Symmetry, Marks and Meaning: Observations from Brand Identity Design

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Abstract
Organizational symbols are said to be a reflection of organizational strategy, and therefore are designed with the intention of communicating some aspect of a given organization. However, whilst it has previously been noted that symmetry is prevalent in abstract corporate symbols (predominantly by organizations in the financial sector) there has been little systematic investigation into the communicative potential of symmetries within the context of organizational symbols. This paper presents the findings of a survey of the top 100 financial brands (based on global brand value) and discusses the frequent occurrence of symmetry within these symbols.

Introduction
Symmetry as a general concept refers to any action or rigid motion that maps a figure onto itself, determining how parts of the design are arranged to provide the structure of the whole. It is well established that symmetry in the plane is characterised by one or more of the following geometrical actions: translation, rotation, reflection and glide-reflection. Symmetry plays a fundamental role in the structure of the natural world and it has long been incorporated in the design and decoration of cultural artifacts [1].

However, despite earlier observations, the potential of symmetry as an unambiguous and reliable communicative device, within the field of brand identity design, appears to be an unexplored domain [2]. Symmetry, within the practice of graphic design, is usually associated with compositional studies rather than as a tool of expression. However, simple concepts such as balance, stability and harmony can be expressed through a symmetrical composition, whereas an asymmetrical composition can evoke a sense of instability, tension and movement [3]. Such concepts appear to be exploited by the designers of the visual manifestations of corporate brand identities—more commonly referred to as logos.

Symmetry and Perception
Although mathematical symmetry is defined as any one of four operations that bring an object into coincidence with itself, often the term is commonly understood—particularly to those who have not been exposed to group theory—as specifically the action of reflection or mirror symmetry. This characteristic is also known as bilateral symmetry, where a figure is divided into two mirror-image parts. Since bilateral symmetry pervades the natural world, it is not surprising that there is substantial evidence that humans have a remarkable sensitivity to symmetry as an ordering principle [5]. It has been shown that infants, as young as four months, are able to discriminate bilateral symmetry from other forms of symmetry (although this is not a uniquely human trait) [6]. This phenomenon may be explained in terms of the
environment in which our visual system has evolved. Human constructions have also been noted for particular emphasis on two-fold rotational symmetry. The requirements of stability, constraints of the manufacturing process and anthropometric considerations are of practical concern and may also relate to the inherent symmetries of our visual system [7].

Symmetries may, of course, be produced for purely aesthetic exploration and have formed a central component of decoration in almost all human cultures, often carrying both explicit and implicit cultural values. Studies have also indicated unique symmetry preferences and that design structure, when assessed in terms of symmetry properties, is by some means culturally sensitive [1][8]. The prevalence of symmetry within modern brand identity design seems to indicate that symmetry continues to be intuitively used as one of a combination of graphical elements to convey meaning across multi-cultural audiences.

**Design as Communication**

It has been noted that certain symmetries in logos may be more suitable than others, in terms of their ability to convey the nature of organizational activities [9]. Rotational symmetry, it was suggested, would be a suitable expression for an organization such as a bank, where the cyclical nature of money would appear to be aptly represented through a rotationally symmetrical device; and indeed many financial institutions use this form of symmetry. Whilst the conveying of such operational activities may appear suitable for industries where the customer directly experiences an organization’s operations (e.g. transportation), there is an intrinsic limitation of presenting such a generic perspective of an organization. Since the purpose of branding is to express a distinctive point-of-difference, the communicative emphasis would typically focus on specific organizational values rather than generic organizational activities [10].

In the visual expression of organizational values, designers of brand identities use elements such as color, shape, and typography, to express specific organizational values. Additionally, symmetrical constructions occur frequently within the design of brand identities and therefore are being used as intentionally expressive devices. However, given the lack of literature on the communicative potential of symmetries, it appears that designers are intuitively assigning symmetry operations to organizational values.

