Pearson

GCE A Level Advanced Art and Design

Art, Craft and Design Component 1

LAMPS

Total Mark 53 (46+PS7)

	AO1 Develop	AO2 Explore and Select	AO3 Record	AO4 Realise	Personal Study
Mark	11	11	12	12	7
Performance Level	4	4	4	4	3
				Total out of 90	53

Pearson

PERFORMANCE CALCULATOR	Level 1			Level 2			Level 3			Level 4			Level 5			Level 6			
A LEVEL PRACTICAL – SEPT 2016	LIMITED ABILITY			BASIC ABILITY			EMERGING COMPETENT ABILITY			COMPETENT AND CONSISTENT ABILITY			CONFIDENT AND ASSURED ABILITY			EXCEPTIONAL ABILITY			
Taxonomy	partial, inconsistent, literal, elementary, minimal, rushed, sporadic, naïve, little creative intent, disjointed, pedestrian, credible, lacks control over the formal elements, vague aims			straightforward, deliberate, just adequate, methodical, superficial, unrefined, crude visual language, simplistic reflection, plays safe, unresolved, contextual references explored but lack relevance, defines aims with some understanding, developing control over the formal elements			predictable, broadening, makes progress, relevant, description not explanation, demonstrates intentions, appropriate, sufficient control, emerging individuality, thorough, adequate control over the formal elements, contextual references inform journey, pursues aims with understanding			diverse, effective, purposeful, consistent, skillful, coherent, imaginative, informed, some perception, satisfies creative intent, engaged, consistent control over the formal elements, realises some aims,			independent, realised, sensitive, creative, sustained, highly inventive, critical, perceptive, comprehensive, in-depth, insightful, original, genuine creative journey, refined, in-depth reflection, exciting, comprehensive control over the formal elements, contextual references shows some personal insight, fully realises all aims and objectives			inspired, surprising, unique, authoritative, genuine discovery, adventurous, accepting of the unexpected, challenging, fully informed, questioning, dexterous, erudite, highly intuitive, daring, insightful and comprehensive exploration of contextual references, ideas synthesised into highly sophisticated realisations, goes beyond aims to produce surprising realisations, control over the formal elements demonstrate fluent sensitivity and understanding			
AO1 Develop ideas through sustained and focused investigations informed by contextual and other sources, demonstrating analytical and critical understanding	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	AO1 total: 11
	LIMITED			BASIC			EMERGING COMPETENT			COMPETENT AND CONSISTENT Purposeful Imaginative Some perception			CONFIDENT AND ASSURED			EXCEPTIONAL			
AO2 Explore and select appropriate resources, media, materials, techniques and processes, reviewing and refining ideas as work develops	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	AO2 total: 11
	LIMITED			BASIC			EMERGING COMPETENT			COMPETENT AND CONSISTENT Engaged						EXCEPTIONAL			
AO3 Record ideas, observations and insights relevant to intentions, reflecting critically on work and progress	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	AO3 total: 12
	LIMITED			BASIC			EMERGING COMPETENT			COMPETENT AND CONSISTENT Consistent control over the formal elements			Sustained			EXCEPTIONAL			
AO4 Present a personal and meaningful response that realises intentions and, where appropriate, makes connections between visual and other elements	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	AO4 total: 12
	LIMITED			BASIC			EMERGING COMPETENT			COMPETENT AND CONSISTENT Realises some aims Contextual references inspire creativity,			CONFIDENT AND ASSURED Refined			EXCEPTIONAL			
																			Total mark: 46

PERFORMANCE CALCULATOR	Level 1			Level 2			Level 3			Level 4			Level 5			Level 6			
A LEVEL PERSONAL STUDY – SEPT 2016	LIMITED ABILITY			BASIC ABILITY			EMERGING COMPETENT ABILITY			COMPETENT AND CONSISTENT ABILITY			CONFIDENT AND ASSURED ABILITY			EXCEPTIONAL ABILITY			
Taxonomy	partial, inconsistent, literal, elementary, minimal, rushed, sporadic, naïve, lacking, disjointed, pedestrian, credible, study naively informs practical work, elementary use of written language			straightforward, deliberate, methodical, superficial, unrefined, simplistic reflection, plays safe, unresolved, study adequately informs practical work, adequate use of written language			predictable, makes progress, relevant, description not explanation, demonstrates intentions, appropriate, sufficient, control, thorough, adequate, signs of understanding, developing analytical skills, study consistently informs practical work, developing and broadening use of written language			diverse, effective, purposeful, consistent, coherent, imaginative, informed, some perception, engaged, fulfils intended aims, study perceptively informs practical work, consistent and effect use of written language			independent, realised, sensitive, creative, sustained, critical, perceptive, comprehensive, insightful, original, genuine creative journey, refined, in-depth reflection, exciting, genuine personal investigation, study authoritatively informs practical work, articulate and highly effective use of written language			inspired, surprising, unique, authoritative, genuine discovery, adventurous, accepting of the unexpected, challenging, synthesis of ideas, fully informed, questioning, dexterous, erudite, intuitive, daring, study informs practical work with sophisticated insight, highly articulate and sophisticated use of written language			
Personal study (AO1/A02/ A03/AO4) Develop ideas through sustained and focused investigations informed by contextual and other sources, demonstrating analytical and critical understanding Explore and select appropriate resources, media, materials, techniques and processes, reviewing and refining ideas as work develops Record ideas, observations and insights relevant to intentions, reflecting critically on work and progress Present a personal and meaningful response that realises intentions and, where appropriate, makes connections between visual and other elements	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Total mark for the Personal Study (part of A level Component 1): 7
	LIMITED ability in the use of written communication and specialist terminology and LIMITED ability across the Assessment Objectives in the personal study			BASIC ability in the use of written communication and specialist terminology and BASIC ability across the Assessment Objectives in the personal study			EMERGING COMPETENT ability in the use of written communication and specialist terminology and EMERGING COMPETENT ability across the Assessment Objectives in the personal study			COMPETENT AND CONSISTENT ability in the use of written communication and specialist terminology and COMPETENT AND CONSISTENT ability in the Assessment Objectives in the personal study			CONFIDENT AND ASSURED ability in the use of written communication and specialist terminology and CONFIDENT AND ASSURED ability in the Assessment Objectives in the personal study			EXCEPTIONAL ability in the use of written communication and specialist terminology and EXCEPTIONAL ability in the Assessment Objectives in the personal study			

Examiner commentary

This submission is a Competent and Consistent creative journey, which moves consistently from the early typography and chair designs to the more personally engaged lamp design. This candidate demonstrates a purposeful and coherent creative journey in their exploration of form, drawing inspiration from a diverse range of designers and natural forms. There is an engagement with the exploration of form supported by some perceptive review of progress. Effective sculptural lamp forms realise some aims with a consistent control of visual language, placing this candidate's submission towards the top of Performance Level 4, Competent and Consistent Ability.

AO1: An imaginative rather than highly inventive idea development is informed by a wide range of designers who are exploring fluid organic form in their work. This candidate moves beyond description of this work to show some perception in their responses, which move beyond pastiche and engage effectively with design ideas.

AO2: The candidate engages with three-dimensional form with consistently imaginative explorations, moving through CAD drawing to maquettes and experiments with laser cutting paper, card and polypropylene, as the process takes the lead, reviewing consistently throughout to make improvements which effectively move the work forward.



Pearson

Examiner commentary continued

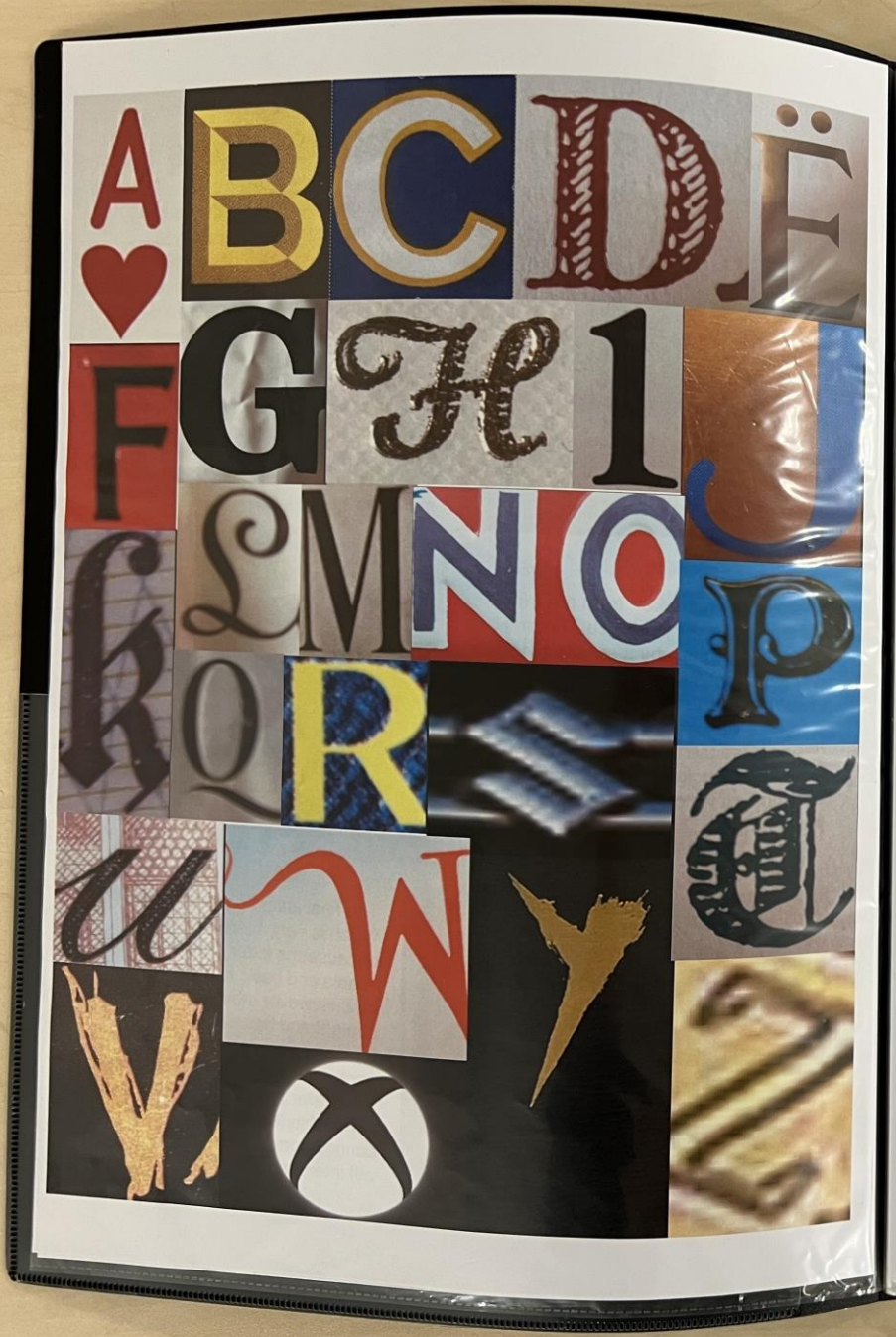
AO3: Recording from sources is consistently sustained, and we can see how the candidate responds to designers' use of natural form as inspiration with imaginative responses. The candidate has yet to develop the confidence to be described as highly inventive and independent, and their critical ability confirms the position at the top of Performance Level 4 for this objective.

AO4: The candidate's extensive research into lamp design shows some perception and has inspired and driven the work forward to its realisation. Some of the candidates aims are realised and the final lamp designs are refined in their making, and so is moving towards the next level of ability but are the result of a purposeful and consistent rather than independent and original creative journey, and therefore is placed at the high end of Performance Level 4, Competent and Consistent.

Personal Study: This study summarises the research made by the candidate during the practical investigation. It describes but does not explain the ideas of designers, making sufficient comparisons and thorough investigation into the subject, in a pedestrian and predictable but unresolved study. This places the study at low end of Performance Level 3, Emerging Competent.



Function and form in typography



Analysis of photographed letters



This photo has taken from the front of a book. I choose this letter to analyze because it has a unique deign which is very different to any other 'T' I have seen before. This typeface has a very old-fashioned look as it looks like it was written with a quill, as the shape is not perfect in places. This is fitting as the book is called 'this day in history' which is why it has the old-fashioned look. The letter has an intricate design using very small thin lines which come together to make the simple letter.

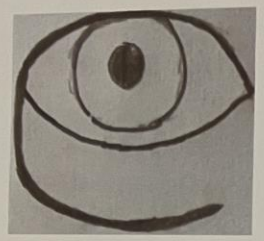
This picture was taken from the from the top of a jewelry box. This letter 'H' is the logo which is why it stands out that is why I choose it to analyze. The way the edges of the letter curl around creates a very aesthetically pleasing design. Also the use of gold on a white background looks very sophisticated and modern which is perfect for a jewelry logo.



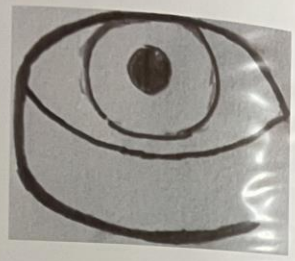


The final letter I am analyzing is 'W' which is very interesting. This is because the letter itself is very simple and basic and is a standard font. However the letter is not straight and has almost a tail. This typeface was on the front cover of a book. Possibly because it interests the reader as to why this font is used. Also the cooler red has connotations of blood and evil so will interest a possible reader.

Wordplay initial ideas

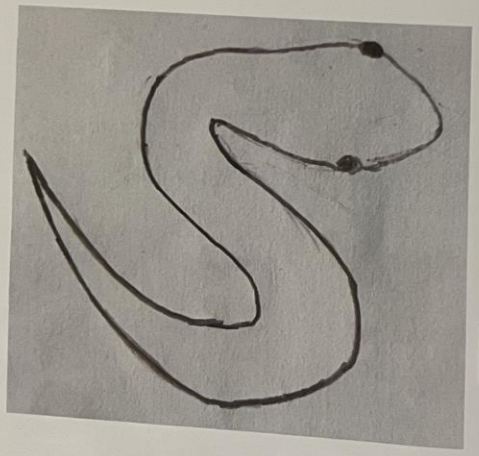


Y

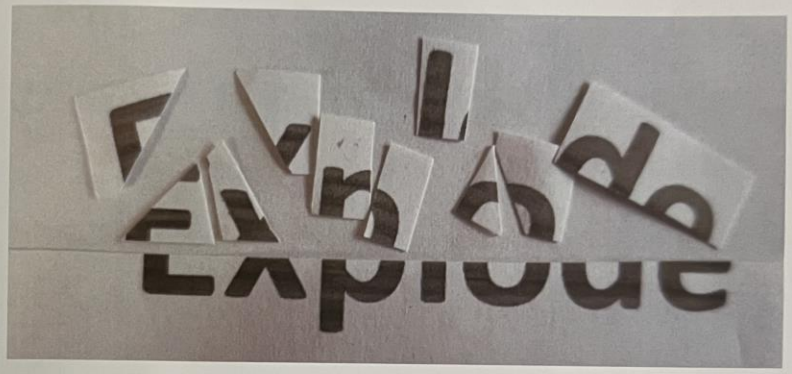




ountain



nake



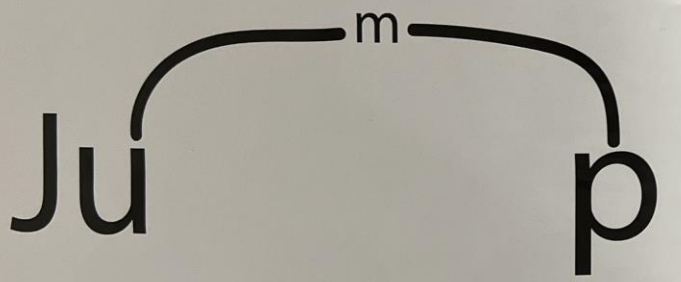
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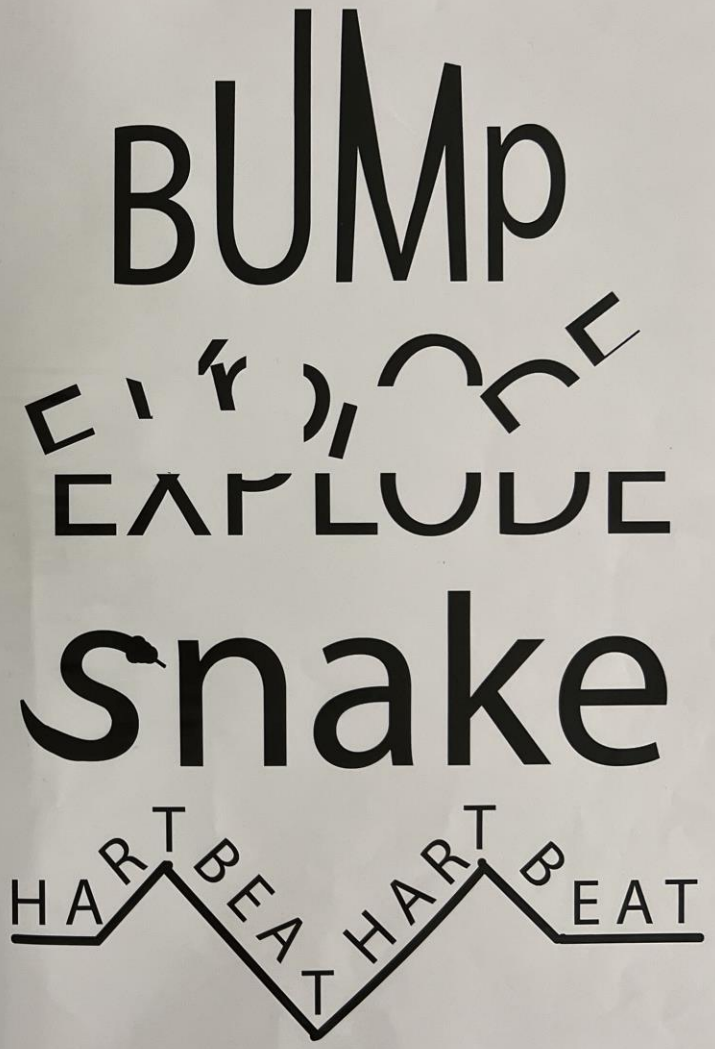
H de

