

PICTOGRAM LANGUAGE

Abstract: *This paper tries to explain the importance of graphic representations as pictograms in a global communication. The aim of this study is to represent and discuss about pictograms as different representations all over the world, but using common elements to be easier understood by the people. We have studied pictograms for different purposes and, the same time, we have proposed new ones to be used in a very good graphic language. The aim of this paper is to bring together pictograms from our daily life and new graphic representations of them and to include these ones in a special language without words. It is about a comparison between what is now in charge and what is suggested to be comprised. This study was a challenge for us due to the generous area of such graphic representations knowing that pictograms are above all boundaries of any writing and spoken language.*

Key words: *Pictogram, graphic language, visual and graphic communication.*

INTRODUCTION

There is no doubt that a graphic representation is very important in our daily life. A lot of our activities are connected to this.

So, we have to answer to an important question, namely: What is a pictogram and what is its importance for life?

It is not so easy to answer, but we have tried, by using examples, to convey an answer.

So, a pictogram is “a special language” which is developed by signs, symbols and other graphic representations. It is about a visual sign which has to be very known by the people.

This different language breaks the boundaries of writing or spoken language, having a “special gift”: no words, sounds or grammar, just graphics.

A pictogram is a special graphic element which is in charge to solve the problem of a good communication between people all over the world [1]. Are these representations necessary? Of course, they are without any doubt. Let's try to make an exercise: think to be in a big airport and don't know the language of the country.

The same time, is very difficult to be understood by the people of this country. In this unpleasant situation, your salvation is coming from the graphic representations. That is the power of pictograms.

2. THE PICTOGRAM'S ATTRIBUTES

These graphic signs inform, warn and guide to a final destination. For a pictogram is necessary to be [2], [3]:

- Easily identify;
- Available;
- Legible;
- Timeless;
- Designed in a very good graphics;
- An easy visualization.

Also, a pictogram has to accomplish the three dimensions of communication: warning, information, guiding and to allow a fast and efficient displacement.

3. ABOUT THE WORKING AREA OF PICTOGRAMS

This special sign has a very important feature: that means to strike straight to the point for the people who ask to know where to go.

A good graphic representation is easily understood, but a word / a few words may be unreadable or incomprehensible by every person on the planet.

That is why the using of this graphic sign is met in many domains as: hospitals, airports, business centers, zoo gardens, schools and universities, museums and libraries, IT networks etc. In these domains there are, many times, the same pictograms (e.g. toilet, meeting point etc.) that express something very known.

In Table 1 there are presented the pictograms used in different domains.

In this creative work, there is one thing that is very important: a graphic representation has to be as clear as possible in order to satisfy the concept of the three determinations: *reception – translation - action*.

In Table 1 the graphic representations are suggestive and anyone can identify what is about.

4. THE PICTOGRAM'S GRAPHIC ELEMENTS

It is quite interesting to design pictograms.

But in this work is important to understand some peculiar characteristics that define such a graphic representation. There are important things like the thickness of the line, the kind of the line (thin or thick), the aspect of the line (straight or curve), on “open pictogram” or on a “closed pictogram” (the representation is included in a shape, like circle, square, rhomb, triangle, ellipse etc.) [4], [5].

It doesn't matter if there is open or closed, the only important thing is to be representative and understood.

In Table 2 and 3, there are presented a few pictograms concerning the suggestion (activity area) and their symbols.

