ABSTRACT

This paper is a continuation from papers presented at previous PDE, EPDE and SEED conferences. The paper will outline research being developed by the Creative Design Research Group and taught on design courses, in the School of Design, Engineering and Computing at Bournemouth University. The main aim of this paper is to describe the potential of semiotics to instil an aesthetic character in a design. The paper will illustrate how this can support the education and development of product and engineering design students in creative aesthetic design, to influence new perspectives in design education. The paper will refer to and define semiotics theories and describe how these can relate to the design of commercial products. This includes arrangement of aesthetic design media and composition of colour, texture, shape and form to create expressive character. The principles embody both analysis and deconstruction, along with synthesis and reconstruction. The paper will make direct correlations between aesthetic media and design language and will refer to application in the design industry.

Keywords: Design, creative, methods, aesthetics, semiotics, colour, form, language

1 INTRODUCTION

In a commercial design industry where creativity and aesthetics are paramount, creative design research provides the opportunity to promote and inspire the creation of interesting and competitive design ideas. This paper aims to illustrate how investigation and understanding of semiotics and design language can enhance the depth of consideration and the resulting effect on aesthetic character in design education.

All objects have a character which forms part of the overall experience. Products have parallels to people in this sense. Although not exhibiting the same levels of individuality as humans, products do have traits that consumers identify with. In the same manner as people form bonds with animate objects they do so with inanimate. The strength of bond or relationship is obviously not to the same degree as seen between people, but there is a rapport shared between consumers and objects with strong characters. This rapport can deepen depending on the level of experience, engagement and interaction between the two. Adding strong character to products (depending on the intended personality) draws them closer to the user [2].

2 DESIGN CHARACTER AND SEMIOTICS

Aesthetics in design falls into distinct but related categories: Beauty and perfection; Character and expression. These can be applied to discrete and integrated design media: Colour and texture; shape and form, as well as other sensory responses [1]. The designer
aims to engage as many senses as possible, touch, sight, sound, smell all help to become aware of a product character and its depth or level of design content. [2]. The analysis and synthesis of aesthetic design character is enabled through Semiotics. The underlying design message portrayed through the composition of aesthetic design media has direct correlations to semiotics theory. Semiotics is concerned with the interpretation of signs. Theories emerged from the study of language and illustrate how semiotics and design language can enhance aesthetic character [3].

It is difficult to see a point in the short term where physical character becomes obsolete. For this to change, our lifestyles and social habits would need to alter significantly from where they are now. As consumers we are looking for visual stimulus, appreciating beauty as we see it. Character can be skewed to specific demographics and directions if required. Often the more targeted the direction the stronger the visual language [2].

Design education is greatly enriched with a well-developed design language. This can be as a means of communication and expression, for individual students and the collective group. Creating an aesthetic character through design language gives depth to the educational experience, through exploring literal, abstract ideas and concepts.

3 DESIGN ICONS, SIGNS AND SIGNIFIERS

Designers use successful characters or design icons on other related products (also known as a halo effect). Design icons are the purist expression of a character, defining the object DNA. Building a product family around an icon does not mean directly copying areas of that specific product but taking key traits of the overall character and applying them in slightly different ways. These characteristics can be the form factor, proportion, experience, colours, materials and finish. DNA runs through all areas of the object in the designer's eyes [2].

Saussure [3] described the interchangeable and inseparable signifier-signified semiotic relationship. Products are signifiers, as a whole, as are individual features and specific aesthetic media. They exude a character that is a composition of signifiers, with a gestalt effect signified, such that the whole is exalted from the sum of the parts. Saussure's semiotics defines difference and code. Aesthetic media associated with products has difference of colour, texture, shape and form as well as other sensory responses such as sound and smell. These different media have difference within each collective group. The multiple combinations of these aesthetic media illustrate the seemingly endless possibilities of difference. Individual and combinations of aesthetic media can be aligned with established codes. The codes may be natural and inherent or nurtured, learned and acquired, at both conscious and subconscious levels. The reaction to a new product highlights both challenge and continuation of established codes.

Barthes [3] describes the difference between denotation and connotation. Connotation is the implication of the image and the resulting effect. Denotation is the depiction of objects that leads to the connotation. Barthes positioned the two, as he argued that connotation is a natural reaction that is subsequently supported through denotation. Designers are effectively attempting to pre-empt the connotation through consideration of the denotation in aesthetic design character composition.

