit and vague" (1945: 198). Indeed, as Goode (1994) writes:

> children were assigned multiple and, to a large degree, conflicting identities that reflected differences in the microsociology of face-to-face relations with the children. Doctors saw these children through the organization of doctors' work with them, and direct-care staff experienced the children through the organization of their custodial and teaching work with them. (p. 10)

The problem therefore is not to deny the difference in cognitive and visual abilities, but rather to reverse the perspective. We know from the work of the cognitive psychologist Eleonor Rosch (1973 and 1978) that a category is a structure in constant change. Moreover, we have learnt from Harvey Sacks' (1972) concept of 'membership categorisation device' (MCD) that associations among categories are also mutable and culturally unstable. Hence, to return to the topic of this study, we may ask: can a sightless person drive a car or fly a plane? Whilst in the former case the scene in the film *Scent of a Woman*, where a blind, medically retired Army officer (Al Pacino) drives a Ferrari at high speed along the streets of New York, seems nothing more that an amusing cinematic gimmick, what can we say about the man the following photographs?

Indeed, "seeing is believing": the man in the photographs is a blind pilot. Likewise, a blind person can ski (with someone leading the way) and do many other things unimaginable within certain categorizations. Hence the problem is how to revise, from a constructivist perspective, the ways in which certain representations (in this case of blindness) which are eminently cultural and do not replicate reality, are constructed.

Theoretical approach and methodology

The research was conducted by conjugating two different but (I submit) complementary approaches – Ethnomethodology and Grounded Theory – as already proposed by Lester and Hadden (1980). The former approach, of phenomenological orientation, was extremely useful in addressing blindness as a process, as an organizational construct, as an ongoing event. Ethnomethodology therefore drove the logic of discovery and estrangement with the aim of reconsidering blindness in new light. Ethnography was instead the methodology best suited to the data collection, because it is able to gather information which is both rich in detail and unmediated by the participants' interpretations (Gilbert and Mulkay 1983; Heritage 1984: 236). Grounded Theory (in the version of Strauss and Corbin 1990) furnished a procedural rigour in the collection and analysis of the data which, to my mind, is still unsurpassed.

As said, added to these approaches were the main theoretical principles of Actor-Network Theory, these being particularly useful for reconsideration of the role of artifacts, furnishings, and technologies.

The research

This study reports ethnographic research conducted in a third-year class (16 pupils) of an Italian elementary school in which a sightless girl was one of the pupils. Subject to study were the organizational practices, resources and environmental constraints of the school that combined to construct a particular notion of handicap, and in particular the identity of the sightless girl. The fieldwork lasted a total of ten months, during which I and one of my assistants participated in school activities. In particular, my assistant was constantly present in class as part of her teacher training course.

The initial intention was to study the integration of the sightless child with the rest of the class. The plan was to use three research methodologies: (a) participant observation; (b) in-depth interviews with the pupils and the teachers; (c) the sociograph. However, as the research proceeded, both the focus and the methodologies changed. As regards the former, we almost immediately discovered that sightlessness is a 'social event' besides being a biological, psychophysical and medical one; a conceptual product constructed in everyday interactions among pupils, teaching staff and non-teaching staff. For example, because children have mental schemas that differ profoundly from those of adults, they do not initially have a specific social representation of a sightless person: in other words, they do not know what a sightless person is, what s/he is capable of doing, or what s/he is not. Indeed, the children observed during the research reported here initially invited their sightless classmate to join the same games that they would have proposed to any other child of the same age. Hence, they formed their conception of sightlessness mainly through the organizational practices and rituals performed (around the

sightless girl) in the various places making up the school environment: the entrance lobby, the corridors, the staircases, the toilets, and the classroom. The organizational and discursive practices that took place in these locations contributed decisively to construction of the sightless girl's identity. We therefore decided to change focus and concentrate on the practices of construction of blindness, abandoning our initial intention to produce a study on integration.

As regards the methodologies, the headmaster of the school did not give us permission to interview the pupils, for fear that they might find our conversations with them upsetting. Consequently, we could only extensively use observation and, in ancillary manner, the sociograph. The latter is a method which measures the cohesion of a class, the strong and weak bonds among the classmates, and the degree of integration among individual pupils.

