AN ANATOMICAL QUESTION: Pictogram design associated to female gender



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The pictogram representing a woman to indicate women's toilets is a subject of controversy, prompting various questions relating to the sign's validity and design. This paper researches the representation of the female figure. Moreover, we propose different graphic solutions and viable approaches to reconsider the design of this pictogram for our contemporary society.

KEY WORDS: PICTOGRAM/WOMAN/FE-MALE/GENDER/FEMALE TOILET/ICON

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The female figure in History

Since Prehistory, the human being has been represented in many ways, on many media and through varied iconography. Around two-hundred Prehistoric female sculptures have survived, such as the Venus of Willendorf, Grimaldi or Lespugue. These share a set of anatomical features with a very specific pattern: obese bodies, huge breasts and protruding stomachs.

Similarly, in cave paintings we find female figures with accentuated sexual attributes. The exaggeration of such features has been linked to fecundity; which is to say, these representations highlight the relevant role of women in Paleolithic communities as guarantors of the survival of the group. Gerard Blanchard stresses the idea that a shape may be determined by a social role. This author compiles a gamut of signs with varying degree of simplification, from which he reflects on the "sexual differentiation that defines the visual identity of man and woman. For the former, a thin waistline, flat chest and important sex. For women, breasts and sex (pubic triangle); an inverted heart-shaped abdomen (fecundity of women, for such a long time a defining feature of the goddesses-mothers, the body shape of vase, jug and amphora".1

In Ancient Egypt, we find that among the taxograms² used in hyeroglyphs, there are two different representations for man and woman. The first one is used to refer to "male aspects" such as "son" or

"husband", while the second one has female connotations, such as "mother". The Sumerians advanced the process of abstraction of the female and masculine signs, through a synthesis of the sexual organs. According to Adrian Frutiger, if we compare these Summerians signs for man (pennis) and woman (vulva) with their Egyptian contemporaries for the same meaning, we could appreciate that even though the hyeroglyphs show the entire body, "their legibility is much more "imprecise" than that of the Summerian signs».

From another point of view we could value Chinese characters, both in arcaic figures as in the current signs that express the concepts "man" and "woman". It can be appreciated that the female and male genders have been created from different ideas. The male character is made up of the sign "rice field" and "strength", since growing rice was the main occupation of Chinese men (Fig. 1).⁵

The proportions of Venus

The theories of proportions of aesthetic canons⁶ that have appeared in specific historic moments point at an interesting perspective for the design of pictograms for people. They also suggest contemporary alternatives as a new take on human proportions. A number os artists have tried to racionalise the shapes of female and male bodies in their search of an ideal of beauty, finding the fundaments of their approach on concepts such a symmetry or geometry (Fig. 2).

The Egyptians made a grid of identical squares, of 18 or 22 units of height, in order to help drawing people. On this pattern, the artist would draw the outline of the figure, organizing systematically on the grid differents points of the human body. Contrasting with this, in the Greek canon, dimensions come from direct observation and a minute study of reality. In works as the Aphodite of Knidos, by Praxiteles (circa 350BC) or Venus de Milo (2nd century BC), the relations between measurements of all the parts of the body are taking into account in the search of

the ideal human being. In Rome, Vitruvio would define beauty based upon eurythmia and symmetria.

Vitruvio's approach and proportions system is determined with the geometrical inscription of the human figure, arms and legs spread, within a square, which is also inscribed within a circle. Once these parameters were stablished, the proportions of the different parts of the body are generated with regards to a module that takes as a constant the measurement of the head, or the foot. During the Middle Ages, painters would simplify the body applying simple geometrical layouts, or following elementary patterns. Panofsky compares the medieval system against the previous ones, defining the Egyptian method as constructive, the Classical Antiquity as anthropometric, and the Middle Ages system as schematic.8 With the arrival of the Renaissance, neoplatonic theories of man as a microcosmos would be recovered again, and beauty would once more measured according to proportion and eurythmy. Authors such as Alberti, Pacioli, Piero della Francesca, Leonardo da Vinci or Albrecht Dürer, carried out studies on human proportions. The Golden Ratio or Divine Proportion is one of the concepts that are more important in the art of the Renaissance: Luca Pacioli would define the Golden Number, which expresses "a ratio which exists in nature and which implies and conditions its beauty and harmony".9 In Leonardo da Vinci's work we see the harmonious relationships between the different parts of the human body and of these with the complete body (Fig. 3).

