

Adam Higgins

1700155

Research in Context – ADAD6001

BA Product Design

Dr Julia Lockheart

Supervisor: Dr Pete Spring

How do designers create deeper relationships between users and products?

Word Count - 6192

Submitted in partial fulfilment of the requirements for the degree of BA (Hons) Product Design,
University of Wales Trinity of St David, Swansea, 13th December 2019.

Table of Contents

List of Illustrations	2
Introduction	3, 4
Chapter 1	5
Value is a very important aspect of design	5, 11
Chapter 2	12
The relationship between Affordances and Value	12, 16
Chapter 3	17
Relevant?	17, 20
Conclusion	21, 24
Reference List	25
Bibliography	26, 27

List of Illustrations

Figure 1: Design and the creation of Value.....	10
Figure 2: A process framework of affordances in design.....	14
Figure 3: Automatic Sliding Door	18
Figure 4: Door Knob	18
Figure 5: Facebook Scandal: Who is selling your personal data?	19

Introduction

The aim of this study is an attempt to discover how product designers create deeper relationships between users and products. Within the design world today, there can be a disconnect between users and products due to various reasons. There is no consistency between products. Some products offer just a function to users, some have massive influence on users and others value to users. This inquiry will aim to suggest whether this is something a designer can control, but also exploring and investigating deeper into the ideology of certain things which can influence relationships. The idea of a relationship between a user and product is what makes user value a product. Therefore, this inquiry has lead me to research the idea of value within products and how value can create and influence deeper relationships.

There are many areas which you can explore to discover the idea of *value*, such as such as co-design, product interactions and semiotics. However, due to the constraints of this inquiry, I have chosen to focus on three detailed areas which are translated into three separate chapters. These are; value, affordances and relevancy. These will be the basis and layout of the independent inquiry, where multiple methods, theories and idea's of how designers can create connections will be evaluated. For example, within these chapters, I will study and discuss many sources of information, some of which are well recognisable such as J.J Gibson, Donald Norman, and Karl Marx. In chapter 1, I will be discussing value in relation to products and users. How value is defined in design and the different types of it. The types which we may not think of at first but in the end are very much contributors to value. In chapter 2 I will discuss the idea of affordances and their relation and link to

value. Additionally, questioning how they can be used to help build and create a relationship. Finally, in chapter 3 my aim is to discuss how all of this is relevant in today's society. Today, trends, society and technology are constantly changing so we have to look at whether these past theories and ideas are still current and relevant. Within each chapter there will be a set of main questions addressed, What makes a relationship? How are relationships formed? What influences that? Is it something a designer can control?

Within this essay, I will be evaluating several sources, as well as comparing theorists' beliefs in regards to their idea of value and affordances, investigating how these create relationships. Additionally, I will fuse and contrast these with contemporary sources. These are current ideas and beliefs which will enable me to get a better understanding of what is relevant now in today's design world. For example, looking at recent news articles enabled me to realise how relationships are woven between users and products. This inquiry is important to try and understand what creates a relationship between a product and user, a deeper relationship, one which will make people value, appreciate, understand, connect and create an experience.

Chapter 1 – Value is a very important aspect in product design.

Value defined by Oxford Dictionary is, 'the regard that something is held to deserve; the importance, worth, or usefulness of something.' (Oxford Dictionary, 2019) This suggests when something has value it has a true meaning, it has a status or it has a deeper understanding to it. People will relate to these values individually. Values can also be defined as 'Principles or standards of behaviour; one's judgement of what is important in life.' (Oxford Dictionary, 2019) this suggests products have value, it can either have great significance to one individual but also no significance to another. It's how a person reacts to the sense of value and if that value or 'standard' is something they believe in or something which is important to them in life. To each individual, there is a certain point when it has value to them. Oxford Dictionary (2019) Values can be defined as the affordability, comfort, or how sustainable a product is. Additionally, it can be measured by how well a particular product fits in your pocket or in your hand. This co exists with the idea that everyone has their own set of values. It suggests in the creation of a product, a designer would have to consider the different 'standards' of the users and their level of importance to them, Oxford Dictionary (2019). How these values are measured up against one another is a key part of designing.

