

# FLEXIBILITY IN DYNAMIC VISUAL IDENTITIES: EXPLORING VARIATION MECHANISMS TO ACHIEVE FLEXIBILITY

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## Keywords

Dynamic Visual Identities, Flexibility, Flexible Dynamic Visual Identities, Graphic Design, Visual Identities

## Abstract

Dynamic visual identities differ from the conventional ones, by the occurrence of variation in at least one of the elements of its visual system. The type of dynamism depends on the variation mechanisms used, which may confer different features to the visual identity. One of these features is flexibility, which consists in the ability to adapt to different content and formats. In this paper, we focus on the study of how flexibility can be achieved using different variation mechanisms, by conducting practical experimentations.

## 1. Introduction

Dynamic visual identities (DVIS) are defined by the existence of variation in one or more of the elements of its visual system. The dynamism of a visual identity varies according to how the variation occurs. Several authors have addressed the categorisation of DVIS, e.g. Kreutz (2001), Felsing (2010), Hollington (2011), van Nes (2012), Jochum (2013), Pearson (2013), Murdock (2016), Silva and Martins (2018), and Martins et al. (2019). Our work builds upon the model proposed by Martins et al. (2019), which is based on how variation visually occurs.

The model proposed by Martins et al. (2019) considers three aspects: (i) identity focus, (ii) variation mechanisms, and (iii) features. The identity focus identifies where variation occurs – in the graphic mark or/and in the system. The model also distinguishes between how the variation is implemented – variation mechanisms (VMs) – and which features are achieved. The VMs identified by Martins et al. (2019) are colour variation, combination, content variation, positioning, repetition, rotation, scaling and shape transformation. The VMs can be used separately or in combination. The features proposed

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are flexible, fluid, generative, informative, participatory, reactive and unlimited. The features are oriented towards client needs and requirements, for example, a flexible DVI is characterised by its ability to adapt to different contents, formats or media.

In the last two decades, technological evolution has changed the way visual identities are developed. In order to better represent the entity that they stand for, visual identities are now often required to adapt to constantly changing environments (van Nes, 2012). Moreover, different media should be considered when designing visual identities, making them suitable not only for printed materials but also for digital ones (Shaughnessy, 2009). These aspects make flexible DVIs increasingly relevant, due to their adaptability to new content and media/formats (Martins et al., 2019). In addition, the results presented by Martins et al. (2019) indicate that the flexible feature is one of the most recurrent in the analysed set of DVIs. Despite this, few studies exist on this subject. In this paper, we focus on the study of the flexibility in DVIs, addressing its advantages and conducting practical experimentation to study how it can be achieved using different variation mechanisms.

## 2. Approach

Previous research work identified flexibility as one of the most frequent characteristics in DVIs (Martins et al., 2019) and one that is mostly related to specific needs of the client – the requirement of adapting to different content or media. In this paper, we focus on experimenting with VMs with the goal of identifying different ways in which they can be used to achieve flexibility, as well as, advantages of each VM in terms of adaptability to different content, formats and media.

In our experimentation, we follow a client-oriented approach. The first step consisted in identifying a client with needs related to flexibility. In order to do that, we firstly identified in which sectors flexibility is mostly used. According to Martins et al. (2019), flexible DVIs are most used in the sector of Art and Museums. Theatres are a type of client that belongs to this sector and can have several necessities related to flexibility, for example, the adaptation to new content (e.g. new events) or to different media for advertising purposes (e.g. print and digital). For these reasons, the chosen case study in this paper is a theatre. After producing a list of possible candidates, we selected the Diogo Bernardes Theatre, located at Ponte de Lima, Portugal. Given its current static visual identity, we considered it suitable for

investigating the advantages of introducing dynamism to address flexibility-related needs.

To guide the experimentation process, we defined a methodology composed of the three main tasks described below.

The first task involves the creation of the base visual identity to be used as a skeleton from which mutations may occur (Kreutz, 2012). In our experiment, we designed a base VI, which was inspired by the current VI of the theatre (Figure 1).