Wordplay using illustrator

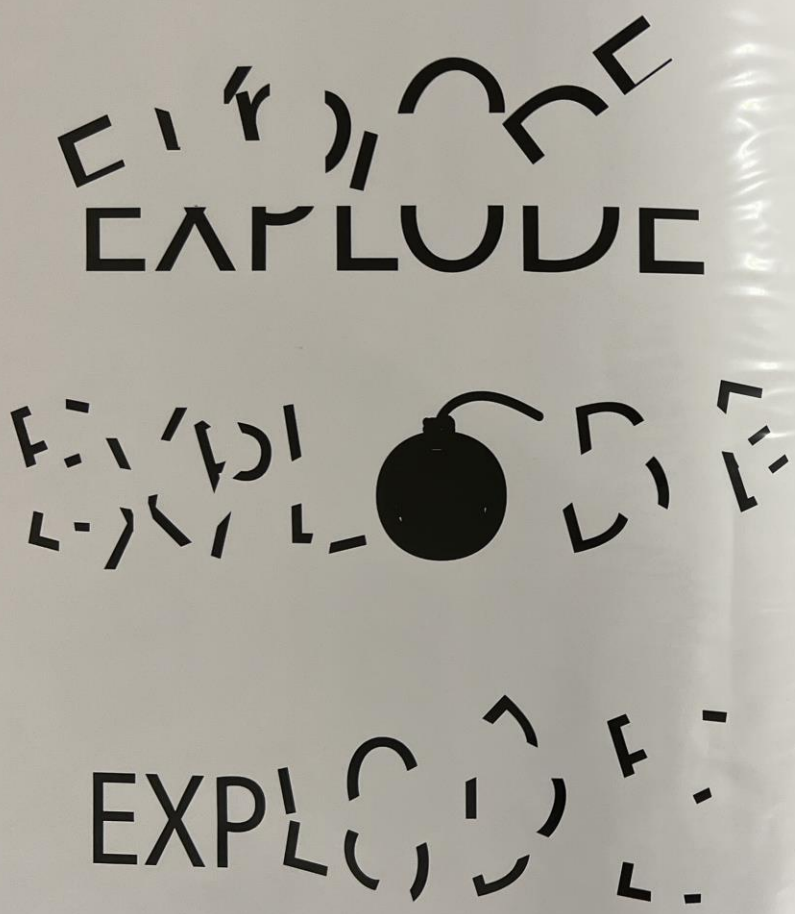
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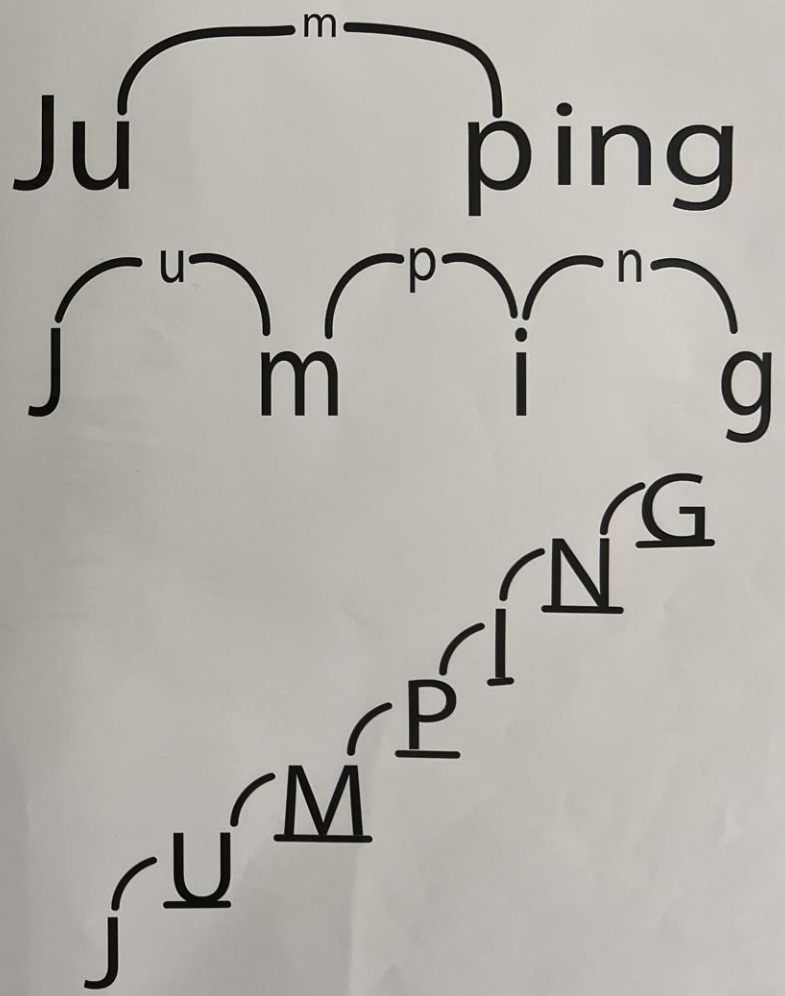
Sin



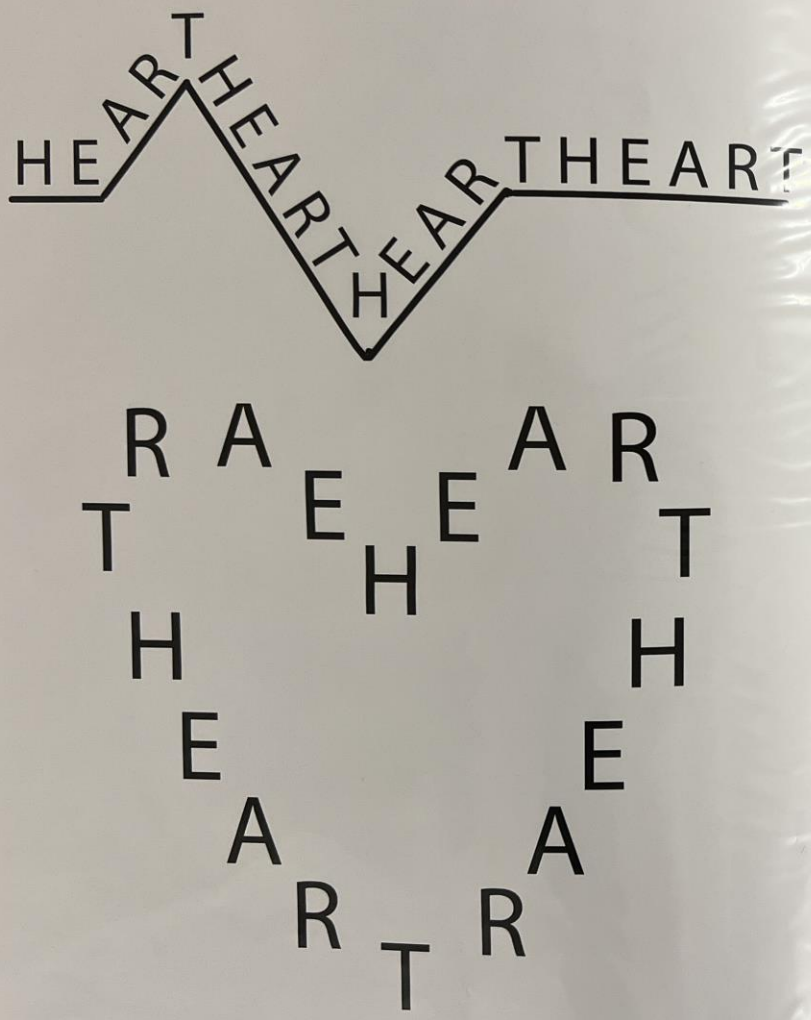
Initial idea 1: Explode



Initial idea 2: Jumping



Initial idea 3: Heart



David Carson - Ray Gun (form)

- Ray gun was an alternative music magazine. David Carson was the founding art director of the magazine.
- *Ray Gun* is commonly regarded as being one of the more influential typographic deconstruction for its experimental design in typography, layout and its overall bold visual image style which in-turn inspired a new generation of designers.



- Ray Gun was an American rock and roll music magazine therefore target audience was young edgy people.
- Therefore Carson uses an unconventional and almost chaotic design to appeal to this younger audience.

- David Carson's style was intent on moving away from the clean, structured, legible and rational design ideas of modernist design. It was quickly embraced by popular culture and eventually found its way into commercial advertising as a way of targeting a younger demographic.
- The magazine has been manufactured using ICT which you can tell by the way he plays with the letters. , the advances in technology have allowed this and the designs are very innovative for their time
- This design has great focus on form Carson uses the bar code as to add to the design when most magazines are placed in the same place in the bottom corner without adding anything. Also manipulated the letters by using numbers in replace of words, some of the letters have parts rubbed out and all the font is different. This is done so that the magazine stands out and makes people want to Read it if they see it briefly in a shop. There is a conflict between the text and image as most of the ray gun designs do with the unconventional typography as the focus of the magazine.
- Due to the focus on form the functionality is less important to the magazine. This can be seen the text is barely legible in places. Also if you don't know who the people are on the cover and Havant seen the magazine before it is not clear that it is a music magazine.
- These magazines have become a collector's item for their very interesting designs. Some of these magazines cost £30 upwards if you would try and buy them today.
- The work is very much defined by the form rather than function with the outside of the box designs which I really like because of the way Carson plays with all aspects of the page including the title and bar code which every other magazine I have seen keep the same each time.

Worlds soccer magazine (function)

- World soccer is a football magazine with monthly issues about what is happening in the football world.
- It is commercially made and is bought in great quantity around the world.
- Each issue of the magazine costs around three pounds to buy.



- The target audience for a football magazine is probably for children which could be why the designer uses large font. This is to make it clear what is in the magazine and grabs their attention as they will immediately see awards in bold letters in the middle of the page.
- Also Cristiano Ronaldo is used on the front cover which tells the reader immediately what the magazine is about so will grab any football fans attention.

- This design has a very simple clean, legible and rational design which is completely opposite from David Carson's ray gun design. The form of this magazine is very structured and perfect which has been done to draw attention to certain parts.

- The focus of this magazine is function as is clear from the bold clear lettering. The white font on the red background is done to stand out and to be clearly legible to someone reading from a distance in a shop. Also the yellow banner going across the middle of the magazine completely contrasts the rest of the design. This brings attention to 'Awards' which is clearly the main point of the magazine. Ronaldo has been used on the cover as he is one of if not the most well-known football player around the world. This means without reading anything it will interest the target audience of football fans as this is the first thing you see on the page. The next thing you see on the page is the banner saying awards. The other Titles are the last thing you read before looking through into the magazine. The designer has achieved this visual hierarchy very well.

- This design is very successful in its intention which is to attract people to read through the magazine. It is clearly defined by function rather than form. I like this design as it is very clean and simple.

Function and Form in magazine design





In this essay I will be discussing how different magazines use function and form in the design to attract readers to the magazine. Raygun was a rock and roll style music magazine from the 90s. is commonly regarded as being one of the more influential typographic deconstruction for its experimental design in typography, layout and its overall bold visual image style which in-turn inspired a new generation of designers. David Carson's style was intent on moving away from the clean, structured, legible and rational design ideas of modernist design. It was quickly embraced by popular culture and eventually found its way into commercial advertising as a way of targeting a younger demographic. These magazines have become a collector's item for their very interesting designs. Some of these magazines cost £30 upwards if you would try and buy them today. However, World Soccer is a football magazine with monthly issues about what is happening in the football world. It is massed produced and sold commercially. Each issue of the magazine costs around £3 to buy. These magazines are very different due to the target audience and the contents of the magazine.

Ray Gun was an American rock and roll music magazine therefore had a target audience of younger, edgy people. Therefore Carson uses an unconventional and almost chaotic design to appeal to this younger audience and the style of music which they enjoyed to listen to. However target audience for a football magazine is for big football fans. This is to make it clear what is in the magazine as it is very legible. Also Cristiano Ronaldo, in this issue, is used on the front cover which tells the reader immediately what the magazine is about so will grab any football fans attention.

Both designs have used ICT to create the covers however use very different techniques in order to achieve their aims. Carson plays with the letters for example using letters instead of numbers and splitting letters. The advances in technology have allowed this and the designs to be innovative. In contrast World soccer uses technology to structure the design and create a visual hierarchy.

Ray Gun has great focus on form. Firstly, Carson uses the bar code as to add to the design when almost every other magazine doesn't use it to add anything. Also Carson has manipulated the letters by using numbers in replace of words, some of the letters have parts rubbed out and all the font is different. This is done so that the magazine stands out and creates some mystery on what is in the magazine, so people want to Read it. There is a conflict between the text and image as most of the ray gun designs do with the unconventional typography as the focus of the magazine. In complete contrast the football Magazine has a very simple clean, legible and rational design which is completely opposite from David Carson's ray gun design. The form of this magazine is very structured and perfect which has been done to draw attention to certain parts.