As stated by Karl Marx, 'The value of a commodity can be objectively measured by the average number of labour hours required to produce that commodity.' (Marx, 1865, p. 27-35) In relation to design, Marx's theory can be used to understand part of the idea of value within a product. When applying this, it would give the notion that the more time it takes to produce a product from start to finish, the more valuable the product would be. Therefore arguing that the more labour

hours worked on a product, overall the quality of the product will be better which to the customer would bring more value.

A book on '*Creating Value by Design : Thoughts*' suggests, 'We need to abandon our obsession with adding extra functions and fancy gadgets to products. Instead, we must enhance the quality of the consumer experience by making products easier to use. (Marzano and Philips Design, 1999, p. 15) This illustrates that quality is a key factor when it comes to buying products. Quality can come under many things but one example is consumer experience. Consumer experience is the interaction between the user and the product. Good user experience would be a product leaving a good impression on the user, wanting them to keep coming back to use the product. The quality of user experience can influence the value of a product, as a designer embedding quality in a product, from the quality of finish to the quality of user experience can enhance that sense of value. A better experience would suggest that they have found the product useful, enjoyed using it and satisfied with its function. This idea of better quality can evoke more appreciation towards a product.

Prasad Boradkar, author of *Designing Things, A critical Introduction to the culture of objects*, states that 'Value is therefore perceived as the capability of things to satisfy the physiological, cognitive and emotional expectations of people' (Boradkar, 2010, p. 64). From this perspective of Boradkar, he demonstrates that people who can relate to a product on an emotional, physiological and cognitive level will value a design much more. For example when users buy products there is a physiological thought process they will undertake. Many values would be thought of, one of which could be quality. This makes the design process much harder as a designer, you have to spend time to understand your user and truly immerse yourself

into what they would want. If you can do this, it's only then when someone will see the 'usefulness, worth and importance' (Oxford Dictionary, 2019) of a product. This is a definition for value but it also defines quality. All of the mentioned ideas are linked. They go hand in hand and have several connections of how designers create that sense of value. With the use of Marx's theory of more labour hours which would result in a better quality products, Marzano Philips idea of abandoning 'extra functions and enhancing consumer experience' (Marzano and Philips Design, 1999, p. 15) and the idea of satisfying users expectations from Broadkar, they all would enable you to have a better understanding of how to add a sense of value to a product. If you can use the more labour hours to your advantage and focus on a better experience, interaction and user needs then ultimately you can create value. Value in a product can highlight the design and not just the overall product. This means, the details in the design, how its made, the materiality and the wider context of it, not just this tangible object.

Although these ideas are well-evaluated theories in regards to value, value in today's world is changing and will always be changing, Marx's theory of value was the forefront at his time but not necessary at the forefront today. Today,

'The challenge for designers, and indeed for everyone in societies is that they are entering the third wave, is to discover the new relevant benefits and qualities – the qualities that products and services will need to have if they are to discover the aspirations and dreams of those who use them' (Marzano and Philips Design, 1999, p. 5)

Therefore, this quote defends the idea that the design world is constantly changing. Suggesting we are going into a third wave already shows Marzano thinks the world has changed several times before. What people want and truly value is massively influenced by changing trends, society and new technology, this results in many peoples values changing. The questions raised is, will the trends still be the same in 50 years time? For designers to be able to have their design values recognised they need to keep up with changing times and understand their users. This emphasises the importance value holds in product design. Otherwise a designer's product will not be seen, it will not stand out and the characteristics of it will not be valued. For example, with the big focus on sustainable design in today's society, if one is entering a market full of sustainably focused products with a single-use product a customers will not value the product. Therefore, creating value in a product, so the user can relate to it would enable the users to think deeper about the design and form deeper connections towards the product and ultimately buy the product. They will understand why they are buying the product instead of impulsively buying something just because it's the next big thing.

