

How simplicity and complexity contrast and work with each-other in design and in our everyday lives.

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Summary

This paper will be discussing the topic of where we find simplicity and complexity and if complexity and simplicity are opposites or can they be used together in design and in our everyday lives. The paper will demonstrate the uses of simplicity and complexity in design, products and our daily lives, the outcome should show the contrasts and similarities both simplicity and complexity share.

Introduction

This paper will be researching complexity and simplicity and how they contrast and work with each other in many different ways and forms. While looking at a wide range of topics that have simplicity and complexity both imbedded in them, we will then attempt to narrow it down into design and how it's used in design and if there's a better way of using these states. The definition of complexity is , The state of having many parts and being difficult to understand, the definition of simplicity is the fact that something is easy to understand. By the end of this paper you will have a firm understanding of both simplicity and complexity in a number of different aspects of life and design, you will also see how their differences complement each other and how many things they have in common. Through looking at a variety of online sources and books this paper will show many different perspectives on both simplicity and complexity, it will also show how many different ways in which these terms can be interpreted.

Simplicity

There is a book written by John Maeda called '*The Laws of Simplicity*' where he deconstructs the laws of simplicity into ten simple concise rules these rules were very helpful in my research as they gave a perspective of how 'simplicity' can be thought of and recognised in many different ways. Maeda believes that the ten laws of simplicity are reduce, organize, time, learn, differences, context, emotion, trust, failure and the one. The most important ones to me are reduce, learn, emotion, trust and failure.

Reducing things in design to create simplicity is an effective way of getting rid of any unnecessary elements that might be confusing to users. Maeda explains "on the one hand, you want a product or service to be easy to use; on the other hand you want it to do everything that a person might want it to do". It is very important to find the balance between simplicity and complexity because making things simple by reducing/removing can equally make something increasingly more complex. Maeda has an interesting outlook when it comes to this rule that "when in doubt, just remove. But be careful of what you remove." (Maeda, p.1) Removing something is easy but choosing what to remove is the hardest part and requires a lot of consideration.

Knowledge often helps with many things and as the famous saying goes 'knowledge is power'-Francis Bacon, this is also the case in design. Although you can have a simple design it is the knowledge that renders the product useful or useless. Maeda uses the brilliant analogy of the screw as he explains "Operating a screw is deceptively simple. Just mate the grooves atop the screw's head to the appropriate

tip—slotted or Phillips—of a screwdriver. What happens next is not as simple, as you may have noted while observing a child or a woefully sheltered adult turning the screwdriver in the wrong direction.” Simply put, the person operating the screwdriver needs to know what way turning the screwdriver would tighten or loosen the screw they would also need to know their right from left. “Thus operating a screw is not as simple as it appears. And it's such an apparently simple object!” (Maeda, p.33).

Emotion is a connection that we create with designs and products as we judge them subjectively and decide if we like them or not. Everyone reacts to different designs uniquely and it's impossible to please everyone. “more emotions are better than less” (Maeda, p.64) It's important to create something that provokes thought and emotion this creates a valuable connection between consumer and product. Maeda talks about how “in the age of the typewritten letter, one would have expected to stumble upon the funny combination of characters that can make a wide variety of silly faces like ☺ 8^)... and so forth” (Maeda, p.65) this shows that even when faced with a purely mechanical system humans will always find a way to express emotion.

Trust comes in many different forms whether its trust in people or more commonly today in technology. We often trust in designs and products to do what they've been advertised to “Imagine an electronic device with only one unlabelled button on its surface. Pressing the button would complete your immediate task.” Here Maeda imagines a not so distant future where people trust so much in technology to do tasks that today only we do ourselves such as writing “a letter to Aunt Mabel” where at a click of a button it could “send a fair approximation of a kindly email to her from you” (Maeda, p.73). This is useful in design as it demonstrates that it's not so much that

the user trusts the task that the computer/product would be completing but in fact the user would be trusting the simplicity and convenience of the device. In turn it gives us boundaries in where you can design a product that eliminates complexity and time-consuming tasks and suggest an alternative way of completing this task in order to gain the trusts of users.

Failure, a word feared by many people and often people try to avoid it. However, this should not be the case as we learn from failure, because when we make something unintentionally complex when trying to simplify, we can learn that less isn't always more. Simplicity and complexity are both relative and "shift with subtle changes in point of view." (Maeda, p.83) This means that anything can be complex or simple depending on the perspective from which you look at it. An example of this is a flower as Maeda says that "Complexity can be beautiful. At the same time, the beautiful simplicity of planting a seed and just adding water lies at even the most complex flower's beginning." (Maeda, p.83,84).

