STYLE-BRANDING, AESTHETIC DESIGN DNA

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ABSTRACT
This paper is a continuation from papers presented at previous PDE, EPDE and SEED conferences. The paper outlines 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 the paper is to discuss the potential to retain aesthetic style brand DNA in a new design concept and the formulation of a proposed model. The paper illustrates how this can support the education and development of product and engineering design students in creative aesthetic design education.

Keywords: Design, creative, methods, aesthetics, semiotics, colour, form, style, brand.

1 INTRODUCTION
A model is proposed for style-branding aesthetic DNA, to inspire new design concepts for designers and design students. A key drive is for a generic model that can be applied to any design industry or brand. Previous research involved specifically colour semiotics and aesthetics. This work is a study of the semiotics and aesthetics of brand DNA, to enhance designer creativity through the compilation of a model for style-branding.

Correlations between aesthetic media, semiotics and brand DNA refer to application in the design industry. A model is proposed as a basis to illustrate commercial and educational potential. The work contributes to creative design methods and practice, knowledge and understanding of semiotics and aesthetics in design education.

2 COMMERCIAL CONTEXT AND BRAND SIGNATURE
In a commercial industry where creativity and aesthetics are paramount, design research provides the opportunity to promote and inspire interesting and competitive design ideas. Commercial design and aesthetic style are creative driving forces in a world where products may be regarded as iconic personal statements. The desire for image identity puts design aesthetics at the forefront of the consumer culture. The designer is required to maintain a competitive edge, to create styles for more discerning markets, while identifying brand signature. The brand signature forms an aesthetic DNA, with instant recognition of a mark of replicated quality as an extension of the product family, characteristic of the origin.

Brand awareness and the power of aesthetic style DNA embedded into the design of a product hold potential for design student creativity. Students can engage in an intellectual and practical activity that has direct relevance to the commercial world and design industry. This provides one of many focused areas of study for aesthetics in design education.

3 DNA SIGNIFICANCE AND ICONIC PRODUCTS
Design and the DNA significance provide a company with an opportunity to differentiate itself from others. DNA provides a platform for a business to display its values to the end user in the form of an experience which can be say physical and/or digital. The DNA itself is generally driven by principles and values which resonate with their consumers. Used effectively, DNA can be an extremely effective tool, creating a buzz around a company, helping drive sales. A good example of this is Apple. Their products speak for themselves, the buzz that surrounds them helps drive self promotion and ultimately sales. Apple principles are clear: A highly intuitive and refined user experience, no compromise. Due
to this clear communication, the company advertising and marketing costs do not have to be so high. In short the products speak for themselves [1]. Iconic products are generally the purest manifestation of a design language DNA, showing the core values in their rawest form. All products need to carry a DNA, it provides a core thread linking a range together. To what extent the DNA is applied is generally down to the design team and how they follow the predefined principles. A physical design language between two products can be totally different however they can both still follow a core set of values [1]. Design students can relate to brand DNA through their own experience of products. Creating a DNA experience through student design work requires a depth of thinking of interaction design and the user experience. To produce designs that hold core brand values helps students to appreciate the aesthetic golden thread of iconic products.

4 DESIGN PARAMETERS AND PRINCIPLES
Decisions made by designers when redefining a product are effected by many different parameters. The discussions that take place within a design group are highly complex and can be effected by external influences and trends. A design team has to be highly reactive and flexible, should a need arise to change or tweak a design. What is important to the product is that the core design principles of a brand are retained throughout the process. These core principles are the DNA, they represent the brand and run far deeper than design language. When defining a language as one might expect, design principles are discussed and agreed way before the physical form is developed. Areas that need to be considered depend on the project and the product. Generally design principles and language are already defined when it comes to a raw project. As can be imagined, it is a huge task in its own right to develop these fundamental building blocks. It is also a task that is undertaken by senior leadership and designers alike [1]. The parameters when developing an object, consider different language(s) and the language selection can be down to several different reasons. Internally, there is consideration of what exists in the current market space within a company portfolio. Discussion takes place as to whether a fresh approach i.e. a different language could be applicable. As discussed, the DNA goes way beyond the physical. Successful products have a strong continuity running through them, creating a complete experience. The more in depth the experience the harder it is to ensure this continuity is maintained. The key here is internal software, getting that right takes time. A much longer period of gestation is required to get a platform correct in a product than the physical form [1]. Student awareness of the continuity of the brand DNA throughout the design process has to acknowledge the internal aesthetic DNA content as well as the external form; to realise that the product is in essence an interface of the design language through interaction design and style DNA. These are criteria that can be integrated into a student design project, emphasising the realisation and translation of design language.