Design shouldn't be a second thought, 'It is sometimes said that there is no such thing as good or bad design, that it has no real measurable standards, this it is, in fact, just a matter of personal taste. But it is readily accepted that there is a standard of, say honesty, or driving, or housing, so why not design?' (Heskett et al, 2017, p. 185) This suggests that people don't have the same thinking process or decision making process as they do when buying houses for example. In design there are certain buying standards that users have when deciding on buying a product. Away from the cliché buying questions such as is it good quality? Or it a good price? Why don't people raise the questions, why have they used that

material? why is it this size? the questions in which the producers of the products are asking themselves? This could be because there isn't a connection between the user and the product, or the relationship between the two stops at a certain point. For example most users do not make links between a product and its material because there is nothing there to give the user a signal to make that link. Or is it just how it should be, the designer designs and the user uses. As a designer myself, I think designers should be encouraging users to value their products, make them understand the product right down to the details. It's a designers job to add value to the product and to make those standards be seen.

Value can be added to a product by 'restoring the traditional sense of friendship between consumer and product' (Marzano, Stefano., and Philips Design (1999). p. 15). A sense of friendship can create a connection between a consumer and a product like it does between two friends. People can understand better when they can make a connection, there's something there they can relate to. Just like two friends have things in common, that's usually why they're friends, therefore forming a relationship. When having the ability as a designer to create a connection between a product and the user you're creating much more than just an object for the user to use. A designer can embed this connection very early on in the design process, it takes a designer to spot this connection, most of the time the connections a user's need. However, users will not even know they need the product until it's presented to them. Suggesting, a designer can embed a connection in a product would also suggest that they can embed value to the product. If researching and sketching is part of the design process then why isn't deep creative thinking such as creating value not part of the process?

Some designers may disagree with the idea of creating value as it is ‘Only when an idea is embodied in a design – encapsulated into forms that are relevant, comprehensive, useful, accessible, affordable or pleasurable in the lives of users – can we truly speak of innovation, of creating new value’ (Heskett, 2017, p. 159). A key point in this passage is ‘only when an idea is embodied in a design’. It suggests that it is the idea that has the value. It’s not a matter of a designer adding value during the design process or halfway through sketching they think how can I add value. It’s the initial idea which carries the value. When the idea is made into an end product, it includes the characteristics mentioned in the book. It is full of usefulness, affordability, pleasurable interactions, this is when the product is valued. We can’t forget the link between the idea and that idea being used in peoples lives. It cannot go unnoticed that a user will only commit to buying a product if they can fully see themselves using it to perform whatever function the product is intended on doing. Value, therefore, I believe it is not something which is to be added to a product, it is something that is in the product from the start from that first initial idea.



Fig 1: Design and the creation of value.

Referring to Figure 1, Value can be created in other means than what we have discussed already. Value can be created after a product has been, manufactured and sold. Most products are put into product markets of similar products. So when products are made there is no idea that value can be added to them after they are released and purchased. Users who buy the products will interpret a product how they think best fits, they will sometimes use a product in a way in which it is not supposed to be. They will see it differently, use it differently, hold it differently and interact with it differently. When this happens it may create new value, or as Marx's describes it as use-values.

This type of value is an unseen value or most commonly known as 'use-values are to do with the quality of objects and are only realised in use or consumption whereas exchange values are quantifiable in terms of other commodities.' (Marx, 1976, p.126-128)

Only when the commodity (product) is in the user's hand is when the true value is recognised. As a designer, you can communicate this underlying connection between user and product so when a user just looks at a product they relate to it. However, that can all change when the user holds, interacts or uses the product for the first time. This type of interaction is defined by J.J Gibson as Affordances. Being able to touch, feel and interact with a product generates much more value or emotion or on the hand it can trigger the opposite and generate a sense of nothing. Objects (products) all have their own language and when in the hands of the user this is when a whole new level of value can be created.

CHAPTER 2 – The relationship between affordances and value

Following this new level of value, an affordance is defined by the Cambridge dictionary as ‘a use or purpose that a thing can have, that people notice as part of the way they see or experience it’ (Cambridge English Dictionaries, 2019) It is that signal that the user gets when they look at an object. A good signal would be able to tell users how to interact with that object. In design, products are full of affordances, some may be so obvious that it causes one to not recognise them as they are easy to understand, it's just part of the product.