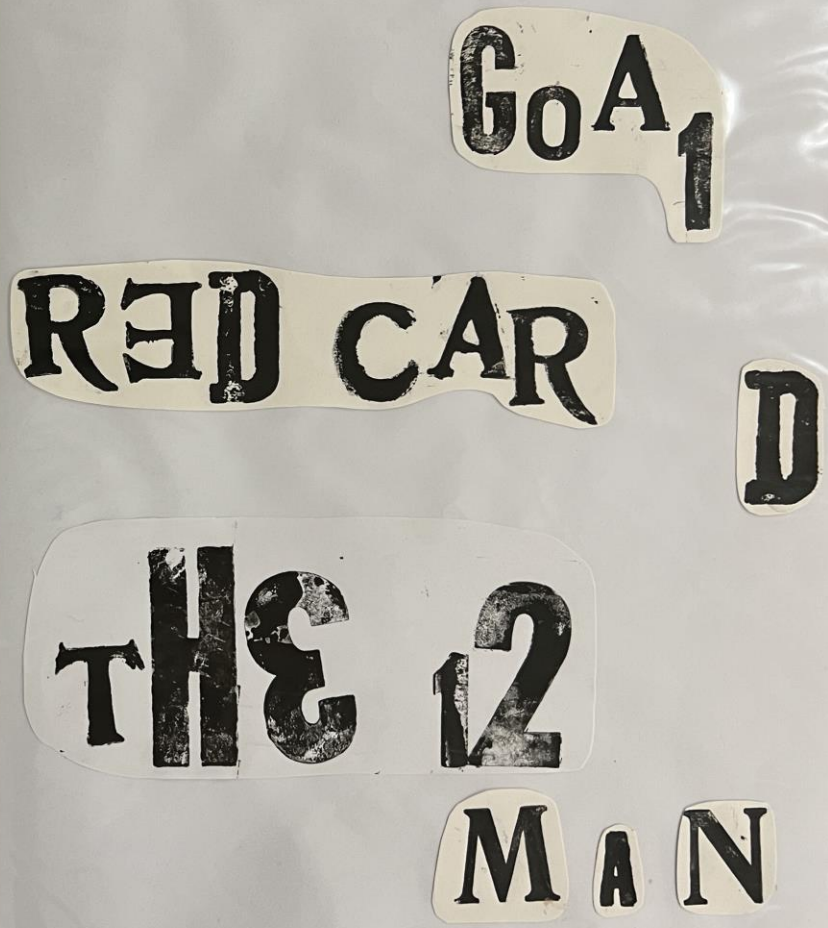
Due to the focus on form on the Ray Gun the functionality is less important to the magazine. This can be seen the text is barely legible in places. Also if you don't know who the people are on the cover and Haven't seen the magazine before it is not clear that it is a music magazine. However The focus of the football magazine is function as is clear from the bold clear lettering. The white font on the red background is done to stand out and to be clearly legible to someone reading from a distance. Also the off puff in center of the magazine completely contrasts the rest of the design. This brings attention to 'Awards' which is clearly the main point of the magazine. Ronaldo has been used as the central image as he is one of if not the most well-known football players around the world. This means without reading anything it will interest the target audience of football fans as this is the first thing you see on the page. The next thing you see on the page is the banner saying awards. The other Titles are the last thing you read before looking through into the magazine. The designer has achieved this visual hierarchy very well with the symmetrical design around the central image.

Carson's work is very much defined by the form rather than function with the outside of the box designs which I really like because of the way Carson plays with all aspects of the page including the title and bar code which every other magazine I have seen keep the same each time. It is extremely successful in its intention which we know as even though you can't buy the magazines today, they are still resold for quite expensive prices which shows how iconic this magazine is. Also at the time it would interest people as it is very different from the norm at the time, so it would catch people's attention. The World Soccer magazine also is very successful in its intention which is to attract people to read through the magazine. It is clearly defined by function rather than form. I like this design as it is very clean and simple.

Magazine Cover Photography



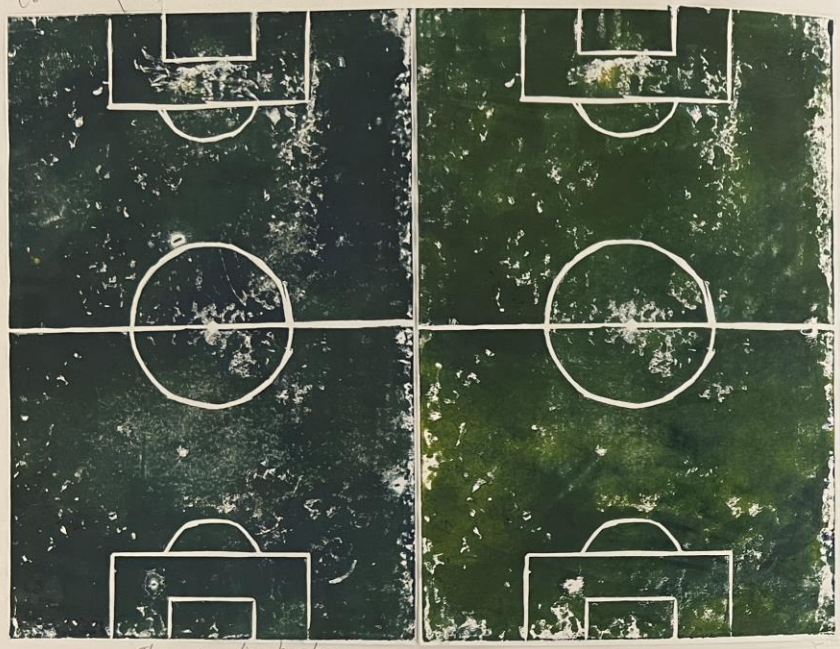
Experimenting With Block Printing



Magazine cover development

[Title]

Experimenting with monoprinting



Edited with illustrator





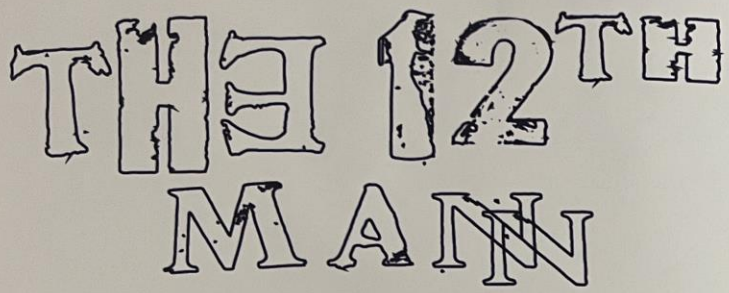


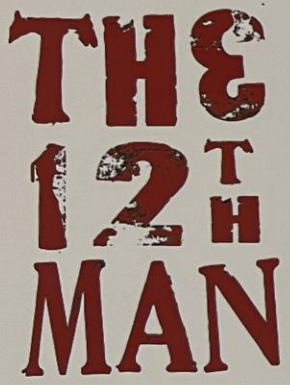






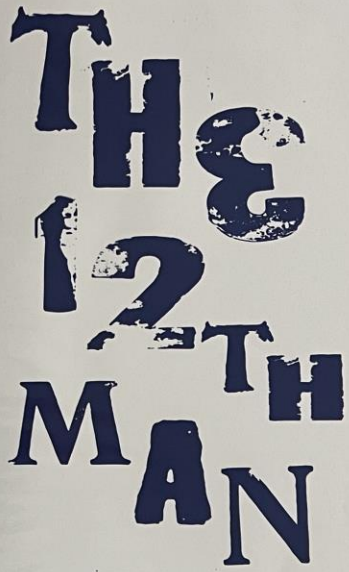
The 12th man - title



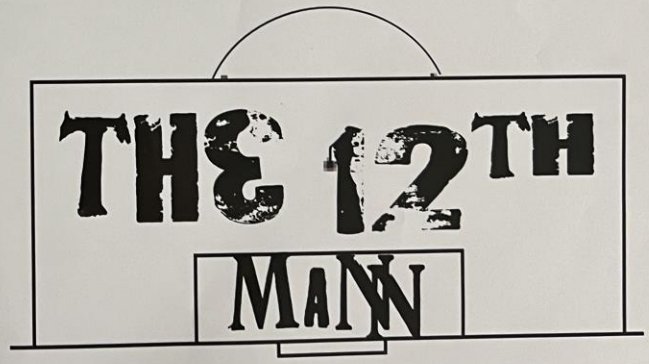


I choose to develop **The 12th man** as the title for my magazine cover. This is because in football, the 12th man refers to the fans who act as an extra player and give the players an advantage. As my magazine is aimed at football fans, I thought this title was most suited and would attract the target audience.

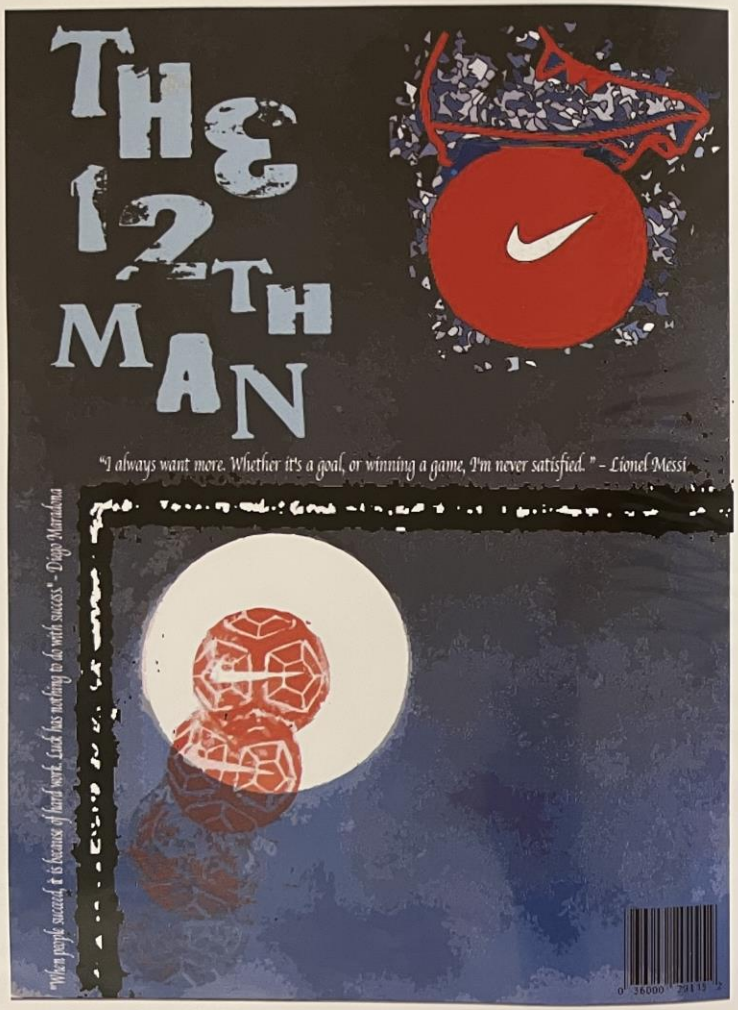




My titles were inspired by Carson's work as I have replaced some of the letters for numbers and in places the words aren't perfectly legible as they have areas in which the letters are disconnected and faded. Also many of the possible titles have almost no structure with the letters at different heights and angles. This makes the titles stand out amongst others. With these five titles I have experimented with color, letter placement and other effects so I have a wide range of possible titles depending on what suites the magazine cover I make.



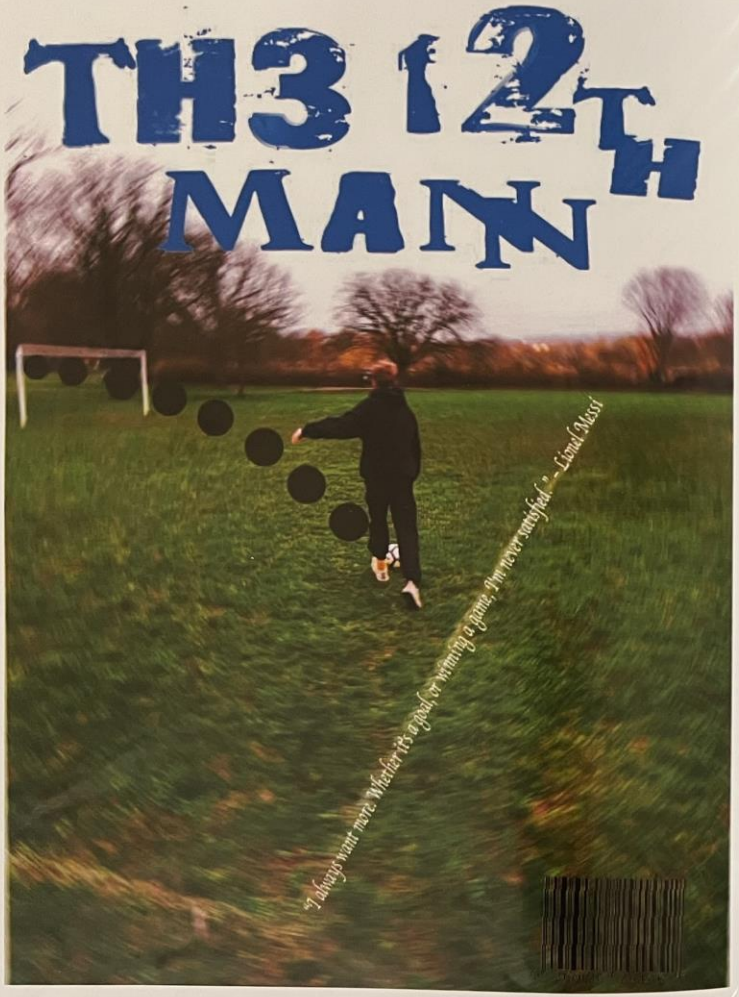
Initial idea 1



Initial idea 2



Initial idea 3



Initial idea 4





In my first initial idea I have used a range of different printing techniques together to make the cover. I have used red outlines and color onto of the dark background, so the main images are really highlighted. Therefore you can instantly tell its football themed. There is also very little structure to this cover much like David Carson's work.

My second initial idea I've used effects on the computer to create an interesting design. The surrounding has been blurred around the person in the center. This brings attention immediately towards the ball and the person taking the shot which will attract football fans to this magazine.





In my penultimate design the use of printing gives a very interesting smudged design. This is much like Carson's work not being perfect and not following any particular pattern. Also a puff has been used to make two very common football phrases stand out which will attract football fans as this is the first thing they will see.

My final design uses a mix of editing on the computer and types of printing. This design looks almost cartoon like with the muted colors and the edits that have been made to the central person. The shadows that have been used on the title make it really stand out as if giving off a glow, which will I interest the reader.





Final evaluation

My intention with this magazine cover was to create an unorthodox design that breaks the norms of conventional football magazine cover which are often very legible and structured and follow similar patterns.

David Carson and his work on the ray gun magazine covers inspired my work in many ways. The way that Carson uses typography making the lettering less legible and more interesting which really adds to the design, I used in this magazine cover in a few places. For example, using a 3 instead of the E in the title, Varying the spaces in the quotes and the effect of the block printing used to make up the title gives it an different out there look.

I have used mono printing and Lino printing in order to make these images on the page. The posts and footballer celebrating are a result of Mono printing. The Football and the boots are done by Lino printing. The way they have transferred onto the final cover using Illustrator and photoshop looks very interesting as some look very clean and some are deliberately messier to add to the chaotic design of the final cover.

I am very pleased with how my final piece came out as I feel I have achieved my intentions of designing a different football magazine. I am very happy with how all the small components have come together on the page to create a chaotic scene. This will interest the reader to go and read the magazine amongst all the other generic magazines that are around.

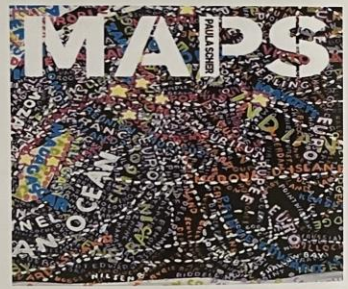
Typographic illustrations research



Peter Strain's Posters

This typographic illustration has a rustic handmade feel, by the way Strain has used a pencil stroke effect on the letters to look like fur. This designer would have used ICT to fit the lettering into the shape of a reindeer. As a poster it really catches your attention by the way the legs fade into the background and the contrasting white lettering making up the body of the deer really stands out.

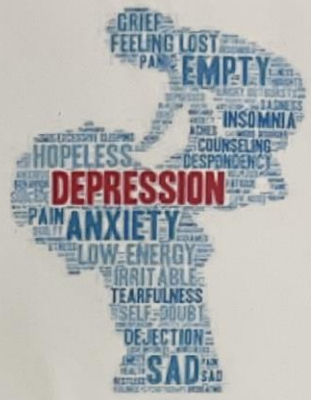




Paula Scher - Typographic maps of the world

Scher has designed colourful typographic maps of the world, its continents, countries, islands, oceans, cities, streets and neighbourhoods. These designs have great detail as the use of tiny words and phrases make up the designs some of which are as tall as 12 feet. The way the typography connects in the water makes the design look as if there is a smooth, swirling motion despite being still.





This typographic illustration would have used ICT to make this design. This stands out as all the words are bad and problems in this world however are put In a very happy image of a mother and child. The use of the main word in red makes it stand out and pushes the message of the image which all the other words in relate to.

This design is very fun and creative. It plays with the meaning of the word to create an image. The design has a very clean finish as photoshop has been used when duplicating and placing the Letters. The smooth movement of the letters is almost an optical illusion.





