

THE MEANING OF PICTOGRAMS IN A GRAPHIC AND VISUAL LANGUAGE

Abstract: In this paper we have analysed the significance of (discussed about what represents) a pictogram as a graphic representation over the boundaries of any language. For a pictorial language, it is necessary to have very good and well known drawings by people, to allow the effectiveness of their functions: guiding, informing, warning and forbid. We have introduced a rule to design pictograms and we hope to be a helpful tool for someone interested in the field of design. We have tried to define, using many original examples, the importance of pictograms in any kind of signage system. The case studies have allowed us to point clear conclusions and to offer a direction for future researches.

Key words: Pictogram, signage system, graphic design principle, functions, shape, color.

INTRODUCTION

Are necessary pictograms in our life? That is a good question for everyone and for a designer, especially. Because he is in the position to realize some drawings which may lead the people to a desired destination. Imagine a world without pictograms: in airport, in university, in hospital, in business center, in a mall etc. How someone could manage his way: asking, begging, reading books etc.? No! It will be so easy to see only a few pictograms to manage the life, to be focused on a good way, where ever you go. That is, in a few words, the important meaning of graphic representations.

2. THE PRINCIPLES TO DESIGN A PICTOGRAM

2.1 The MSCA rule

A very good and interesting definition of a pictogram is presented in [1]. „A pictogram is an image created by the people for the purpose of quick and clear communication without language or words, in order to draw attention to something”. The meaning is: a pictogram is a created graphic representation, not a natural element, to communicate something, without words, breaking the borders of any language all over the world and, finally, to manage important functions: to guide, to allow, to warn and to forbid. That is, in a few words, this important constituent of a signage system.

A pictogram has to satisfy the MSCA rule (to contain a *message*, to have a *structure*, to allow *connections* and to be focused on an *aim*) (Fig. 1).

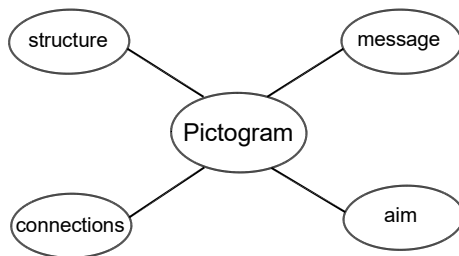
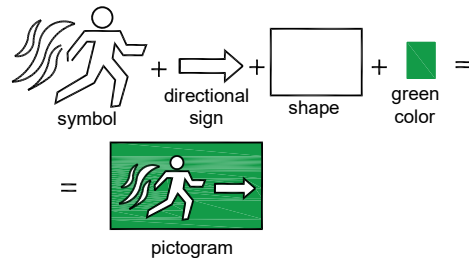
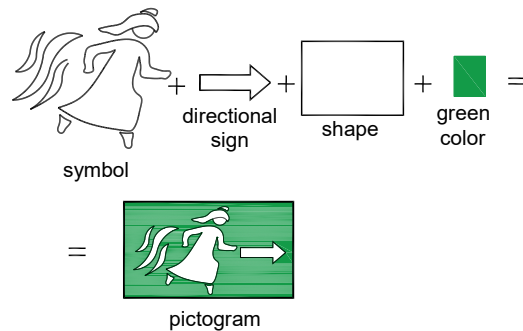


Fig. 1 The scheme of MSCA rule.

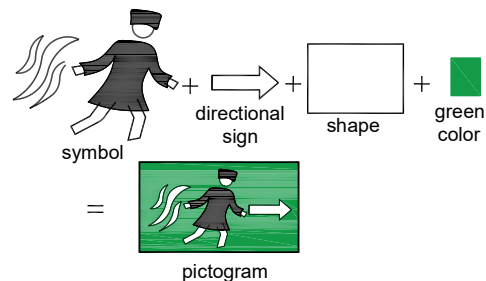
To create a pictogram is like an equation to put together, by addition, a few elements. In Fig. 2 we have represented this equation by examples.



a. Fire exit.



b. Fire exit in Oriental countries.



c. Fire exit in India.

Fig. 2 Examples to design a pictogram.

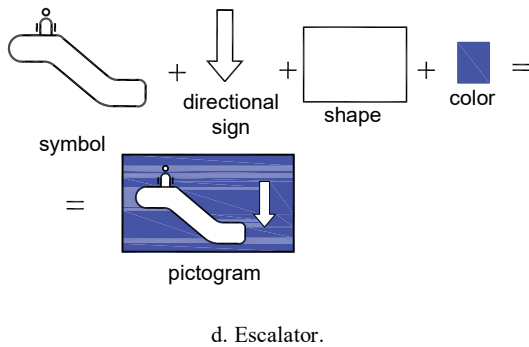


Fig. 2 Examples to design a pictogram.

