

Dissertation proposal: "Naturally good design".

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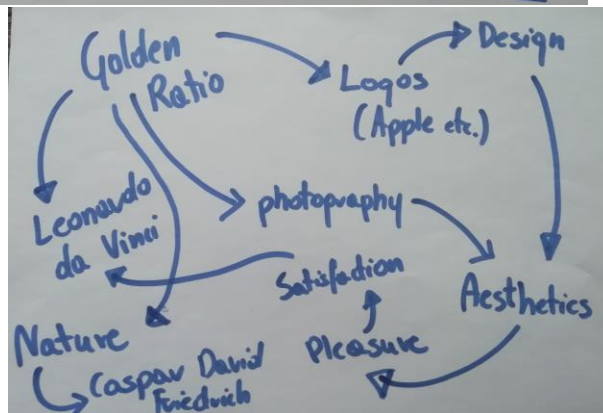
Key word one: Design

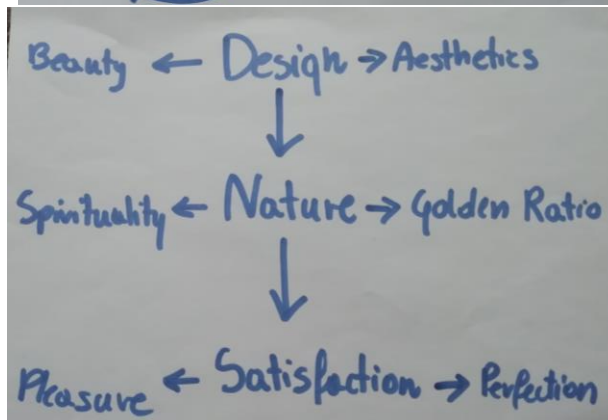
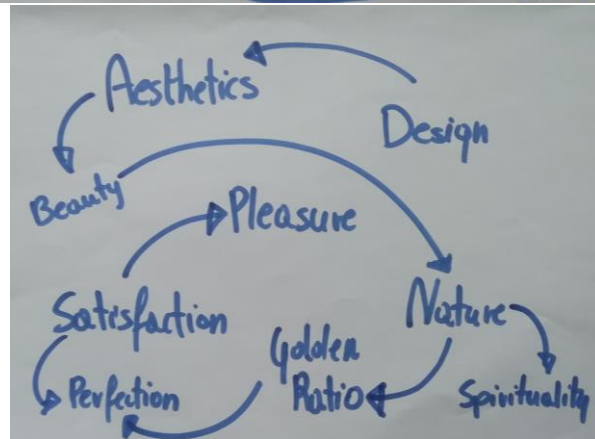
Key word two: Nature

Key word three: Satisfaction

Proposed question for Independent Inquiry: How can we design our environment to be good for us?

<u>Aesthetics</u>	Proportion	Order
Punk	<u>Satisfaction</u>	Art
<u>Design</u>	<u>Nature</u>	<u>Pleasure</u>
Obsession	Disruption	
	<u>Beauty</u>	<u>Golden Ratio</u>





INTRODUCTION

The following study will reflect upon the process of design and its relationship with nature with the goal of analysing the factors that affect a human perception of good, satisfactory design, in addition to the origin of this process and its impact on the reality of everyday life.

The topic of subtle determinations of aesthetic values based upon human history and its preconceptions. By discussing the core touchpoints of this issue, this study will try to prove that the basis of design aesthetics and usability lays in our rooted need of connection with the universe and its rules. Moreover, each of the following points raises a different aspect of the issue and consequently the result more varied and reliable.

The study will consist of three main sections. In each of them, one keyword will be discussed along with its relationship with the main purpose of this study.

The first concept that will be raised is the concept of design as it is a key element of the selected issue. This widens the range of opportunities to reflect on the following points.

Subsequently, the issue of nature and its relation to creation will be discussed. This will lead the thought path through concepts such as spirituality and the golden ratio to finally arrive at the last main point - the concept of satisfaction.

Each of these sections is a starting point for analysing the presented problem. The selected keywords have little to do with each other at surface level, but deeper within are overlapping elements that will be explored in the following sections, connecting the thought processes to a final seamless and comprehensible conclusion.

DESIGN

Design is a specification of the construction of an object or system. To design demonstrates the process of its conception and development (Design, 2020). It can also refer to the organization or structure of formal elements within a work of art or composition. "The design usually has to meet certain goals and constraints like considering its aesthetic, functionality" (Cambridge Dictionary of American English, no date).