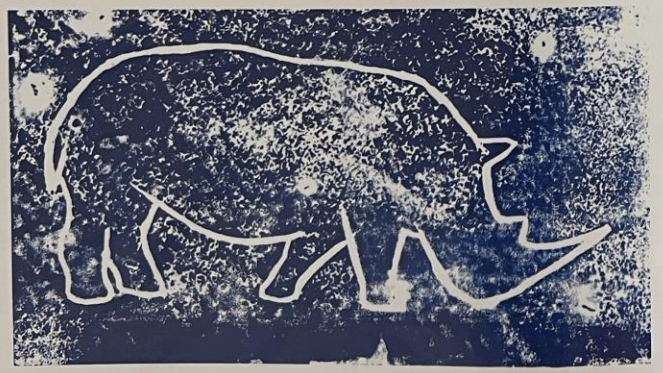
This piece of typography sends a message with the words that make up the tree. The creator has once again used ICT to fit the words into the outline of a tree.

Printing techniques

Block printing

ABCDEEFF
HIJKKGML
RSTOP

Lino printing

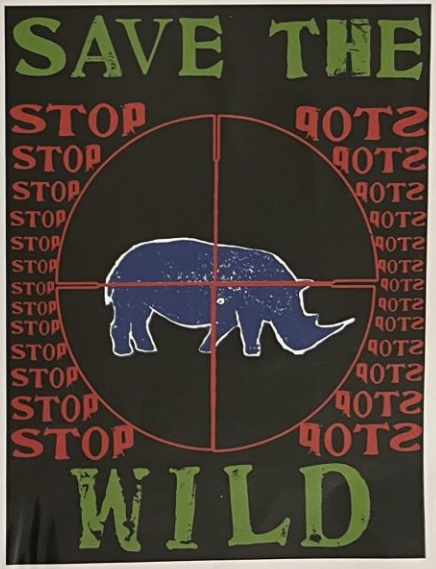


Initial ideas

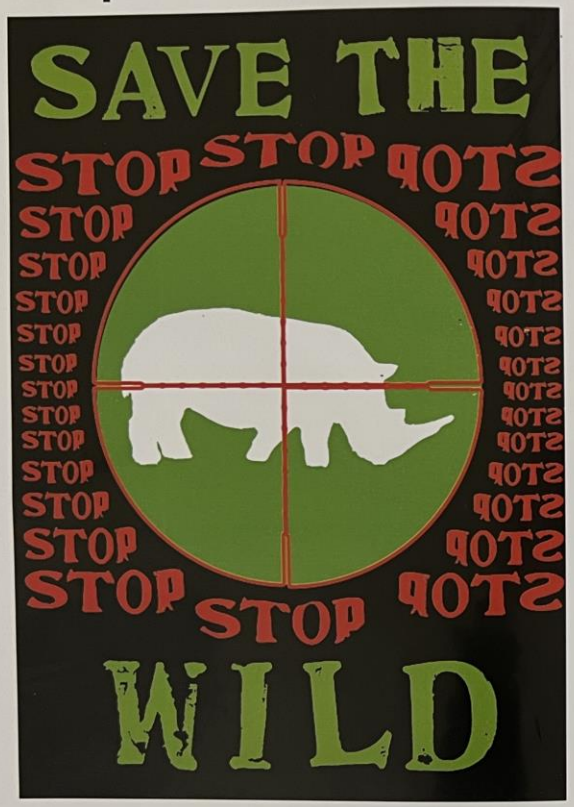


This is my first initial idea. I have used block and Lino printing to make this design. The rhino was the result of a Lino print. This design was made to send a message about animal poaching and to 'save the wild.' Red is used on the lettering around the animal as it often represents anger and blood, and this gets the message across that this is wrong. However, the green is used in contrast as it often represents nature and life. The cross hairs of a sniper instantly catches the attention from afar and gets across the message instantly.

My second initial idea follows a similar design. However, use of the black background makes everything else stand out and look more interesting. Also, I have moved the words Save the wild, so they stand out and are more legible on the page.

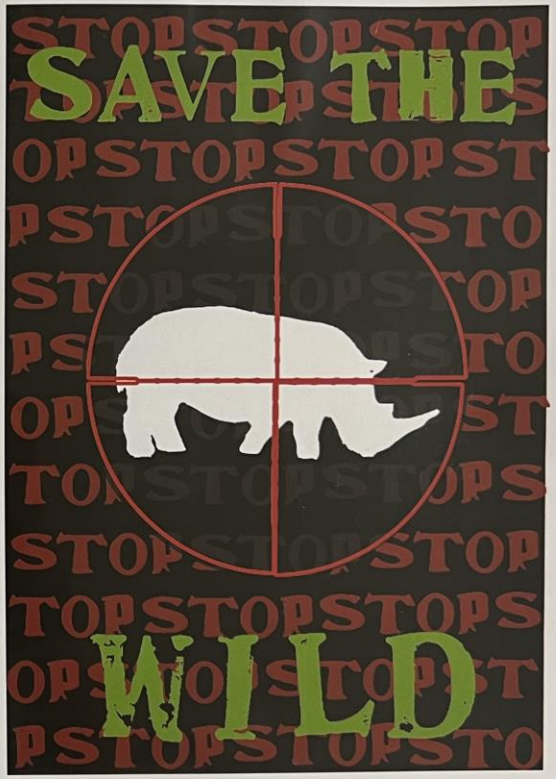


Development



This is the final design I am going to choose to print off as my final piece. I am very happy with my development as I have only made a few subtle changes but give a lot to the design. Firstly, the green background in the scope which really makes the Rhino stand out and fits perfectly with the message and theme of nature. The words STOP know go all the way round the scope which highlights the wording of the image. Finally, the rhino has become white as it gives a clean finish and makes the rhino stand out on the page. I am very pleased with how this all came together to create my final.

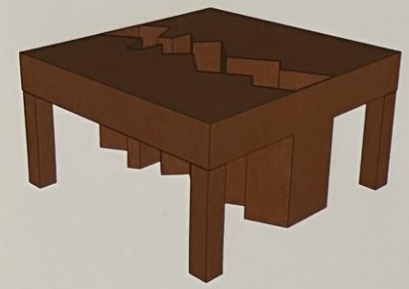
Final



I am very happy with the outcome of this typographic illustration on the theme of poaching by using a range of printing methods. Since my development I made some minor changes firstly by having the words stop in the background throughout this piece as a darker red which draws attention to the center image and the writing used rather than the words around the outside. Also the Green writing going over the dark red and black creates contrast and focuses the viewers attention on the main message and the main image of the design

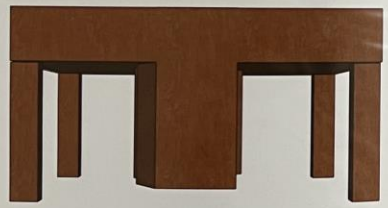

Function and form
in furniture Design

Initial idea 1





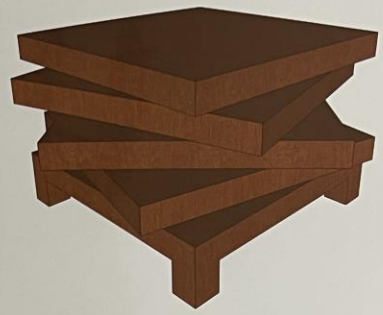


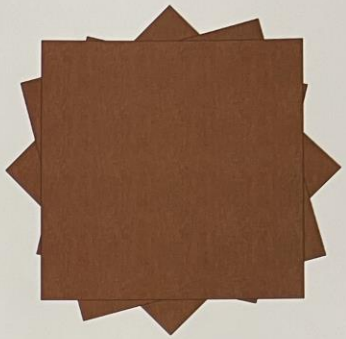




These are examples of Gregg Klassen's work which have very interesting designs. All his tables have what appears to be a 'river' going through the center using glass to contrast the wood that is used for the rest of the table. This was the inspiration for my first idea. My table idea however uses the crack in the table for use as storage which improves the functionality of the table. It follows a very similar shape to the original lack table and will use both the tabletop and legs of the original table.

Initial idea 2





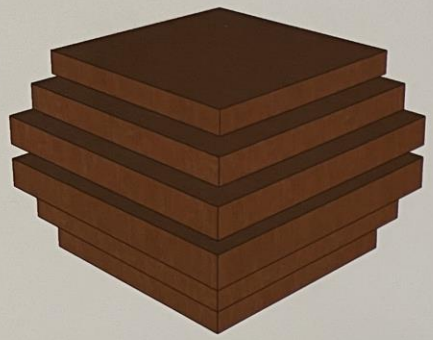






This design was initially inspired by the spiral tower by Zaha Hadid. This is seen with the layers almost floating and each layer is rotated in a different way, this creates gradual movement between each layer. Also the table on the left inspired the design to be in repeating spiral pattern which is very aesthetically pleasing. Despite the very drastic changes I have made to the original lack table it still functions perfectly, as a small coffee table.

Initial idea 3







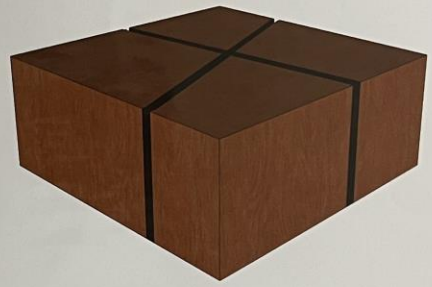


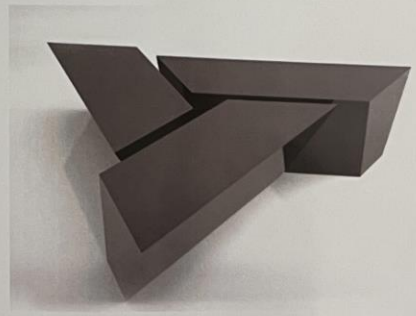
My third table design was inspired by the UFO pendant lamp made by Verner Panton. I followed the use of floating layers of the same shape increasing in size towards the middle then decreasing in size towards the top. This design is very futuristic which is why it is named after a UFO. My table follows a similar repeating pattern, which is very aesthetically pleasing with the gradual increase in size, to this lamp. This table would be made from a few of the tabletops of the original lack table

Initial idea 4



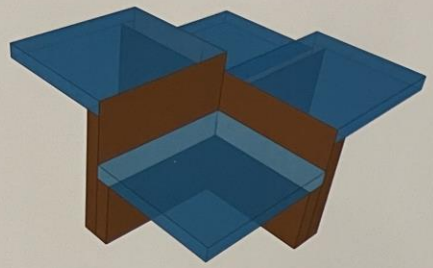






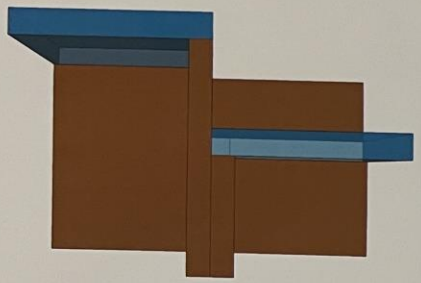
My fourth table design has a much simpler design than my previous three. It was inspired by a modern coffee table which appears to be separated into three parts. I have followed a similar design but using a square shape instead. This table has followed the modular style which was inspired by the triangle table. Therefore each individual part can be moved and rearranged into many different shapes and combinations. Moving forward I could play with different forms and patterns and how they separate and possibly how they could be re arrange into completely alternative shapes.

Initial idea 5

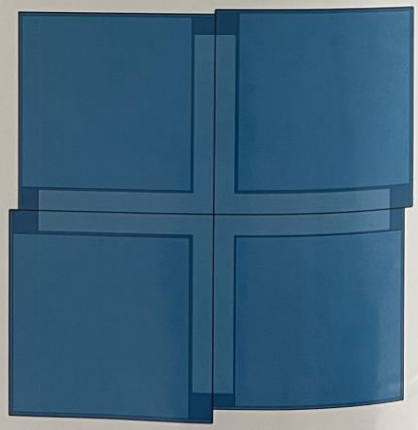




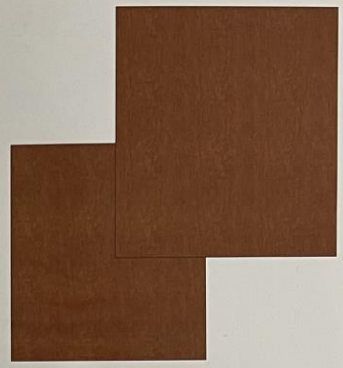
My penultimate initial idea has a very interesting form. This design was influenced by the set of tables on the right. The set of tables are very interesting as they are all at different heights, and despite all being separate the tables match each others curves and edges to fit into one.

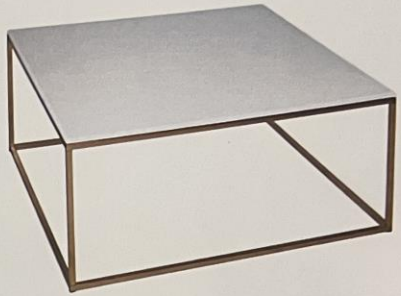


My table follows a similar idea of having the shape separated into four all at different heights. However my table is one piece instead of being separate.



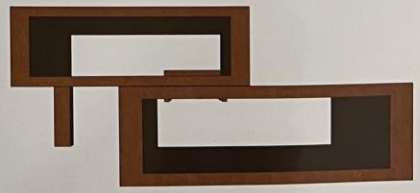
Initial idea 6







My final idea was inspired by a very simple, common coffee table in a cube shape. My design balances two similar cubes on top of each other to create an interesting design because of the balancing of the box on the top level. The use of very geometric simple shapes creates a very balanced table. This table functions better than the average lack table as there is more space on the top as well as possible place for storage.





Ikea lack table

Factual infomation

- cheap table from ikea
- made from wood
- mass produced and sold very cheap

Materials

- Wood has been used through out the table.
- This has been chosen as it is particularly cheap so can be mass produced with very low cost
- However the final finish looks as if it is made from more expensive man made materials.

Process and technique

- They are mass produced as their is a lot of demand for them as they are in demand

Form

- The form of this table is as simple as possible.
- The structure is perfectly stable balanced on 4 legs in each corner.
- relatively durable if used for its purpose as a simple coffee table
- The simple design gives a clean look.



The product is very much defined based on function instead of form

Function

- its function is to be a simple small table to hold light objects
- it is user friendly as it is sturay and robust
- The only real focus of this table was the function little attention to form.

Context

- low cost at the same time as having a clean design.
- Can hold up to 100kg of weight so is very user friendly

Cost

- Table cost between £5-7 depending on colour or finish
- No particular target audience anybody could own one as design is so simple and such low price
- Back table is very good value for money as it is so cheap and does exactly what it is needed for as a table it is able to be so cheap as it is mass produced
- Table has good longevity as a basic coffee table

Opinion

- very succesful and achieves the intention
- I like this product, it is so simple you can't really dislike it.
- This will kind of influence my work.

Les Ministres Stand, Alessi Phillipe Starck

Factual infomation

- designer is Phillip Stark
- It is an Alessi product which is a factory of italian design which has many different high quality products and designers
- This table is available in many high end shops.

Materials

- Man made materials
- mirror polished 18/10 stainles steel platter
- Thermoplastic resin base
- two materials create a contrast
- High quality materials used



Process / technique

- Hand crafted in Italy which is one of the features of Alessi work
- Not produced in bulk in the same way the ikea table is. However it is produced in small batches so quite few around.

Cost

- between £100-300
- target audience is people with more intrest in design. It is not the most functional so will not be bought by everyone. Also the origin legs and mirrored top does not work with much.
- Therefore targets people who have more space and money than the average person
- Product is good value for money as very good long lasting materials have been used and it was hand crafted

Context

- Part of the Alessi piecdes which had a diffrent view on design. The design and designer was the most important part. However for the mass production the design had to be functional and easily reproduced which was more important than the design itself for example the ikea lack table
- Alessi products are on display in museams worldwide with many

Function

- More of a focus on the form
- The table is not the most functional as it has a platter as the table top.
- This means you could not put a drink down on the table. Also anything you put in the table will just slide towards the center.

Form

- very intresting unique form
- The mix of the bright orange base and mirrored effect gives a very modern feel
- Steelise of steel in a thin sheet curving in gives a aestheticaly pleasing feel.
- The legs look like human legs in a crouched position or fingers. This gives a very intresting look.

opinion

- I really like this table.
- Succesful in its intentions which have a more form focused table
- This will inspire my work as a table is not all about being perfectly functional

Form and function analysis

In this essay I will be discussing the differences between the Ikea Lack table and The Les Ministres Stand by Alessi. I will be discussing how each table achieves its aims with form and function. The Les Ministres Stand by Alessi is very different from the basic ikea lack table. This interesting piece was designed by Philippe Starck. Philippe Starck was born in 1949 in Paris and is a French architect and designer known for his varied designs.