J.J Gibson states ‘The perceiving of an affordance is not a process of perceiving a value-free physical object to which meaning is somehow added in a way that no one had been able to agree upon; it is a process of perceiving a value-rich ecological object’ (Gibson, 1986, p. 140) This is suggesting that affordances are something which are enriched into objects from the moment of their conception. They have always been in the object from the start. It is down to the user to use the visual information that the object is communicating to them and react accordingly. It also implies that affordances are only in objects that hold value. As discussed in the previous chapter, there is the idea that values are embedded in products from the beginning. If you are able to create a product which has value then affordances within the product are something which will be in the product no matter what. As a designer, you don't need to design affordances into a product as a well designed and valued product will automatically have these signals, communications and object language embed into it. It is in the design process where they are created by the designer's design thinking. Therefore, we can say affordances are visual languages in products. In Addition, well designed products are inclined to have affordances

woven in the product. These affordances make a deeper relationship between the user and the product.

Donald Norman shares very similar opinions on the topic of affordance, he suggests 'an affordance is a relationship between the properties of an object and the capabilities of the agent that determine just how the object could possibly be used' (Norman, 2013, p. 11). It suggests that the users will try to find a connection to objects. The connection may answer how they use an object, how to pick up an object or how they should hold an object. 'Good design requires, among other things, good communication of the purpose, structure and operation of the device to the people who use it.' (Norman, D 2013, p. 14) As a designer, you have to make sure that your design is clear. It should be so easy to understand that the user can jump straight in and know what they're doing without being confused. Good communication in a product is a good value to have. It enables the user to use little or no effort to operate it. Affordance is that little link from the user to the object. These links are very useful to the user, it gives the user better experiences. They create a smoother interactions and eliminates any mental barriers of confusion and uncertainty and ultimately leads to the users recognising a products worth. A sense of value is added to a product when a user can recognise an affordance. Affordances, therefore, can create a deeper level of thinking between the user and object, a level which may not be obvious at first, if at all, and the user may never notice the connection or link. But it adds another level of value, this type of value is a relationship.

However, Norman also defines 'an affordance is a relationship' (Norman, D 2013, p. 11) he describes an affordance as a relationship, although discussed

above, focusing on the word relationship is key when talking about how designers embed deeper connections and values between products and users. The term relationship as described by the Oxford Dictionary is ‘the way in which two people, groups or countries behave towards each other or deal with each other’ (Oxford Dictionary, 2019). In relation to design, it suggests that the way a product and a user behave towards one another can vary, there are good and bad ways of behaving towards each other therefore there will be good and bad relationships between the two.

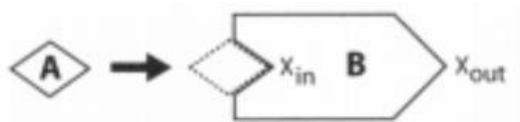


Figure 2
Behavior (B) as a construct that provides input parameters (X_{in}), representing relevant properties of affordances (A), and output parameters (X_{out}), representing the measurable states produced.

Fig 2: A Process Framework of Affordances in Design

The article, *A Process Framework of Affordances in Design* states that ‘Figure 2 consists of two shapes that symbolise affordances and behaviours, respectively. For affordances to interact with behaviours, there needs to be a “fit” between the two.’ (Kannengiesser, 2012, p. 3). Therefore, Figure 2 suggests that the ‘fit’ needed between the two, behaviour and affordances, can also be interpreted as a relationship. It’s the coming together of these two things that create a relationship.

So a user and a product would need to find a fit or a sense of relationship for there to be a positive outcome and for users to recognise the affordance.

The point being, as a designer, if you can create a good relationship between the two then the user would be able to have a better sense of connection towards a product. Connections are positive, they create a sense of bond, promise and loyalty, which will lead to the user understanding and valuing the product more.