According to Charles Eames "design is a plan for arranging elements in such a way as best to accomplish a particular purpose" (Eames, no date, cited in goodreads.com, no date). This definition presents design as a process of creating a composition that performs its function. It implies that the core factor is its mechanics whilst overlooking the aesthetic values. This opinion is mirrored by Steve Job's "design is how it works, not just what it looks like and feels like" (Jobs, no date, cited in goodreads.com, no date).

The concept of design is very broad and covers almost every area of life. It can refer to "social activity" (Armstrong, 2009), "can be art, can be aesthetics" (Rand, no date, cited in goodreads.com, no date) or even a "strategy tool" (Armstrong, 2009). "The design creates a culture in which we live, in consequence, shapes our values" (Peters, no date, cited in goodreads.com, no date). To many designers, art/design is a cultural mission in which life and work are inseparable. Design can enhance products, environments, communications, and corporate identity (Armstrong, 2009).

Design is visible everywhere, yet it is also invisible—unnoticed and unacknowledged (Armstrong, 2009). It's a vital factor in life. As stated by Bertrand Russell "everything in the world is made just so that we can manage to live in the world, and if the world was ever so little different, we could not manage to live in it" (Russell, 1967).

The issue of design is important because of its breadth and profoundness in our culture. Its aspects can be discussed by applying the history of humanity and the history of art. It expresses both the process of crafting and psychological perspectives of the objects value which would then be in its aesthetics and performance. It contains all the following concepts to be discussed in this study and is flexible enough to reflect on a wide range of disciplines.

Design can pose many ethical problems. Even if a badly designed product works, is still as unethical as it is beautiful, regardless of if it fulfils its function (Armstrong, 2009). To design is to find a perfect ratio between the subtle matters. "The good design satisfies both idea and form, the needle and the thread" (Armstrong, 2009).

Moreover, the concept of good design can be considered a matter of history of art. The 'Good Design' movement was an artistic movement or design concept that originated in the 1930s but only truly took form in the United States after the Second World War. The expression Good Design came into usage in 1940 when the Museum of Modern Art sponsored the exhibit 'Useful Objects of American Design under Ten Dollars' (Armstrong,2009). Designs made under the influence of Good Design include buildings and furniture, but also household objects. Names associated with the movement include industrial designers Charles and Ray Eames and furniture designer Hans Wegner whose insights about the matter of aesthetics tie into the dissertation concept.



fig. 1.

However, there are some opposing theories about design and its connection to aesthetics and nature. Some see it merely as "decoration—a legacy of the past" (Armstrong, 2009).

In some circles, art and design are considered effeminate. Benn Pitman, the figure responsible for transferring ideas about the arts from the UK to the USA stated: "Let men construct and women decorate". To him, art belongs in the home or museum and doesn't include any design work in its definition (Armstrong, 2009).

Those definitions will help to understand the process behind creating good design. As Edgar Kaufmann claimed: "good design is a thorough merging of form and function and an awareness of human values, expressed in relation to industrial production for a democratic society" (Armstrong, 2009). That indicates elements of science, sociology and politics. This information can raise many issues surrounding design and its relations.

Design is linked to aesthetics which can be considered crucial for this study. It is a set of principles concerned with beauty and taste, as well as philosophy. It deals with how one feels about art in general, why some works of art are preferred over others, and how art can affect our moods or even our beliefs (Munro, 1986). Scholars define aesthetics as a critical reflection of art, culture and nature (Riedel, 1999). This will highlight key points about the principles of good design. It examines subjective and semi-emotional factors worth consideration.

NATURE

Nature is the natural, physical, or material world (Ducarme and Couvet, 2020). Although humans are part of it, nature itself is a fraction of the universe not created by humankind. It's widely referred to as the wildlife: the animals, plants (Collins Dictionary, no date). "Nature" can refer to the phenomena of the physical world, and to life in general (Ducarme and Couvet, 2020). Nature is our physical environment as well as our place in the world as humans. Quoting Einstein: "A human being is a part of the whole called by us universe, a part limited in time and space" (Einstein, no date, cited in goodreads.com, no date).

Humanity is the product of an evolved relationship with nature, as well as its ongoing interactions and a deep experience of the natural world (Kellert, 2012). Even with our advanced technology and concrete cities we are still deeply rooted in the ecosystem and connected to our origin. "Our senses, our emotions, our intellect, and even our culture developed in close association with [...] the nonhuman world" (Kellert, 2012).

