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# LOGO AND THE DESIGN PRINCIPLES

*Abstract: This paper has tried to explain the importance of the general and special principles in logo design. The study was realized on a lot of logos to understand when a designer could use the principles to create wonderful graphic representations. It is about symmetry, asymmetry, proportion, rhythm and harmony, substitution, juxtaposition, using different geometric shapes, lines, curves, silhouettes and stylizations, mirror and illustrative representation and so on. We have explained how to use graphic representations in some fields of activity and to choose the best symbol for a company/university etc. And, of course, it was a significant part about the redesign working. This paper presents a few interpretations and conclusions concerning the design principles applied for logos.*

*Key words: logo design principles, graphic representation, logo, symbol, colour*

## 1. INTRODUCTION

During the study of logos, we have understood the importance of the design principles applied in a graphic representation. We have noticed two kinds of principles: general and special (logo design principles).

The general principles are about symmetry, asymmetry, proportion, rhythm, harmony and the others, the special ones, about substitution, juxtaposition, repetition, stylisation, graphic opening/closing shape, 3 D optical illusion, 3 D graphic representation, association of different fonts, sensory perception, mirror graphic, tagline support, illustrative and continuous line. It was a challenge for us to describe the problem, to identify in the world of logos the applied design principles, to give the most adequate examples, to explain the research and establish the conclusions. It was an interesting study work of thousands of logos.

We have tried concerning this research to achieve a kind of workbook in the field. This was our goal for now and, of course, in the future study.

## 2. ABOUT THE DESIGN PRINICPLES

In the field of design, the logo creation has a very fixed place. All over the world there are studio design or freelancer designers which are working to create identity for a company, public organization and so on. In many cases they are working with design principles.

But there are a lot of logos created as a picture. Further, we have introduced in the paper the explanation of design principles and the situations of "free hand" to create wonderful representations.

### 2.1 The design principles

There are some design principles used to create good graphic representations. We have presented them as they are identified in design books [1], as follows:

1. *The principle of symmetric balance*.

It is about an imaginary axis which pass through the middle of an object and divide it in two equal parts. The visual determination is clear for a viewer and it is easy to understand what is about.

2. *The principle of asymmetric balance*

The position of elements is arranged not equidistantly on both sides of an axis. The asymmetric principle is used to create a focus on the graphic representation.

3. *The principle of proportion*

It is used to accentuate some elements of the representation.

4. *The principle of rhythm*

Is a graphic representation in which an element is repeated as size and position.

5. *The principle of harmony*

Is a principle which is important to create good connections between components and to convey the message of a design work.

6. *The principle of repetition*

Some of visual elements are used more than one time in composition.

### 2.2 The essential principles for designing logos

First, we have presented the functions of a logo and its typology.

For a logo we have:

- the contact function (allows the connection between the company and the public;
- the explanation function (indicates the identity and the personality of the company);
- the translation function (decodes the message);
- the identification function (shows the target public);
- the information function (conveys knowledge about the company);
- the sensitivity function (talks about beauty, pleasure, emotion, sensibility).

The logo typology is of three main types:

- iconic (symbolic): graphic representation of a sign, symbol, object (from our daily life), animals, insects, plants, ordinary objects, The Moon, The Sun, stars etc.
- logotype: as letter/letters, figure/figures, words.
- complex (mixed logo): to put together a symbols and words in an integrated concept.

In our research we have identified this kind of typology. It was very difficult to say what kind of typology is prevailing, but we have noticed that the complex logos are more developed by the designers.

In our book about logo design/redesign [1] we have defined principles to design logos. It was a hard-working research study on thousands of logos all over the world. Shortly, they are:

1.*The substitution principle* (changing letter/letters with symbol/symbols);

2.*The graphic reproduction principle* (different sizes for a logo, to see the clarity of the representation);

3.*The stylisation principle* (a stylised graphics without losing what is represented);

4.*The repetition principle* (a letter or a symbol is repeated in the graphic structure of a logo);

5.*The juxtaposition principle* (being two graphic elements, a static one and a dynamic one);

6.*The 3D optical illusion principle* (making a 3D graphic illusion);

7.*The 3D graphic representation principle* (building a 3 D structure of a logo);

8.*The combination of different fonts principle* (combining fonts to an interesting visualisation);

9.*The real graphic representation principle* (a picture of the real object/animal/etc and not stylised);

10.*The chromatic principle* (monochrome/coloured logo);

11.*The graphic opening/closing principle* (involving a symbol or logotype in a geometric shape);

12.*The sensory perception principle* (is about to see hidden elements into a graphic representation);

13.*The silhouette principle* (is something drawn as a real thing);

14.*The tagline principle* (to use a short phrase to evoke an emotional response);

15.*The mirror principle* (to see a graphic representation twice, as in a mirror);

16.*The illustrative principle* (an image is seen in "cutting letters");

17.*The continuous line drawing principle* (to draw a graphic representation only with one line, from the beginning till the end of it).