Table 1

Pictograms in different working area	
Working area	Pictograms
Airport signage	Arrivals/departures, check in, information desk, baggage lockers, men/women toilets, disabled toilets, parking area, elevator, stairs, coffee bar, restaurant, meeting point, post mail, transfer, exchange, airline baggage, baggage checkroom, shopping, lost & found, rent a car, taxi /bus/ subway, way in, way out, waiting lounge, escalator, connecting flights, coin lockers etc.
Business centre	Information desk, way in, way out, men/women toilets, escalator, stairs, lift, car parking, smoking area, bicycle parking etc.
University/ College	Lecture room, rest room, restaurant, cafeteria, library, information office, amphitheatre, stairs, lift, escalator, men/women toilets, sport hall, laboratories etc.
Zoo garden	Graphic representations for animals, information point, meeting point, toilets, coin lockers, coffee bar, restaurant, car parking etc.
Hospital signage	Information office, waiting room, wash your hands, keep the place clean, kitchen, cafeteria, first aid, infirmary, ambulance, check in, laboratory, exit, healthy services: internal medicine, surgery, dermatology, orthopedic surgery, urology, obstetrics & gynecology, respiratory organs, circulatory organs, pediatrics, examination reception desk, radiology, endoscopy, radiotherapy, electrocardiograms, ophthalmology, dentistry, pharmacy, CT scan, nursery etc.
Shopping center (in-store signage)	Escalator, stairs, lift, men/women toilets, shopping trolley, rest room, restaurant, parking, changing room, telephone, wireless area, safety box, cash machine, toilet for disabled, no rollerblades, no dogs, no ice cream, no smoking, to the left/to the right, cash point, cloak-room, food area, coffee shop, pharmacy, book shop etc.

Table 2

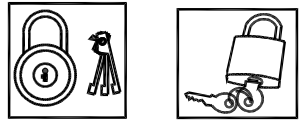
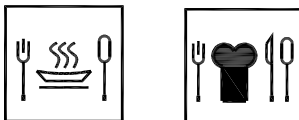
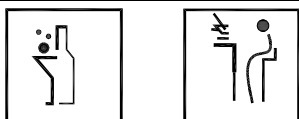
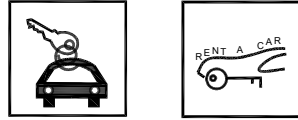
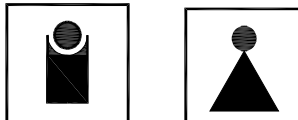
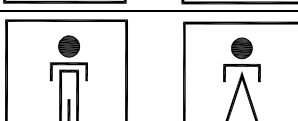
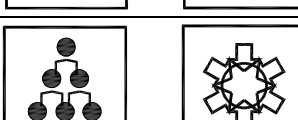
Symbols and graphic representations		
Symbol	Suggestion	Graphic representation
Padlock	Safety	
Fork & knife; fork & knife& plate; bottle, fork, knife& plate.	Restaurant	
Cup / glass / bottle	Coffee bar	

Table 3

Symbols and graphic representations		
Symbol	Suggestion	Graphic representation
Car & key	Rent a car	
I letter	Information point	
Envelope; box	Post office/ post courier	
Men/women (fig. 1)	Toilet	
Central point & arrows; people	Meeting point	

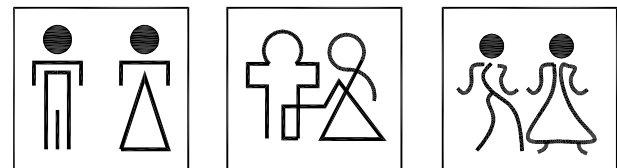


Fig. 1 A few pictograms

5. CASE STUDY

5.1 Pictograms for the Engineering Graphics and Industrial Design Department

It was an exercise for us to design pictograms for the building where is our Engineering Graphics and Industrial Design Department.

We have tried to realize a signage map to be useful for teachers and students too.

Many books concerning graphic representations were studied and finally the result was this signage map.

There were two necessary steps to do. In the first step we have define how many classrooms, labs and amphitheatres there are in this building. The same for libraries, cafeteria, copy centers, lifts and stairs.

The second step is about the graphic process of design. To design pictograms, anyone needs to take into consideration two aspects: firstly, information and direction, and secondly, infrastructure.

Figure 2 is the result as regards all necessary steps to be done.