Beauty in nature has historically been a prevalent theme in art and books. Reasons behind this association and its elements are studied by a branch of philosophy known as aesthetics.

Wilderness portrayals in art became more prevalent in the 1800s, especially in the works of the Romantic movement. The Romantic movement was built upon the idea of nature as the salvation of the mortal soul and imagination when industrialization was beginning to choke its way through Europe. British artists John Constable and J. M. W. Turner turned their attention to capturing the beauty of the natural world in their paintings (Williams, 2017).

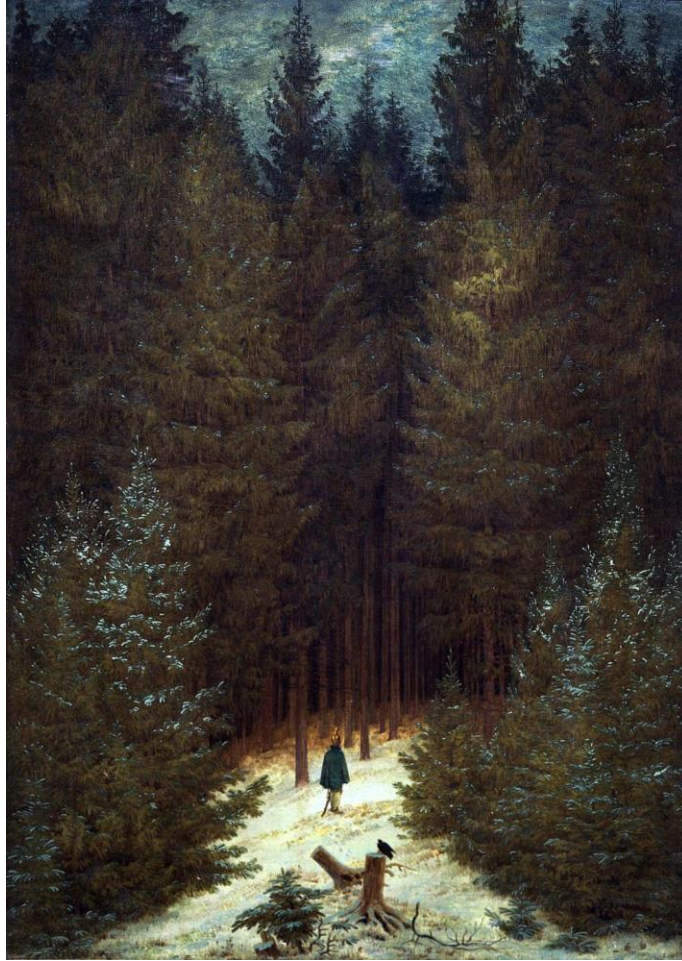


fig. 2.

The concept of nature is a key aspect of searching for the rationalisation of good design. It is important because it refers to the origin of humanity and connects design, beauty and spirituality. Furthermore, it allows the science behind art and philosophy to be discussed.

One of the elements connecting nature with art and science is the concept of the golden ratio. Ratio (logos) is the relation of one number to another (Olsen, 2006). The golden ratio has been used over the millennia. Represented by 1.618, "phi is a very special number, an irrational number followed by an infinite number of digits and is accurate enough for almost any practical purpose" (Meisner, 2018).

It is known as a “divine” or “golden” number due to its unique mathematical properties and numerous features throughout geometry and nature. Nature widely expresses the golden section through a very simple series of whole numbers (Olsen,2016). It's recognised in family trees of bees, stock market patterns, hurricane clouds, self-organizing DNA nucleotides and a variety of aspects of life, art, and architecture (Olsen, 2016). Moreover, this number has been the subject of numerous experiments in psychology (Livio, 2003).

The history of the golden section is intricate. Despite its use in ancient Egypt and the Pythagorean tradition, the first definition comes from Euclid. Plato, in ‘The Republic’, asks to “take a line and divide it unevenly” (Olsen, 2006). By his rhetoric, he explains that the result is the code of nature, a constant geometric proportion. Plato maintained that "the goal of aesthetics is not simply to copy nature [...], but rather employ the sacred ratios and proportions" (Olsen, 2006).