A pictogram is connected to the context of action. We have noticed 3 types [1]: indicative (informative), imperative- authoritative (obligation or forbidden) and suggestive (it is about consequences of something). In Fig.3 there is an example of pictogram concerning three contextual situations.

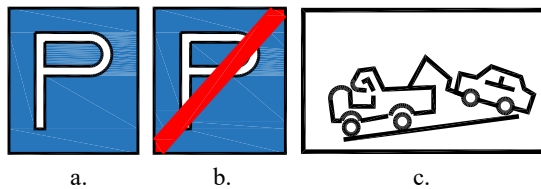


Fig. 3 The contextual situations for a pictogram.
a. indicative; b. imperative; c. suggestive.

2.2 Colors and shapes in pictogram design

The colors (red, yellow, blue and green) and shapes are elements which make the difference between pictograms:

- Red color & circle shape is translated as interdiction;
- Red color & triangle shape is translated as compulsory;
- Yellow color & triangle shape is translated as warning, concern, caution;
- Green color & rectangle shape is translated as emergency exit, rescue, fire exit;
- Blue color & square shape is translated as indicative (give an information about something);
- Blue color & circle shape is translated as indicative; also, it is possible to be an obligation (for traffic sign - *only to the right road*, for example);
- Blue color & rectangle shape is translated as indicative. Also, it is possible to have an obligation (see traffic sign namely - *only one way*, for example).

In Fig.4 there are represented pictograms, in accordance with colors and shapes from above.

A pictogram has to be neutral, as culture. The chosen example is about a pictogram for men/women toilet. There are three types of pictograms, generally speaking (Fig.5):

- Representative (the drawing is a real representation);
- Arbitrary (the drawing keeps the essential features of the represented object, to be recognized);
- Abstract (it is a new representation that have to be learned).

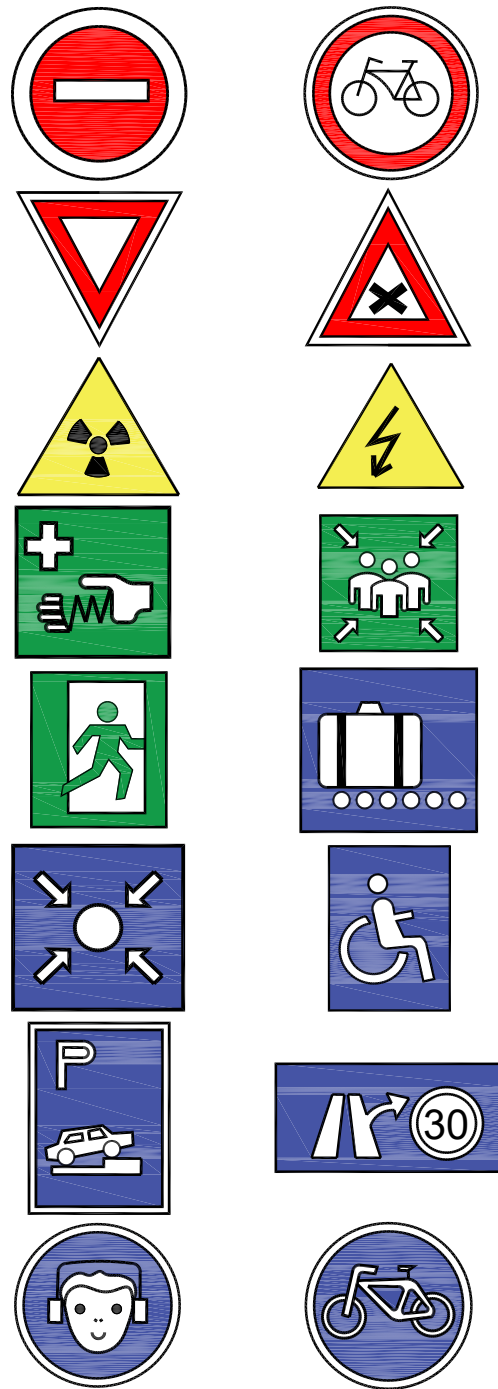


Fig. 4 The message of pictograms connected to shape and color.

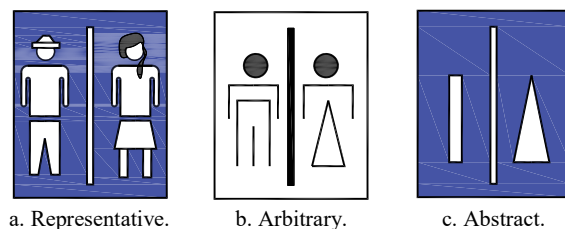


Fig. 5 Types of a pictogram.