To conduct the research, I employed the theoretical and methodological apparatus of ethnomethodology (Garfinkel, 1967; Sudnow, 1967) and cognitive sociology (Cicourel, 1973). My intention was to observe the organizational practices of the school which transformed a person into a 'sightless pupil'. This transformation was brought about by a set of procedures which began when the girl arrived at the school in the morning and continued throughout the school day. Organizational and discursive practices were therefore observed in all the school's premises.

The results

To collect the ethnographic notes I used the system proposed by Schatzman and Strauss (1973: 99-101) and Corsaro (1985: 295), which divides them into observational, theoretical, emotional and methodological. As regards analysis of the ethnographic notes, I followed the advice of Strauss and Corbin (1990: 59) by dividing the coding into three progressive steps: "open coding" (a sort of deconstruction), "axial coding" (construction) and "selective coding" (to validate hypotheses and observations).

Open coding

We first spent several weeks closely observing the sightless girl while she interacted with her classmates – taking and collating ethnographic notes as we did so. I then began to analyze the data by classifying the content of the ethnographic notes. This analysis yielded a preliminary list of categories (concepts) of rituals. I gave a heading to each category: "arrival at school", "getting ready to enter the classroom", "going to the washroom", "questioning pupils", "turn-taking strategies" to speak in class, "choosing a playmate", etc. For example, I assigned to this last category an episode – recorded by an *observational note* – when a boy asked the teaching assistant why Jasmine (the sightless girl) could not join in a game. The teaching assistant answered as follows: "because she can't see and so might hurt herself". In my relative *theoretical note*, I put the hypothesis that sightlessness is not nearly the self-evident phenomenon as one might believe. The fact that the boy had asked such an apparently obvious question suggested that children have mental schemas of sightlessness which differ profoundly from those of adults (and also researchers). At the beginning of the school year, Jasmine's classmates probably had no precise social representation of a sightless person.[i] In other words, they did not know what a sightless person was (apart for the banal notion that s/he is someone who cannot see), and above what a sightless person can or cannot do?

This was evidenced by the fact that they initially asked Jasmine to join in the same games which they proposed to other children. At this stage of the research, I therefore hypothesized that sightlessness (as regards its behavioral features) was primarily a "process", a conceptual product constructed in everyday interactions at school among pupils, teaching staff and non-teaching staff. I recalled a study carried out many years previously by Sudnow (1967) on the social organization of death in hospital, where he documented how death is a *social* phenomenon before it becomes a biological one. The death of the patient occurred well before his physical demise, when the hospital staff decided – more or less correctly – that he was dying. A series of organizational practices reserved for dying were then enacted, so that it was very difficult for the patient to "save himself".

Axial coding

Having formulated this hypothesis, based on the ethnographic material and suggested by Sudnow's study, I moved on to the next phase (construction) and collected further materials documenting organizational practices and environmental constraints in the school which contributed decisively to constructing a specific notion of handicap, and especially the sightless girl's identity. I used the five components of Strauss and Corbin's (1990) model to construct a preliminary framework: causal conditions, intervening conditions, context, micro-actions, and consequences. Thus the initial and generic research objective was made more precise. If the pupils formed their conception of sightlessness mainly through the organizational practices and rituals performed around the sightless child, then systematic observations would have to be made in the school premises that my observations during the deconstruction phase had indicated as most significant: the entrance lobby, the staircases, the passages, the toilets, and the classroom. I therefore assembled a more specific sample for the new category: the help practices (ethno-methods) enacted for Jasmine by the teaching assistant in these five places. For each of them I identified the most recurrent actions, which were then sampled.

For example, during recreation, the children were accompanied to the toilets before the next lesson began:

Observational note 1

Jasmine usually took more time that her friends to finish her snack, and on occasion was urged by the teaching assistant to eat more quickly: "Come on! You're always the last". Consequently, Jasmine got to the washrooms a little after the others. While her classmates were in the toilets, the class teacher waited at the door, leaving the children alone inside. By contrast, the teaching assistant always accompanied Jasmine into the toilets.

Theoretical note 1

It is likely that this behavior altered the children's concepts of 'private' and 'body' with respect to Jasmine.

Observational note 2

Whereas the children often playfully splashed each other with water while they were in the washrooms, they never played the same joke on Jasmine. On leaving, the children held hands and filed back into the classroom. Jasmine and the teaching assistant were left behind in the toilets and only got back to the classroom when the other children had settled down at their desks.