If, however, there is no 'fit', an affordance may not be produced because a connection wasn't able to be made. People make connections when buying, looking, touching and using products, they do so by 'by grouping similar elements, recognizing patterns and simplifying complex images' (Interaction Design Foundation (2019)). This suggests the reason behind us not being able to make connections to products is due to the lack of knowledge. There is no previous knowledge of 'similar 'elements' or 'patterns' in this new product we are interacting with. Our brains are almost lazy and will only look for the things we already know before thinking any deeper into the product. A principle from Gestalt theory, 'Meaningfulness (Familiarity): We group elements if they form a meaningful or personally relevant image.' (Interaction Design Foundation, 2019). This suggests that when we interact with a product and that initial link or relationship is formed, where the mind tries to take steps to understand the product. This is where the mind makes sense of anything relevant to their existing knowledge. Users will only recognise the value a product has to them if the affordances are recognised. If the mind can't instantly makes any sense of it, this is when you become confused and the affordance and values are not recognised.

As a designer, this is a challenge when creating products, especially products which no one would have seen before, how are you going to get your user to create

a relationship, understand, value and connect with the product? It comes down to the execution of the product idea, the research and how these are embedded or communicated into the product if you can get

‘our brains to combine information from our eyes with data from our other senses, synthesize it and drawn on our past experiences to give us a workable image of our world. This image orients us, allows us to comprehend our situation and helps us to recognise significant factors within it.’ (Barry, 1997 p. 1)

If the brain can make small but significant links from our knowledge, experience and senses then we can piece together the bigger picture or more specifically the affordance and values in a product.

Overall, our brains are very clever at making links, creating relationships and creating connections. To be able to have affordances in a product it creates a deeper meaning and deeper connection between user and products, its another level between the user and product and not just a tangible object to the user. Affordances make the process easier for the user, it makes it easier for them to understand and overall bring a positive and better user experience.

Chapter 3 – Relevant?

Will values exist in products in 50 years time? Or do designers have to change the way they apply value and affordances in products? These are questions that were raised from the previous chapters, which lead into the investigation of the relevancy of value and affordances. As briefly discussed earlier in this piece of writing, 'The challenge for designers, and indeed for everyone in societies is that they are entering the third wave, is to discover the new relevant benefits and qualities – the qualities that products and services will need to have if they are to discover the aspirations and dreams of those who use them' (Marzano and Philips Design, 1999, p. 5) This sense of the third wave is so relevant today. Technology, society, trends are changing, always will be changing. In order to write about how values and affordances can create deeper relationships based on past theorists and past ideas it would be naive, we have to look at what is relevant today.

D. Norman states, 'A doorknob has the perceived affordance of graspability. But knowing that it is the doorknob that is used to open and close doors are learned: it is a cultural aspect of the design that knobs, handles, and bars, when placed on doors, are intended to enable the opening and shutting of those doors.'

(Norman, 2013, p. 11). This is one of Norman's most common examples of affordance, if we were to deconstruct this and apply it to life today, we will see that this sort of affordance is different. From chapter 2, we have learnt that affordances are relationships, and how users interact with a particular thing, object or design. So with this theory in mind, it raises questions. What happens when you bring new technology, a new generation of people and a new type of doorknob? How many doors do you walk through today where you use a doorknob or handle? The

perceived affordance of graspability does no longer exist. For example, Figure 3 and 4 demonstrate the visual differences.



Fig 3: Automatic Door



Fig 4: Door Knob

Many doors in this day and age do not require a doorknob, as seen in figure 3. The doors are automatic, using technology to sense when a person is close and wants to enter or exit the door. When the individual is close enough, the door will open for them. The new and younger generation of people don't have any previous knowledge of doorknobs and handles so their perceived affordance is a sense of walkability, can they walk up to a door and walk through it. This is where designers have a challenge if they designing a product for the new generation.

The point made here is that; are affordances still relevant in today's design world?

Chemero suggests that the "affordances do not disappear when there is no local animal to perceive and take advantage of them." (Chemero, 2003, p .181) He suggests that affordances will always be in objects even for example when there is no user to use a product, that affordance is still embedded into the product. It is always ready to be used and interpreted by the user. So with regards to future generations and changing times, it's not a matter of affordances not existing, there will always be affordances just a new set of them, different types which we wouldn't

have thought of before. The doorknob could well be a forgotten affordance, Normans example, although a very clear and understandable, today can be seen as outdated.