Phillipe stark has used man made materials such as a thermoplastic resin base holding up a mirror-polished 18/10 stainless steel platter. The mirror effect gives the table a modern look and contrasts the bright plastic legs. This table is handcrafted in Italy with the use of machines so is made in small batches. In complete contrast the Ikea Lack table uses thin cheap wood and a honeycomb cardboard in the centre to give stability to the table. This is because it is very cheap so can be manufactured and sold in bulk with very low prices.



The Les Minstres stand clearly favours form over function with a unique design. The legs of this centrepiece almost look alive, giving an organic lifelike feel to this Contemporary piece. Also the use of steel which gives the mirrored effect, also the concave basin gives a smooth aesthetically pleasing feel and very modern look. Oppositely the ikea table has little attention to form due to the cheap price as the design is as simple as possible.

These two products both have the same function as small coffee tables. The Ikea table completely focuses on this function. This is because it follows the most basic possible structure for a table but does the job perfectly as it can withstand around a 100kg on it so is perfectly balanced with no intricate or noticeable design. The Les Ministers table has much less focus on the function. This is because the tabletop is concaved which is not as effective as you could not balance a cup or mug on it which is one of the few purposes of a small table such as this one.

The cost of these tables are also very far apart. The les ministers stand is quite expensive between £150-300 because of the use of expensive materials and being hand made. The target audience is for a place like an office or a law firm as a statant piece. This is because it isn't the most functional table therefore this table most likely would not be used in a home. The Lack table however is much cheaper between £5-8.There is a much wider target audience as the table can be used by anyone because it comes in so many finishes and colors and is so simple and cheap, I can see this table being in any home as it is so versatile.

Both these products are very successful in their intentions. the Ikea table is cheap and focusses on function. However the les miinstres stand focusses on form and is expensive. I am a big fan of Phillipe Stark's work with very modern interesting design. This will influence my own work to find a balance between form and function. This is because I hope to have a table that functions as well as the Lack table but also incorporates an interesting design which is what will add value to the table.

Maquette 1









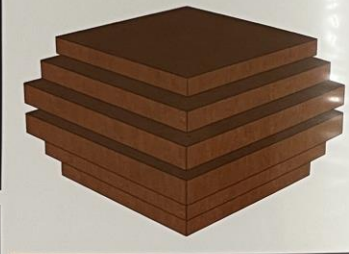


My first model was relatively simple to make as I used the basic IKEA tabletop shape to make the layers. Each tabletop what's spun 15 degrees from the previous one to create the swirling pattern which is very aesthetically pleasing due to the smooth movement. The only change I made from my sketch up model was not using gaps in between each layer this is to give the table more stability.

Maquette 2



My second model once again uses the original tabletops of the IKEA table in a very interesting way Progressing from smaller to much larger in the middle and then smaller again at the bottom. When I make this table bigger from the real lack table, I could think about developing the design so that each layer is movable and can be rotated so different patterns could be created depending on the user.







Maquette 3







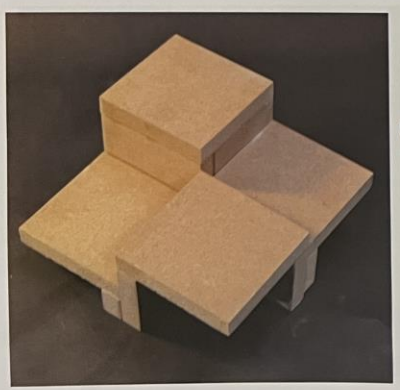
My third table Looks much more interesting in reality than on SketchUp. The only change I have made is the two separate pieces are interlocking whereas in my initial idea on SketchUp I had one of the boxes balancing on an author. This gives more intricacy to the design. This design definitely has a more of a focus on function rather than form. This table design could be developed by using another box shape and making them balance in a interesting way.

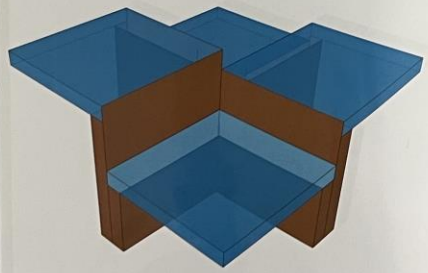
Maquette 4





my penultimate table model looks as if it is four tables put next to each other which gives a very interesting look to a simple coffee table. Despite using a clear material for my SketchUp model I actually decided to use the same material as used for the rest of the table on the tops as otherwise I wasn't incorporating the original lack table.

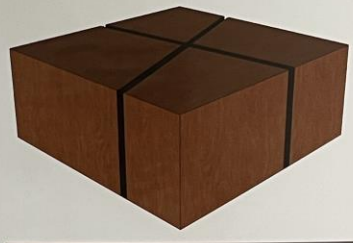




Maquette 5

My last model was this modular table design. This table is very simple and effective As it is the same shape as the lack table however it's divided into 4 separate parts that can make up different shapes depending on what the person wants and how it fits in their space.









1/2 size model/development

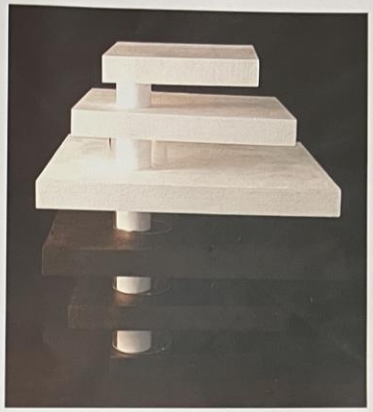


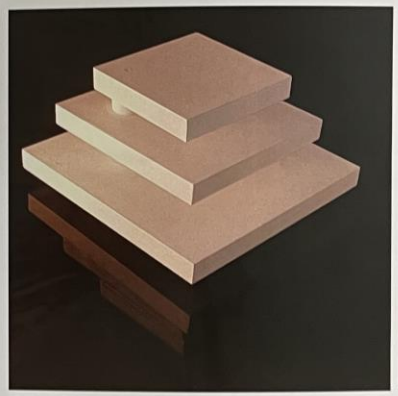
I have developed my model based on this coffee table. I liked this table because of the way the individual layers can be moved to change the form and function depending on the user. Also the storage space in each layer makes the table very functional.
The way each layer looks as if it is floating and the gradient of the colors going from light to dark gives a very modern contemporary feel to the table. I really like this table even in its most basic form of 3 squares layered on top of each other. The use of geometric simple shapes that can be moved to add to both form and function is something I wanted to incorporate into my design.

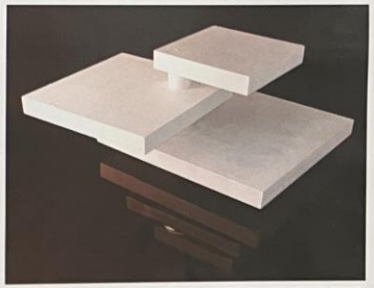
Having seen this table I have made some minor changes since my first. Firstly, and most noticeably each layer of my table can be rotated completely by 360 degrees. I have been able to do this by having the pipe connecting through each layer placed towards the corner. This is so that rather just rotating in one place there is much wider range of movement which makes the design much more interesting. I have painted half the layers white and half black as the contrast of the colors stands out in comparison to a simple block color.

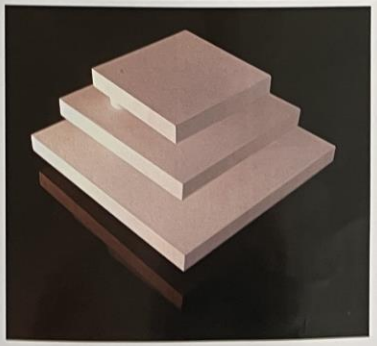


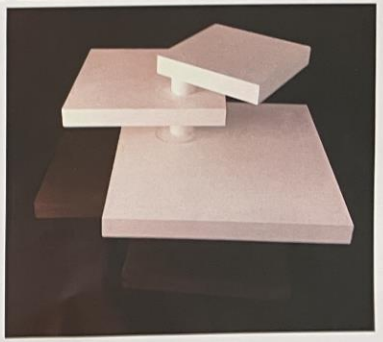
When I make my final piece, I will make some changes to my model. This is because I had a big problem keeping this table steady and balanced. There are many slight changes and adjustments I can make to sort this out. For example having the connecting tube slightly more central to give slightly more balance is a tiny adjustment that I can make which will make a big difference to the functionality of the table.











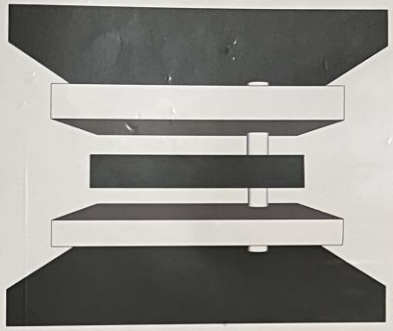
Experimenting using drawings



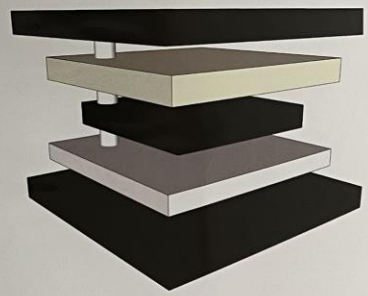
Final Development drawings



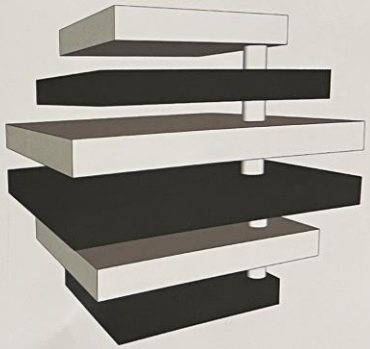
This is a table from bunny Williams called the hourglass table which as the name suggests is inspired by the shape of an hourglass. This inspired a change of structure for my table going from wider at the bottom and thinner in the middle in a similar hourglass shape.



Development



Original



I choose to make these changes because it makes the table more functional. This is because the tabletop has a larger surface area, and the base is much more stable. Also these changes give a lot to the form as the concave design looks smoother than the original convex design. The final change I made was getting rid of one of the middle small layers. This is because it wasn't adding anything to the function or form of the table. Also rather having each half different color's I had the color alternating at each layer as I believe this accentuates the movement of the piece creating the hourglass shape.

Final table

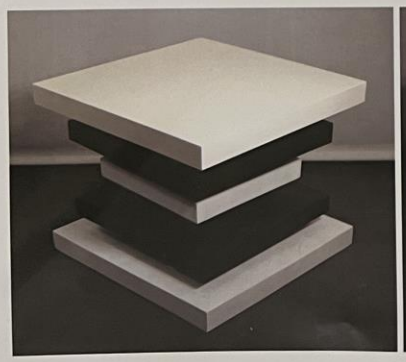
In this project I set out to make a table out of the original ikea lack table and increase the price. I believe I achieved these aims as I think this table would cost a much larger sum of money as not only did I improve the form of the product but also the functionality as the movable element of this table adds great use. The elegant finish and contemporary style is clearly an improvement on the basic lack table.

This table has been developed greatly since my first model which was inspired by the Verner Panton lamp and its modular design with gradual movement from wide to narrow. The main changes are the rotatable tabletops which offer both interesting forms while in different combinations as well as increased surface area for things to be put. The design was further inspired by this rotating coffee table which lead me to change my table dramatically so that each layer rotated 360 degrees. I was able to make the table balance by gluing metal rods to the corner of the top table where the rotation happens. Each layer is connected as a solid wood rod goes through each layer and acrylic tubes have been used to provide more stability and divide each layer.

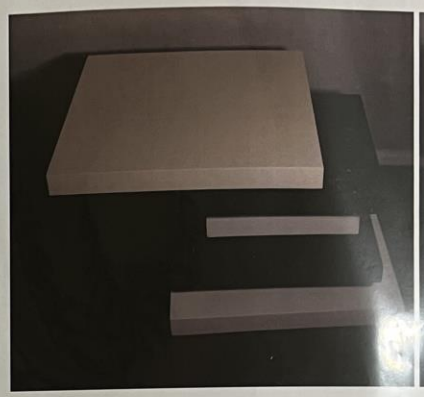








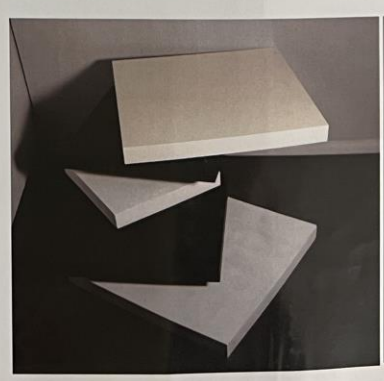






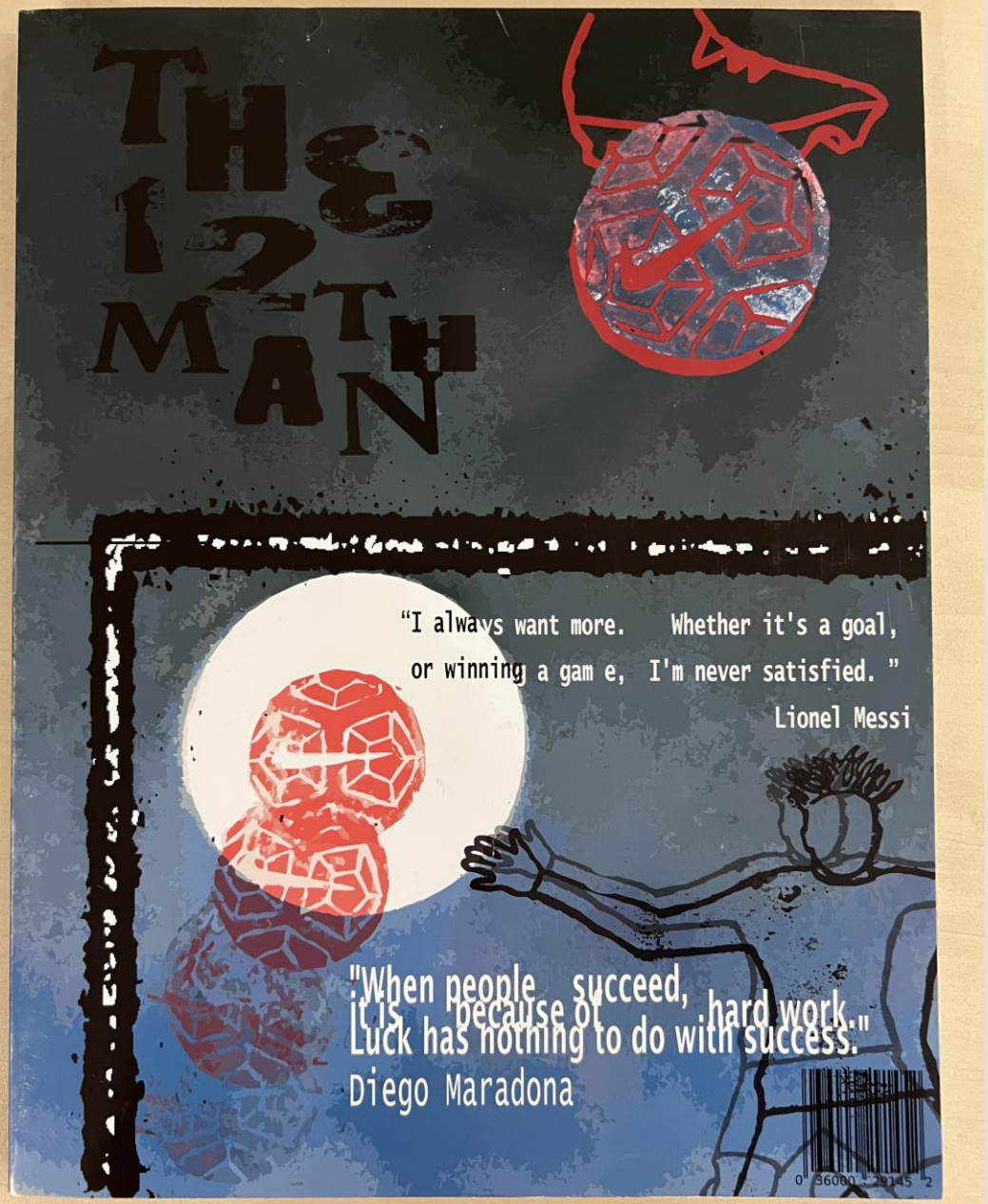
Overall I am extremely happy with how this table came out as it has many formal and functional features for such as the way each layer seemingly floats which is accentuated by the contrast between the white and black layers. I think the use of white and black gives a very elegant look and makes it stand out amongst other similar tables. The change from having a convex to a concave design was very important to both the function and the form of the table as the hourglass structure is very aesthetically pleasing and it means that there is more surface area on the top. Also the use of the geometric shapes of the Ikea lack table and the symmetry of the table gave structure and balance to the design.