For me to state that the children "never" played jokes on Jasmine, or that she was "always" accompanied into the washroom, I must have collected a certain

number of substantially similar episodes. In this case, from of a total of 216 recreations (as many as there were in the school year) I extracted a sample of 43 cases, which represented 46% of all episodes, of the "going to the toilet" ritual. Samples were similarly constructed of the most significant rituals (units of analysis) performed in the other places in the school.

The entrance lobby

At Jasmine's elementary school, the cadence of organizational time was set by the ringing of a bell. At 8:20 the bell rang for a first time to tell the children to get ready to go up to the classrooms. At 8:30 it rang again; the children formed pairs and then filed into the classrooms to begin their lessons. During these organizational activities there occurred a series of behaviors which constructed Jasmine's "diversity": (a) whereas the other children came to school on their own or were accompanied by their parents, Jasmine was brought by an escort provided by the social services; (b) whereas the children had to arrive at the school before the first bell rang, lateness by Jasmine was tolerated, and she sometimes arrived even after the second bell; (c) whereas the children played and joked among themselves while waiting for the second bell to ring, Jasmine was taken aside by the teaching assistant, and they talked together separately from the class and the teachers; (d) whereas the children formed pairs to go up to the classroom, Jasmine and the teaching assistant either preceded or followed them. It appears likely from these observational notes that Jasmine's identity (and in particular what it means to be sightless in cognitive terms) was constructed organizationally.

The classroom

The children's work tables were arranged facing the teacher's desk. Jasmine sat in the back row, next to the teaching assistant's desk. The children changed places during the school year so that they could interact with other classmates. But Jasmine stayed at the same work table throughout the year, because it was next to the teaching assistant's desk. I also noted that the children who showed the greatest friendliness towards Jasmine were those who sat at the table closest to her; physical proximity bred affection. A further difference was apparent from the differing use of deference rituals (Goffman, 1956); whereas the children addressed the class teacher as "Miss", Jasmine was allowed to use the teacher's first name.

The various subjects taught during the school day may have heightened the differences between Jasmine and the class. During a geography lesson, for example, the class teacher described the morphological features (mountains, plains, rivers) of an Italian region. The pupils stood around the teacher's desk on which the map was displayed. Jasmine stretched out her hands to touch the map. The teacher told her that in so doing she was preventing the other children from following the description, and that in any case the map did not have "enough relief" for Jasmine to be able to understand by touching it. The same thing happened while the teacher explained how the compass worked; Jasmine tried to open the instrument.[ii]

As the teacher was explaining a point, Jasmine would sometimes raise her hand to ask questions or to make remarks, thereby interrupting the lesson and irritating her classmates. On other occasions she raised her hand to ask for the turn, but spoke before being explicitly permitted to do so by the teacher. This event was rather common; the convention that a pupil had to wait for a signal from the teacher before s/he spoke was often breached, because the children coordinated themselves differently; they looked at who had raised their hand first, or if there were still hands

raised by pupils wanting to speak, then acted without waiting for the teacher's signal. These cognitive and social skills were obviously not available to sightless Jasmine. It was grotesque for the teacher to reprimand her by saying: "Wait your turn! Someone put their hand up before you did".

Also the weekly lessons in religious (Catholic) education and English unjustifiably constructed a difference between Jasmine and the class. The religious education teacher (a priest) adopted a protective and permissive attitude towards Jasmine which he never showed to the other pupils. The English teacher was likewise over-indulgent with Jasmine; indeed, a pupil exclaimed one day: "Why does Jasmine always get 'very good' and we almost never do?" The teacher's explanation was that Jasmine had to be helped because she was handicapped.

A framework

Using the suggestions of Strauss and Corbin (1990), I then constructed the following framework.

1. Causal conditions = the professional model used by the teaching assistant to interact with disabled pupils

The main features of the teaching assistant's professional model were the *principles* on which it is based. These included: never leave disabled pupils on their own; always keep them beside you; give them affection; do not let them feel alone; support them; foster their relations with the other children; guide them in their movements; do not let them feel too diverse, etc. As Lane (1997: 155-6) has stressed, every professional (physician, therapist, teacher, etc.) has his or her own vision of the phenomenon. And this vision exerts a professional influence over construction of the latter.

According to Strauss and Corbin (1990: 100), in reality a ritual rarely has only one cause - the etiology is usually more complex. For example the type of training received by the teaching assistant, her religious beliefs and biography may be included among the causal conditions.

In our observational notes (given below in section *Action/interactional strategies*), causal conditions are signaled by the conjunction "whereas", which frequently occurs in the descriptions.