Value is an important way to embed relationships and connections between users and products. Does the sense of value in products change with time? Or is this something we can always expect in the product after all. Values are 'the regard that something is held to deserve; the importance, worth, or usefulness of something.' (Oxford Dictionary, 2019) The definition will never change, but what users value will. A great example of this is the Facebook data scandal. Not even within 50 years, but 4 years has seen how users can change their values towards a certain product. Figure 5 shows that although this is a digital product it is still very relevant. When Facebook started, users loved the network, loved the idea of sharing their day to day life, they found it rather 'useful' and some would even go as far to say that it was an 'important' part of their life. Oxford Dictionary, (2019)



Fig 5: Facebook scandal: Who is selling your personal data

When the news hit that Facebook was selling personal data to third party companies people's values changed. Users valued their personal data more than posting a silly picture of their dog or what they had for dinner the night before. The realisation of what's important in this digital product is no longer the same. Its most

likely that relationships will not last forever, as time goes on, peoples values change and the original values go out of date. A Book by Jonathan Chapman and Nick Gant, *Designers, Visionaries + other stories*, discuss the idea that over time 'both functionality and aesthetic attributes become outdated, relative to later models, and so the value of those attributes becomes diminished' (Chapman and Gant, 2007, p .69) These attributes are seen by users as the most important attributes when buying a product. But also these attributes are the first to be redesigned and reworked when creating a new product. So naturally, these are the first to be recognised as 'outdated' or valueless. (Chapman and Gant, 2007, p .69)

When discussing value in products in relation to their relevancy, 50 years on from when a product was first created, the initial value goes through a journey of evolution and the type of value or the meaning of the value changes. 'Value can be restored' (Chapman and Gant, 2007, p .69) Discussed by Chapman and Gant (2007) the idea of restoring value comes in different types, artistic value, use value, sentimental value and exchange value. The idea of a product's value changing over 50 years steers me towards the example of museums. Museums are an example of how objects and products gain a sense of artistic and sentimental value. They are displayed in a place of safety due to the cultural and social values and relevancy they have gained over the years of their existence. Not forgetting their original value, Chapman and Gant state that the 'original value would have been primarily their use-value, coupled with their 'newness' (Chapman and Gant, 2007, p .70) Objects and items that have landed a place in museums at one point of time would have held that sense of 'newness' and original value. This makes them relevant. It concludes me to think that value is something which is not lost in a product but it is something which changes.

Conclusion

It's clear this essay has shown that the main factors, both value and affordances have major influences on how a designer can embed deeper connections and relationships between a user and a product. The ultimate goal of doing is the hope to create an overall better experiences for users. These experiences can make a product more than just a tangible object. There is a clear link between value and affordances, they go hand in hand. Value on its own creates connections between the user and the product. As discussed, value is something which holds the sense of importance, worth and usefulness. Having these attributes in a product creates meaning, meaning in which users can relate to. Each attribute start to form a relationship between the user and product.

How do designers create this sense of value? As explored in the main body of this inquiry, there are many ways and different approaches as to how value is created. A strong argument which was discussed was the idea of value is natural and is something which is part of the product from the start, its part of the original idea that the designer has. I agree with this statement as the original idea is the creativity which designer has. There must be some sort of value which the designer notices for the idea to be taken forward and developed into a product. Creativity is important part of designers skillset, it what allows them to create products, as defined by Sir Ken Robinson 'creativity as I define is the process of having original ideas that have value more often than not comes about through the interaction of different disciplinary ways of seeing things.' *Do schools kill creativity* (TED, 2007) Ideas that carry value is what users can relate to when interacting with the product. Although this is true, value can be interpreted differently by different users. All users

are going to have different values and are going to appreciate things differently. This includes what they believe a certain product should be able to do, will be different to someone else. Whether it be the quality of a product which generates a good impression or the experiences or excellent function which makes the process of interaction much easier and better for the user. These are all values in a product but it comes down to how the user measures that value. Value can not only provoke an emotional, physiological and cognitive response but it can has the potential to enable users to understand and connect deeper to a product. This is ultimately highlights the design overall including its materiality and detail, together with the wider context of the product.

