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This essay will attempt to use the three keywords tactility, weight and interpretation to form a research question. The focus with the keyword interpretation will be on the design process, tactility will focus more on how we relate to it in a more general sense, and weight will address visual weight. Within tactility I will touch upon Filip Mattens and Johan Gottfried Herder, weight will touch upon Rudolf Arnheim and tactility will focus on research by Ethem Güner et al.

Tactility

Filip Mattens (2017) argues that all mammals and birds are covered by an integument that is sensitive to contact with a foreign object. This skin, except the human hand, is not being used for the purpose of perceptual examination of objects, but rather knowing that the body is being touched and where it is been touched. This is the most fundamental function of tactile sensibility, to act as a surveillance system for the entire body of the animal. Being able to perceive the properties of objects

differs from this surveillance function. (Section 2) The properties of an object is not important to this function, you do not sense the object and its features, but what the object is doing to that body part. (Section 3) There is tactility keeps an eye on our body" (section 5).

The material nature of an object can change without there being any noticeable change to the visual appearance of the object. "Presented with something unknown, one might see all there is to see and still have no insight into its material nature."

(Mattens, 2017, Section 4.1) Features like the hardness or malleability of an object is not necessarily discernible from the object's visual quality. These qualities can reside in a realm past what we are able to perceive with our eyes. Through previous tactile experience with objects with similar visual qualities you can distinguish these features. Material characteristics and material nature can be understood also by how the object reacts to mechanical interaction. This insight is acquired by studying how the interaction unfolds and effects the object. The act of touching is a mechanical interaction because a body part acts upon another material object. Touching provokes a response from the object and the response gives us insight into its material qualities. (Mattens, 2017, Section 4.1) We can use the information we get from touching an object to get a better understanding of the object in its entirety.

Herder (2002) claims that everything we perceive with our eyes are merely shapes arranged besides each other on a visible surface. Tactility and touch are a way of confirming the depth of the world we perceive with our eyes. (p.35) We use our own reason and tactile feelings to confirm the existence of an object. (p.36) Tactile feelings are determined by the object and how we touch the object. We can distinguish different forms of mechanical impact, for example a slap, a caress and so forth. Something hitting your back softly does not necessarily mean the object is soft

and if something soft hits your back hard you may not be able to tell that object is soft. We understand the sensory effects from an object based on how we touch it, and with them we can get insight into the material nature of the object. (Mattens, 2017, Section 4.2) “For how my body is acted upon is how I feel.” (Mattens, 2017, Section 4.2)

We may not know how a foreign object may respond to a particular interaction, but we know the tactile feeling we get when an object is touching our body. A tangible object resists the material object that is my body and it acts upon the skin that covers the body and creates a particular tactile feeling. (Mattens, 2017, Section 4.2) “For what are properties of bodies if not relations to our own body, to our sense of touch.” (Herder, 1974, p.36) The materiality of an object differentiates how the body is acted upon which results in a tactile feeling. Similar objects with different material qualities will feel different, even if they are to be touched in the same manner, due to how the individual material reacts to your body. (Mattens, 2017, Section 4.2)

Our skin is impressionable and it is something we can feel. We can adjust how we touch an object based on these feelings. Tactility can enable us to figure out roughly how easy it is to alter an objects condition without doing it. We can get insight into the material nature of an object by seeing or feeling how it acts upon our own body and we learn how the same object mechanically relates to other objects or potential bodies. We can predict how an object would act upon another object if we had acted upon it in the same way. We can assess what an object can do to us, what we are able do to the object, and how it interacts with other objects. (Mattens, 2017, Section 4.3)

From early life, we use our sense of sight and touch in union to increasingly understand different concepts accompanied by ideas derived from sight. The sensory

feelings we get from touching an object fuse together with what our eye sees and creates an understanding of the object. Eventually our ability to use sight to understand objects and concepts is more rapid than the slow act of touching. This uneven distribution means we no longer feel objects, yet it is what our understanding of the things we perceive, is founded upon. (Herder, 2002, p. 37-38) “In all of these cases sight is but an abbreviated form of touch. The rounded form becomes a mere figure, the statue a flat engraving. Sight gives us dreams, touch gives us truth.” (Herder, 2002, p. 38) With this in mind, it would be interesting to actively use the sense of touch more and try to rely less on the sense of sight.

Weight

Arnheim (2002) proposes that tensions influence how we perceive objects, just as much as size, shape, location, and colour. These tensions are not visible with the eye, but they are present, nonetheless. Take the circle in figure 1, it is slightly off-centre, and it is being attracted by something we are not able to see. In figure 2, the circle is closer to the edge of the frame, and we get the impression that there is less breathing room. There is a “correct” spatial distance between objects that our eyes can perceive intuitively. (p. 13) Weight is influenced by the location of an object. Various positions in the structural framework (figure 3) can support different amounts of weight. The centre can support more weight than an off-centre position can.