To conclude I believe I have achieved my aims of creating a table from the basic Ikea lack table and increasing its value.





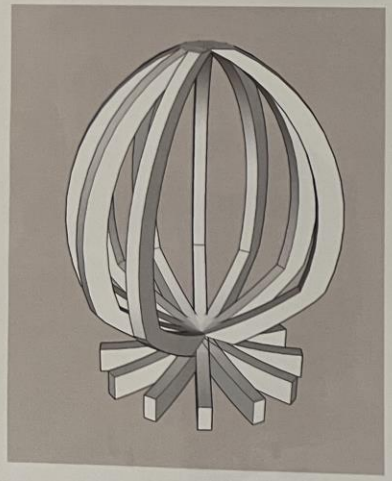
THE NEW SH1


THE 12TH MAN
"I always want more. Whether it's a goal, or winning a game, I'm never satisfied."
Lionel Messi
"When people succeed, it is because of hard work. Luck has nothing to do with success."
Diego Maradona

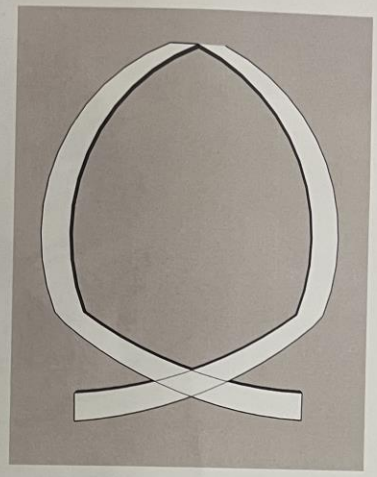
Initial idea 1



This onion shaped lamp is what inspired my first initial idea. It was designed by Verner Panton in 1977. the outer shell is formed by differently, curved concaved–shaped segments. I believe a similar design suits a chair. This is because a cocoon shape around the user. Also, the way the concave pieces come together at the bottom It creates a perfect cup shape seat. This influenced my design as I used a similar concave shape to create the hollow center, so it is a functional chair. I have however used a symmetrical design creating the perfect oval shape which is very aesthetically pleasing. With this chair design there is huge room for changes and improvements based on others work's and designs.





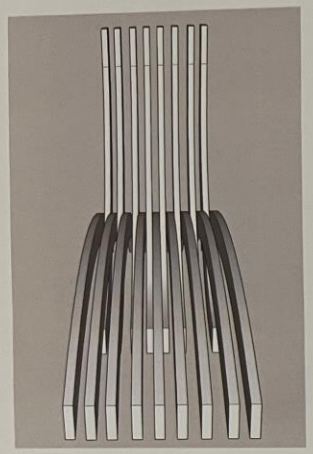


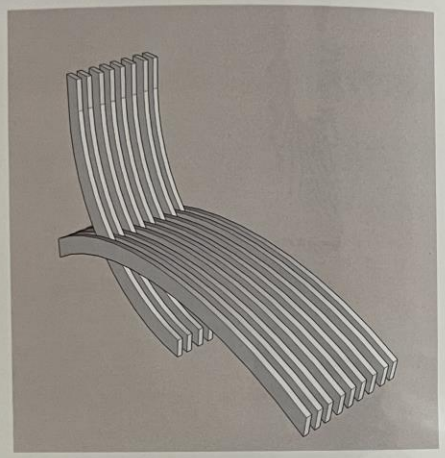




This chair still follows the x seat style. However instead of doing this using each piece of the frame running parallel as the one above does the lines are perpendicular and meet in the middle crossing over. This takes away the old-fashioned design and gives it a modern twist. Also, I have used a similar curved base however instead of it stopping at the arm rest it curls right the way round creating the cocoon shape.

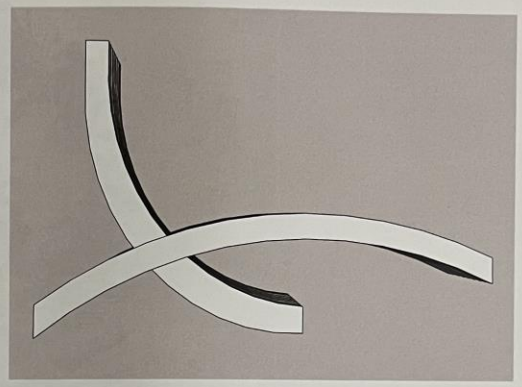
Initial idea 2





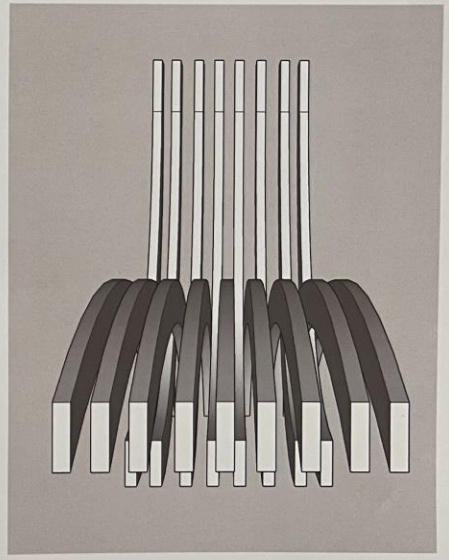


My second idea took inspiration from the Sylvester chaise lounge chair. The ergonomic design of the Sylvester chaise lounge, The S-shaped silhouette and without any form of base or support, it looks totally modern and innovative. This lounge chair was designed by Leonardo Dainelli in 2008.

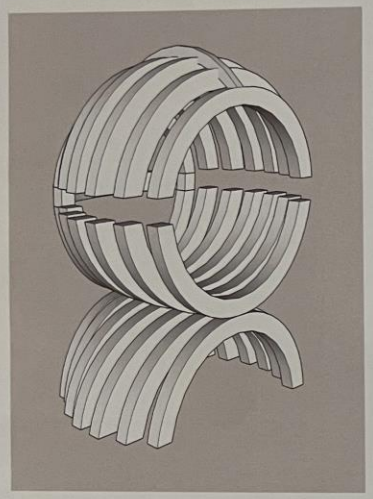


This design still follows the x chair design as can be seen from this side profile. However, this is a lounge chair which obviously has a quite different style to the old x chair designs therefore instead of the x design being front on it appears from the side view..

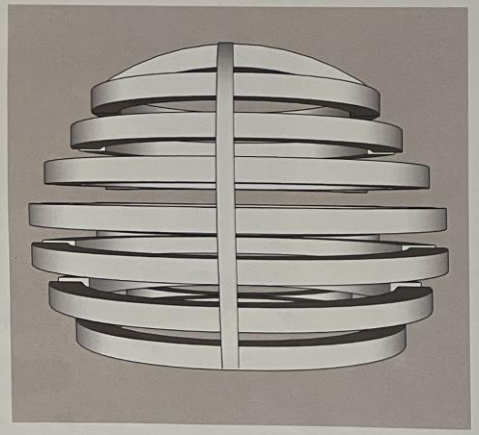
My second idea has a very interesting design. Only two shapes are used which gives the design an element of simplicity and a clean look. The pieces that make up the chair are very thin so can be flat packed and this means it can be used functionally as there are no large gaps and plenty of support for the user. The curves of the chair give it an ergonomic comfortable look. Despite the simplicity of the design there is a very modern clean look inspired by the Sylvester chaise lounge which looks extremely futuristic as it is made from one piece and comes with no support frame at all.



Initial idea 3



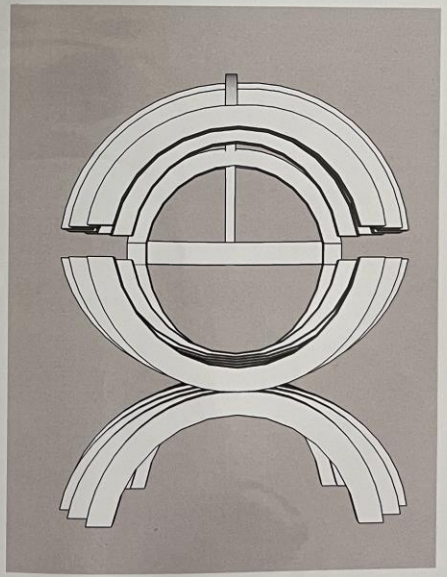




This design follows a similar structure to that of a ribcage. The hollow center creates an ideal seating place. The winding bones that make up the ribcage are very aesthetically pleasing which I have translated into this model. Also, the way two sets of semi-circular shapes meet down the middle conveys the ribcage shape.

This chair is Eduardo Benamor's Airy Rapigattoli Seating. Similarly, to my design the purpose of this model was to resemble the bones in the human body. Another reason I choose this design to inspire my model is it uses flat pack shapes which is the purpose of my designs. This chair design has an organic feel and at the same time futuristic. This is done by the gradual thinning of the chair which gives a very smooth aesthetic look.



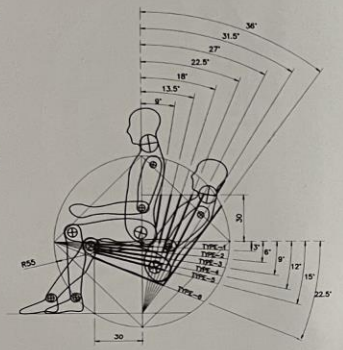


My final model has a very interesting form. The top of the chair looks very futuristic as it looks as if it is floating as they are clearly separated from the bottom half apart from the back. The base of the chair has a basic design very similar to the original X chair designs with a few subtle changes. The ball like structure gives a smooth modern look. I am very pleased with this model and am sure I could develop and improve it in many ways.

Extended research Ergonomics

Ergonomics is the scientific discipline concerned with the understanding of interactions among humans and other elements of a system, and the profession that applies theory, principles, data and methods to design in order to optimise human well-being and overall system performance.

This is very important when it comes to chair design as the focus of a good chair is comfort and function as they should be designed to reduce fatigue and give good support. In a chair, the dimensions of the seat, back and arms can be varied to provide seating for different functions, such as dining, writing, resting and lounging. At the same time, the insides of a chair are angled or raked so that the sitter is supported and made to feel secure.



Based on this research I plan on making changes to the shape of my chair to suit the ergonomics of people of all sizes.



Chair

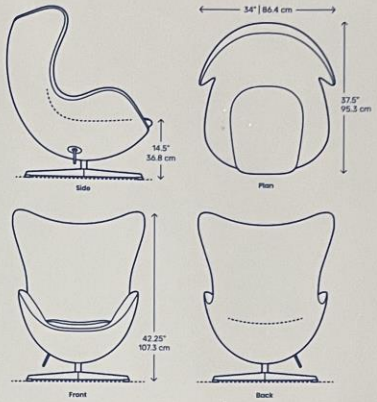


Lounge



Reclining chair

The Egg Chair and Footstool are a pair of sculpted furniture pieces shaped to respond to the human body. Designed by Arne Jacobsen in 1958 as the signature element of his collection for the lobby of the SAS Royal Hotel in Copenhagen, the Egg Chair can adjust for privacy and comfort by tilting and swivelling its upholstered foam shell around an aluminium base.
The way the seat of the chair curls up around where the person would sit is like my design which is why I focused on the ergonomics of this chair.

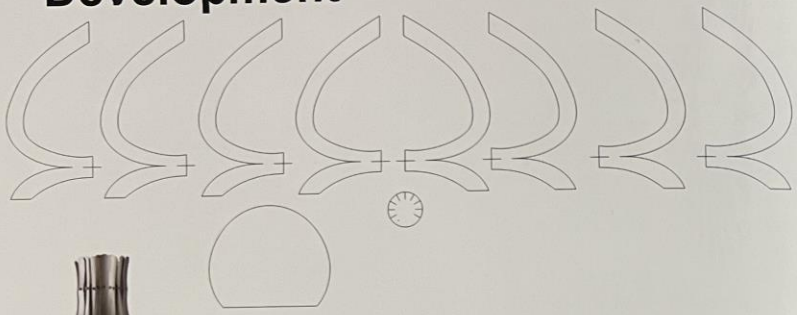






The red lines show where my model could be adjusted so the design is more ergonomic. The seat could be shorter and this would allow the back to be much less straight which will increase comfort for the user.

Development



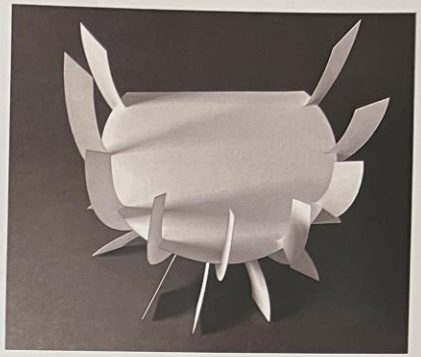


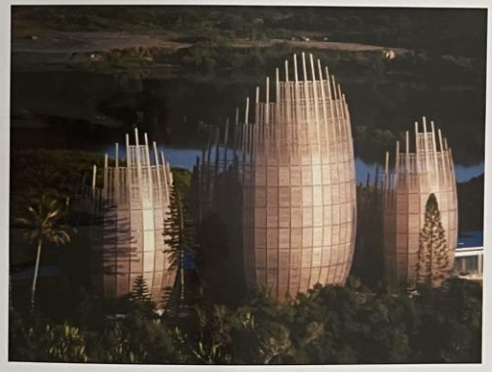
I have decided to develop this design as the symmetrical form is very interesting and I believe I can develop it in many ways. I have made some big changes to the shape of my chair since the SketchUp models. This was necessary so that the slotting system would work as a 3D model. I did this by using one repeated shape nine times which all meet at two points with a slotting system much like the onion lamp which my original model was inspired by. I am happy with how my first card model looks as the smooth design is very aesthetically pleasing.





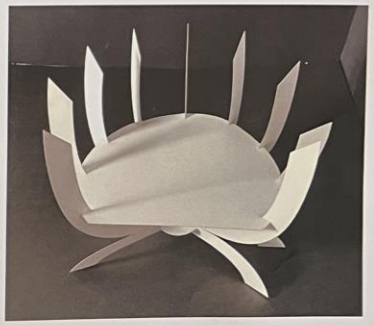






I have changed the shape of my chair based on Renzo Piano's Jean-Marie Tjibaou Cultural Centre. Instead of each individual spike meeting at the top they are all cut shorter. This change to the shape makes it more ergonomic as the pieces are much straighter rather than curling back towards the center.









I have developed my chairs further by using corrugated card to give an idea of how the chair will work when using resistant materials. The first chair above uses a combination of horizontal and vertical lines to create a contrasting cage structure. However, the slotting system was very complicated and unstable so if I develop this design, I may have to make some changes.

The second chair uses a descending height to make it more organic in a similar way to Renzo piano's cultural center. This model doesn't use horizontal lines to create a more simplistic open design.