5 AESTHETIC STYLE AND SEMIOTIC SIGNIFICATION
Aesthetic character and expression are captured in a style DNA. Periodic trends, specific artists or designers and corporate branding are examples. Style, be it of a designer, design movement or a company brand will embody character and expression relating to discrete aesthetic media such as colour, texture, shape and form as well as words, descriptive design language and the combined aesthetic composition. Semiotics refers to the interpretation of signs and symbols and as such, lends itself to the analysis and synthesis of aesthetic style DNA. Saussure [2] identified the mutually inclusive signifier-signified relationship. In design, specific aesthetic media such as colour, texture and shape can be aesthetic signifiers that hold signified character and expression in a design form, discretely and as a whole. Morris’ syntactics-semantics-pragmatics model [2] and Barthes’ denotation-connotation model [3] can be applied to any design style. Barthes’ iconic essay on the Citroen DS [4] characterises distinctive styling, describing the car as being ‘as smooth as cake icing’. Morris’ and Barthes’ semiotic models hold potential for style-branding as they differentiate the literal denotations of the discrete aesthetic media from the underlying connotations of the overall form; while simultaneously providing a semiotic association and transition from syntax to signification. Figure 1 illustrates examples of semiotic analysis of the Pink Cadillac brand style with design students, using Morris’ and Barthes’ models.
Semiotics provides design students with a formal structure for both analysing and synthesising aesthetic design DNA. The power of words and descriptors to define the depth of the DNA signification, along with the semiotic association to aesthetic media and brand style, facilitates a means of generic expression and subsequent translation of the design language. Design students respond well to formal structures that support understanding and learning, from which a freer, creative approach emerges through experience.

### 6 STYLE-BRANDING DESIGN TOOLS

Design tools for aesthetic style-branding is an emerging and growing field. The work of McCormack and Cagan [5] who studied the shape grammar of the Buick car brand identity to create new design concepts is exemplary. Here, the front view of a range of Buick cars are analysed and broken down into key elements that contain the Buick brand, eg. fender, hood, grill and emblem. The analysis is represented in a tree structure, illustrating features of the topology of a vehicle. Shape grammar rules are then applied in a step by step generation of a range of Buick car concepts.

A design tool for colour aesthetics was designed at Bournemouth University, a Colour Concept Generator [6] to translate descriptive natural language into proposed colour schemes for products. The tool can retain a brand style identity by association of name descriptors to a category of colours or specific colour combinations.

Design students find these models inspirational and it illustrates how computational tools in design research can enhance design education. These particular design tools are focused on specific aesthetic media, ie. shape or colour. A generic style-branding model has to include a breadth of aesthetic design media.

### 7 STYLE-BRANDING RESEARCH

The study involves the consideration of the association between the different aesthetic media, formed from semiotic analysis of brand DNA and the creative design methods. The work shows a potential to enhance designer creativity, gaining inspiration from combinations of aesthetic media. The research is generic in nature and transcends the breadth of aesthetic design fields.

The main aim of the investigation is to study the semiotics of brand style DNA and establish a grammar for aesthetic media (colours, textures, shapes, forms, patterns, words). From this basis, to then compile and formulate a generic model for any brand DNA style grammar and generate new aesthetic design concepts to fit that brand style.

Throughout the research, further knowledge and understanding of the semiotics of brand style DNA and how aesthetic media can be organised and manipulated in the context of creative design emerges. This develops along with the structure and operation of a generic model, adaptable for any creative design industry and brand.
8 STYLE-BRANDING MODEL
An initial model has been developed (figure 2) of which there are three key stages. The first stage involves deconstruction of the brand DNA through semiotic analysis to establish the style grammar. The second stage involves the categorisation of the style grammar to be manipulated. The third stage involves the reconstruction of the brand DNA through semiotic synthesis to generate a new concept. The possibility of a specific driver of some sort, to allow for particular emphasis or direction of the reconstruction, gives an interesting creative edge to the process.

8.3 Diagram: Style-branding Model

9 DESIGN EDUCATION
The style-branding model is taught explicitly to 2nd year design students for design aesthetics, semiotics and interaction design. Here a focused pilot project involved direct application of the model and initial findings were presented [7]. Application of the model is developed further by design students in the final year through their individual final design projects. Experience of working with the model has illustrated the following:

- Students engage in an intellectual and practical activity that has direct relevance to the commercial world and design industry.
- Producing designs that hold core brand values helps students to appreciate the aesthetic golden thread of iconic products.
- Semiotics provides design students with a practical and usable methodology for both analysing and synthesising aesthetic design DNA.
- Design students respond well to formal structures that support understanding and learning, from which a freer, creative approach emerges through experience.
- Students progress from the literal denotations to the more in-depth connotations as they engage more fully with the intellectual complexity.
- The proposed style-branding model focuses the integration of aesthetic design method, process and media.
- Over-structuring of the style-branding process can inhibit and confuse design students who are trying to be creative and understand an already complex design issue.
- There is potential for developing computational models and design tools to enhance the style-branding methods and process.
10 CONCLUSION
A key aspect that has emerged from the research is the differentiation and association of the internal design DNA content and the external form. From this, it has become apparent as to the significance and importance of words and natural language descriptors in the brand style DNA. The power of words and descriptors to define the depth of the DNA signification, along with the semiotic association to aesthetic media and brand style, facilitates a means of generic expression and subsequent translation of the design language.

The proposed style-branding model holds relevance and significance for educating designers for a commercial society. The model has potential to expand across the field of aesthetic design and there is much scope for a range of educational and research activity. Further direction of the work moves towards the convergence of aesthetic media with design methods, process and computer tools.

REFERENCES