All of these so called 'laws of simplicity' loosely gives a basis to what simplicity contains and what attributes are needed to be included in designs in order for them to be considered as a truly simplistic design.

There are many different forms that simplicity comes in, one most noticeable to me is in the form of products. Often it is in the aesthetics that we see simple design, like a pair of glasses or more specifically glasses designed by "The Centre for Vision in the Developing World and Goodwin Hartshorn." (Attila Nagy, 2013).



Fig. 1: *Child Vision Glasses*

These glasses in figure 1 look like most glasses out there with two round circles as part of the frame for the eyes with an 'n' shaped centre connecting the frame by the nose and two stems that hold onto the back of the ears. Although the look of these glasses is very simplistic, they actually carry a very unique purpose where they are "Self-adjustable glasses that allow the wearer to tweak the lenses until they focus clearly, developed specifically for young adults aged 12-18." (Attila Nagy, 2013).



Fig. 2: *iPhone X*

Another product that is an aesthetically simple one that is used and recognised by over “1.4 billion people worldwide” (Juli Clover, 2019) is the apple iPhone. The form of the iPhone is a very sleek rectangle that has rounded corners, the phone features only four buttons and a touch screen to operate its systems, this is a very simple design that makes it less likely for the user to get confused by the phone. This product may look simple but the first iPhone took 5 years to develop and the shape has changed ever since. The most recent “iPhone X took over two years to develop” (Mikey Campbell, 2017).

Some products are designed with minimalism in mind “In its most stripped-down definition, minimalism is about designers expressing only the most essential and necessary elements of a product or subject by getting rid of any excessive and, therefore, unnecessary components and features.” (Marc Schenker, 2018). This would also be considered a simple design. There have been many products made with minimalism in mind, one of these products is a watch made by Phillippe Starck and it’s called the Veiled watch. The watch looks like a metal band at first glance “but upon further inspection you’ll notice the subtle hands underneath... or you might not

notice—they're pretty obscure.” (Tim Jacobsen, 2019). This watch although it looks slick and modern the functionality of the watch is arguably complex, by taking the numbers away and making the arms barely visible he has actually complicated what was once a simple task of telling the time. This is a great example of how simplicity can go too far and end up becoming unnecessarily complex.

Another product created by Phillipe Starck that again has the minimalistic approach is “the most controversial lemon-squeezer of the twentieth century” (Phillipe Starck, 2015) it's called the Juicy Salif which is meant to be a modern take on a lemon squeezer. The design is very simplistic as it looks similar to a three legged spider with a big hump on its back but the functionality of the product is useless because when you press the lemon on the top of the product the seeds go into the cup and your hands get soaked.



Fig. 3: *Amnesty International bananas, Poster*

Minimalism isn't just in products either, there is a lot of graphic designers that use minimalism in order to create an impactful meaning to pictures. "Fons Hickmann m23 are a Berlin-based graphic design studio founded by art director Fons Hickermann" this studio creates posters and magazines that are bold and deliver "a strong message, using a minimalistic aesthetic" (Trolley, p.50). The use of these simple, colourful and contrasting colours catches the reader's attention and make the subject mentioned in the magazine more interesting.



Fig. 4: *Our Net Gain* / Greenpeace

The elegance of simplicity can create stunning visuals that are meaningful on more than just one level. Take this graphic by Noma Bar for example, which uses a couple of different colour blues, a bright vibrant yellow and a clean white in order to get a clean and simple look while conveying some important information across to the readers. D8 together with Noma Bar created "Greenpeace UK's 'Our Net Gain' campaign to combat harmful industrial-scale fishermen" this visual was so powerful

that it “formed the backbone of a cross-channel campaign that inspired 75,000 people to take action and lobby their local politicians, helping to turn a spotlight on the issue in the runup to the british general election in 2015” (Trolley, p.29).



Fig. 5: *Icebergs Take Away Cup*

Often there are crossovers between graphic design and product design where a simple design is met with an equally simple graphic that create a harmony of simplicity. Icebergs dinning room and bar invited a multi-disciplinary agency by the name of M35 which was formed by Jamie Mitchell a creative director to rebrand their business (Trolley, p.66).