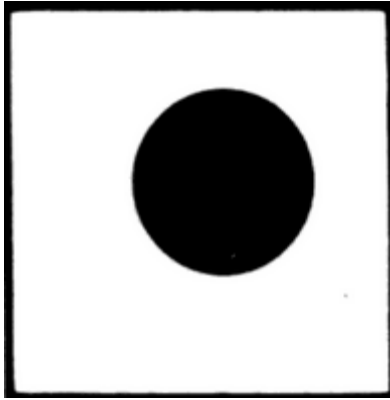


Figure 1. Square with black circle. From “Art and Visual Perception: A Psychology of the Creative Eye” by R. Arnheim, 1974, University of California Press. Copyright 1974 by The Regents of the University of California.

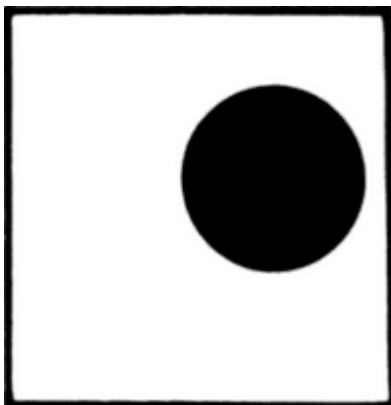


Figure 2. Square with black circle. From “Art and Visual Perception: A Psychology of the Creative Eye” by R. Arnheim, 1974, University of California Press. Copyright 1974 by The Regents of the University of California.

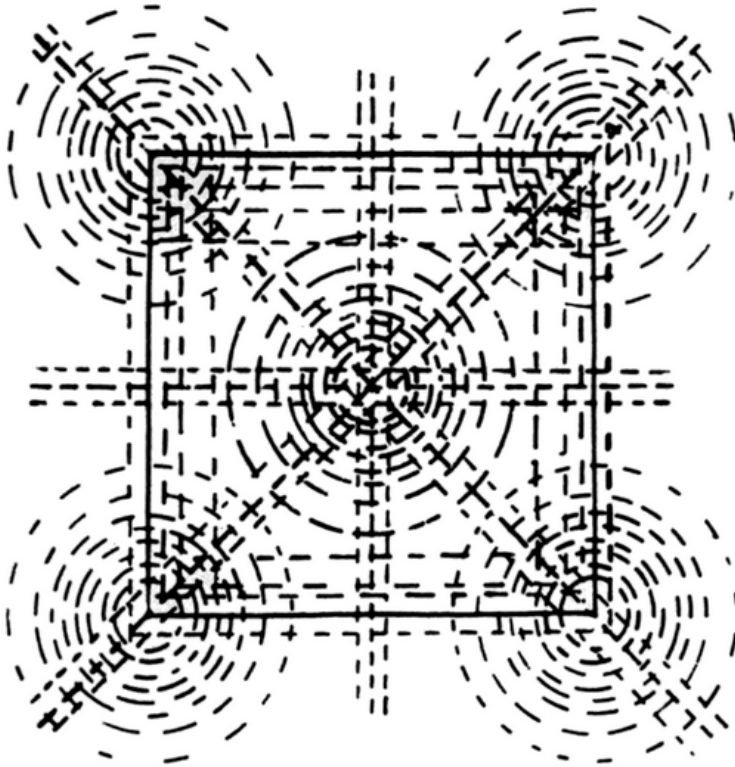


Figure 3. Visual framework. Square with black circle. From “Art and Visual Perception: A Psychology of the Creative Eye” by R. Arnheim, 1974, University of California Press. Copyright 1974 by The Regents of the University of California.

There are multiple factors that have an influence on how we experience visual weight. Spatial depth is one of the ways to influence how we perceive weight. More distant objects appear as larger and more substantial than objects located closer. Size can change the perceived weight of an element, bigger elements seem heavier than small ones. Bright colours are heavier than dark colours. Dark areas must be larger to counterbalance bright areas. If an object is isolated within a frame, it will seem heavier than an object with the same size, but with other objects around it. Shape can also influence weight, simple geometrical shapes can be seen as having more weight than less defined shapes. The amount of mass centred around the centre of an object effects the visual weight. Vertically oriented elements carry more weight than oblique ones. (Arnheim, 1974, p. 24-25)

Height effects the visual weight of an object. Because of gravity, we recognize that to rise upward is to overcome resistance and to descend is to lose to gravity. Potential energy is higher the further away (up) from the centre of gravity an object gets. An object carries more visual weight if it is placed higher up. Intrinsic interest can affect how a pictural or sculptural piece is perceived, either because of the subject matter or because of its peculiarity. If the beholder finds some aspect more fascinating than others, it can also create a balance with other objects. There are numerous ways of creating visual balance. Isolation can counterbalance size, spatial depth can offset dark colours and so forth. Light objects can create counterbalance if positioned correctly due to their weight and placement, in relation to a heavier object. All elements must be regarded together when it comes to weight and balance. The “correct” spatial distance between objects, can be important to establish a balance between objects, but it is the entirety of the composition that is the most crucial. The different opportunities and combinations can make for a more dynamic experience. (Arnheim, 1974, p. 25-26) When adding together all the different ways of creating visual weight it becomes apparent that utilizing these tools to create visual balance can be done myriad ways. (Arnheim, 1974, p. 29)

Interpretation

Hermeneutics is the study of interpretation. Hermeneutics is often present when dealing with the human experience, which requires an interpretive approach.