In 1509, Pacioli wrote a book called *The Divine Proportion*. Pacioli linked the ratio to God and the Platonic solids that symbolize earth, air, fire, water, and the shape of the universe. He became a math consultant to Leonardo da Vinci who later illustrated "The Divine Proportion" (Hauster, 2015).

By carefully balancing the ratios and proportions an artist can create an aesthetic harmony and utilises the principles of nature. Among many examples, the golden ratio is used in a ground plan of the Parthenon, Leonardo Da Vinci’s painting of John the Baptist or Salvador Dali’s Sacrament of the Last Supper.

Many designers proportioned their works to approximate the golden ratio believing this proportion to be aesthetically pleasing. It points out the logic behind their creative decisions and strategy. This knowledge and understanding can be used to discuss key cultural devices which can

then be applied to many practices. Nature and its connections bring the necessary diversity and scientific base to this study.

With all the effect nature has on our lives it seems logical to transfer the knowledge about the divine proportion. However, this wisdom is barely mentioned in the curriculums of academic institutions. It is because many confusing and polarizing claims have been made about its application and some link it to the realm of conspiracy theories (Meisner, 2018).

Quoting Hauster: "Mathematicians before Euclid knew that irrational numbers existed however they couldn't write down its value using integers and fractions" (Hauster, 2015). The golden proportion became widely known and for centuries scientists and engineers believed that the golden ratio was godlike. That myths aroused from very famous historical figures, in times when there were very close connections between religion, science, and math (Hauster, 2015).

SATISFACTION

Satisfaction or contentment is a broad class of mental states that humans experience as positive and worth seeking (Contentment,2020). It's linked to gratification, an emotional reaction of happiness in response to a fulfilment of a need, desire (Cambridge dictionary, no date). Gratification, like all emotions, is a motivator of behaviour and conditions us to desire and search for it (Gratification, 2020).

These definitions explain the process of satisfaction from work. Knowing the motivations behind human decisions is important for understanding aesthetic mechanisms.

Using this concept allows for exploration into a range of psychological fields such as questions of happiness and obsession. It is a medium for understanding the link between nature and beauty. It is the destination of the equation of design with principles of nature.

Design is a personal activity and springs from the creative impulse of an individual. The goal of the designer is the distinct pleasure of personal accomplishment (Armstrong, 2009). Michelangelo, responding to the demands of Pope Julius II replied: "It will be finished when I shall have satisfied myself in the matter of art" (Armstrong, 2009). Artists often sacrifice many aspects of their personal life through devotion to a craft of good design and legacy. Paul Cezanne feared that a single wrong brushstroke would ruin the whole piece, which led his work to "less is more" impressionist style. Another artist known for his long creation process is Leonardo da Vinci. He was the embodiment of the statement: "Quality takes time". Da Vinci completed only six paintings in the seventeen years he was in Milan. The satisfaction from his pieces was an ongoing obsession of his which he only sometimes managed to get.

Defining satisfaction is clearly as burdensome and laborious as the creation process can be. It shows the true key values needed to produce quality work. The Golden ratio provides a framework for the design decisions.

"A logo derives its meaning from the quality of the thing it symbolizes, not the other way around" (Rand, 1990, cited in Graphic Design Theory: Readings from the Field, 2009).

An inspiration for design is the golden ratio-based Apple logo. It displays how using nature principles can lead to good, successful design.