Also, it is so important an encoding system by using colors, images and letters/figures/words. For a signage system in a university, there are necessary eloquent graphic representations (fig. 3).

The pictograms on the panels have to be clear, so the designer has to pay also attention to the shape of these panels.

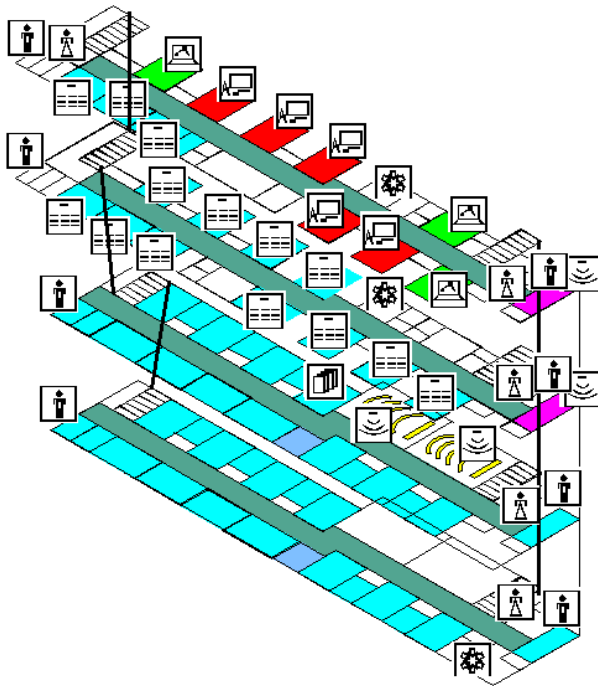


Fig. 2 Signage system for an university building-3D model

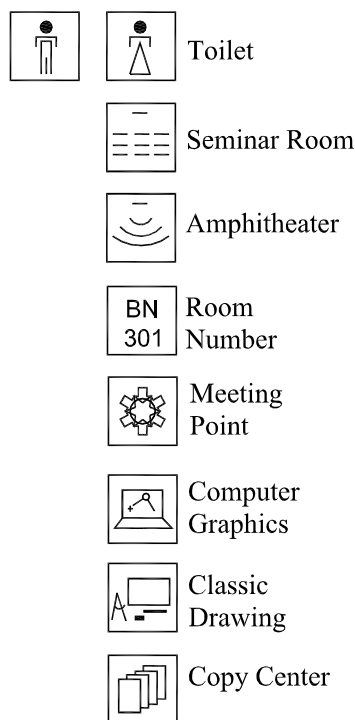


Fig. 3 Signage system for an university building

5.2 Pictograms for a hospital

To design pictograms for a hospital was a challenge for us because it is a special working area. We have tried to create interesting, useful and clear graphic representations to be easily understood by the people. In our research study we have realized a signage system (it

is about a signage map which is not included in this paper) for the hospital using a colour code too. The colour is important to reach the final destination towards the desired department. Of course, for the staff and the patients. In Figure 4 we have presented a few pictograms created for this purpose.

