









## TOPIC 6

NOTES & GUIDANCE BOOKLET

2020-2022



This booklet contains the Notes, and teaching support material for Topic 10

DP DESIGN WITH

MR MONEEB



## **Contents Page**

1.	Teaching & Learning Presentations	3
2.	Summary Notes - Q&A	13
3.	Topic Questions & Exam Questions	17
4.	Glossary of Terms	21



## Teaching & Learning Presentations



## **Topic 6: What is covered?**

These are the topics covered in Topic 6:

CORE TOPICS		ORE TOPICS	Topic Covers	Approx Lessons hours on each topic	Total Lesson Hours	Checklist (√)	Exam Mark	Exam (%)	
П	6	6 Classic Design	6.1. Characteristics of classic design	4	0				ľ
	0		6.2. Classic design, function and form	4	0				

### 6.1 Characteristics of Classic Design

Essential idea: A classic design has a timeless quality, which is recognised and remains fashionable

#### Concepts and principles:

- Image
- Status and culture
- Obsolescence
- Mass production
- Ubiquitous/omni presence
- Dominant design

#### Guidance:

- How image makes a classic design instantly recognisable and provokes emotional reactions
- How a classic design defies obsolescence and transcends its original function
- How the role of mass production contributes to a product reaching classic design status
- How the constant presence of a product in changing context leads to classic design status
- How classic design are dominant in the marketplace and difficult to change

#### Aim:

The iconic status of classic designs is often attributed to them being "breakthrough products".

#### Nature of Design:

A classic design is not simply defined by how well it functions or its impact. Classic designs can be recognized as from their design movement/era. Yet, originality— whether it is evolutionary or revolutionary—seems to be the trait that makes a product "timeless".

#### Theory of knowledge:

Classic design often appeals to our emotions. Are emotions universal?

#### 6.1 Classic design, function and form

A design classic is an industrially manufactured object with timeless appeal. It serves as a standard of its time and remains relevant to future generations and in this way has a lasting impact on society. The design resists the vagaries of taste and fashion and once established as a "classic" it gradually acquires further value. Design classics are usually innovative in their use of material and often unite technological advances with beautiful design, for example, Apple products such as the iPod, the Coca-Cola bottle and soft drink cans. Classic designs can emerge from any sector of the market.

Often referred to as "iconic", the longevity of classic designs suggests quality and the continued demand for such products is not dependent on heavy marketing or advertising, although this often takes place to reinforce the status and remind new generations of consumers of the intrinsic value of the classic design. The design is often widely imitated, usually with cheaper versions, so this reinforces the status of the original design and its "pioneering" concept.

For many centuries prior to the Industrial Revolution, "classic" evoked thoughts of artistry and craft skills, for example, classical architecture and furniture. The advent of mass production and "designing for the masses" often meant a reduction in quality of products and poor design. However, once mass production techniques became more established some designers embraced the opportunities offered by the new techniques and materials as a way of providing people with well-designed products at an affordable price due to the cost-effectiveness of production. No longer was classic design the preserve of the elite in

A design classic is an industrially manufactured object with timeless









#### **Notes / Activities**

#### Website on 61. Classic Design

https://www.ruthtrumpold.id.au/destech/?page\_id=418

#### **Image**

#### How image makes a classic design instantly recognisable and provokes emotional reactions

Whether it's a mobile phone, a vacuum cleaner or a chair, the very best examples of industrial design seamlessly blend form and function to make products truly desirable. As its name implies, this discipline is about all balancing creative, conceptual, freeform thinking with the practical, industrial constraints of actually getting something made, which requires knowledge of production processes, materials and technology.

Over the years, some designers' mastery of this crucial balance has elevated them to iconic status. We all know how products designed by the likes of Jonathan Ive, James Dyson or Charles Eames look and work. Chances are

you already own one, or at least want one.

Aesthetically pleasing objects appear to the user to be more effective, by virtue of their sensual appeal. This is due to the affinity the user feels for an object that appeals to them, due to the formation of an emotional connection with the object. Making you happy or emotionally attached can create a feeling that the object functions more effectively. Donald Norman the author of *Emotional Design*, suggests that classic design [good design] often has in-built emotional triggers that make the product desirable. The three elements or levels of design that he describes are the *visceral*, behavioural and reflective.