The whole redesign was centered around the location of icebergs dining room and bar where “tides dictate much of the leisure activity in bondi” Trolley explains “The design encapsulates this by creating a virtual tideline, which is carried through all promotional formats.” (Trolley, p.66). This rebrand created a new brand identity to where icebergs dining room and bar connected and merged with its surroundings,

rooting it's existence within the sydney beach community. The simplicity in this design really shows that things don't need to be complex to have deep meaning.

Simplicity can be found many things and these examples have shown how diverse simple designs and simplicity on its own can be. We have seen that simplicity can be effective but sometimes can be perplexing.

Complexity

In his book *'Design of Everyday Things'*, Don Norman talks about how complexity is good but the confusion that comes with it is bad. He goes on to explain that "The everyday kitchen is complex. We have multiple instruments just for serving and eating food. The typical kitchen contains all sorts of cutting utensils, heating units, and cooking apparatus" (Norman, "The Design", p.247) although eating and serving food is easy preparing food required many products to help and when you know how to use each product this task becomes easy. Furthermore, if you were to cook in someone else's kitchen this task would become much more complicated as working in an unfamiliar area makes the task much harder. Don Norman talks about how complexity can be tamed in order to eliminate the confusion that comes with it, or in other words simplify it. He goes on to talk about how structuring the kitchen utensils in a certain order that makes sense to you will organise chaos and will give you the knowledge of where the utensils are at any given time, "the people who use it understand why each item is stored where it is: there is usually structure to the apparent randomness" (Norman, "The Design", p.247).

Sometimes complexity in design is desired and in Don Norman's book, *'Living with complexity'* he talks about how complexity can be a useful thing in design and that "complexity by itself is neither good nor bad, it is confusion that is bad" (Norman, "Living with", p.4). The fact that Norman believes that confusion is a negative element of complexity brings a different perspective on how to view both simplicity and complexity. It brings questions to mind such as, is there confusion in simplicity also, and is there a certain thing that causes this confusion. Furthermore, knowledge

seems to be a common element and debate on what causes things to seem complex, there's an article which talks about a knife analogy and how the author believes that the knife is a seemingly simple design but it's the skill-based knowledge that can make the knife seem complicated. "a great chef can chop, dice, fillet, with a good knife. Where someone else might use it for much more rudimentary actions. Either way, it is an effective tool based on the user's level of mastery." (Francisco Inchauste, 2012), there are different knives for all types of jobs but having the knowledge and skill to use the correct knife in the correct way is what can define how complex it is to use the knife and complete the task. This gives some insight in to what can cause confusion in seemingly simple designs/products, it also shows that simplicity and complexity are linked in even more ways than previously thought even though they are opposites, "when the complexity is the result of poor design with completely arbitrary steps, with no apparent reason then the result is perplexing, confusing and frustrating" (Norman, "Living with", p.10).

Norman talks about how "everyday life is often hard" because even the simplest of things like opening a door can be hard, he talks about how locks on doors are meant to be simple things but using them can be complex because "does the key in this lock go clockwise or counter clockwise?" (Norman, "living with", p 64). Doors seem to be a commonly confusing subject in Normans book, when designed a certain way a door can either be complex or simple to use. When talking to a friend D. Norman discovered that he had gotten "Trapped in the doorway of a post office in a European city" (Norman, "The Design", p.2) due to the confusing modern design of the doors which were glass and had hidden hinges with no handles. This led to Normans friend repeatedly pushing on the wrong side of several doors as it wasn't clear where the

handles were. Norman goes on to explain that he would use signifiers to combat this door problem “signifiers can be deliberate and intentional, such as the sign push on door” (Norman, “The Design”, p.14) this is a way of taming complexity by suggesting an interactive action to the user.

This reverts back to the discussion in page two where Maeda mentions that you need knowledge to operate everyday things like a ‘simple screw’ Maeda explains “knowledge makes everything easier” (Maeda, p.33). To be denied or to simply not know the knowledge of how objects work and how to operate them makes things increasingly harder. Just like changing a light bulb, it sounds easy enough but the knowledge you need to know are what type of fixing does it have, is it a thread or a bayonet, is it an LED or an incandescent bulb, and which way to unscrew and screw it in. All of these factors then start to make a seemingly simple product increasingly harder to use.