![Figure 1](image.png)

Figure 1: (a) Go airlines brand mark  
(b) Grant Thornton brand mark

Despite this seemingly intuitive application, there is an apparent logic in the association of symmetry operations to communicative concepts. For example, the brand identity for British Airways’ low cost airline operator called Go used the repetition of the same shape throughout the logotype as a graphical suggestion of economy. Figure 1 shows, the shape of the letter “o” which is repeated in the double loop construction of the letter “g”, thereby “encapsulating the attitude of economy” [11].
Similarly rotational symmetry has been used as a graphic device to suggest qualities such as cohesion and reliability. In a recently designed brand identity for the accountancy organization, Grant Thornton, the designers intended to suggest that the organization was “becoming a more cohesive, global organization” by using rotational symmetry [12]. This symmetry operation has also been used for newly merged organizations, where rotational symmetry has been used to express the concept of unification around a central point [13].

Nevertheless, despite the intended communication of concepts through visual devices, designers have no assurance in the reliable interpretation of such devices. Whilst the authors were concerned with the intentions of designers, it appears that recipients are adept at assigning values and concepts to the presence of symmetry within brand identities. In a recent research study summarized in Harvard Business Review, it was discovered that organizations, whose brand marks contained symmetry, were perceived as being more ethically and socially responsible than those organizations whose brand marks were asymmetrical [14]. There seemingly appears to be a distinct association between symmetries and specific organizational characteristics.

Symmetry in the Financial Services Brand Identities

Brand identities of the top 100 global banking brands were selected for analysis from the BrandFinance Banking 500 (2011) league table, which uses a discounted cash flow technique to discount estimated future royalties (at an appropriate discount rate) to arrive at a net present value of the trademark and associated intellectual property, thereby producing a brand value [15]. The brand identities—or more specifically, the brand marks—were analyzed for their constituent symmetries and then grouped into one of five mark types; examples from each of these categories are shown in Figure 2. The first group consisted of brand marks containing symbols that exhibited perfect symmetry. It was noted that symbols within this group were often used as recognizable, stand-alone marks by the organization without a supporting logotype. The second group consisted of brand marks containing symbols that displayed a close—or perceived—symmetry. The third group contained combination marks, consisting of a graphic device and logotype arranged in a near symmetrical manner. In these cases the graphic device served as a support to the logotype rather than as a separate component, as shown in Figure 2c, in which the logotype is arranged on the point of two-fold rotation. The fourth group consisted of asymmetric symbols; and the fifth group contained logotypes only (stylized name-marks).

Of the 100 brand marks reviewed, 13 were categorised as consisting of a logotype only (group five) and a further 39 were found to be asymmetric (group four). Of the remaining 48 brand marks, 32 exhibited perfect symmetry (group one), with the remaining 16 displaying perceived symmetries of the
symbol or combined brand mark elements (groups two and three respectively). Analysis of the symmetries prevalent within these 48 marks showed a predominance of reflection, with 40 percent of the marks exhibiting bilateral reflection, 29 percent displaying a combination of reflection and rotation, and 31 percent demonstrating rotation only. Further consideration of the highest order of rotation present within these marks revealed a clear preference for the use of two-fold rotation, displayed within 38 percent of this group, when compared to 17 percent exhibiting three- and four-fold rotation. It is particularly notable that of the 15 brand marks within the sample displaying rotation only, 60 percent of these exhibited two-fold rotation.

**Conclusion**

An analysis of case studies from prominent design consultancies shows that designers have used symmetry as a visual device to communicate concepts such as cohesion, efficiency and equality. Yet the assignment of such symmetries is seemingly applied intuitively. The prevalence of symmetry within the sample of brand marks from the leading 100 international financial brands, with nearly half (48 percent) exhibiting at least one symmetry operation, indicates a preference towards the use of bilateral reflection followed by two-fold rotational symmetry above other multiple symmetries. These findings provide several points of departure for further study: firstly the exploration of the implicit and explicit values that designers intend to express through symmetry, and secondly the perceptions of symmetry by key institutional stakeholders.

**References**