2.3 Basic criteria for pictograms

There are basic criteria for a pictogram into a signage system:

- To be visible (a place to be easy seen);
- To be legible and available;
- To be clear related to the graphic message;
- To straighten to a right direction;
- To be informative.

In a lot of areas (sport arena, supermarket, airport, parking etc.) there are common graphic representations and not figures, numbers or letters because it's easier to memorize something very known (animal, bird and so on). It is like you answer at a question: *Where is your car in this parking?* And if there are animals as sector representation you may say: *My pictogram is a CROCODILE, my car is in CROCODILE area.* It is easy to answer. So, the CROCODILE pictogram is the place in the parking where is your car. Only this example shows us the importance of a pictogram to save our daily time.

Henry Dreyfuss in his famous Symbol sourcebook [4], has given a wonderful example concerning the importance of existing pictograms. He told us about a bottle, and on this bottle is written in Greek, Japanese, Russian and Hebrew Languages the word POISON. If you do not know these languages is very difficult to understand what is in the bottle, and is possible to drink. But if there is a pictogram on the bottle represented a skull and two crossbones is *clear as a crystal*, because this pictogram means DANGER, DEATH.

3. PICTOGRAMS IN A SIGNAGE SYSTEM

3.1 Why it is necessary a signage system

Today we are living in a complex world and there is more mobility for the people. It is very difficult to imagine a world, as ours, without any signage system. It could be a chaos. It is necessary to have information to guide, to allow, to warn or to forbid in a signage map, because in this system everyone follows a flow. A signage system means a better life for people, its lack means a stressful one. That is why is important the role of a designer to find the best solutions when he is in the position to develop a signage system.

3.2 Questions for the signage designer

To begin the development of a signage system is important to make a complete analysis of the theme, that means a map which may include all demanded aspects. Studying this information, the designer may create a graphic and visual language for the system, to be able to accomplish what is necessary to function „at maximum speed”. There are a few questions about the signage system and the designer has to answer to all these. The questions are [3]:

- What are the displacements flows in a signage map?
- What kind of graphic representations will be used?
- How many signs, symbols, pictograms will be necessary?
- Where are the locations of these signage elements?
- What kind of information is necessary to be specified?
- What colors are for signage elements?

- What size is necessary to be clearly seen?
- What kinds of materials are used to realize them (to prevent their devastation)?
- What kind of supporting systems are used and what quantity?
- What kind of coding system will be conceived?

4. CASE STUDY

4.1 The instrument panel car

It was interesting for us to make this research about the instrument panel car, using pictograms and without them [2].

In Fig. 6 we have drawn some pictograms necessary to be on this driving element and we have fixed them on it. There are graphic representations bellow and lighting pictograms above. In Fig. 7 the pictograms were replaced by numbers to represent something on the instrument panel car.

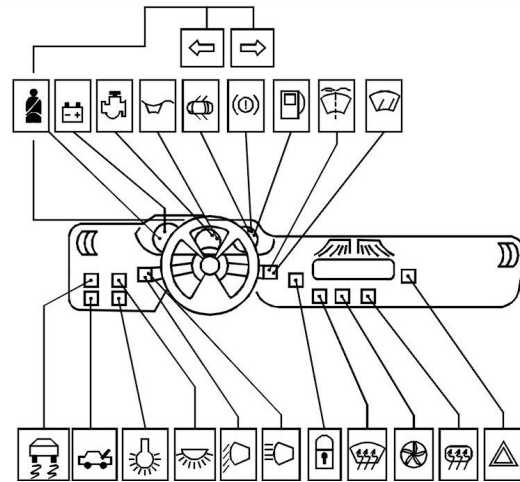


Fig. 6 Pictograms on an instrument panel car.

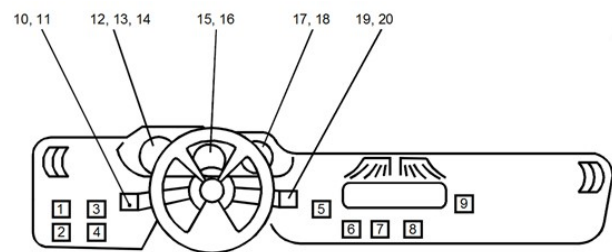


Fig. 7 Single numbers on an instrument panel car.

Some observations, as conclusions of this case study, are necessary to be made.

