AS

FACT FILES

Technology & Design

For first teaching from September 2011
For first award in Summer 2012

Aesthetics, Ergonomics, Anthropormetrics Part 2

FACT FILE

technology and design

Learning Outcomes

Students should be able to:

- demonstrate knowledge and understanding of:
- the use of aesthetics (shape, form, colour, texture, symmetry, and proportion) in product design.

Course Content

In design terms, aesthetics is our perception or opinion of an object based on what we see, feel, hear, smell and even taste. Our opinion could be based on one or all of these senses.

Our opinion can then be further refined by whether we perceive that object to be fashionable, familiar or if we feel it improves our status. Of course all of these perceptions are strongly influenced by our personalities there are some features of aesthetics which designers pay attention to the most.

Shape

Products are often defined by their shape, some products are very angular with straight edges and some products use curves to provide both performance enhancement and attractive aesthetics. Shape is usually one of the aesthetics that consumers will place highly on their list when selecting a product. Some products have such distinctive shapes that they are very recognisable as a particular brand.

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Form

Form can be described as the overall shape, profile and or visual appearance of a product. Products are often designed purely with form in mind e.g. fashion items like watches, shoes and bags. Products like these, where form has dominated over function in the design, will have been designed with current fashions in mind and have a short lasting consumer appeal.

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Colour

Colour is very much personal taste, however, designers use colour to help define the product's function. For example television and audio equipment is often black/brushed steel, children's toys make use of bright primary colours, safety equipment is often bright yellow/red. Often colour is used to define a product that is intended to be used by male or female users. Colour choice of key components on a product not only provide aesthetic appeal but also have ergonomic uses, for example lights in a car dashboard or a television remote control.

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Texture

Designers use texture to enhance the shape of a product, where one part of the product may be gloss and another a smooth lightly textured finish to aid grip for the user. For example a hairdryer might have the grip in a textured surface for ease of grip but gloss or chrome finishing for the main body to enhance appearance. Clothing and footwear uses texture predominantly, it allows designers to accentuate aspects of the design

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Symmetry

The placement of the light indicator or position of buttons on a remote will often be placed symmetrically to improve ergonomics and aid the user in it's use. However, designers also use symmetry to provide aesthetic appeal, for example the front grill of a car, electronic products like mobiles or laptops. Symmetrical products are visually easier for us to 'take in' and appreciate. It can make products look organised and allows designers to improve the ergonomic of their products. However, too much symmetry and shapes become complex and 'mathematical' in appearance.

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Proportion

Product dimensions are usually constrained by their function and/or any technologies used within them. However, a designer needs to ensure that their solutions not only fit ergonomically but fit visually. Products which have good proportion i.e. not too tall, not too wide, not too heavy, etc are considered aesthetically pleasing and attractive. The original Apple iPod is considered a good example of excellent proportion. For instance if a product has too many buttons of the one size or if all the components are mathematically/equally divided out it can sometimes result in a rather dull design.

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Designers need to ensure a product is 'dynamic' in it's appearance to make it visually appealing and this can be achieved through:

- parts which have something dimensionally in common.
- create harmony so that different shapes all 'fit' with each other easily with each shape having a similarity with the other surrounding shapes.

1. Describe how a designer might make use of proportion to enhance the appearance of a television remote control. [2]

2. How might a designer use texture to improve the visual appearance of a product. [2]

3. Proportion and colour are two aspects of aesthetics that the designer needs to consider.
   (i) Briefly explain what is meant by the term proportion and give **one** main reason why it is an important consideration for the designer. [2]
   (ii) Outline **three** different ways that colours may be used in products in order to improve aesthetic appeal. [4]

4. Explain how texture and symmetry can influence the aesthetic appeal of sports footwear. [2]