Barthes developed a structure to sign functioning that linked the denotative and connotative through signifier-signified relations. A signifier-signified gives a denotative sign. This becomes a signifier-signified to give a connotative sign. The Populuxe (popular-luxury) design style [4] associated with American 1950-60s consumer boom, characterises typical ultra extreme styling, such as Cadillac cars. Here, the rear wing shape denotes rocket wings, with space-age connotations that these cars can fly.

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Design education benefits from theoretical models and applied methods. The structures of semiotics provide a practical basis for analytical and creative thinking of a complex design issue. The educational experience involves the deconstruction of existing and past design icons along with the reconstruction of new designs of the future.

4 DESIGN JOURNEYS AND UNLIMITED SEMIOSIS

Depending on the positioning and target, the product character can be something that is discovered over time. The designer takes the consumer on a journey with any object, the more time spent with the product the more you learn about each other. The more you experience with each other, the stronger the bond. Experiences and characters that adapt over time are a compelling concept that is being explored by many studios [2].

Peirce [3] categorised three parts to experiencing a sign that he called firstness, secondness and thirdness. Firstness is the initial sign encounter as a general feeling, quality or notion; secondness establishes facts from a relationship with other object entities in the world; thirdness provides mental law. Thirdness contextualises firstness by associating it with secondness. This can occur over a period of time through engagement with a product as a whole, along with particular semiotic features.

Peirce described a state of unlimited semiosis whereby the thirdness from one encounter becomes the firstness of the next and so on, continuing like a day dream. This illustrates a kind of continuation in the mind as a response to a product style, such as a feeling of nostalgia triggered by a particular aesthetic composition. It indicates the power and depth of semiotics in design aesthetics.

If the product character is unique, striking a chord with the consumer it is normal for the object to become a topic of conversation. Consumers like to have nice things, unique experiences and will talk about them when they are discovered. Over time a ground swell of opinion starts to surround the object, more consumers purchase it and the character grows [2].

Design education and the creation of objects-of-desire, goes beyond immediate effect and into the more subtle nuances of pleasure and desirability. Here, semiotics can illustrate the experience of time and continuation through the design journey. The time perspective allows a view of the product in the world and with people, in a life.

5 PRODUCT FAMILIES AND KINSHIP

Design drivers are set more to guide designers into creating objects that can form part of a family. Naturally families evolve and are full of different characters. Product families generally share core attributes in the same way that people in families share common values. Design values are constant, providing longevity to manufactured products or a brand, talking to the consumer. Companies producing many different products aim to apply these ideals consistently across all product lines. In doing so, consumers have an idea of what they are getting, can repeat purchase on this basis and trust a brand [2].

Levi-Strauss [5] defined semiotic structures based upon kinship and the relations between terms, how and in what way they are associated. Saussure termed these relations values of which there are two forms, exchange and comparison. A vacuum cleaner can be exchanged for a mop, dustpan and brush, carpet sweeper but can be compared to a motorbike, space-age gun, astronauts backpack. An Apple iPod can be exchanged for a personal stereo, hi-fi system but can be compared to a tablet of stone, doorway, bar of soap.

The product experience and philosophy are inherently linked, when designing multiple propositions in multiple tiers, experience can be used to help define and emphasize
character. It is important to note that each product needs its own character whilst maintaining position as a family member. A family was created around the Razr product by Motorola, addressing all tiers and consumers globally. The Razr V3 was the *design anchor* and the V3x, V3i and W220 were the high, middle and low tiers respectively (figure 1). Entry level products from the family can help those unable to purchase an icon due to the cost, to still share some of the cache aspirations [2].

![Razr, V3 – Design Anchor](image)

![V3x](image)

![V3i](image)

![W220](image)

*Figure 1 Character and families of products*

Design education gains from an awareness of the potential for exchange and comparison of semiotic features. The interpretation of aesthetic style is critical in order to engage the consumer and gain commercial acceptance across a branded product range. This illustrates how semiotics can influence the analysis and synthesis of aesthetic character.

### 6 DESIGN TRIBES AND CONVENTION

To some (particularly the younger demographics) objects themselves can be seen as an extension of the self. They indicate a lifestyle and set of values we have an affinity with, like to be associated with or aspire to. Impressions are made by and communicated via the products someone has or uses. Tribes of users form and can be regarded as people ‘in the know’ in their own group of early adopters [2].