For the first example, the things are very clear. Someone has to read the technical book of the car to be familiarized with the pictograms. And after that, it will be no problem to drive well the car using pictograms.

In the second example, when there are only numbers instead of pictograms it will be difficult to memorize the numbers for what pictograms they are. It will be difficult to access a control knob because it is heavy to make associations between pictograms and numbers very

quickly. No doubt, it may appear a lot of mistakes and an insecure in driving. These two examples show how important are pictograms to be in our lives.

4.2 Pictograms for Olympic Summer Games

We have designed the pictograms for an Olympic Summer Games in according to the principles to achieve a signage system (Fig.9 and 10). Firstly, we have realized the drawing of the athlete and then we have conveyed him into a colorful shape to obtain the necessary pictogram. In Fig. 8 we have presented the way to design a pictogram for the Olympic Games. The shape is like a sheet of a calendar because our intention was to convey a message about the time which is passing during the Olympic Games. We have used a thick line and a thin line for athletes and only a thin line for the discipline tool (e.g. sword, arch, box gloves etc.).

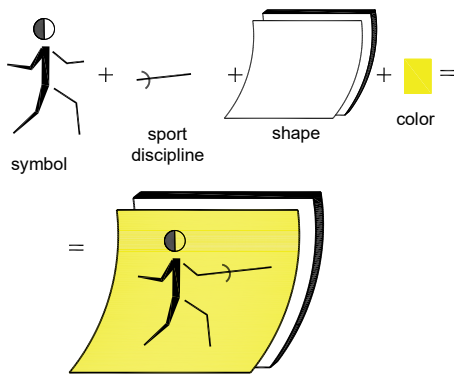


Fig. 8 How to achieve a pictogram for Olympic Games.

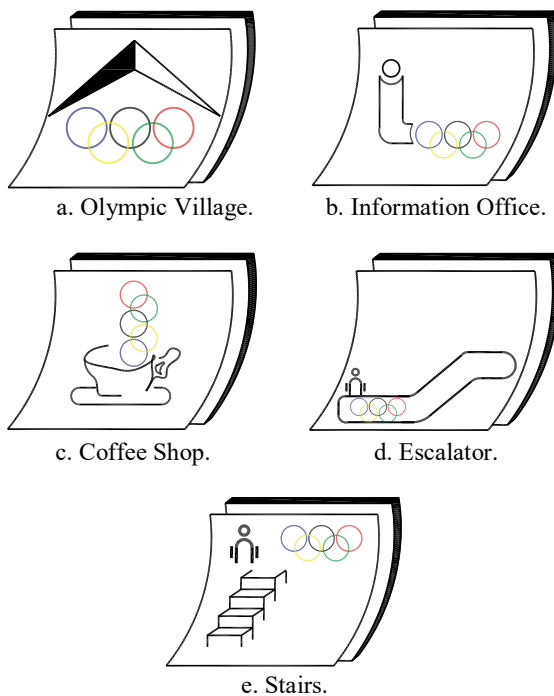


Fig. 9 A few pictograms.