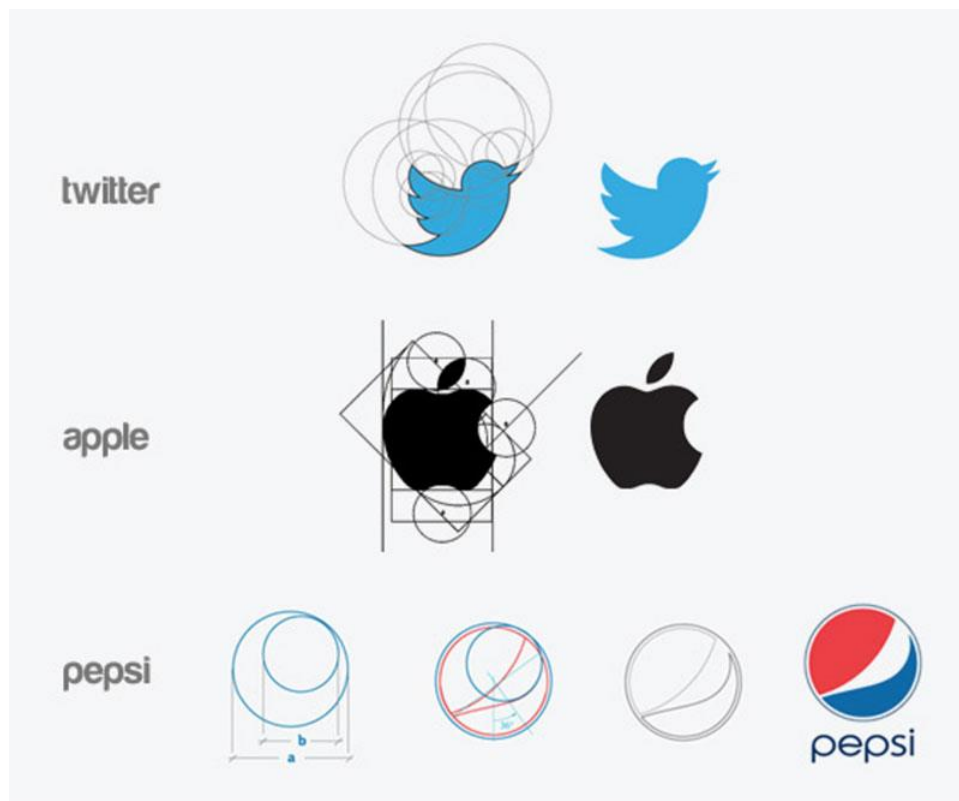


fig. 3.

Designing is a fundamental human activity that transfers to our everyday life. We are surrounded by artificial manmade objects. Our environment has changed dramatically through the latest century and people find themselves more and more dispatched from nature, spirituality and contentedly.

"Nature is always right outside our door as a reference and touchpoint. We should use it far more than we do" (Macnab, 2011).

There are many fields that are not based on mathematical, logical proportions but are effective and have a deep artistic impression. They are often based on pure aesthetic impression and expression of emotions.

Recently, David Cole, product designer at Quora, posted about the golden ratio in the Apple logo. He believes that "the Apple logo follows the Golden Ratio in the determined, mathematical way that you could make any shape fit a series of circles and triangles" (Wilson, 2013). According to Cole, Apple's logo appears to have some mystical aspect, but it doesn't.

"Real visual rhythm is hurt by precision. This fact is where we get the saying in design: if it looks right, it is right" (Cole, no date, cited in Debunking The Myth Of Apple's "Golden Ratio", 2013).

CONCLUSION

In this proposal, a wide range of concepts have been discussed. Varied books have allowed for insight into the subject of good design.

Graphic Design Theory: Readings from the Field explains the reality of design craft and the challenges artists face and the ways to avoid them. Through this study a whole host of new knowledge has been analysed.

Nature, Design and Science: The Status of Design in Natural Science investigates whether concepts and principles involving nature and mathematical design can be called science and be widely applied.

Life and artists such as Leonardo Da Vinci show how certain aspects of creative work remain unchanged for centuries. His intellectual and artistic possessions delight and inspire others to discover the methods and principles which he followed.

The key elements of this proposal are design, nature and satisfaction. They are far enough from each other to allow for free exploration into the subject and close enough that their link is not stretched and the interaction between them is strong. Each of them brings new aspects and opportunities to discuss. Thanks to this, the dissertation will be supported by a wide range of research and various sources of information and opinions.

This research showed how complex this dissertation topic is. Each of touchpoints leads to valuable information. Moreover, they state questions that haven't been mentioned before.

As such the main question the dissertation will answer is as follows:

How can we design our environment to be good for us?

And the three sub-questions are:

How does good design reflect our well-being? What rules must be followed to allow for good design? Can we live in a concrete jungle designed and modelled after nature and feel satisfied?

FIGURES:

Figure 1 Charles and Ray Eames Charles and Ray Eames. *First edition ESU Desk* Available at: <https://www.daniellaondesign.com/blog/modern-in-your-life-the-good-design-movement#> (Accessed: 09/04/20)

Figure 2 Caspar David Friedrich *Hunter in the forest* Available at: <https://www.welt.de/geschichte/article121019920/Preussische-Amazonen-im-Kampf-gegen-Napoleon.html> (Accessed: 08/04/20)

Figure 3 Logos based on golden proportion Available at: <https://wpamelia.com/golden-ratio/> (Accessed: 18/04/20)

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