**Fig.1** The current graphic mark (on the left) and the one developed for this study (on the right).

The second task consists of experimentation with individual VMs. We conducted experiments to identify the advantages of each VM in achieving flexibility. For each VM, we used the elements of the base VI system (i.e. a circle and a plus sign) and applied variation both in the graphic mark and in the system, having content and format adaptation as a goal.

The third task relates to experimentation with a combination of different VMs in order to identify possible advantages in comparison to VM individual usage.

### 3. Results and Discussion

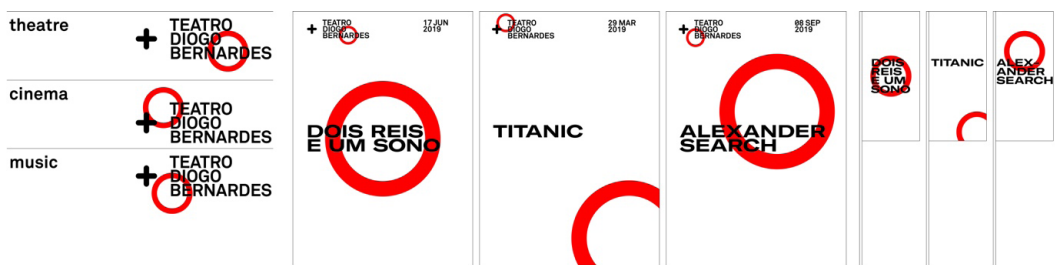
In this section, we present experimentations with each individual VM and with a combination of two VMs, analysing how they work and identifying advantages.

**Rotation:** there is a graphic element that is rotated (Martins et al., 2019). Our results show that rotation alone is not an efficient way to achieve flexibility. Regarding adaptation to content, rotation is not suitable as it only works with a small number of events – differences would only be perceptible to a certain point. It may be employed to distinguish between event types, provided that they are small in number – i.e. using different rotation angles for different types of event (Figure 2). This codified correspondence between angle and type of event is not easily perceivable, which makes it an unsuitable choice for adaptation to content. Moreover, rotation alone is not able to make elements to adapt to different formats.



**Positioning:** there is a graphic element that is positioned in different ways (Martins et al., 2019). Similarly to rotation, using it for content adaptation relies on a codified correspondence. For this reason, even though it allows the distinction between a small number of events, it is not recommended to use it for that purpose. As far as format adaptation is concerned, positioning allows the same elements to fit in different formats, often resulting in only showing part of the element (Figure 3).

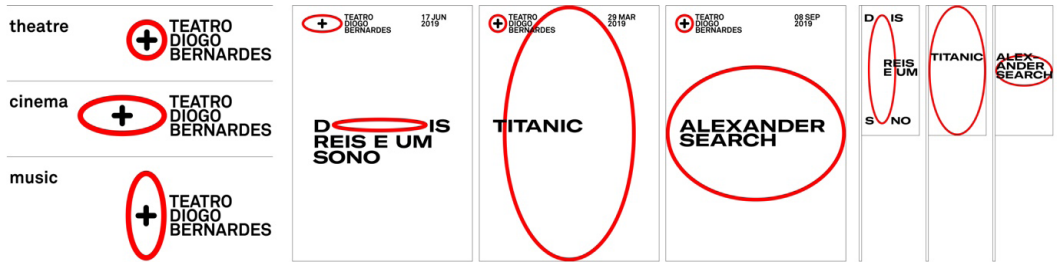
**Fig.2** The use of rotation in the graphic mark and in the system, using posters and banners as an example.



**Scaling:** there is a graphic element that changes in size (Martins et al., 2019). In this experiment, the circle was stretched in different ways to adapt to different formats and to different content (Figure 4). During our experimentation, scaling did not show any indication of being a good solution for adaptation to different content. The only way of being used in such a way would be to map certain sizes to different contents. This is similar to what occurs in rotation and positioning – a codified correspondence that only works with a small number of events or event types. On the other hand, we identified it as one of the most indicated VMs to adapt to different formats, working well in the graphic mark and in the system.