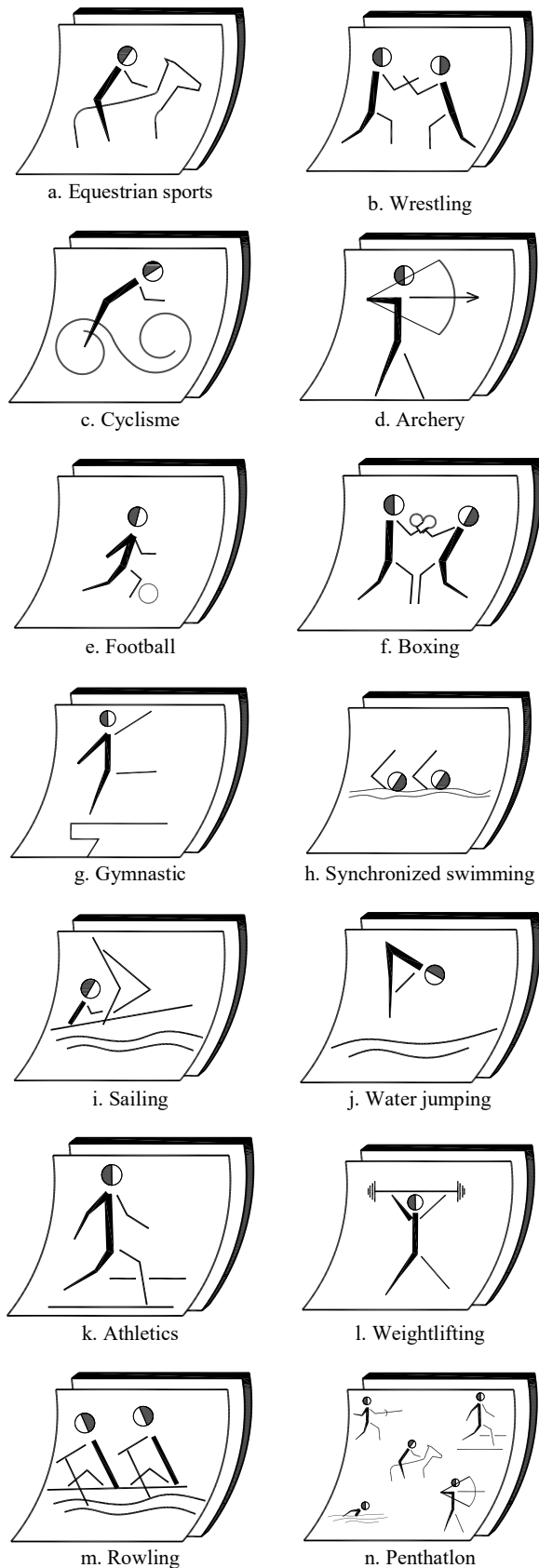


Fig. 10 Pictograms for sport disciplines.

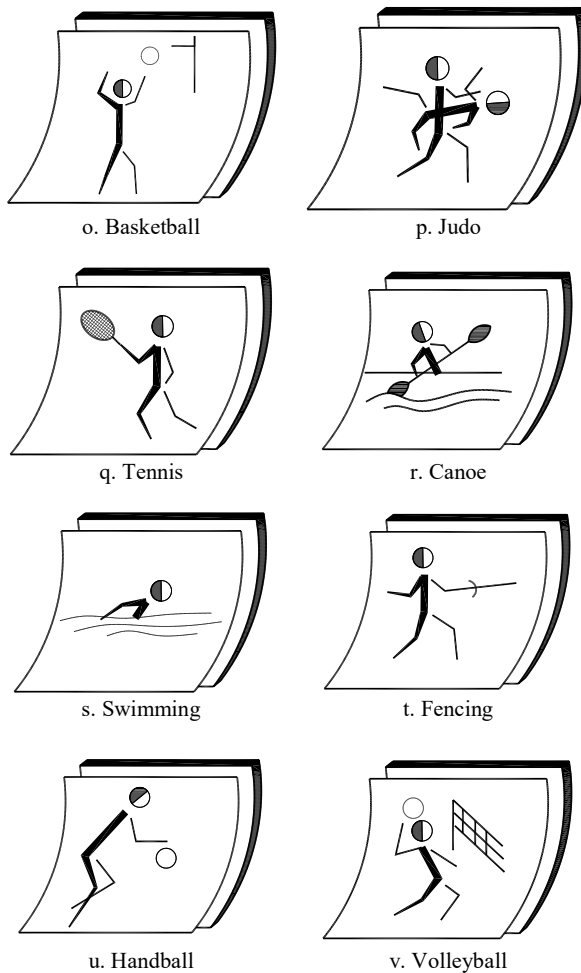


Fig. 10 Pictograms for sport disciplines.

5. CONCLUSION

The universe of pictograms is so interesting and allows to design them if is imagination. We have tried in this paper to present some of our research concerning a language using pictograms. To design a graphic representation which has to be understood from a lot of people is not an easy work. Without knowledge of graphics, aesthetics, communication, colors is almost

impossible to draw good pictograms. We have given examples to „build such a construction” as a useful exercise for someone who is interested to join „the designer club”. This paper is a plea for now and, especially for the future. We ask you to answer to the question: *Is it possible a world without pictograms?* We believe the answer is *no*.

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Authors:

Associate prof. Ph.D. Eng. Victor ADÎR, Department of Engineering Graphics and Industrial Design, University Politehnica of Bucharest, Romania. E-mail: victoradir@yahoo.com

Associate prof. Ph.D. Eng. Nicoleta-Elisabeta PASCU, Department of Engineering Graphics and Industrial Design, University Politehnica of Bucharest, Romania. E-mail: nicoletaelisabeta_pascu@yahoo.ro

Associate prof. Ph.D. Eng. George ADÎR, Department of Theory of Mechanisms and Robots, University Politehnica of Bucharest, Romania. E-mail: adirancuta@yahoo.com

Assistant prof. Drd. Eng. Laura IVASCU, Department of Engineering Graphics and Industrial Design, University Politehnica of Bucharest, Romania. E-mail: laura.ivascu@yahoo.com