Image: the general impression that a person, organization, or product presents to the public

#### Status & culture

#### How are classic designs often recognised across culture and hold iconic status

Design classics can reflect cultural influences. The culture concerned may be national or religious or it may concern a sub-culture such as a particular youth culture.

Identifying an Eames chair is like picking Angelina Jolie or David Beckham out of a line up. Its shape and form are ingrained in our brains. But what makes a design iconic, and how do certain pieces achieve this level? Like movie stars and sport people, designed objects carry a similar visual power. We are drawn to them for their beauty and distinct features. This iconic status is derived from their prolific use over a number of years (or decades) or by taking center stage in an art installation, a popular restaurant, hotel, or movie set, certain pieces become instantly recognizable to us. If you love design you're probably familiar with a long list of iconic designs and can recall where they have featured.

The iconic status of classic design is often attributed to them being breakthrough products, products that set new standards or new meanings.

Classic designs are often recognised across culture and hold iconic status These everyday objects could arguably be the best examples of successful design: they have stood the test of time, they were easily adopted by a vast majority of the population, and, as objects, they are so user-friendly that they disappear into our daily routine



#### Obsolescence

#### How a classic design defies obsolescence and transcends its original function

The classic design may no longer be needed as a functional object or it may become technologically obsolete. However, it may still sell very small numbers although it may no longer be viable to produce it commercially. In such circumstances the resale value of existing products increases enormously as the number of products available lessens over time. Such products become very collectable and have investment value, for example, classic cars. Other products may not intrinsically be worth much money but are valuable to certain owners or collectors, such as toys that have been used and are in poor condition.

Some products are considered to be **classic design** based on the quality of execution, enduring qualities and restraint. These qualities enable the product to fulfil its function, whether that is making toast or shading your eyes from the sun. Some products however obtain a classic status that transcends this function in that they become iconic objects. The object achieves its iconic status for a number of reasons which might include: its dominant position in the market, its aesthetic qualities, and its desirability. A design classic will remain in the maturity phase of its product cycle and although some products may well experience some decline at a certain time in the cycle the product will experience the growth phase again as it enters the classic design status.

Planned obsolescence is when a product is deliberately designed to have a specific product cycle. This is usually a shortened life span. The product is designed to last long enough to develop a customer's lasting need. The product is also designed to convince the customer that the product is a quality product, even though it eventually needs replacing. In this way, when the product fails, the customer will want to buy another, a up to date version. Obsolescence can be determined by fashion, technology, materials, construction techniques.



Obsolete: no longer produced or used; out of date

#### Mass Production

#### How the role of mass production contributes to a product reaching classic design status

Mass production involves the bulk manufacture of products that have little or no customisation. The setup costs for mass production are high because it usually involves extensive mechanisation and automation. The total cost per unit is lower though as less labour is required and materials can be sourced in larger quantities for less.

The mass production strategy is to produce a higher number of units, but supply these to the market at a lower cost than the competitors. Therefore the consumer is able to access a product of equivalent quality at a lower price. Consumers will show preference for the lower priced product and it will sell in much higher quantities. The preference of this design over others will afford the product classic design status.



Hille Poly Chair Chair- Robin Day



VW Beetle- Ferdinand Porsche 1938



Apple I-Touch, Jony Ive



Mass production: the production of large quantities of a standardized article (often using assembly line techniques)

#### Ubiquitous/omnipresence

#### How the constant presence of a product in a changing context leads to classic design status

A classic design often has a constant presence, or omnipresence, in a rapidly changing context.

When an object becomes part of our everyday lives, we become very familiar and comfortable with it's presence and style. The product becomes part of our life and we start to attach emotions, feelings and experiences to the product.

The product becomes embedded in our life. Therefore the demand for the product continues even when new products with better function enter the market. This continued demand for the product when newer alternatives are available afford the product classic design status.