We may list some differentiating elements of gender, cultural aspects, social clichés, traditional roles, and above all, anatomical differencies. However, as we get closer to the pictograms currently used, we see how these do not display specific anatomical features of each gender, and that female identity is constructed from a schematised version of the male identity, to which a dress or skirt is added.

Once There Was a Pictogram to a Skirt Attached

In the twentieth century, the implantation and spread of signage systems arises the need to develop two signs, for male and female, to indicate the use of toilets in common areas or public spaces. Otto Neurath and Gerd Arntz developed the Isotype system (International System of Typographic Picture Education) with the objective of conveying information throughout a simple sign system. If we analyse the figures of man and woman, we can appreciate that the differences between them consists in the woman being represented with a variety of clothes and hairstyles, with the constant of a skirt. However, some anatomical differences are also evident: the woman has breasts, her figure narrows at the waist and it displays more slender legs than the man's. (Fig. 4).

The increase of international travelling triggered a collaboration in the mid 1970s between the American Institute of Graphic Arts (AIGA) and the U.S. Department of Transportation. The result was an airport signage system "that could be clearly read and understood by travellers in a hurry, even in the case that they were not fluent in English".12 This family of signs, which is still valid today, is a clear reference for research on design of icon and pictogram systems. If we focus on the message "Women's toilets", we will see that as Ellen Lupton and J. Abbott Miller state, "the difference between male and female bathrooms is signified by the addition of a cultural mark to the generic human form: the fin-like extrusions representing the woman's dress". The same essay refers to the signs proposed by National Lampoon in the mid 1970s, highlighting that they express differences between men and women through an anatomical representation. However, the design committee of AIGA/ DOT decided to keep the "already-conventional device of the fin-like party dress".13

We know that in spaces where large events take place, with crowds of people from different countries and cultures, signage plays a very important role. This is the case of the Olympic Games, in which we can locate some of the oldest models for toilet signs. In 1964 they took place in Tokio. In the family of pictograms designed for this event, woman and man differ in three elements. The first difference is in the torso, which is nearly half of the man's torso. Another difference can be found in the clothes, with the woman dressing a huge, semicircular skirt. The last distinctive element is the size of their legs, which are bigger and wider in the male figure.

In the pictograms of the Olympic Games of Mexico (1968), the signs for the toilets mantained the same differentiating features than in the previous case, although the skirt is smaller, displaying a triangular structure. In this case, the designer added another distinctive feature by incorporating hair to the pictogram for women.

In 1972, in the Olympic Games of Munich, the pictogram design was commissioned to Otl Aicher, who introduced a significant conceptual innovation by presenting a grid on which all signs where created, based upon human movement. In these signs, the woman keeps her famous dress/skirt and the proportions are conditioned by the geometrical patterns of the rest of the family, and by the structure of the male sign (Fig. 5).

Paradoxes of the "female toilet" pictogram: this sign means what it means

Nowadays we find numerous pictogram systems in which the skirt is a distinctive feature which allows to identify the female gender. In the examples shown in figure 5, a series of patterns of graphic solutions repeat themselves in different signs and allow us to point out a series of reflections. Different alternatives may be appreciated with varying degrees of iconicity and schematisation which not always adapt themselves to the structure of the referent. Also, some anatomical features that are consubstantial to human figure (arms and legs) are either exaggerated or have been completely removed. For instance, in some cases the two legs have been unified into an only one, thus evoking an ice lolly or a manequin; in other cases it is arms which disappear. On the other hand, some examples bring formal coordination with visual identity to the extreme, so human proportions are comparatively less important. A different approach consists in designing pictograms using the identity markers of a typography. However, the signs may acquire shapes that are not very natural, when the proportions of alphabetical features impose themselves over the proportions of human bodies. In some of these cases, the use of a graphic line enables the construction of figures in which their counters contribute to defining the torso and/or hips, as well as to marking the extension of limbs.

Lastly, we can value the dress type used, with a variety of types of skirts which differ in aspecst such as their length, fullness, size and shape. Thus, the pictograms acquire connotations which suggest contexts that are too specific, as though the woman had dressed for a specific social event.