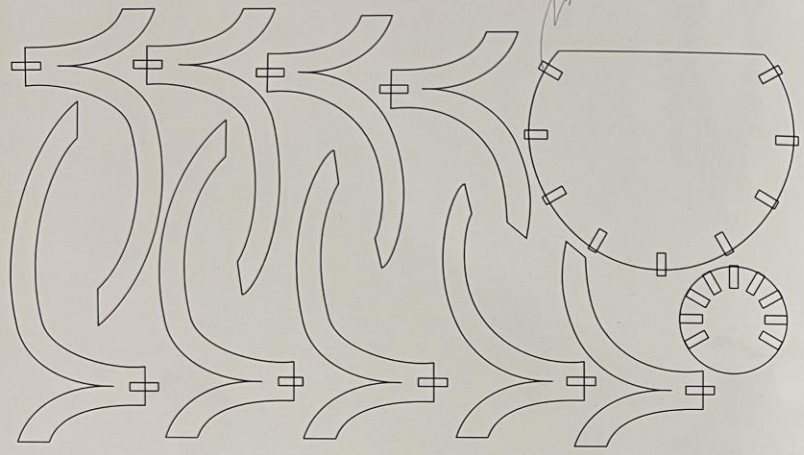




This is my final development before my final design, and I am very pleased with how it looks in a hard material model. Also, I am very happy with how well the slotting system works and how stable it is. The only slight change I have made with this design is by making the chair much narrower as in my previous model it was very wide. This will make the chair more ergonomic as the back is straighter and narrower.
I really like how clean this model looks in clear acrylic however for my final I will most likely use white or opal acrylic.



Final Model

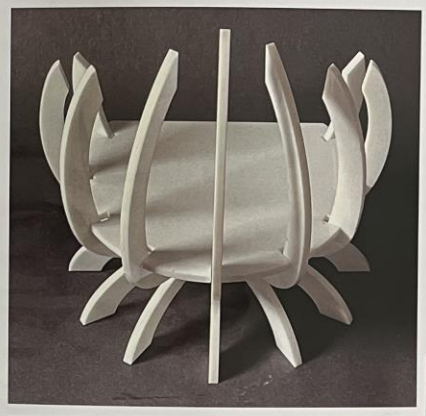




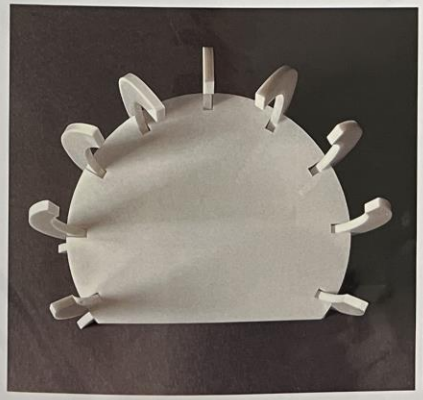


I am very pleased with how this final piece has come out and have achieved my intentions to make a flat pack chair by laser cutting the individual shapes. The design has changed so dramatically from my first ideas. I have made gradual small changes throughout each stage of this project based on other designer's work. This has produced a very aesthetically pleasing as well as ergonomic chair design.





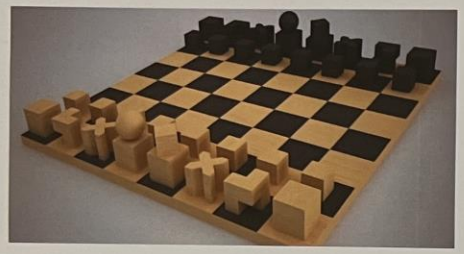
Since my previous model I have made a few subtle changes. Firstly, the seating has a slotting system to give the chair more structure rather than the seating being balanced in place. Also, the use of white acrylic rather than clear gives the model a much cleaner look.






Jewellery Design

The Bauhaus chess set by Josef Hartwig



Munich-born Hartwig had an unconventional background as a monumental mason in Berlin, until Bauhaus founder Walter Gropius hired him in 1921 as master of works at the Weimar wood and stone sculpture workshop. Not the biggest of the Bauhaus names, Hartwig designed only two key pieces in his brief time there: Eule ("Owl", 1922), and the chess set which was designed in 1923.



These simple shapes could be interesting to experiment with jewelery design. Also, the idea of the form representing the function could may inspire some designs.

The figures have characteristically reduced forms which, in contrast to commonly used figures, are symbols based purely on the function and form of the manoeuvre of each piece. Cubes, cylinders and balls lead you move by move to checkmate. The X-shaped bishop denotes its diagonal movement, while the near-limitless possibilities of the queen are abstracted to a simple sphere. The tower is represented by a compact cube with a correspondingly larger volume than a pawn or knight. Form and completion of each figure are subject to the dictum of function. Thus, the pieces harmonize skilfully with the chessboard, since they do not form a playful contrast, but rather find their way stringently into the symmetry.

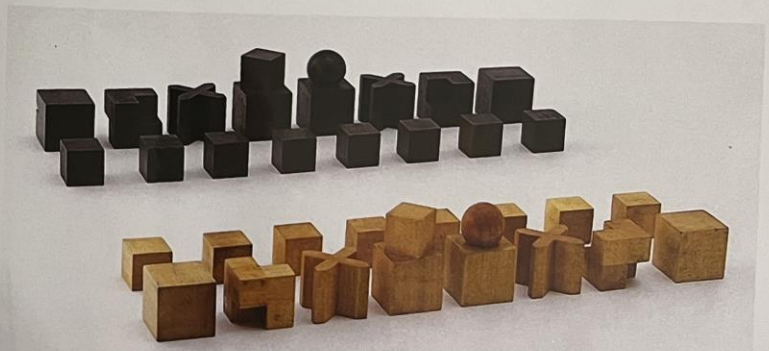
It embodied the school's tenets that an object must be practical, durable, inexpensive and beautiful. originally sculpted from pear wood, which is relatively expensive and is used as is very high quality which is clear when you look at the figures. Every aspect of the Bauhaus set was given consideration, even the packaging designed by Joost Schmidt. It truly is, in the Bauhaus tradition, a union of art and craft. Bauhaus replicas produced by Naef are classics in the true sense of the word. An archaic use of forms which these objects suggest is characteristic of this collection. Products with the Naef logo (placed in the background) stand for the highest precision and quality in wood processing. Adults and children the world over, are inspired by the harmony of the visible and technical durability of these objects which in turn, encourage creativity and develop the senses during play.

The Bauhaus movement championed a geometric, abstract style

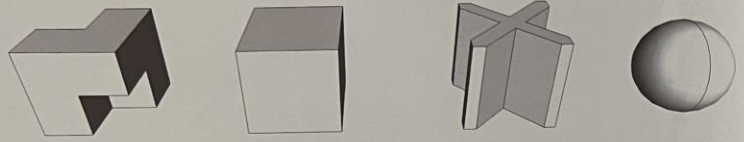
This piece is still relevant and bought almost 100 years later as it is such a popular design due to its unique style.

Fascinating, aesthetic, ingenious. The objects possess all these features, yet each one has its own individual character. One first understands this when held in the hand. Apart from the concept behind them, it is the quality of the workmanship which makes Bauhaus play objects so special. Respect for the material, wood and handcrafted with extreme care, result in this unique quality.

The beautiful style could translate very easily to jewelry as the figures are a statement piece alone.



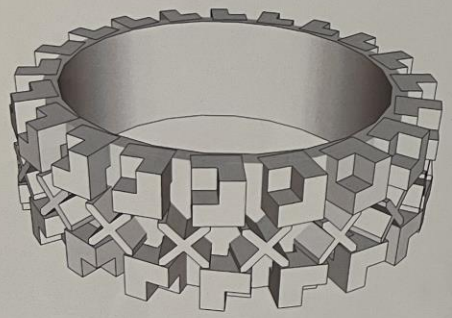
First ideas using SketchUp

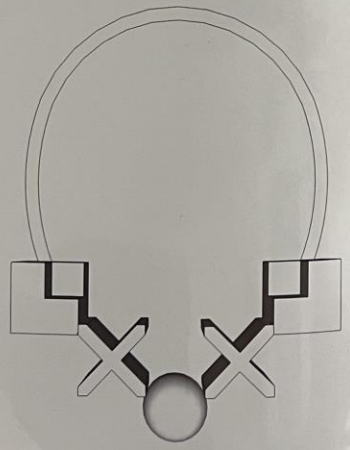


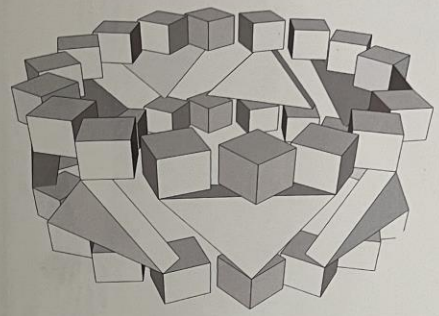


All my ideas have been inspired by the Bauhaus chess set by Josef Hartwig. This is clear as the basic forms that make up the chess set; I have used throughout my jewelry design.

Two of my first ideas are a necklace and a bracelet. The bracelet on the left uses two repeating shapes throughout to create an interesting, unique pattern. The symmetrical design is very aesthetically pleasing. The necklace on the right has a much simpler elegant design. Much fewer of the shapes have been used as they are very interesting and beautiful on their own.

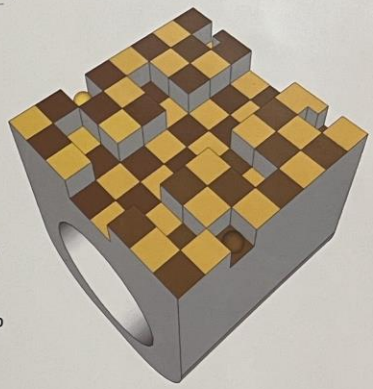


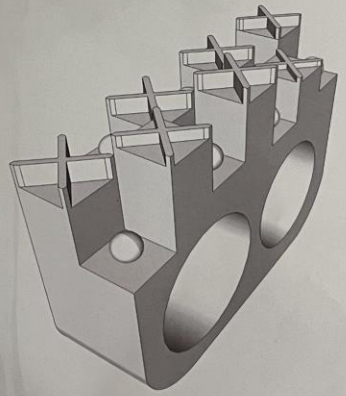


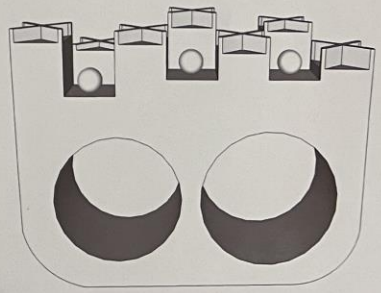


I have also designed some possible rings using Similar shapes and patterns to that of Hartwig's chess set. The first design on the left uses very simple geometric shapes which is a big part of Bauhaus design.

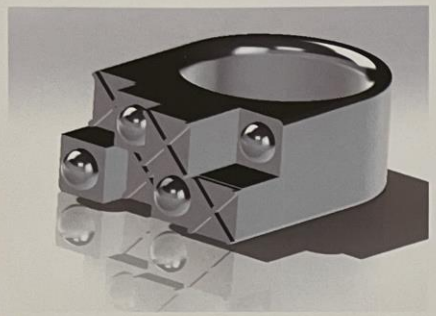
The other two rings have chequered patterns the same way a chess board does. The ring to the right is made up of squares that spell ring much like how Hartwig uses the form to show the function of the chess piece.
The ring below has varied heights to add to the design. However, from above the piece makes a symmetrical pattern which is aesthetically pleasing. Finally, there is a great contrast between the cross shape which is made of sharp hard lines and the sphere which is smooth and perfect the whole way round.





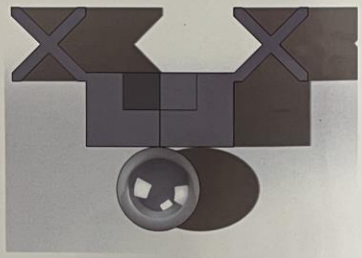


Development using solid works

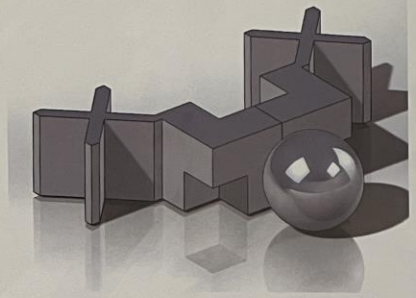


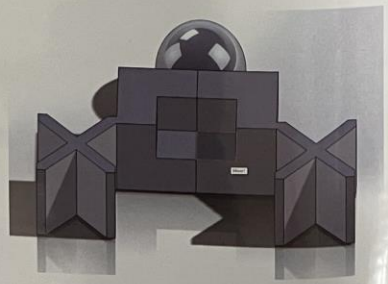


This ring has changed slightly since my SketchUp model but am very happy with how the changes look. Firstly, it only has one finger hole which I believe looks much better and the spheres instead of balancing are now semi spheres. This allows the ring to be transferred from a concept to a real 3D design.



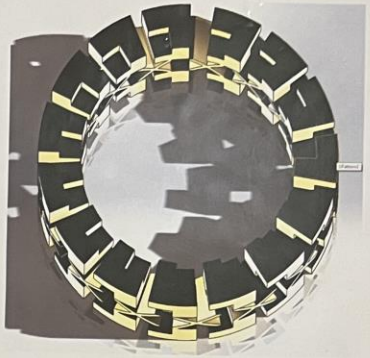
This necklace also has been changed so that it works as one piece rather than just 5 shapes put together. I also believe these shapes suit their placement as they show the movement of the necklace.





Ring





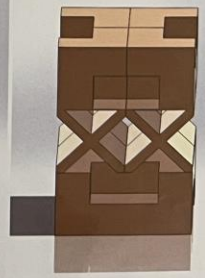
Bracelet





Earrings or cufflinks





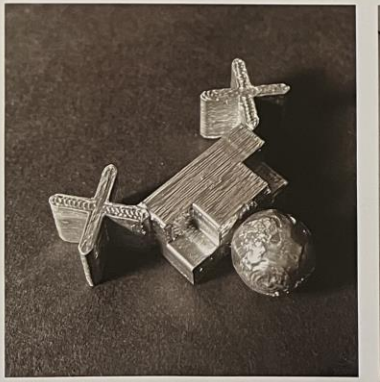
These 3 designs all use the same pattern in different shapes to suit the function. The bracelet is much thicker to stand out on someone's wrist. However, the earrings are arranged in a square shape to create an interesting small pattern.

First 3D printed models

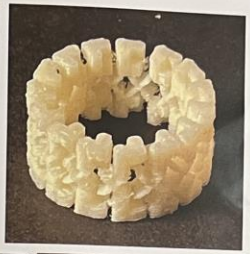




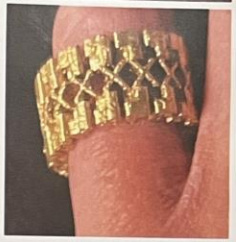

These are my first 3D printed models based on the Bauhaus chess set which uses a small variety of shapes that I have used to produce jewelry designs. The model above is designed to be sturdy as it is a cufflink this is done by the pattern being repeated four times in a square shape creating a symmetrical pattern.
The necklace has come out very well as the x shape works as a place for the necklace to attach to also the string follows the cross shape. This means the string follows the movement down towards the sphere which results in an aesthetically pleasing design.











This ring and bracelet are very similar as they are made up of the same pattern but are adapted to their functions. The bracelet will need to be changed as it is much too tall in comparison to width however I am very happy with the general form of both the ring and bracelet.




Final





I am very pleased with this final product as it fits the wrist perfectly and the form is very elegant. I believe I have created a beautiful 3D printed bracelet design through the use of a repeated pattern and using the simple, geometric forms that Josef Hartwig used. The cross's play with negative space between the solid forms which overall provides a interesting piece of jewelry.





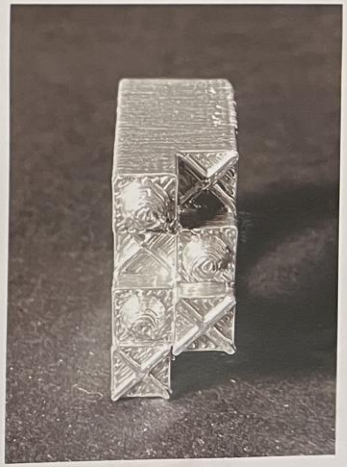


My second final piece is a very interesting ring with contrast between geometric forms in an ordered pattern and random heights of the surface as well as this there is contrast between the smooth metal spheres and the sharp edges [illegible] attention to the forms that are seen in [illegible] chess set.

Also the top of the ring is divided into squares inspired by the layout of a chess set. Overall I really like this ring as it achieves my aims to make a piece of jewelry inspired by the Bauhaus chess set.