Values can be the function, the experience or the relationship of the product but one which we don't necessarily notice is the affordances. Well thought of and well-designed products have affordances in them. These products will have links, these links are what the user uses to interact and form a connection with a product. Affordances make it easier for users to interact with products its almost like a language of signals which the user will receive. This is where value links with affordance. Value is added between the user and product when the user can recognise its affordance. These affordances as discussed in the main body are something which is always in the objects and products, from the start and not necessarily added to the product. As a designer, you don't need to concentrate on how you add affordances to a product, but more so concentrate on the designing and execution of a creative idea. If you have a well designed and valued product, affordances will be embedded in products as signals, communications and it's visual language. But also it's the communications, signals and values which create this

deeper level of thinking between the user and product. this creates relationships or builds on the current relationships between a user and product.

Most people understand how relationships work, a good relationship would amount to positive things. In terms of products, this would mean the user experiences with products, the interactions and connections. Being a designer, if you can create a positive experience or interaction between the two, then the user would be able to have a better relationship with a product. However, a bad relationship can cause a negative outcome. Value and affordances may not be recognised. It is my job as a designer to avoid the latter of these outcomes. The human brain can become lazy, we will not think deeper about things unless we really have to. We will only look for the things we already know. Users today want it all on the plate ready for them they don't want to have to think about how to open or close a water bottle. These relationships which a designer creates come down to the execution of a product, the idea, the research, the whole process of design. If you can enable your users to make small but significant links from the design knowledge contained within the product through their experience and senses, then you can allow the user to see the bigger picture or more specifically, allow them to see the true value of products.

So how do designers embed deeper relations between users and products? To conclude, a simple hierarchy demonstrates the process of creating deeper relationships influenced from this inquiry.

VALUE
creates
WORTH, FUNCTION & EXPERIENCE.
to be able to acknowledge these,
AFFORDANCES
are used which create,
CONNECTIONS, SIGNALS & INTERACTIONS
these then create a
RELATIONSHIP
this allows you to
UNDERSTAND
CONNECT
ENJOY
EXPERIENCE
BOND
and ultimately
MAKES YOU VALUE
it
ADDS A DEEPER CONNECTION BETWEEN USER AND PRODUCT

I think what I have gathered from this inquiry about how designers creating deeper relationships is that a lot of things stem off from the idea of value. The relevancy of value this in a constantly moving world of design trends and technology is something which goes on a journey and changes. Value is something which will always be in products, something which we will always be able to relate to but most importantly something which will always create a deeper relationship between the user and a product.

Reference List

- Barry, A.M. (1997) *Visual intelligence : perception, image and manipulation in visual communication*, Albany, New York: State University of New York Press.
- Boradkar, P. (2010) *Designing things : a critical introduction to the culture of objects*, Oxford: Berg.
- Cambridge English Dictionaries, (2019) *Affordance*. Available at: <https://dictionary.cambridge.org/dictionary/english/affordance> [Accessed: 27th November 2019]
- Chemero, A. (2003). *An outline of a theory of affordance*. *Ecological Psychology*, p. 181–195
- Dant, T, (1996) *Fetishism and the social value of objects*. Lancaster: Dept Sociology,
- Heskett, J. (2017) *Design and the creation of value*, London : Bloomsbury Academic.
- Interaction Design Foundation (2019) *Gestalt Principles*. Available at: <https://www.interaction-design.org/literature/topics/gestalt-principles> [Accessed: 15th November 2019]
- Gibson J.J. (1986) *The ecological approach to visual perception*, New York: Psychology Press.
- Marx, K. (1976) *Capital: Volume One*, Harmondsworth, Middlesex: Penguin Books.
- Marzano, S. & Philips Design, (1999) *Creating value by design : thoughts : facts from Philips Design. Vol.1, Thoughts. Vol.2, Facts from Philips Design*. 2nd ed., London: Lund Humphries.
- Oxford English Dictionaries, (2019) *Value*. Available at: https://www.oxfordlearnersdictionaries.com/definition/english/value_1?q=value [Accessed on: 2nd December, 2019]
- Oxford English Dictionaries, (2019) *Relationship*. Available at: <https://www.oxfordlearnersdictionaries.com/definition/english/relationship?q=relationship+> [Accessed on: 2nd December, 2019]
- Norman, D (2013) *The Design of Everyday Things : Revised and Expanded Edition*, Boulder: Basic Books.
- TED (2007) *Do schools kill creativity*. Available At: <https://www.youtube.com/watch?v=iG9CE55wbtY&t=853s> [Accessed: 20th November 2019]