## 3. THE IMPORTANT DIRECTIONS OF THE RESEARCH STUDY

We had three directions as target of the research. The first one was to classify the domains of activity of logos. The second one was to see the typology of logos. The third one was to understand where the principles have been used and what they have created, as graphic representation and message. The goal of our research (we consider that is only the beginning of our work) is to create libraries concerning these three targets. That is why in the paper is only a small part of our study.

About the symbols used for the domains of activity we have noticed interesting things. It is not necessary that a graphic representation of a logo to be mirrored on the activity of the company. But there are activities which require an adequate symbol to identify the company. For example, pet shop/veterinary clinic (cat, dog, cage), dentistry (tooth, teeth), zoo garden (graphic representation of animals, birds), airline company (the message is for flying using stylised birds, planes) need a representative symbol for them. In Figures 1 and 2 we

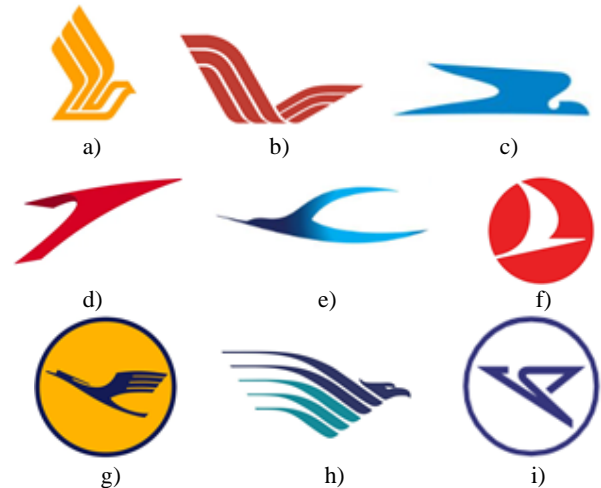have presented some examples which support our statement.



**Figure 1** Logos of airline companies [1].
a) Singapore Airlines; b) Macedonia Airlines; c) Aerolineas Argentinas; d) Austrian Airlines; e) Kuwait Airways; f) Turkish Airlines; g) Lufthansa; h) Garuda Indonesia; i) Condor.



**Figure 2** Symbols used in dentistry logos [9].

We have noticed that two principles (silhouette and stylisation) were used in these domains. But this was not a general rule, because we have found many examples of logos which have used different symbols (especially in the field of airline companies), such as polar bear, The Sun, an Aztec eagle warrior, a water lily, an Oryx, head of Horus, a white cross etc. In a previous paper [9] we have presented research about airlines logos using symbols and a few of them not connected with flying.

We have presented a study about pet shop/veterinary clinic and dentistry field logos in [9].

Not only these domains were analysed. We have taken into consideration more, namely: automotive, apparel, education, food & beverage, oil, gas & petroleum, healthcare etc. The goal was to see what symbols, colours, fonts were used to create an identity, by logos.

We have identified the whole typology of logos and the future papers will present some conclusions of the research concerning these domains of activity.

The education field was very interesting to study because it has presented usual symbols and many others different from a logo to another. And, of course, there are logotypes for many of them. First of all, we have noticed that for some of them it was important to use a known symbol for the university. Thus, for Politehnica

University of Bucharest (today is a rebrand process for National University of Science and Technology Politehnica of Bucharest) was a logo which has described the main administrative building, for Kuala Lumpur University (Malaysia) was the Petronas Towers. And the examples may continue. For a lot of educational schools/universities in UK was used a shield with heraldic symbols to show a long activity through the centuries in education (Figure 3).



**Figure 3** Symbols for university logos

It was so interesting to notice the universe of symbols in university logos (book, building, heraldic and abstract graphic representation etc.). This study will be in a next research paper.