There are many computer applications out there that are complex to use for a number of different things, one used a lot in design is photoshop but as with most complex things organising this application can dramatically improve the way people use and interact with it. Photoshop has hundreds of different buttons and ways of creating and manipulating photos and original designs but with every update and versions these tools get organised in a way that makes them easier to understand (Scott Baird, 2014). “Baliho’s local marketing technology addresses a complex problem and relies on a complex interplay of data and execution. By constantly increasing our understanding of the optimal workflow for executing local marketing”

(Scott Baird, 2014), so for some online companies they actually need complex systems in order to store information and figure out how best to use this data.

Technology has vastly improved over the years and has been integrated into many household items we have today such as tv's, laptops, mobile phones and desktop computers. When these technologies first came onto the market, they were considered complex to use as "people had enormous difficulties understanding and using them." Norman explains that "these were interactive devices, where an action by a person would lead to a change of state of the machine and then the requirement to do some new action." (Norman, "Living with", p.143). These actions mentioned by Norman would often be complex and once done the output would be very simplistic. Take the computer for example, when it first came out computers had to have codes inserted in order for the user to do anything with them. This meant that computers had no user interface and users would have a book filled with commands that would have to be manually inputted into the computer in order to accomplish simple tasks like opening files. These were called command-line interface "Most operating systems implement a command-line interface in a shell for interactive access to operating system functions or services. Such access was primarily provided to users by computer terminals starting in the mid-1960s, and continued to be used throughout the 1970s and 1980s on VAX/VMS, Unix systems and personal computer systems including MS-DOS, CP/M and Apple DOS." (DKordic, 2019). Today the computer industry has become increasingly advanced but that's not to say that they are any less complex.

Mobile phones are another example of a once new technology that was hard to comprehend at first. The first mobile phone could only make calls and as time moved on improvements such as SMS messages were made and in 1992 “The world’s first ever SMS message was sent in the UK. Neil Papworth, aged 22 at the time was a developer for a telecom contractor tasked with developing a messaging service for Vodafone. The text message read “Merry Christmas” and was sent to Richard Jarvis, a director at Vodafone, who was enjoying his office Christmas party.” (Uswitch,

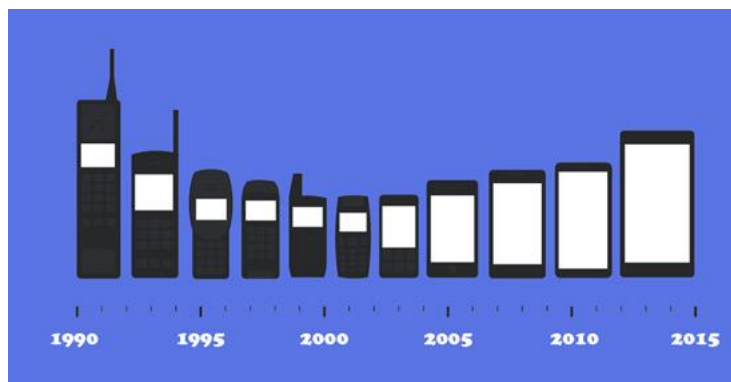


Fig. 6: *Evolution of Mobile Phones*

2019). Today having a phone is like having a small computer in the palm of your hand, we call these smartphones which have increasingly become more and more complex each year. with hundreds of new features getting added it’s hard to keep up with all of the different functions. Developers and phone makers “believe everyone wants to use these devices for ‘productivity.” But there was a poll done of “thousands of customers and found that about 80 percent of all smartphone users only use eight to 12 apps on a consistent basis, which includes basic things like email, messaging, social networking, news, games, weather, and photo- and video-related apps and services. But only

about 10-15 percent use them for serious productivity.” (Tim Bjarin, 2016), This means that there are applications on these smartphones that aren’t needed and even worse they are making using the mobile phone more complex.

Moving on from technology, products also have a form of complexity in them, they might not be as obvious as the form of complexity you see in technology and programs, but they are definitely there.



Fig. 7: *Panton Plastic Chair*

In the figure above you can see the Panton plastic chair which was created in 1968 by designer Verner Panton. The chair consists of complex angles and curves that has been created from one single piece of plastic which was “the first single-form injection-molded chair” that was also stackable. Although it looks like a simple chair the development of the technology to create this chair was a complex and advanced process which has since made this chair an icon “and secured it a place in design

history” (Kathryn Henderson, 2013). This an example of how there is hidden complexity in just about any design.