Bibliography

- Barry, A.M. (1997) *Visual intelligence : perception, image and manipulation in visual communication*, Albany, New York: State University of New York Press.
- Boradkar, P. (2010) *Designing things : a critical introduction to the culture of objects*, Oxford: Berg.
- Brown, D & Maier, J. (2015) *Affordances in design*. Artificial Intelligence for Engineering Design, Analysis and Manufacturing
- Cambridge English Dictionaries, (2019) Affordance. Available at: <https://dictionary.cambridge.org/dictionary/english/affordance> [Accessed: 27th November 2019]
- Chemero, A. (2003). *An outline of a theory of affordance*. Ecological Psychology, p. 181–195
- Dant, T, (1996) *Fetishism and the social value of objects*. Lancaster: Dept Sociology,
- Garegnani, P. (2018) *On the Labour Theory of Value in Marx and in the Marxist Tradition*, Review of Political Economy.
- Heskett, J. (2017) *Design and the creation of value*, London : Bloomsbury Academic.
- Heatherwick, T & Rowe, M (2015) *Thomas Heatherwick : making Revised and expanded*.
- Interaction Design Foundation (2019) *Gestalt Principles*. Available at: <https://www.interaction-design.org/literature/topics/gestalt-principles> [Accessed: 15th November 2019]
- Gibson J.J. (1986) *The ecological approach to visual perception*, New York: Psychology Press.
- Kohler, W. (1947) *Gestalt Psychology*, New English Library.
- Lidwell, W, Holden, K & Butler, J. (2003) *Universal principles of design : 100 ways to enhance usability, influence perception, increase appeal, make better design decisions, and teach through design*, Gloucester, Mass.: Rockport.
- Marx, K. (1976) *Capital: Volume One*, Harmondsworth, Middlesex: Penguin Books.
- Marzano, S. & Philips Design, (1999) *Creating value by design : thoughts : facts from Philips Design. Vol.1, Thoughts. Vol.2, Facts from Philips Design*. 2nd ed., London: Lund Humphries.
- Oxford English Dictionaries, (2019) Value. Available at: https://www.oxfordlearnersdictionaries.com/definition/english/value_1?q=value [Accessed on: 2nd December, 2019]
- Oxford English Dictionaries, (2019) Relationship. Available at: <https://www.oxfordlearnersdictionaries.com/definition/english/relationship?q=relationship+> [Accessed on: 2nd December, 2019]
- Norman, D (2013) *The Design of Everyday Things : Revised and Expanded Edition*, Boulder: Basic Books.
- TED (2007) *Do schools kill creativity*. Available At: <https://www.youtube.com/watch?v=iG9CE55wbtY&t=853s> [Accessed: 20th November 2019]

Vernon, M.D. (1970) *Perception through experience*, London: Methuen.

List of Illustrations

Figure 1: Heskett, J. (2017) *Design and the creation of value*, London : Bloomsbury Academic p. 160

Figure 2: Kannengiesser, U. (2012) A Process Framework of Affordances in Design. *Design Issues*, 28(1), p. 50–63

Figure 3: *Blog Spot, Automatic sliding door.* Available at:
<http://automaticslidingdoormagasui.blogspot.com/2017/05/single-automatic-sliding-door.html>
[Accessed: 4th December 2019]

Figure 4: Talk Local, Door Knob latch Stuck. Available at:
<http://www.talklocal.com/blog/2013/08/s/locksmiths/door-knob-latch-stuck/> [Accessed: 4th December 2019]

Figure 5: BBC News, (2018) *Facebook scandal: Who is selling your personal data?* Available at:
<https://www.bbc.co.uk/news/technology-44793247> [Accessed: 20th November 2019]