**Fig.3** The use of positioning in the graphic mark and in the system, using posters and banners as an example.

**Shape transformation:** there is a graphic element that changes in shape (Martins et al., 2019). The fact that shape transformation has no defined limits makes it capable of adapting to different contents and formats. Regarding content adaptability, it also relies on a codified mapping between event and shape, which works best with small numbers (e.g. few event types). One way of doing this is to transform



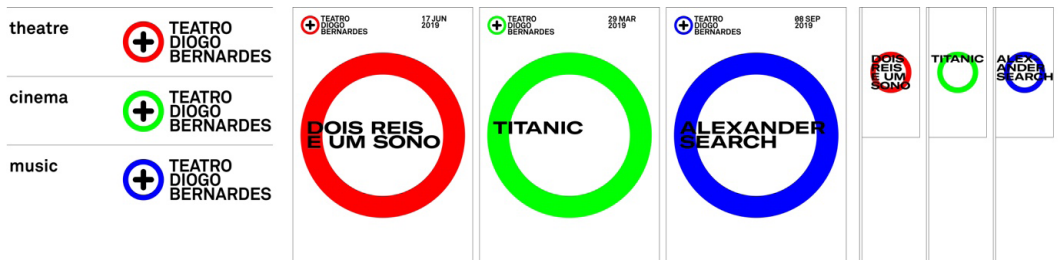
**Fig.4** The use of scaling in the graphic mark and in the system, using posters and banners as an example.

the shape into something that represents what it stands for (e.g. a letter representing the event type). Concerning adaptation to format, shape transformation allows the elements to fit different sizes. However, the transformations applied to the shape of the element should always guarantee that a certain degree of similarity, to make the resulting shape be perceived as the same element. In this case, the circle changed its shape to represent different types of events (Figure 5).



**Fig.5** The shape transformation in the graphic mark and in the system, using posters and banners as an example.

**Colour variation:** there is a graphic element that changes in colour (Martins et al., 2019). According to the experimentation, colour variation (Figure 6) allows the distinction between different content (e.g. obtaining different colour for each theatre play) but is not a good way of clearly identifying each content – beyond a certain number of variations the colours start to get too similar. On the other hand, it allows the distinction between a small number of event types (e.g. theatre, cinema, etc), as observed in Figure 6. Moreover, this VM has no effect on format adaptation as colour change is not able to make elements to adapt to different formats.



**Fig.6** The use of colour variation in the graphic mark and in the system, using posters and banners as an example.

**Combination:** different graphic elements from the VI system are used in combination (Martins et al., 2019). Briefly, combination may lead to some degree of flexibility but it is not an efficient method to achieve it. In this experiment, a system of three symbols was created (Figure 7) and each pair of symbols represents different content. According to the experimentation, combination is not appropriate for content adaptation (e.g. using a different combination for each theatre play) as it relies on a codified use of a set of different elements, which may even be seen as mere ornaments. However, when used with a small number of content instances (e.g. event types) it may allow distinction between them. Furthermore, combination does not allow the adaptability to different formats as it has no effect on it.