Fig. 8: *Pukka Tea Packaging*

Here’s a well know Herbal Tea brand that uses a lot of contrasting colours and complex repetitive patterns, these attributes are a form of maximalism and Pukka uses it in such a way that the packaging grabs the buyer’s attention. There is plenty of space around the writing so that the brand name and the flavours on the packaging stand out. When you think of tea you might not think that it’s an exciting thought however “your packaging design can bring your brand to life and make your product more exciting through its standalone design.” (Media village, 2019). The complexity in the packaging creates a brand identity and an unforgettable look which carries on through Pukkas product line.



Fig. 9: *Brooks Transcend*

There are many examples in fashion today which use complex shapes and lines in order to create a 'fashion statement'. In the figure above you can see a running shoe with a various amount of lines across the body, some are thin, and some are thick they also connect in places. The use of this complex network of lines grabs byer's interest, coupled with the unusual bright colour this shoe would be hard to miss in a shop window. The outer design of the shoe visually looks complex but the majority of the complexity lays in the technology of creating the sole of the shoe, this is another example of hidden complexity (Peter Larson, 2014).

All of the examples given have shown how complexity can be good and bad, they also tell us how there's a theme of complexity throughout design and in our own personal lives. The examples have also shown a diverse range of perspectives on how we view complexity and has helped us discover that there is complexity in the simplest of things also.

Compare and Contrast

Similarly, to simplicity, complexity is also desired in certain cases because “when things are too simple, they are also viewed as dull and uneventful” (Norman, “Living with”, p.13). Therefore, complexity and simplicity work very well together when balanced so that the design is simple in looks but has some form of complexity that keeps it interesting to use. This relationship between these two states when done correctly could create the perfect product with the perfect user experience but finding the balance of both simplicity and complexity would be extremely hard to figure out. These days people want a product to do everything and anything they need it to do, this isn’t a realistic way of thinking this is why so many companies choose a handful of functions to incorporate into the design “We want to be able to do all of these things, yet we want the device to be simple, The real challenge is to tame the complexity that life requires” (Norman, “Living with”, p.11).

Maeda talks about how “simplicity and complexity need each other” because “the more complexity there is in the market, the more that something simpler stands out” (Maeda, p.45) this is very true because how else do people know what a simple product and a complex product look like without comparing one to the other, the contrast of one to the other are so drastically different that one wouldn’t exist without the other.

Simplicity and complexity can both live within the same product but there has to be a balance so that they both complement each other “Achieving a situation where the differences enhance, instead of cancel out, either’s existence is something of a subtle art” (Maeda, p.46).

There is some sort of correlation between Simplicity and complexity and Maeda describes it as a “mathematical graph going upwards to complexity, then sloping downward to simplicity, then upward to complexity, and back down again ad infinitum”(Maeda, p.46) this means that if you could get the theoretical graph to make a line between the top and the bottom , you could find a perfect harmonisation between the two states. The fact that these two are connected and have a rise and fall relationship shows that there’s also a consumer connection with them “There is no way to connect with simplicity when how complexity feels has been forgotten.” (Maeda, p.51) when you find something hard to do or ‘complex’ another task that maybe takes less steps to complete feels easier or ‘simple’, This means that you would not know that something was complex until you did something simple and vice versa.

There are technologies in cars that have become simultaneously both much more complex and simpler to use, one of these things are as basic as the car keys. Norman talks about how “Today’s cars have many means of verifying permission. Some still require a key, but it can stay in one’s pocket or carrying case” (Norman, “The Design”, p.141). This is different to how it used to be as cars used to have a basic key that would open the car as you inserted it into the door, these days they use a mix of technologies in order to make it easier to open your car and start it while also being complex enough in order to protect the safety of your car. This mix of simplicity and complexity is a different variation than we’ve seen so far where it is the technology that is complex and the only bit that the user sees is the simple aesthetics and user interface of the product, in a way you could say that the complexity happens behind the scenes and allows the product to be seemingly simple.