#### Ubiquitous/Omnipresent: present, appearing, or found everywhere

#### Dominant design

#### How classic designs are dominant in the marketplace and difficult to change

**Dominant design** is the emergence of a product that possesses a particular feature or features that seem to be essential. Interestingly, dominant designs can link to *diffusion theory* portrayed by Rogers. Getting your product to market as quickly as possible may mean it diffuses quicker than competitors and reaches the majority of users faster. If this occurs; a business may experience 'buyer loyalty and brand retention' (Constantinos et al., 2005). The product or design may become the dominant design and be hard to dislodge by competitors and alternatives.

When classic design is dominant in the market-place it can be difficult to change. Apart from the functional or particular feature that is so appealing to the user, emotional issues can impact. Users are often reluctant to change, they are happy with the product and can not see any advantage in 'up-grading' or changing to a later model. Users can become emotionally attached to the classic design, can cannot believe that any other product is better, or in fact simply do not want to change from their reliable, and cherished possession.

Students will need to consider classic designs that have become dominant in the marketplace and the difficulties for designers to change them.

**Dominant design** is the emergence of a product that possesses a particular feature or features that seem to be essential.



#### Activity

- 1. Choose two products that you consider to be classic designs.
- 2. Write a sentence or two why you consider it to be classic.
- 3. Include an image.
- 4. Add it to the Padlet "Classic Designs"
- 1. Look the ToK and IM statements below.
- 2. Find a classic design that you think that evokes an emotion in one culture but maybe not in another culture or in the same culture.

3. Include an image.
4. Write a sentence why.
5. Add it to the Padlet "Classic Design and emotions"
Notes / Activities

### 6.2 Classic Design, Fuction & Form

Essential idea: For a design to become a classic design, the form can transcend function.

#### Concepts and principles:

- Form versus function
- Conflict and compromise
- Practical function versus psychological function
- Retro-styling

#### Guidance:

- The tension between form and function when developing new products based on a classic design
- Identify products where either practical or psychological function has been the determining factor in the design
- Comparison of retro-styled products with the original production models in relation to form and function
- How retro-styling a new product needs to respect and understand the original form and underlying structure before making changes

#### Aim:

The balance between function and form is often an area of difficulty for the designer. If a product is purely functional, it may be lacking in appeal to consumers, no matter how good it may be at completing its job. Often we are drawn to products that have been developed with form as a primary consideration. The human psyche appreciates beauty.

#### Nature of Design:

Classic design holds "form follows function" as a fundamental principle, but this is not always evident in practice. Some products are so well designed with function as their primary goal, that their use is intuitive. As designers develop new technologies, the lines between the form and function of a product continue to blur.

#### Theory of knowledge:

Is aesthetic value purely a subjective matter?

**Notes / Activities** 

#### Form versus function

#### The tension between form and function when developing new products based on a classic design #1

Although Louis Sullivan an American architect first used the phrase form follows function in the late 1890's in an architectural article the more practical origins of form follows function are to be found in the ideology of the Bauhaus School the influential design school from Germany that emerged during the early part of the 20th Century [1919-1933]. The products designed at the Bauhaus can provide us with excellent examples of the success, and often conflict, between the concept of form follows function.

The success of form follows function manifests itself in the ideas of the machine aesthetic and the architectural movement of the international style. Both of these ideas reduce the ornamentation of the object, patterns, detail or relief.



Le Courbisier- Villa Savoye





Bauhaus design-functional, minimal, rationale. A machine

Le Corbusier described Villa Savoye as a machine for living, as has all the attributes of the international style and of modernist architecture. The modernists were not without their critics. During the middle of the century, some architects began experimenting with organic forms that they felt were more human and accessible. Mid-century modernism, or organic modernism, was very popular, due to its democratic and playful nature. Expressionist exploration of form was revived, such as in the Sydney Opera House in Australia by Jørn Utzon.