Semiotics help us understand cultural processes as communication processes. According to this discipline, a sign makes reference to something and has meaning for someone within a given cultural, temporal context.14 Curiously with the female pictogram is that if we make a first reading what we see is «a person wearing a skirt, who is standing doing nothing». If we consider the sign cattegories defined by Charles Morris, 15 the female toilet pictogram is a sign that is both iconic, indicial and symbolic. (Fig. 6). It is iconic since there is a relationship of simmilarity with a woman. When it is seen placed up on a door, the indicial function prevails, since it indicates that «we have finally arrived and behind this there is what we were looking for». Finally, it has a symbolic function, since in the 1970s it was agreed to relate such icon with the function known to all of us. Through that convention, the users perceive the sign and interprete it. When we see it, it only takes us a split second to decode that such sign means what it means, and that such space has the use that it has. With just a quick glance, comparing the two pictograms, both women and men identify which is the correct door that we must open.

The experts in charge of standardising this sign, most probably faced a problem of difficult solution, since it required a distinguisable code among the signs for each gender, for the signage of those non-

public spaces. On the one hand, it was clear that the function of such spaces could or should not be iconised in a literal way, since what we do within such spaces belongs to the area of our intimacy. On the other hand, given the universal character of the pictogram, the main problem was how to reflect any woman and all at the same time, in one only sign. Which was the logical representation of the female features? The male pictogram had an easy solution, since it could be represented with a generic human being, with refined shapes, reduced to the essential. It had a head, trunk and limbs. Following this logic, the essence of the woman should show anatomical attributes inherent to her female condition, as bust and hips are. However, the representation of these features could suggest female nudity, a fact that was unconceivable and reprehensible in practically every culture. For this reason, the female pictogram was deviced to be compatible at a syntactic and semantic level with the sign for the male, but an additional feature highlighted the anatomic shape of the hips: the skirt. It is obvious that such feature was not necessarily nor directly connected to the message to send.

These sociologic and anthropologic aspects were what determined, most probably, the graphic decision "man with a skirt is a woman". If such figure was proposed for "every woman", we may suppose that back then most of women in the world wore a skirt, regardless of its style and length. However, nowadays it is at least surprising that the dress is kept as a valid model and a true differentiating feature, present in the corporative signage systems of many entities.

To consider other approaches we have researched a number of referents that are used in a variety of contemporary communication contexts. In figure 7, we can see that some could not be very well decoded by the recipient, other refer to very specific environments, or they are irreverent, offensive, stereotyped or unacceptable in some cultures. Some admit a comical interpretation, but they are only adequate for some environments or very specific spheres. We also find approaches that are too abstract or geometrical, which interpretation is more complicated for the viewer. Thus, many of these proposals would not be valid to reconsider the design of the standardised sign with a universal character.

Searching for the pictogram for "every woman"

The controversy around this much discussed sign is still open within the discipline of Design. Every time designers have to face the challenge of solving a pictogram system where it is necessary to identify clearly the female toilet from the male toilet, the debate relights.

We have seen that the reference principles that the designer shall consider to solve a pictogram

01

BLANCHARD, GERARD: *La letra*, Barcelona, Ediciones Ceac, 1988, pp. 19-25.

Logogramas sin valor fonético que sirven para diferenciar el significado de una palabra.

03

MCDERMOTT, BRIDGET: Decodificar y descifrar los jeroglíficos egipcios: cómo leer el idioma sagrado de los faraones, Barcelona, Art Blume, S.I., 2002, p. 24.

04

FRUTIGER, ADRIAN: Signos, símbolos, marcas, señales, Barcelona, Editorial Gustavo Gili, SL, 1981, p. 85.

05

ROBINSON, ANDREW: Historia de la escritura. Barcelona, Ediciones Destino, 1996, p. 48

06

Según Panofsky (2004), una teoría de las proporciones es «un sistema que establece relaciones matemáticas entre los distintos miembros de un ser viviente, en particular de los seres humanos, en la medida en que estos seres se consideran como objetos de una representación artística».

07

PANOFSKY, ERWIN: El significado de las artes visuales, Madrid, Alianza, 2004, p. 78.

system have to do with cultural adaptation and the logical form of the referent, with graphic brevity, and syntactic, semantic and pragmatic compatibility of the system. 17

This is why we would like to mention four considerations and to pose some graphic hypotheses that could contribute to a possible update of this sign:

1. Female pictographic structure

In the logical structure of graphic representation of the female, based upon the analysis of female images, there is an underlying skeleton that we could denominate pictographic structure. This layout must comprise head, neck joined to the head and to the trunk, torso and upper and lower limbs. It differs from the male structure in the waist, the width of the shoulders and the hips (Fig. 8).