## 4. CASE STUDY ABOUT DESIGN PRINCIPLES

At the beginning of the paper, we have presented the design principles which are involved in the graphic design. We have seen in our research the whole typology of logos from iconic till complex. We have identified many principles which were applied to develop logos. In this paper we have tried to present significant examples for these principles which are used as tools from the designer in the creation of graphic representations. We have verified these principles on a lot of posters also, and we have seen the importance of them to realize graphic advertising. We have presented examples for a few principles looking to select proper representations. We are hoping that all these will be a good representation for understanding the principles about symmetric and asymmetric balance, repetition and rhythm. In many books which discuss about graphic design we have seen these principles. *The symmetric balance principle* was discovered in a lot of renowned logos (for example, in automotive domain) as we have presented a few examples in Figure 4.



**Figure 4** Symmetric balance principle in automotive logos [2].

Also, we have noticed symmetry in other field of activity, like in Figure 5.



a) [2]

b) [2]

c) [2]

d) [7]

**Figure 5** Symmetry in others fields of activity.

For Subaru logo was applied *the asymmetric balance principle* and for Buick logo *the repetition principle*, as in Figure 6.



a)

b)

**Figure 6** The asymmetric balance principle; a) and repetition principle b) from [2].

For *the rhythm principle* we have seen many logos and we may present in this paper only two (Figure 7).



**Figure 7** Examples for the rhythm principle [2].

And for *the repetition principle* we have presented logos in Figure 8.



**Figure 8** Examples of repetition principle [2].

## 5. CASE STUDY ABOUT LOGO DESIGN PRINCIPLES

We have specified the logo design principles identified by us in our research study. In this paper we have presented for most of them our examples from [1],

to define as good as possible the feature of the principle. The bottom figures present these logos.

For the *principle of substitution*, which is a very strong tool in the hands of a designer, we have identified many logos in the research library. We have seen one or two letters changed but there are examples of logos with more than two letters as symbols. In Figure 9 we have drawn a few logos using the substitution principle [1].



**Fig. 9** Example of the susbstitution principle.

For the *principle of graphic reproduction* is important to use the size of a line which may assure the good representation and interpretation of the logo for different sizes. In figure 10 we have presented an example [1].
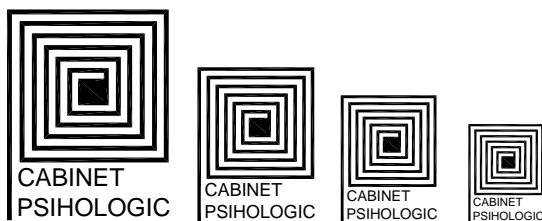


**Figure 10** The graphic reproduction principle.

As it is known, a graphic representation may be real, abstract, stylised, or arbitrary. For *the principle of stylisation,* a designer has to draw the object to be understood as shape and details. In Figure 11 we have presented a few examples [1].
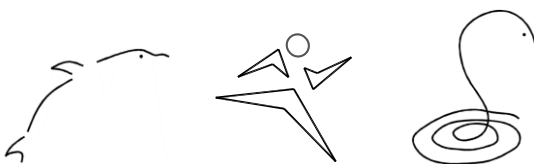


**Figure 11** Examples of graphic stylisation.

The *principle of tagline* is defined in Figure 12. In [1] is presented the typology of tagline and the power of it to assure the seriousness of the company.



**Figure 12** Example of tagline principle.

The *juxtaposition principle* is represented in figure 13 [1].



**Figure 13** Two examples of this principle.

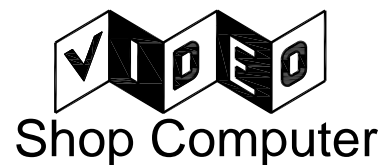Figure 14 [1] is about *the 3D optical illusion principle*.



**Figure 14** The 3 D optical illusion principle.

The *3 D graphic representation principle* is presented by an example in Figure 15 [1].



**Figure 15** The 3 D graphic representation principle.

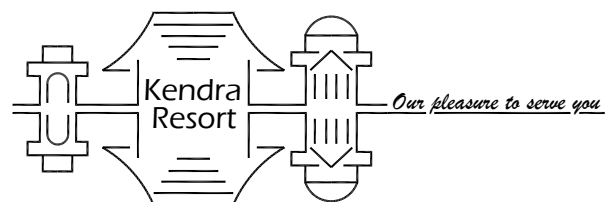About *the mirror principle* the example of Figure 16 [1] is relevant.