2. Phenomenon (main concept) = TEACHER'S SUPPORTING PRACTICES

I was interested in the following properties of the teaching assistant's support:
   (a) the main aim of her supporting practices;
   (b) the rhythm with which they were repeated;
   (c) their time.

The indicator of the property "aim" was the *degree of independence* that Jasmine was able to acquire in the course of the school year. Given that this was an excessively general indicator, I concentrated on one of its (sub)indicators: the amount of initiative granted to Jasmine by the teaching assistant.

The indicator of the property "rhythm" was the *frequency* of the supporting action.

The indicator of the property "time" was the *duration* of the supporting action.

The choice of the indicators had to be carefully thought-out, and it had to concentrate on highly significant aspects of the practice examined because the indicators would be subsequently used as variables in the non-numerical matrices.

For the *degree of independence* indicator I selected a four-mode variable comprising none/low/medium/high. For the *frequency of support* indicator I used a five-mode variable: never/rarely/sometimes/often/always. Finally, for the *duration of support* indicator I restricted the variable to three modes: no action/brief action/prolonged action.

3. *Intervening actions = the classroom teacher's mental model (or conception of sightlessness).*
   This model may have helped or hindered the micro-actions.

4. *Context = environmental constraints, the behavior of the other teachers, the school staff and Jasmine's classmates as the school year proceeded, and of the children's parents.*

5. *Action/interactional strategies = (a) arrival at school, (b) control of punctuality, (c) waiting in the entrance lobby, (d) forming the line.*
   For example, I identified, sampled and systematically observed four micro-actions in the entrance lobby (my observational notes are in brackets):
   (a) *arrival at school* (whereas the children came to school individually or were brought by a parent, Jasmine was accompanied by an escort);
   (b) *punctuality ritual* (whereas it was compulsory for the children to arrive at the school before the first bell rang – at 8.20 – lateness by Jasmine was tolerated; indeed, she sometimes arrived after the second bell at 8.30);
   (c) *waiting in the entrance lobby* (whereas the children played and joked among themselves in the lobby, Jasmine was met by the teaching assistant, and they talked together – separately from the class and the teachers – while waiting for the second bell to ring);
   (d) *forming the line* (whereas the children lined up in pairs before going to the classroom, Jasmine and the teaching assistant either preceded or followed the class).

6. *Consequences = concept of handicap acquired by Jasmine's classmates.*
   As said, Jasmine's identity – and in particular what sightlessness signifies in cognitive terms – was organizationally constructed. The causal chain may have been as follows:
   (1) the teaching assistant's professional model guided her supporting practices, which in their turn (2) were the cause of Jasmine's lack of independence and (3) formed her classmates' conception of handicap.

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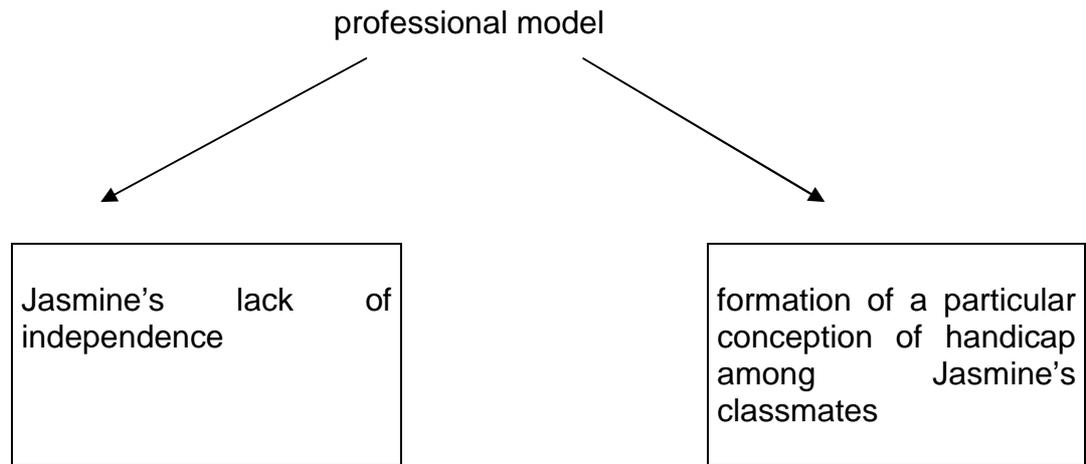
The three assertions were very strong hypotheses which had to be tested and documented with equally strong empirical evidence. The axial coding therefore formulated assertions about the concept (usually related to an action) and its properties.