Fig. 10: NT SFU:L

There are many products and services that combine both complexity and simplicity together to create a collaborative and unique user experience, As seen in figure 10 The Takeo Paper Company created a piece of promotional packaging which is a large box but when opened up “reveals a number of individual delicate boxes, each containing a small surprise interactive gift, which encourages people to engage with the product” (Trolley, p.132). This piece is eye catching and is a fun design that includes both simple and complex features. The bright colour scheme is simple plain and effective but the way that all of the boxes fit is a complex sequence that would take some time to get out and put back in the original box. The brilliant contrast of complexity and simplicity in this piece works together in harmony to create a delightful user experience in which the user’s engagement is captured by the colour contrast and the user’s interaction is captured by the method of trying to extract the boxes. The depth into how this packaging feels to the user is also quite complex as Trolley explains “Opening a sharp, edgy box will create friction, as the paper gets rubbed together, but inside are smaller boxes with goods such as puzzle pieces and

envelopes which are neatly packed together in a grid influenced by the silver ratio” (Trolley, p.132).

APHEX TWIN	
SYRO	
minipops 67 (source field mix).....	120.2
XMAS_EVE110 (thanaton3 mix).....	120
produkt 29.....	101
4 bit 9d api+e6.....	126.26
180db.....	130
CIRCLONT6A (sycobonus mix).....	141.98
f2 pseudotimescatche+e3.....	138.85
CIRCLONT14 (shymoming mix).....	152.97
syro u473t8+e (piezoluminescence mix).....	141.98
PAPAT4 (pineal mix).....	155
s950txl6wasr10 (earth portal mix).....	163.97
sisatsama.....	102
London venue hire for planning meeting	
with international team.....	E0.00143
Promotion team in Germany.....	E0.00331
Outdoor poster in Italy.....	E0.00066
Refreshments and lunch for promo team	
album listening in Paris.....	E0.00043
Hotel in Seattle for album playback meeting.....	E0.00049
Postage costs for US radio promotion mailout.....	E0.00304
Packing CD and booklet.....	E0.00192
Website bandwidth costs.....	E0.00204
Venue and equipment costs for	
London listening event.....	E0.00163
Online advertising in Norway.....	E0.00099
Promotion and marketing team in Norway.....	E0.00166
Online advertising in Australia.....	E0.00338
Promo CDs for US press promotion.....	E0.00018
Hotel rooms for international label managers.....	E0.00311
Promo CDs for US radio promotion.....	E0.00184
A2 retail poster for Japan.....	E0.00035
Digitisation from tape archive copy of	
The Making of Windowlicker.....	E0.0009
Refreshments for NYC listening party.....	E0.00073
Other online advertising.....	E0.01426
Online advertising in Sweden.....	E0.00099
Print advertising including	
The Fader / Vice and others.....	E0.09357
CD-Rs for UK radio promotion.....	E0.00035
Small ledger receipts for pre-orders	
at independent retail.....	E0.00365
Outdoor poster in Berlin / Cologne /	
Hamburg and other cities.....	E0.0265
Average distribution charge.....	E1.36306
Taxis for planning meeting day in London.....	E0.00057
Radio advertising in France.....	E0.01325



Fig. 11: *Aphex Twin Album Cover*

Another complex product is the Aphex Twin album cover which was “launched after the teaser appearance of a blimp featuring the Aphex Twin logo which floated over London, and stencil graffiti in New York.” (Trolley, p.180). This album cover features a breakdown of how much the album cost to make by putting black text against a white background. The simple touch of the white backgrounds gives a very clean look and from a distance the front of the cover seems to have a pattern on it, on further inspection you can make out a list of pricing in a circular shape and on the back you’ll find a long list of more prices. The list “ranges from technical equipment and promotion through to postal expenses” (Trolley, p.180) this was never done before and was a fresh approach to grab buyer’s attention.



Fig. 12: *Prestige Book*

A global design partnership named Mucho designed the prestige book which is “a printed record of the conception and construction of the design hub building in the Barcelona Design Centre.” The book had multiple layers of pages with different shapes cut into them which “emphasizes the building’s orientation and multi-layered connectivity through its neighbourhoods, employees, districts, disciplines and cultural and technological areas.” (Trolley, p.158). Although it seems like a book about the building which is the simplistic part Mucho actually put a lot of thought into designing a “unique cover and page-opening mechanism” because “each turn of the page reveals unique configurations of the title typography, which on the fifth page uses silver foil and embossing” (trolley, p.158). The designers didn’t have to bring this level of depth to the book but with a slick and dark approach they managed to bring a complex page configuration and a minimalistic colour scheme together in yet another perfect example of harmonisation between the two states.