When considering form, students need to understand how it can be dictated by other functions such as design for manufacture techniques, design for example,

#### Retro styling

Comparison of retro-styled products with the original production models in relation to form and function

How retro-styling a new product needs to respect and understand the original form and underlying structure before making changes

Retro styling uses the form and decoration of classic designs from a particular period of time and/or style. Retro styling builds on the classic image but can often involve the use of new technology

Designers may base their ideas on a product from the recent past, attempting to modernise the product yet still capture the form and function of the product that made it so successful. The Mini Cooper and VW Beetle are both good examples of this. This type of design is called retro styling.

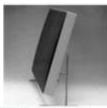
New materials, technologies and manufacturing methods make it possible to realise design features or characteristics that were not available when the original product was designed.

Designers need to however be respectful of the original designer's' intent. For the Mini Cooper it was important to keep the car small, playful and cute. A whole generation had grown up with the original Mini, and it's retro styled remake needed to capture the same emotion to appeal to this generation a second time around.













Has Jony Ive (Apple) retro styled the designs of Dieter Rams (Braun)?

Retro: imitative of a style, fashion, or design from the recent past

#### Conflicts and compromise

The tension between form and function when developing new products based on a classic design #2

The balance between function and form is often a difficult area for the designer. If a product is purely functional, it may be lacking in appeal to consumers, no matter how good it is at completing its job. Often we are drawn to products that have been developed with form as the primary consideration. The human psyche appreciates beauty. The aesthetics of a product are embedded in its form- and often we can be drawn or attracted to it because of its inherent beauty- perhaps over-looking its functional attributes. The Starck designed Salif juicer, a classic design, has a high aesthetic value, its form is celebrated yet its function is poor.. The MT49 teapot by Marianne Brandt is completely stripped of the decoration popular in 1924 - presenting as a purely functional product. Roxy Lo worked with engineers to bring curves to the bicycle - her 2007 Ibis Mojo functioned well and was beautiful compared to others in the market.







#### Practical function versus psychological function

Identify products where either practical function or psychological function has been the determining factor in the design

#### Practical function

The practical function of an object or space is determined by the rational - the logical or well reasoned approach to its design. Decisions by the designer or user will determined by the objects usability and reliability.



#### Psychological function

The psychological function of an object or space is determined by the emotional responses. Decisions by the designer or the user will evoke psychological responses- personal identity, the narrative of 'me' and relate to the desirability of the object or space.





believe Embryo chair- marc Newson

#### Practical function meets Psychological function- rational meets emotional

When practical function forms the designers primary goal the interaction with the object can become intuitive. Intuitive design will have a number of redeeming features: affordance, expectation, efficiency, responsiveness, forgiveness, explorability, emotional security. A product can transcend the its practical function to meeting the psychological needs of the user by evoking emotions- aesthetically pleasing objects appear to the user to be more effective, by virtue of their sensual appeal. This is due to the affinity the user feels for an object that appeals to them, due to the formation of an emotional connection with the object.

## Summary Notes Q&A



## Topic 6 Classic Design

#### 6.1 Characteristics of classic design

A classic design has a timeless quality, which is recognized and remains fashionable. A classic design is not simply defined by how well it functions or its impact. Classic designs can be recognized as from their design movement/era. Yet, originality, whether it is evolutionary or revolutionary, seems to be the trait that makes a product "timeless".

Design Classic	A product that serves as a standard of its time, that has been manufactured industrially and has timeless appeal. It serves as a standard of its time, despite the year in which it was designed, is still up to date and remains relevant to future generations and in this way has a lasting impact on society. The design resists the vagaries of taste and fashion and once established as a "classic" it gradually acquires further value.	
	Design classics are iconic products and characterised by simplicity, balance, is still up to date and usually innovative in their use of material. Often they unite technological advances with beautiful design, for example, Apple products such as the iPod, the Coca-Cola bottle and soft drink cans. Classic designs can emerge from any sector of the market.	
	To ensure sustained success over an extended period of time, design classics must not only address functional and aesthetic requirements but also an <b>emotional connection</b> with the user/owner.  Examples: Fender Telecaster, Eames Lounge chair and Ottoman, Porsche 911	
Image	Within the context of classic design, image relates to the instantly recognizable aesthetics of a particular product. For example, the shape of a Coca-Cola bottle, or the shape of a Volkswagen Beetle motor car.  The classic design is instantly recognizable and provokes emotional reactions.	
	Often referred to as "iconic", the longevity of classic designs suggests quality and the continued demand for such products is not dependent on heavy marketing or advertising, although this often takes place to reinforce the status and remind new generations of consumers of the intrinsic value of the classic design. The design is often widely imitated, usually with cheaper versions, so this reinforces the status of the original design and its "pioneering" concept.	
Status and culture	Classic design defies obsolescence and transcends its original function. Classic designs are often <b>recognised</b> across culture and hold iconic status. The iconic status of classic design is often attributed to them being breakthrough products, products that set new standards or new meanings.	
Status	Products considered as classic designs often increase in value and can project a certain status as they become more desirable. The ownership of a classic design can increase the perceived status of an individual.  E.g. Status of wearing a Rolex Watch	