(George, 2021, 1st paragraph) Within hermeneutics there is an emphasis on the circularity of understanding, which is often referred to as the hermeneutical circle.

This concept signifies that a new understanding in interpretive experience, is derived from new interpretation of further possible meanings of previously rigid beliefs. This

circle can continue indefinitely if you let it. At some point it is important to look at the entirety to understand the parts it is made of and conversely, the individual parts must be understood to understand the entirety. This way of thinking does not mean that you build higher and higher, but deeper and deeper. (George, 2021, 1.3) With this approach to design, you will never reach an end point, but continually evolve the concept.

The rigid beliefs previously mentioned are often referred to as pre-understandings. These pre-understandings can be valuable for a designer, giving them a foundation to produce concepts out of and to give said concepts meaning. Interpretation offers the designer new understandings of the design situation and increase the comprehension across the sequence of interpretations. (Gürer et al., 2017, p. 158)

The hermeneutical circle is evident in a design process. The design process can be broken down to two subprocesses: the diverging act of playing and the converging act of construction. These subprocesses are good examples of the hermeneutical circle. The playing subprocess has no objective rules or judgements. There are multiple possibilities being revealed because of no pre-existing guidelines to lead the search. (Gürer et al., 2017, p. 161 & 163) Adding meaning, objectification and rationalization changes the process into a construction process, where you arrive at specific ideas by means of design strategies and rules. These design strategies and rules tend to validate meaning uncovered in the playing subprocess. From these sets of rules and design strategies, new understandings and relations are formed. The circular nature of this process is illustrated in figure 4. (Gürer et al., 2017, p. 163)

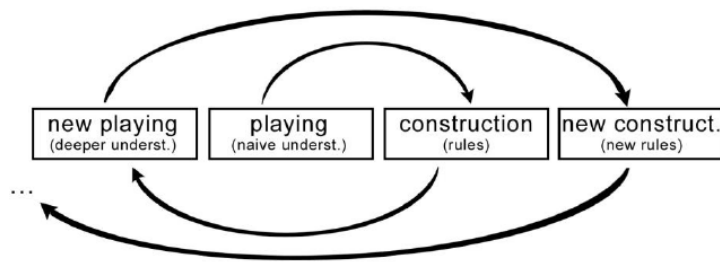


Figure 4. Diagram of how the playing and construction sequences correlate in design process. The role of interpretation in basic design, accessed 4 May, 2022, by E. Gürer. https://www.researchgate.net/figure/Diagram-of-how-the-playing-and-construction-sequences-correlate-in-design-process_fig5_290025470

An effective method of keeping track of previous interpretations and at the same time form new relations, is to implement writing into the design process. This externalizes the design actions taken, removing you from the role of a designer and becoming an interpreter of your own process and actions. Writing forces you to reflect on past and present design actions. Simultaneously, it processes the previous relations to create new understandings used to create new variations to explore. (Gürer et al., 2017, p. 169-170) Visual relations transformed to writing opens new design possibilities. Using writing as part of the design process, fixates our views on the project in an illustrative way and creates a web of future actions to explore while building up an understanding of change in the design process. (Gürer et al., 2017, p. 160)

The unannounced and unexpected results of playing require validation of their usability by applying a general rule or strategy to variations of the results or similar design situations. This practical reasoning is essential to the design process, but it is important to be mindful of it. Writing creates distance between the designer and their work and thus giving the opportunity to reflect. (Gürer et al., 2017, p. 171) Practical

reasoning can be found in the double diamond design process. The convergent and divergent processes (playing and construction) is essential to the double diamond process. (Humble, 2021) The double diamond process is a good visualisation of the differences between the playing process and the construction process. The double diamond process has a more defined ending and thus, can be easier to implement into your own design process.

With the motive of improving my own design process, being aware of the different topics discussed above, will give me a better understanding of my own process, and give me tools to develop more holistic designs to a higher standard. Tactility and weight can be viewed as characteristics of an object and interpretation, on the other hand, can be thought of as an essential component of the entire design process. (Gürer et al., 2014, p. 158) It could be beneficial to experiment with different ways of structuring the design process based on the knowledge of how interpretation in combination with writing, can elevate my personal design process.

Visual balance can be achieved in many different ways and could be used in conjunction with tactile experiences to generate new interpretations and create new understandings. When reflecting upon my previous design processes, the time spent assessing the visual importance of an object has far outweighed the time spent assessing the tactile importance. Focusing more on new interpretations from tactile experiences could yield different and possibly better results. One area that could benefit from this is inclusive design. With this in mind, my research question is: How to utilize the knowledge of interpretation in the context of design, with focus on tactility and weight in a design process? Further questions to help support the

research question could be: How can writing be implemented into this process? What can be gained in a design process by focusing on interpretation, tactility, and weight?

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