**Figure 16.** The mirror principle.

*The combination of different fonts principle* is used very well to focus the viewer on the company (Figure 17).

It is possible to use different colours for fonts to express the service or the product assured by the company. There are many logos using this design principle.

**PERFECT** HOUSE

*Perfect* HOUSE

**PERFECT** *HOUSE*

**Figure 17** The principle of different fonts [1].

The *principle of opening/closing shape* for a logo, in Figure 18. That means a logo involved in a different shape (circle, rectangular, triangle rhomb, pentagon, ellipse etc).
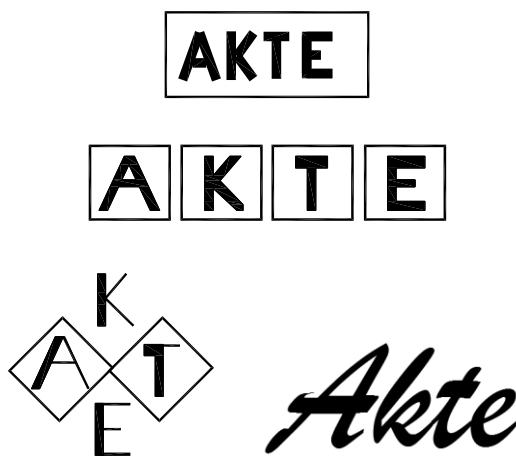
**AKTE**

A K T E

K
A T
E
*Akte*

**Fig.18** Examples for this principle [1].

The *principle of silhouette* is about using a graphic representation the same as real but without details. The examples from Figure 19 are suggestive.
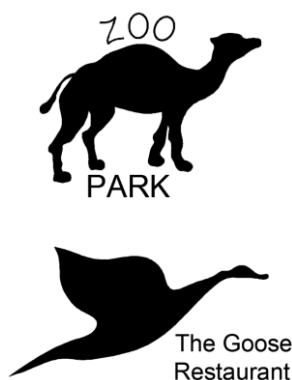
ZOO
PARK

The Goose
Restaurant

**Figure 19** The principle for using silhouette in logo design [1].

A very interesting principle was called by us *the sensory perception* or *the visual associate perception*. In our research study we have not seen so much logos concerning this principle, but we have noticed how interesting is to design such logos. Because is "something hidden" in the graphic representation. Figure 20 is eloquent. [1], [5], [6], [12].

PITTSBURGH ZOO & PPG AQUARIUM

a) [1]

EAGLE MOUNTAIN CAPITAL

b) [5]

Carrefour

c) [6]

F1 Formula 1

d) [6]

ARLINGTON INTERNATIONAL FESTIVAL OF RACING

e) [6]

47

f) [6]

**Figure 20** The sensory perception principle.

A special *principle is bounded of the continuous line drawing*. From the beginning till the end of the representation the line is continuous. We have identified not many logos using this principle, but we have considered an interesting principle to be applied in logo design. This continuous line is used to create simple and abstract logos [3], [5], [8], [13].

a) [5]

YogaStudio

b) [3]

Amulette

c) [3]

lisa pak design

d) [8]

*Marie Claire*

e) [8]

**Figure 21** The continuous-line drawing principle.

*The illustrative principle* uses cutting up letters to represent something (building, landscape, object etc.).



**Figure 22** The illustrative principle [1].

The repetition principle is presented in Figure 23.



**Figure 23** Letters and symbols repeted [6].

During our working research we have identified a special principle that we have named "the brush technique". In Figure 24 we have explain this principle.



**Figure 24** The "brush technique" examples [4].

## 5. CONCLUSIONS

We are going passionately on this way, to study the design principles and the typology of logos. We have been conscious of a hard work in this field. This is a first paper, like a first step on a long way of research. From the beginning we have established three directions about principles, typology and redesign. It will be necessary to investigate the symbols and other graphic representations in logo design to create a library as a support for a designer. In our paper we have noticed, recorded clarified and explained, by examples, interesting things concerning logos as identity element, because it is a small part of our work.

We consider that we have provided how wonderful and so interesting is the field of graphics, especially the logo design. For future papers we will develop the principles of redesign because we have seen many examples about it.

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