#### Culture In the context of classic design, culture plays an important part. They often reflect cultural RAVEL influences and mark transition points within a ENGLAND particular culture. The culture of concern may be national, religious or a sub-culture, such as a particular youth culture or movement. British culture: red letterbox, red double-decker bus, union jack flag and colours, Obsolescence A product that is obsolete is no longer produced or used or out of date. The role of mass production has contributed to a product reaching classic design status. Some products are considered to be classic design based on the quality of execution, enduring qualities and restraint. This is the stage in a product life cycle where the product is no longer needed even though it functions as well as it did when first manufactured. Classic designs tend to transcend obsolescence and become desired objects long after they have ceased to be manufactured. When a product is deliberately designed to have a specific product cycle. This is usually a Planned obsolescence shortened life span. The product is designed to last long enough to develop a customer's lasting need. The product is also designed to convince the customer that the product is a quality product, even though it eventually needs replacing. In this way, when the product fails, the customer will want to buy another, a up to date version. Obsolescence can be determined by fashion, technology, materials, construction techniques. The classic design may no longer be needed as a functional object or it may become technologically obsolete. However, it may still sell very small numbers although it may no longer be viable to produce it commercially. In such circumstances the resale value of existing products increases enormously as the number of products available lessens over time. Such products become very collectable and have investment value, for example, classic cars. Other products may not intrinsically be worth much money but are valuable to certain owners or collectors, such as toys that have been used and are in poor condition. For many centuries prior to the Industrial Revolution, "classic" evoked thoughts of Mass production artistry and craft skills, for example, classical architecture and furniture. The advent of mass production and "designing for the masses" often meant a reduction in quality of products and poor design. However, once mass production techniques became more established some designers embraced the opportunities offered by the new techniques and materials as a way of providing people with well-designed products at an affordable price due to the cost-effectiveness of production. No longer was classic design the preserve of the elite in society. Mass production involves the bulk manufacture of products that have little or no customisation. The setup costs for mass production are high because it usually involves extensive mechanisation and automation. The total cost per unit is lower though as less labour is required and materials can be sourced in larger quantities for less. The constant presence of a product in a changing context leads to classic design status

Example: VW Beetle 21 million sold (1941-2003)

Ubiquitous/ omnipresence	A classic design often has a constant presence, or <b>omnipresence</b> , in a rapidly changing context. When an object becomes part of our everyday lives, we become very familiar and comfortable with it's presence and style. The product becomes part of our life and we start to attach emotions, feelings and experiences to the product.  The product becomes embedded in our life. Therefore the demand for the product continues even when new products with better function enter the market. This continued demand for the product when newer alternatives are available afford the product classic design status.
	This makes a classic designs often dominant in the marketplace and difficult to change.
Dominant design	The design contains those implicit features of a product that are recognized as essential by a majority of manufacturers and purchasers.
	When classic design is dominant in the market-place it can be difficult to change. Apart from the functional or particular feature that is so appealing to the user, emotional issues can impact. Users are often reluctant to change, they are happy with the product and can not see any advantage in 'up-grading' or changing to a later model.
	Users can become emotionally attached to the classic design, can cannot believe that any other product is better, or in fact simply do not want to change from their reliable, and cherished possession.