**Fig.7** The use of combination in the graphic mark and in the system, using posters and banners as an example.

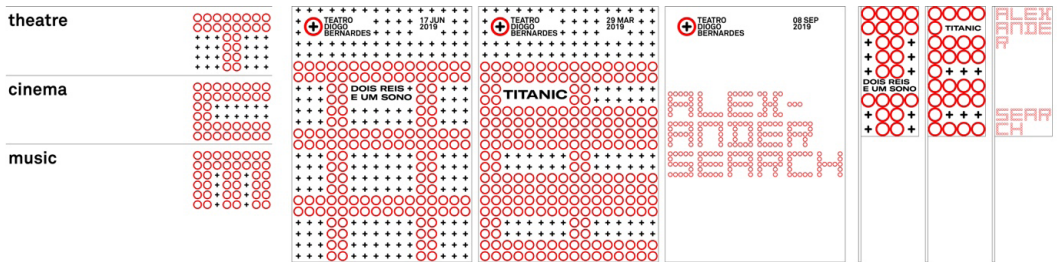
**Content variation:** there is an area or space where different imagery is placed (Martins et al., 2019), which in our experiments was the inside of the circle of the graphic mark and over it on the poster examples (Figure 8). Due to the limitless in terms of what can be used as imagery, this VM allows the VI to adapt to any content (e.g. using images of each theatre play). Regarding adaptation to formats, there is not a direct relation but it may be possible in certain situations if the dimensions of the imagery are taken into account in its selection.

**Repetition:** repeated placement of the same graphic element (Martins et al., 2019). The use of this VM can go from pure element repetition to complex composition with the goal of producing new elements (e.g. letters). Regarding adaptation to content, the VI can adapt

**Fig.8** The use of content variation in the graphic mark and in the system, using posters and banners as an example.



to all kinds of content using the repetition of elements (e.g. circle) to write the event information (e.g. title), as shown in Figure 9 (example on the right). Moreover, this method can also be used to represent different event types, e.g. creating the initials of each type of event. This VM also allows the adaptation to different formats, by increasing or reducing the number of repeated elements. This shows that repetition is a good VM to use in order to achieve flexibility.



**Fig.9** The use of repetition in the graphic mark and in the system, using posters and banners as an example.

**VM combination: Content variation + Scaling.** After concluding the experimentations on each VM individually, it was observed that none of them could achieve the adaptability to content and to format at the same time. However, VMs are normally used in combination. For this reason, we decided to experiment with VM combination in order to assess how the combined use could lead to higher flexibility potential. In this experiment, we chose to combine content variation and scaling because they were the VMs in which we observed the best results – content variation was the best VM in content adaptation and scaling was the best VM for adaptation to format.

Content variation and scaling, when used together, offer the sum of their individual advantages, allowing the adaptation to different content and format at the same time. In the example observed in Figure 10, the content adaptation is achieved by using images that represent the events and format adaptation was achieved by resizing the circle, which is used as content area, to fit in different layouts.

**Fig.10** The use of content variation and scaling, together, in the graphic mark and in the system, using posters and banners as an example.



## 4. Final Remarks

In this paper, we build upon the model for categorisation of Dynamic Visual Identities proposed by Martins et al. (2019) and study how different variation mechanisms can be used to achieve flexibility.

In summary, all the VMs are capable of achieving some degree of flexibility but the majority of them are not efficient. In fact, only repetition (with the creation of patterns) and content variation, were capable of adapting to different content in a perceptible way, the latter being the only one capable of doing it without limitations. Regarding format adaptability, the only VMs that achieved it in a consistent way were repetition – with the creation of different patterns – and the scaling and shape transformation, which are the only VMs capable of doing it without any kind of constraint. With the exception of repetition, all VMs have problems in simultaneously adapting to content and format. Based on this, we can conclude that in order to achieve full flexibility (content and format adaptation), the most suitable solutions are repetition or a combined use of content variation and scaling (the only combination tested). The other VMs can be used as a complement to achieve flexibility but should not be used as the main mechanism to do it. Nonetheless, further experimentation is required on the subject, in particular regarding different combinations of two or more VMs.

Even though the main objective was to study flexibility, we partially addressed the informative feature – i.e. conveying information to the audience – by analysing how different content or data can be distinguished. Other authors focus on this topic, e.g. (Parente et al., 2018). However, the fact that a visual identity is flexible does not mean that it is also informative. Although each case is different, this process allowed us to see the real advantages of each VM in achieving flexibility.

It is important to mention that this paper is mostly focused on printed media. Further research is needed to understand how DVIs and their VMs may provide different advantages in digital media (e.g. a DVI for a TV channel).



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