2. Line

The use of a graphic line could be a path for change and action to solve the recurring problems that we find in the structure of the representation of the female body (Fig. 9).

3. Fullness of the dress versus female hips and torso

Perhaps it would not be necessary to exagerate the fullness of the dress. This way, the figure indicates that there are clothes covering the hips, but they do not necessarily have to be a skirt. On the other hand, we could just highlight the woman's hips and torso, without denoting a specific garment. (Fig. 9).

4. Pure geometric shapes

Another path to explore may be a synthesis of the human body's shapes transforming them into pure geometrical shapes (circle, square, triangle). We can appreciate this approach in *Copernicus Science Center model*. This geometric approach allows both genders to be perfectly identified, freeing us from the sensation of looking at naked bodies. Would this be the optimum solution? (Fig. 7: geometry)

To update this sign we may consider the validity of other formal, semantic approaches and other graphic transcriptions of the sign. We shall consider that the design of the pictogram will always be subject to revision from each cultural time, and that dynamics of change in societies make this an arduous, complex task. The communicative society by AIGA was thus encoded and it took root around the world. It took great effort to spread the use of the pictogram. Since the sign has been learned, tackling a communicative action to change it would be, in our opinion, counterproductive.

1 We shall be aware of the fact that pictograms carry an identity, not only corporative. Signs may be a consecuence of a certain ideology and they do express the vision and values of society at the time they were created. As a consequence, there are always other possible solutions. In the twenty-first century, sociologic and cultural factors are changing and they will continue to change increasingly fast, in many aspects. Despite our being well famil-

iar with this sign, the current referent will evolve towards other models, it will be updated, renewed or transformed in tilme in a natural, gradual way. This process has already happened with other signs in our collective imaginary, signs that were initially alien to us, as the years went by have become a part of our daily life.

It is very possible that we will have to adapt ourselves to a greater pictographic wealth, were the unified sign will have different versions according to the degree of cultural acceptance of the referent. Perhaps we will have to develop a language with non-verbal syntagms, thus responding to our local cultural wealth. We will always have to learn the iconography of each region or the specific languate to ask "where are the women's toilets?" We will guess the answers, that may come in the shape of gestures, also very eloquent. For, is it not true that we learn to say "thank you" in every place we travel to? $lack \label{eq:possion}$

BIBLIOGRAPHY

drid, Alianza, 1985.

ABDULLAH, RAYAN; HUBNER, ROGER:

Pictograms. Icons & Signs, Londres, Ed. Thames & Hudson Ltd, 2002.

AICHER, OTL; KRAMPEN, MARTIN: Sistemas de signos en la comunicación visual, Barcelona, Editorial Gustavo Gili, SL, 1979.

AMERICAN INSTUTE OF GRAPHIC ARTS (AIGA): Símbolos de señalización, Barcelona, Editorial Gustavo Gili, SL, 1984.

BLANCHARD, GERARD: *La letra*, Barcelona, Ediciones Ceac, 1988.

CIOCHETO, LYNNE: "Toilet Signage". En Eye Magazine, (Londres), 46 (Invierno 2002), p. 6

COSTA, JOAN: *Señalética*, Barcelona, Ediciones Ceac, 1987.

ECO, UMBERTO (A cargo de):Historia de la belleza, Barcelona, Lumen, 2005.

ESTRADA, SILVIA (Ed.): Basic Sign, Barcelona, Index Book, SL, 2012.

FRUTIGER, ADRIAN: Signos, símbolos, marcas, señales, Barcelona, Editorial Gustavo Gili, SL., 1981. FRUTIGER, ADRIAN: Reflexiones sobre signos y caracteres, Barcelona, Editorial Gustavo Gili, SL, 2007. GELB, IGNACE JAY: Historia de la escritura, Ma-

GONZÁLEZ-MIRANDA, ELENA; QUINDÓS, TANIA: Diseño de iconos y pictogramas, Bilbao, Servicio Editorial/ Argitalpen Zerbitzua, Universidad del País Vasco/Euskal Herriko Unibertsitatea, 2014. HARTT, FREDERICK: Arte. Historia de la pintura, escultura y arquitectura, Madrid, Ediciones Akal, 1989. LUPTON, ELLEN: "Reading Isotype". En Design Issues, The MIT Press, Vol. 3, No. 2 (Otoño 1986), pp. 47-58.