## **Topic Questions & Exam Practice**



Figure 5 shows a wooden bureau (writing desk) designed by Toby Winteringham. The bureau is made mainly from the hardwood, oak, and the surface decoration is marquetry. Marquetry is a highly skilled hand technique where patterns are cut by hand into the surface of the oak to match the shape of coloured veneers which are then glued in place so they lie smooth with the surface of the oak. Figure 6 shows the bureau opened up. The bureau costs approximately £4500 (6000 USD).

Figure 5: Wooden bureau

Figure 6: The fold-down shelf acts as a writing desk





(ii) Discuss three ways in which the designer has attempted to balance form with function in the design of the bureau.

[9]

6 Marks

The two half-litre, or one pint, Pyrex measuring jugs that shift from kitchen to anywhere around the house and garden serve as many useful purposes as anyone can dream up. Here is an everyday design taken very much for granted. These jugs are a clear, simple and wholly unpretentious, yet thoroughly well-honed product. Cheap, too. A new one costs £3.95 today, and, should last for very many years. The jugs are made of soda-lime glass today, not as tough as the more costly borosilicate glass they were originally cast, or moulded, in, yet strong enough to withstand extremes of heat and cold. They survive in freezers and microwaves. Unlike most glass objects, they seem to bounce harmlessly off wooden floors when dropped. They are easy to clean, retain their lustre and are shaped to be readily handled, with or without kitchen or any other form of gloves, while their spouts pour well and don't drip when you want them to stop. The graphics are clear and it's good to have jugs that read metrically and imperially at one at the same time. Pyrex was first invented by a group of researchers at the Corning Glass Works, New York State.



Explain three different reasons why the Pyrex Jug is considered a design classic.

**Figure 6** shows the S-shaped plastic red chair designed in 1967 by Vernon Panton and manufactured by Vitra. It is made from a single sheet of rigid polyurethane foam and copies of the original chair are now available in a selection of colours. In 1967 the chair was viewed as a radical design based on the use of new materials and manufacturing techniques.

Figure 6: Panton S-shaped chair



(ii) Discuss three ways in which the designer of the chair in Figure 6 has attempted to balance form with function.

[9]

## **Glossary of Terms**



## **Glossary of Terms**

Topic 6: Classic design

Term	Definition
Conflict and compromise	The development of new products often require a multidisciplinary team including designers, engineers, and manufacturers. These different actors often have different priorities when developing a product and this can often lead to conflict. In order to achieve the goals of creating the new product, the different team members must often compromise.
Culture	In the context of classic design, culture plays an important part. They often reflect cultural influences and mark transition points within a particular culture. The culture of concern may be national, religious or a sub-culture, such as a particular youth culture or movement.
Design classic	A product that serves as a standard of its time, that has been manufactured industrially and has timeless appeal.
Dominant design	The design contains those implicit features of a product that are recognized as essential by a majority of manufacturers and purchasers.
Form	Also considered as the three-dimensional space that a product takes up, in the context of classic design, form relates to the shape of a product and the aesthetic qualities that the shape gives.
Function	Products can be considered classic designs based on how well they fulfil the task that they have been designed for.
Image	Within the context of classic design, image relates to the instantly recognizable aesthetics of a particular product. For example, the shape of a Coca-Cola bottle, or the shape of a Volkswagen Beetle motor car.
Obsolescence	This is the stage in a product life cycle where the product is no longer needed even though it functions as well as it did when first manufactured. Classic designs tend to transcend obsolescence and become desired objects long after they have ceased to be manufactured.
Omnipresence	In the context of classic design, a product that is omnipresent has existed and been in circulation for a long time.
Retro-styling	A design that uses the form and decoration from a particular period of time and/or style.
Status	Products considered as classic designs often increase in value and can project a certain status as they become more desirable. The ownership of a classic design can increase the perceived status of an individual.
Ubiquitous	In the context of classic design, a product that is ubiquitous is one that can be found almost everywhere. For example, a mobile phone.

# DP DESIGN TECHNOLOGY WITH Mr Moneeb