Minimalism is a design style viewed as being simplistic and uses a less is more approach while maximalism is a design style viewed as being complex and uses the more is more approach. These two styles are not that different from each other and have a similar affect on people. While minimalism focuses on having only a few key elements in the design style whether it's interior design or the design of a product, when there are only a few things in the design "it makes those elements stand out more. That way, those things have the space they need to shine and play a visual role in an environment. Minimalism isn't about using nothing, it's about using only what really matters.". Minimalism is also used in graphic design and "With a focus on clean lines, neutral colours and basic textures, it's a very versatile way of designing a wide range of things." (Guest Blogger, 2018) These create stunning visuals that use space in order to showcase the true beauty of simplicity.

Maximalism on the other hand is the opposite to minimalism "and lets colour, shapes, tone and texture do the talking. It doesn't have to be loud or overbearing, but maximalism does grab your attention." (Guest Blogger, 2018). Some might see maximalism as a cluttered form of design, but it has just about the same eye-catching affect that minimalism has when done correctly. Maximalisms is used in interior design a lot and was thought to be "a reaction to the minimalist movement and has aspects and elements that are practically the polar opposite to minimalist components.". The use of bold colours, repetitive patterns and intricate graphic details "maximalism encourages utilizing your space in the boldest way possible." (Deirdre Sullivan, 2019) there's a popular misconception that maximalism encourages the behaviour of hoarding an untidiness but this is not the case as maximalism actually has some organisation to it and mainly focuses on fine details and a mix and match of colours that contrast and work well with each other. Although

maximalism looks like there's a lot going on, it is actually a well thought out design technique used by graphic designers, interior designers, visual artist and even by musicians.

I have used minimalism and maximalism to compare to each other in order to focus in a more specific area of simplicity and complexity but there are so many design choices that can be made in these two categories that create exciting new forms of expressing your lifestyle through design. "You want your environment to foster your passions, to be the place to create and regain clarity in." you also want your environment to be filled with things that are personal to you as "It expresses what we want to be reminded of and shows the way toward that lifestyle." (Kelsey Jones, 2019).

There are some cases where both maximalism and minimalism can be merged together to create a harmonisation of both complexity and simplicity in an elegantly designed space.



Fig. 13: *Facile Spa in Pasadena*

As seen in figure 13 above minimalism and maximalism can work together, here the bathroom mirror, sink and faucet are very minimalistic as they are clean shapes and have very little detail on them, but the walls of the bathroom are covered with a complex mix of contrasting colours and patterns. Both elements work well to create something simple such as a bathroom much more interesting to look at and interact with. It also brings a sense of expression through the design and provokes thought and emotion.



Fig. 14: *Facile Spa in Pasadena*

In figure 14 above again, you can see the mix of minimalism and maximalism, this time the interior design is mostly focused on minimalism but that's not to say it hasn't got an element of complexity that comes with maximalism. The clean white walls contrast nicely with the wooden floors and creates a simple visual, but when you look

at the lights the complex design of the lampshade made from multiple strands placed next to each other creates an intriguing look that provokes thought. Both examples are very different but nevertheless they both show different ways in which design can use both minimalism/simplicity alongside maximalism/complexity to create a balanced clean and interesting aesthetic (Kelsey Jones, 2019).

Conclusion

Simplicity is often viewed as either easy or boring and complexity is viewed as interesting or overwhelming, but when used properly both are seen as ways of provoking thought and emotion through design. Everyday more and more products are released and brought to market, these will be a mix of simple and complex products. This paper has discussed how neither complexity or simplicity are bad, but instead they both have very distinct qualities that can either be used together or completely separate. The truth is you can use both simple and complex methods in moderation in order to get the desired effect, but we know that using too much of either of these things can create confusion and that's where the fault lays. Much like design we can translate complexity and simplicity into our own lives to truly express the way we feel, whether it be decorating and furnishing a room with a complex contrast of colours, creating a simple tune in music or creating a balanced canvas of complex lines and simple colours in art we can always find a way to incorporate it the best of both simplicity and complexity in to our lives.

We often find joy in the simplest things in life and with a little perspective we can also find joy in the most complex things. Much like the theme itself this paper is complex in its structure but simply put comes to a conclusion that every bit of our lives professional and personal are uniquely complex and simple and it's all about discovering the balance that allows complexity and simplicity to harmonise to its fullest extent. In every design there are often traces of both complexity and simplicity, also often it is complexity that is hidden in the process of creating a design/product and it is the simplicity that you see in its aesthetic.

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