Selective coding

The third phase began with the construction of a story (Strauss and Corbin, 1990: 119) consisting of a restricted number of hypothetical statements (around ten) which, once tested, constituted the framework of the theory. The aim of the research, in fact, was to produce a theory, not just descriptions, the story was entitled "supporting practices" (the main category) and its hypothetical assertions were:

1. the teaching assistant had learned an assistive professional model;
2. this model tended (unconsciously?) to keep Jasmine in a state of dependency;
3. in fact, towards the end of the school year Jasmine had still not developed a significant degree of independence;
4. Jasmine's independence was obstructed not only by the teaching assistant but also by environmental constraints in the school;
5. the supporting practices which rotated around Jasmine contributed crucially to forming the concept of visual disability among her classmates, especially as regards what a sightless person can and cannot do;
6. the same function was performed (albeit to a lesser extent) by the sanctions and rewards distributed by the class teacher, and by the teachers of religion and English;
7. during the school year Jasmine's classmates changed the way in which they related to her;
8. towards the end of the school year Jasmine had not formed any meaningful or close relationships with her classmates;
9. her only close relationship was with the teaching assistant.

Having outlined the story, the next step was to return to the field and sample (for the third time) the actions and events associated with each assertion, thereby collecting further information with which to document their validity. Obviously, the data collected previously were not neglected given that ethnographic research is a

long and laborious process, it is vital that the ethnographer exploit all information to the maximum extent, and especially information that has already been collected. I therefore returned to my "old" notes with a new objective, that of confirming or disproving the assertions of the story.

Each assertion (which was no more than a statement) had to be supported by an accurate description. In other words, it had to be enriched with details and episodes which gave it solidity in the eyes of the reader (concept of 'thick description'). I thus expanded the story, constructed a complex model, and gave greater sophistication to my theory. If ethnographic notes have been written using a word processing program, control of the hypotheses can be facilitated by using the QSR NUD*IST software. This has nine Boolean operators which, once the observational notes have been inserted, enable the hypotheses to be checked automatically by scanning the content of the observational notes.

In some cases, the relations confirmed were outright patterns which could be represented in non-numerical matrices (see Table 1), like those proposed by componential analysis (cf. Spradley 1980: 130) or produced by cross-classification.

Table 1: Patterns of behavior

SETTING	MICRO-ACTIONS	DEGREE OF INITIATIVE granted to Jasmine	DURATION of the teaching assistant's action	FREQUENCY of the teaching assistant's action
Entrance lobby	Arriving at school	none	—	—
	Controlling punctuality	high	—	—
	Waiting	none	long	always
	Forming the line	none	long	always
Classroom	Turn-taking	high	no action	—
	Participating in activities at the teacher's desk	high	no action	—
	Question-asking	high	no action	—
	Rotating pupils among work tables	none	no action	—
	Writing compositions	high	brief	rarely
Washrooms	Entering the toilets	low	prolonged	always
	"Water splashing"	—	—	—
	Leaving the toilets	low	prolonged	always

Legend: — = not relevant

The matrix furnishes a succinct representation of the pattern of relations. However, like all typologies, taxonomies and classifications, it is static. The researcher must consequently make it dynamic by describing processes. The information contained in the matrix must therefore be connected with actions so that the reader can perceive the indexicality and meaning of the interaction lying behind the succinct representation furnished by a matrix.

Operational proposals: the role of social ergonomics

The main aim of ergonomics is to improve an environment by re-adapting the technologies already present, or by introducing new ones. There are at least three types of ergonomics: physical, cognitive and social. Physical ergonomics is mainly based on anthropometrics and physiology; it seeks to adapt objects (like chairs, tables, glasses, handles, and so on) to the human body. Cognitive ergonomics concerns human perception, attention and memory, and it aims to adapt objects, tools and environments to human minds, that is, to the ways in which people think, take decisions and act. Social ergonomics – an area which is unfortunately less developed – deals with a more collective dimension of interaction between individuals and technologies.

Over the decades, ergonomics has developed various technical solutions for the improvement of work settings. Sometimes, however, a shortage of resources makes new technologies difficult to introduce, so that it is preferable to alter organizational behaviors. From this point of view, in the case examined here a variety of changes can be proposed.