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Lacan [5] identified the power of convention within sign systems. To illustrate his point he took two identical diagrams of a door, above one placed the word 'Ladies' and above the other 'Gentlemen'. This simple but powerful example demonstrates difference by conventional implication. Traditionally, fragrance was separated into perfume for women and aftershave for men. The Calvin Klein 'ck one' perfume successfully broke this convention by being aimed for a male and female market and adopted a design tribe. The Apple iPod has a natural and neutral form, differentiated only by colour.

Design education involves the study of cult objects. The mythical elements associated with this phenomenon need not be an ethereal quality, as semiotics can provide some insight into their adoption. The consideration of controversial semiotics can make design breakthroughs with confidence that challenge convention and achieve cult status.

7 DESIGN PHILOSOPHY AND LANGUAGE

Design philosophy values are generally second nature to a designer and can be in the form of a design language, such as honesty, simplicity, design to improve quality of life. Summarising the philosophy in a clear succinct way helps the designer. It is important to understand that the philosophy is there to help the designer not constrain them. Using words that are more about broad directions allows for the designer to interpret them in their own way. If the principles are overly descriptive this can constrain design and limit the diversity of solutions [2].

Itten [6], in reference to colour, described three areas where design language is exhibited: Impression, Expression and Construction. Impression is the visual effect; expression the emotional mood and feeling; construction is a symbolic reference. Designers need to consider all three exhibitions to pre-empt the desired effect that will be a composition of all three, with an overall semiotic effect that will not necessarily be a sum of the parts.

Derrida [5] identified the importance of appreciating language as a spoken word as well as written text. He referred to the words difference and differance, words that have the same French pronunciation but can only be seen to be different when written down. Lacan [5] defined key signifiers which form a seal for semiotic meaning. He refers to the term 'freedom' as used in 1980s political discourse to imply a positive right as a key signifier. The company Orange have created a key signifier with differance. Orange is a colour and a fruit and now, an international brand. The everyday term 'orange' has been sealed within a corporate identity and created a third differance.

Mukarovsky [5] identified the aesthetic function that can be separated into norms and values. Aesthetic norms are structures that define what is considered to be aesthetic; aesthetic values are individual or institutional and are balanced by the norms. In this sense, art (and design) is a semiotic sign. In a simple way, art is a form of communication, but there is the extra aesthetic semiotic value lurking within the reader. The designer aims to tap into the extra aesthetic value to create designs with profound semiotic effects within the consumer.

8 CONTRIBUTION TO NEW PERSPECTIVES IN DESIGN EDUCATION

A pilot study design project was undertaken with design students. The project involved semiotic analysis and deconstruction of an aesthetic style, based upon the semiotics theories previously described. An aesthetic style language, vocabulary and grammar was established, that included a collection of specific aesthetic design media (eg. colour, texture, shape and form). Verbal descriptors were also allocated, in line with semiotic
theories and Itten’s [6] exhibitions of design language. This was collated as a port-folio of aesthetic images, media and words, as a form of Aesthetic Design Intention. The established aesthetic style language, vocabulary and grammar were then used to synthesise and reconstruct the same style for a new design concept. The project illustrated the following:
- Semiotics provides a formal but flexible structure for creative aesthetic design.
- Character style language can be isolated and replicated for new design concepts.
- Design students respond well to a structured semiotic approach to aesthetic design.

The students initially found the project to be quite bizarre, however as they engaged with the work, their recognition and appreciation grew. The project was found to be an enlightening experience that gave them an additional, new perspective as to how they would approach design in the future. A later project that the students undertook, involving visual design interpretation, showed clear signs that semiotic, aesthetic design experience had been taken on board and developed on an individual basis.

9 CONCLUSION

The educational experience of utilising design language, through words and aesthetic media provides design students with a means of communication and expression of design character intention. Semiotics and design provide a strong combination that can improve the understanding and application of aesthetic character. These can be taken to the design industry and developed to produce fascinating objects and product artefacts. It is clear that design education is enhanced by the teaching and learning of semiotics and design language in creating aesthetic design character. The educational value and intellectual enrichment that this field has to offer, to develop a depth of thinking, will enhance the quality experience of aesthetic design. Semiotics has the potential to make a significant contribution to new perspectives in design education.

REFERENCES


1Dr Bob EVES 2Jon HEWITT
School of DEC Motorola Limited
Poole House Redwood
Bournemouth University Crockford Lane
Fern Barrow Chineham Business Park
Poole Basingstoke
Dorset Hampshire
BH12 5BB RG24 8WQ
beves@bournemouth.ac.uk jon.hewitt@motorola.com
+44 (0) 1202 961513 +44 (0) 1256 790231