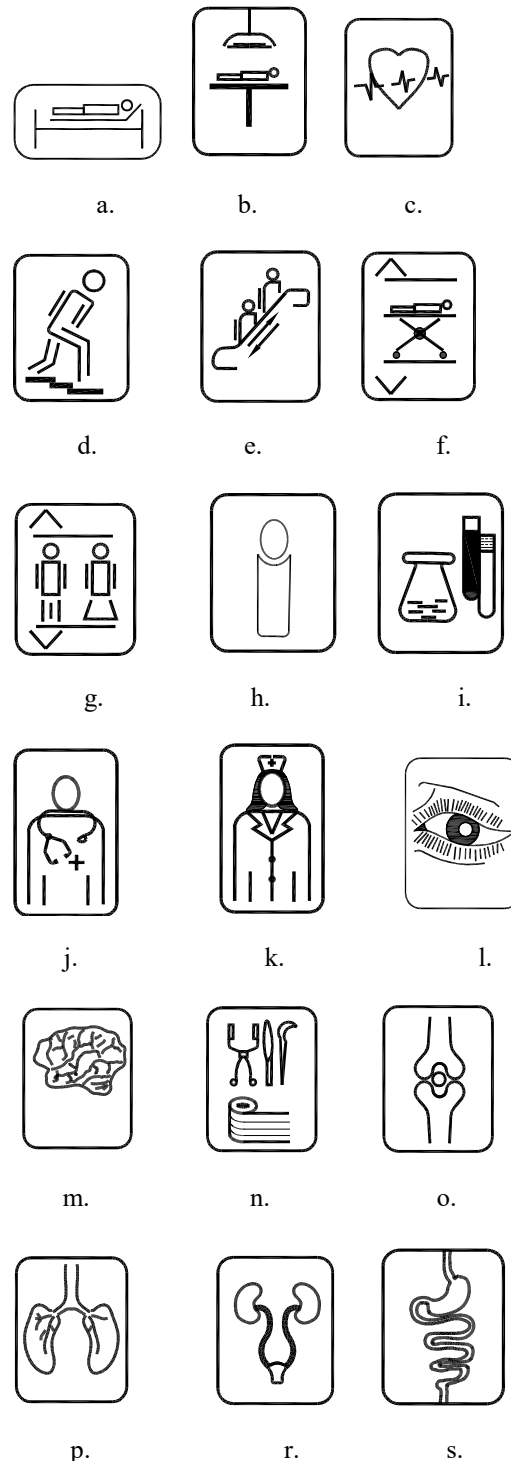
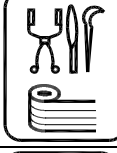
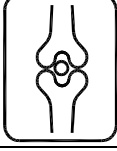
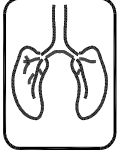
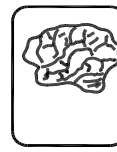
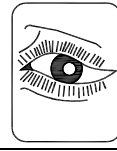
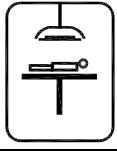


Fig. 4 A few pictograms for a hospital

a. Patients room; b. operating room; c. cardio-vascular medicine; d. stairs; e. escalator; f. patients lift; g. staff and visitors lift information desk; i. analyses lab.; j. doctor station; k. nurse station; l. ophthalmology; m. neurology; n. surgery; o. orthopedic surgery; p. pulmonary function examination; r. urology; s. intestines investigation.

At the entrance of the hospital, nearby the information desk, we have proposed to be a panel which indicate the colour line for each department (*just follow the line*) and the level of it. Table 4 represent this panel.

Table 4

The hospital panel departments		
MEDICAL SERVICES- INFORMATION PANEL		
Analyses laboratory	Black line Ground floor	
Urology	Orange line Level 1	
Intestines investigation	Blue line Level 1	
Cardiovascular medicine	Green line Level 1	
Surgery	Dark blue Level 2	
Orthopedic surgery	Brown Level 2	
Pulmonary function examination	Purple line Level 2	
Neurology	Red line Level 3	
Ophthalmology	Yellow line Level 3	
Operating room	Dark green Level 3	

6. CONCLUSIONS

In this paper we have tried to explain what important creative work is to be performed to design a clear graphic representation.

To realize pictograms for people all over the world is a fabulous thing. It is so different from other works, because knowledge is connected to psychology, sociology, communication, graphics, management of colors.

There are many books “talking” about this special graphics. As we have presented in this paper, the area of using pictograms is so extended in the world.

At the end of our work it remains still a question: Is it possible a future world without pictograms? We think that a world without graphic representations is not possible and more and more pictograms will be defined as “touch pictograms” in the new digital world. This special design will survive in various shape and interesting representations.

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