LUPTON, ELLEN; ABBOTT MILLER, J.: "Critical Wayfinding". En YELAVICH, SUSAN: The Edge

08 *Ibídem*, p. 91.

Ibídem, p. 36.

ABDULLAH, RAYAN; HUBNER, ROGER:

Pictograms. Icons & signs, Londres, Ed.
Thamas & Hudson I td. 2002, pp. 20-21.

Thames & Hudson Ltd, 2002, pp. 20-21.

MODLEY, RUDOLF: Handbook of

pictorial symbols: 3.250 examples from international sources, Nueva York, Dover, 1976, pp. 10-12.

ROBINSON, ANDREW: Historia de la escritura. Barcelona, Ediciones Destino, 1996, p. 211.

LUPTON, ELLEN; ABBOTT MILLER, J.: "Critical Wayfinding". En YELAVICH, SUSAN: The Edge of the millennium, Nueva York, Whitney Library of Design, 1993, pp. 220-232.

MORRIS, CHARLES: Fundamentos de la teoría de los signos, Barcelona, Paidós Comunicación, 1985, p. 27.

Ibídem, pp. 59-61.

Se puede observar que estas referencias gráficas se corresponden con la cultura denominada "occidental".

Para ampliar información consultar GONZÁLEZ-MIRANDA, ELENA; QUINDÓS, TANIA: *Diseño de iconos y pictogramas*, Bilbao, Servicio Editorial/ Argitalpen Zerbitzua, Universidad del País Vasco/Euskal Herriko Unibertsitatea, 2014,pp. 23-37.t of the millennium, Nueva York, Whitney Library of Design, 1993, pp. 220-232.

MCDERMOTT, BRIDGET: Decodificar y descifrar los jeroglíficos egipcios: cómo leer el idioma sagrado de los faraones, Barcelona, Art Blume, S.L, 2002.

MAYOR FERRANDIZ, TERESA Mª: "La imagen de la mujer en la Prehistoria y en la Protohistoria" (En Revista de Claseshistoria, publicación digital de Historia y Ciencias Sociales, artículo No. 236), 2011, http://www.claseshistoria.com/revista/2011/ articulos/mayor-mujer-prehistoria.pdf [Fecha de consulta: 5/09/2014].

MODLEY, RUDOLF: Handbook of Pictorial Symbols: 3,250 Examples from International Sources, Nueva York, Dover, 1976.

MOLLERUP, PER: Wayshowing, Wayfinding, Amsterdam, BIS Publishers, 2013

MOORHOUSE, A. C.: Historia del alfabeto. México, Breviarios del Fondo de Cultura Económica, 1961.

MORRIS, CHARLES: Fundamentos de la teoría de los signos, Barcelona, Paidós Comunicación, 1985.

OLARIA, CARMEN ROSA: El arte y la mujer en la prehistoria, 1996, http://www.raco.cat/index.php/Asparkia/article/view/108288/154753. [Fecha de consulta: 8/09/2014].

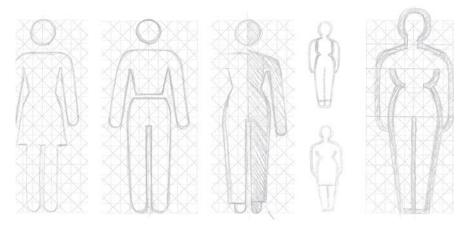
PADILLA, MIGUEL ÁNGEL: El arte y la belleza, Madrid, Editorial N.A., 2006.

PANOFSKY, ERWIN: El significado de las artes visuales, Madrid, Alianza, 2004.

ROBINSON, ANDREW: Historia de la escritura. Barcelona, Ediciones Destino, 1996.

SMITSHUIJZEN, EDO: Signage Design Manual. Suiza, Lars Müller Publishers, 2007.

UEBELE, ANDREAS: Signage Systems + Information Graphics. Londres, Ed. Thames & Hudson Ltd, 2009.



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