Firstly, individual intervention by the teaching assistant should be reduced because it had harmful effects by creating excessive dependency in Jasmine, it hampered her progressive achievement of independence. Moreover, it did not encourage the development of relationships between Jasmine and her classmates: rather than fostering solidarity and social integration, the teaching assistant was a factor in Jasmine's social exclusion.

Secondly, the teaching assistant should have taught the whole class, and not Jasmine alone. Functional differences could be designed for this purpose while avoiding overlaps between the roles of the two teachers.

Thirdly, as regards the specific problem of blindness, a collective distribution of responsibility for Jasmine could sensitize her classmates in practical terms. The emphasis on practical aspects is important. A study conducted by Siperstein and Bak (1980) in England, where children at an elementary school were given lessons to heighten their awareness of blindness, showed that purely technical instruction produces improvements in terms of politeness and carefulness towards sightless classmates, but it does not create friendship. The responsibilization of Jasmine's classmates should instead be developed on practical tasks for example, many of the activities described in previous sections could be entrusted to the children themselves, thus stimulating greater solidarity in the class.

Fourthly, Jasmine should be given greater freedom of action so that she can develop intellective and psychomotorial autonomy. She could go to the toilets by herself, finding her way by touching the corridor walls, orienting herself by means of the voices and noises in the school, and using the banisters on the stairs. And many other ergonomic devices could be installed for her. It is also important for Jasmine to learn certain falling techniques (forwards, sideways, etc.) in order to increase her autonomy (Wright, 1960).

The independence and autonomy of the sightless person was an objective (curiously) resisted by the professionals (social workers and teachers) concerned with Jasmine. As Scott (1969) pointed out, the blind could be better trained to lead independent dignified lives if the agencies would change their ways. For example in the United States in the 1960s there were more than 800 social service organizations and programs helping the approximately 1,000,000 blind men, women and children in the country. Most of these well-intentioned service groups actually encouraged a sense of helplessness and dependency on the part of their clients. Scott (1969: no page) contended that the agencies have paid far more attention to helping society remove the social problem of blind people from sight than to meeting the needs of the afflicted: "The overwhelming majority of people who are classified as blind can, in fact, see and function as sighted persons in most important areas of everyday life," writes Scott. "There is nothing inherent in the condition that requires a blind person to be docile, dependent or helpless. Blindness is a social role that people must learn to play. Blind men are made."

Conclusions

The research reported in this article singled out a set of school organizational practices which transformed a person into a "sightless pupil". As a result of these practices, blindness was associated with events, activities and incapacities which are not inherent to the disability, such as "blind children have little autonomy … they must not run … they must not be left on their own … they must be accompanied by an adult". These commonplace assertions are not specific to blindness[iii]; but because of the particular organizational conditions present in the school, they were wrongly ascribed to sightless children and gave rise to categorizations that still today underpin widespread stereotypes and prejudices.

A phenomenologically-oriented approach helped uncover these organizational procedures, which could thus be described and shown to the headmaster, the teachers, and the non-teaching staff. Once their artificiality had been demonstrated (whereas the participants believed them to be normal, obvious and natural), they could be replaced with other organizational procedures designed to construct (in both the pupils and the adults) other representations of the blind person. The ethnographic observations, combined with a practical vision drawn from ergonomics (and which is often lacking in disability studies for a review see Davis 1997), were also able to suggest changes in furnishings, in teaching methods, and in the organization of activities in class and other places of the school.

It is necessary to go beyond a simple (though very useful) constructivist perspective and adopt one which reveals the different perspectives (social, ideological, political, cultural, etc.) underlying the dominant or most common social representations. It is necessary, therefore, to move in the direction of operationality, towards the solution of practical problems even when resources are in short supply. This would make sociology into a discipline more socially useful than it is at present.

Endnotes

i   Goffman (1961) noted a similar phenomenon in the mental hospital where he carried out his research; the children of the doctors living in the hospital were the only category of non-patients who did not maintain obvious distances of caste from the mental patients.

ii   After a lesson at the town museum, the teacher told the class to write compositions about their visit. Jasmine introduced hers as follows: "My composition is perhaps not as good as those by my classmate because I could not see the things in the museum very well because they were enclosed in the showcases". Evident in Jasmine's cognitive system is the equation "see = touch".

iii   Similar considerations can be drawn from Oliver Sachs' works on deafness (1989) and colour-blindness (1996).

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