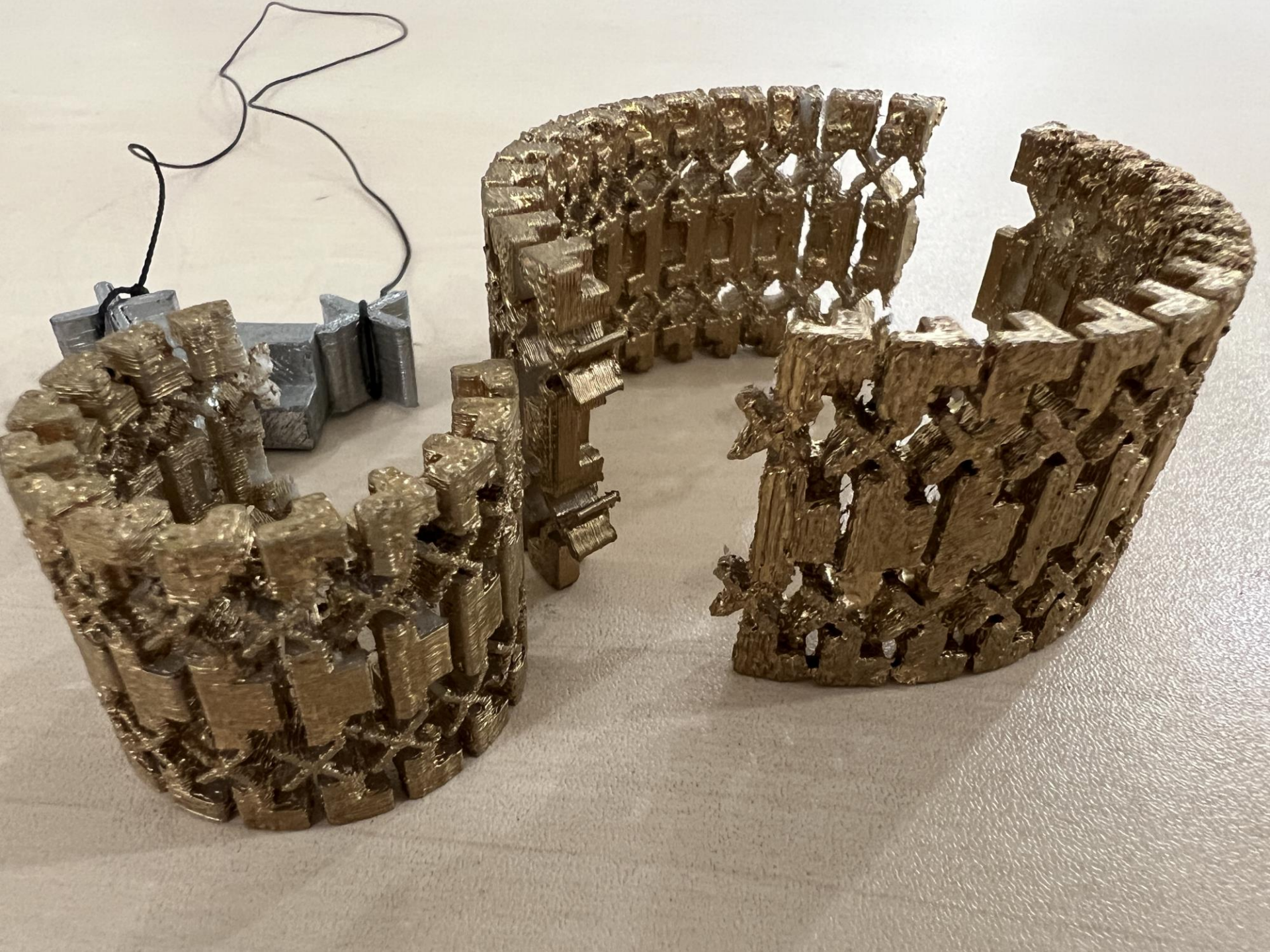













Domestic Lamp Design

The artichoke lamp



The PH Artichoke Pendant is a light fixture designed by Danish architect and designer Paul Henningsen and manufactured by Lois Poulsen. The artichoke lamp was originally designed as a large opulent lamp for the Langelinie Pavilion, a Copenhagen restaurant. It has since been specified for interiors throughout the world. The quality of the design is confirmed by the fact that the lamp makes a handsome contribution to almost any setting, making a highly visible contribution to the architecture of the room in which it hangs.
The distinctive shape and design of the pendant ensures a completely glare-free light no matter from which angle it is viewed. This is due to the 72 carefully placed leaves which form 12 precisely positioned rows that hold six leaves each. The fixture ensures the light is distributed inwards as well as outwards, thereby emitting a beautiful and comfortable light.

I really like the way Poulsen progresses from large to small which creates a smooth piece despite using quite geometric rigid shapes and material. This is something I could experiment with in the future

It is clear both form and function are as important as each other which was very diffrent from any famous lamps at the time which were rather simple and geometric

The artichoke lamp was one of the first lamps to incorporate form and function in the design. "The fact that you couldn't see the light source was very revolutionary," says Rasmus Markholdt, product and design director of Louis Poulsen. "At the time, people didn't see a lamp as a nice object; they simply needed light. Henningsen was one of the first to think of both."



UFO pendant lamp



Verner Panton (1926-1998) was an inspirational and colourful personality. A unique person with a special sense of colours, shapes, light function and room. Over the course of his career, Verner Panton (1926-1998) introduced a series of modern lamps with personalities unlike any of his Scandinavian contemporaries. With a remarkable faith in the unlimited possibilities of the form, he worked successfully to create a new set of theories about how lighting should work and how it should influence its surrounding.

This design really stands out despite being made up very simple ring shapes. This is because of the futuristic style as he has made each ring look like its floating.

Verner Panton has created a range of lamps with various shaped tubing creating a UFO like design. It has an extravagant luminous body, the UFO-light floats in the air. Ring- shaped plastic tubes, hung in metal chains, form the three-dimensional body of the spaceships. Five different lamps of this kind created Verner Panton in 1975. The Ufo light is sighted in the home space sky since 2009 again. With this variation the plastic tubes cover the bulb, placed in the centre and reflect the light.



Andromeda lamp by Ross Lovegrove



British designer Ross Lovegrove has created the Andromeda lamp for Yamagiwa. Andromeda is an artificial structure for capturing artificial light. Emerging from the concept of Netification; the reduction of physical mass through selective perforation across a pre defined form; the concept floats more as a diatomic sea creature in the free ocean of space. It floats in a state of apparent anti gravity, capturing its light within to graphically delineate a structural net as a soft external shadow of itself.

The light that is emitted from its LED clusters is reflected back into itself via mirrors orientated to maximise their output and to freely distribute a very pure light. It becomes the source of ambient light within a room, vesting gentle forms like large roots onto adjacent surfaces to form extended relationships onto and into architectural dimensions. The piece is moulded from a single material as a unified white Botanical, aquatic organism to softly implant a sense of nature into the spaces we inhabit.



Wagenfield lamp

The very simple geometric style gives an elegant simplistic look, only using 3 forms. This is completly opposite the artichoke lamp which is focused on form and is very intricate. This shows the variety of natural forms.



This object, known as the "Bauhaus lamp," embodies an essential idea—form follows function—advanced by the influential Bauhaus school, founded in 1919 by the architect Walter Gropius, which taught a modern synthesis of both fine and applied arts. Through the employment of simple geometric shapes—circular base, cylindrical shaft, and spherical shade—Wagenfeld and Jucker achieved "both maximum simplicity and, in terms of time and materials, greatest economy." The lamp's working parts are visible; the opaque glass shade, a type formerly used only for industrial lighting, helps to diffuse the light.

Wilhelm Wagenfeld created the famous Bauhaus Lamp in 1924. Above all, Wagenfeld's achievement is evident in the balanced solution for the proportions and the functional clarity of the lamp. He had designed it as an all-purpose lamp for the illumination of living spaces and not just a table lamp. On the other hand, its geometric structure largely followed the specifications of his teacher László Moholy-Nagy.
As Wagenfeld said years later, the Bauhaus designs were intended to be industrial products, and indeed looked like them, but in fact they were hand-crafted. Today replicas of the Wagenfeld table lamp continues to be manufactured on this basis.



Giulio and Valerio Vinaccia



The designers Giulio and Valerio Vinaccia, who at Euroluce with Pulsar's glazed ceramic LED lamps collection, showed how is possible to develop a successful mix of old and new technologies, return with a new project where an overlay of wooden slats are used to create volume and soft familiar shapes. The lamp on the left is a cloud of wood blades that form the Cumulus lamp as it seemingly floats while spreading soft light.

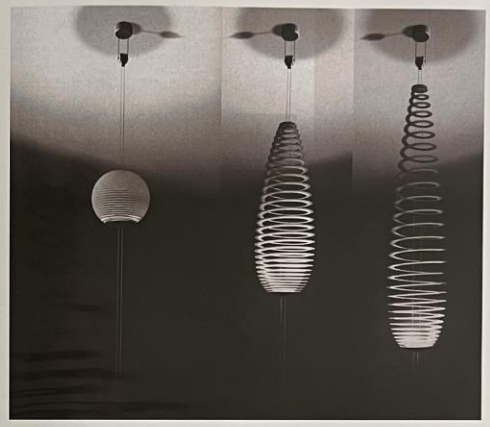
The layered pattern of these designs and smooth curves create two very comforting soft lamps which contrasts the nature of the material which is being used.

The Frame lamp on the right uses wood slats to hold an interchangeable central screen that casts elaborate, evocative shadows on the surrounding space. As Junichiro Tanizaki said, at times, perhaps most important is the shadow rather than the light.

The focus on shadow and how light is diffused around a room I could explore in detail with a range of modular designs.



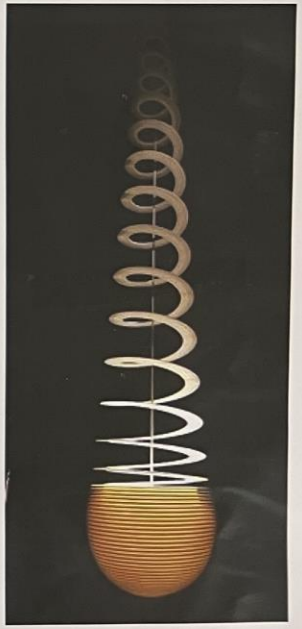
Ron Arad GeOff sphere lamp



Ron Arad is a contemporary Israeli industrial designer, artist, and architect. One of the most influential designers of his generation, Arad is responsible for numerous innovations in the fields of rapid manufacturing and integrated technology. The GeOff lamp designs is one of his most iconic pieces.

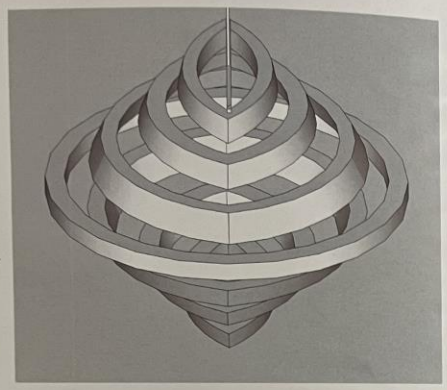
Arad's Not Made by Hand, Not Made in China collection of spiralling, flexible 3D-printed designs was launched during Milan design week in 2000. The GeOff sphere lamp was part of this collection. This lamp is a sphere which hangs from the ceiling. However, the spiralled structure of the lamp can be stretched out which determines how the light is cast upon the room.

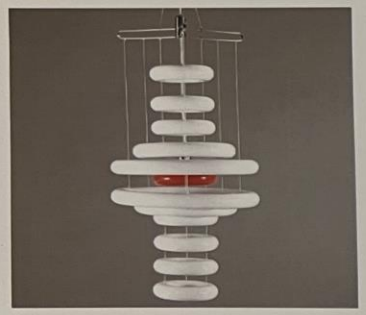
The spiralling pattern creates a very intresting aesthetic piece and looks never ending as it slowly gets smaller but due to the gentle movement it is hardly noticable. I really like how the user can change the function to suit them as this is completly unique to this lamp.



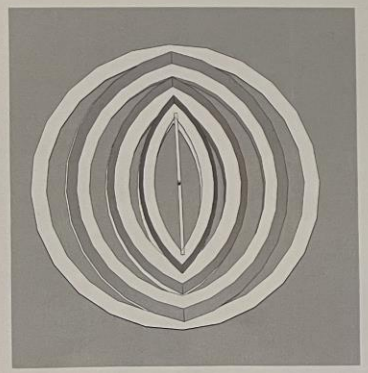
Initial ideas

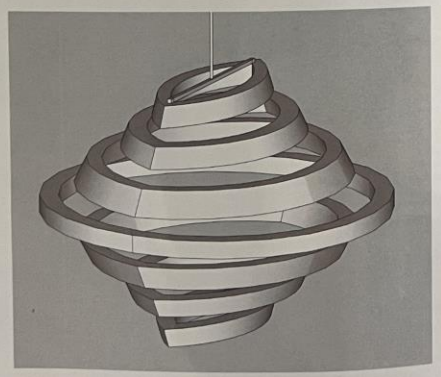


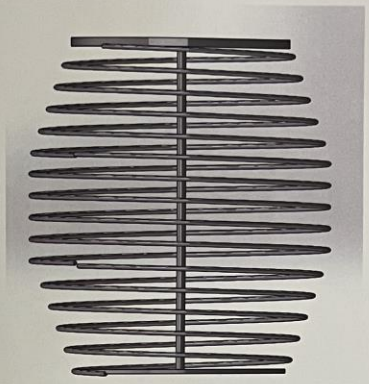




My initial ideas have been inspired by the Verner Panton range of UFO lamps which uses tube rings to create a futuristic intricate design. This idea incorporates a very similar structure to Verner Panton's lamp however uses different forms to create the gradual movement towards the center rather than a repeating form getting slightly larger. The smooth pattern that is created between each piece, progressing from an eye shape to a complete circle, of the lamp creates a very aesthetically pleasing design. Very similar to Verner Panton my designs focus on parametric design.





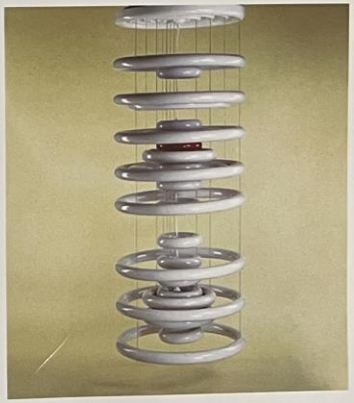




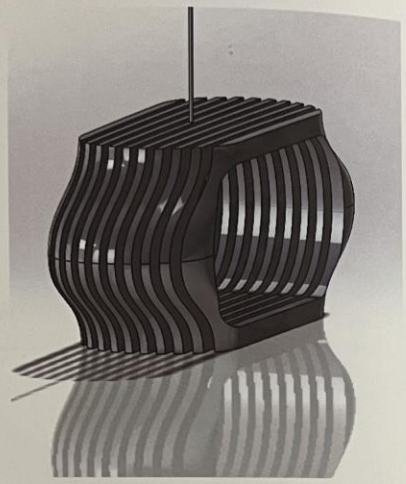


As a response to Verner pantones lamp, I designed a spiraling structure using a similar tubing to create the lamp. Spiraled patterns are often seen in natural forms such as plants, and shells which have inspired this design with the smooth movement get wider at the middle. This is something that Verner Panton incorporates in most of his modular lamp designs. As well as this the lamp is symmetrical so maintains a balanced stable design so is attractive to the human eye as it is familiar as it seen all around in everyday life.

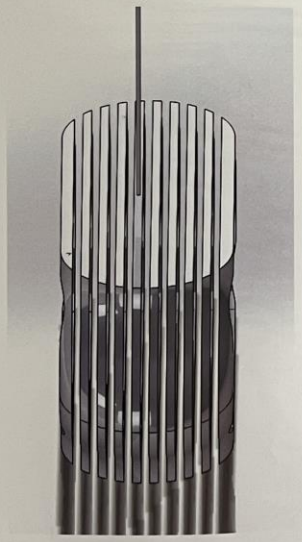




I am very happy with how this modular lamp design looks. This is because much like the UFO pendant lamp, the movement from the wider center pieces and the thinner ones as it gets wider, creates a hierarchy in the design. Also, the design creates contrast between the sharp edges and straight lines as opposed to the smooth gentle curves on the side. This emphasizes the gradually arc of the lines. I believe I can develop this lamp by using a variety of different shapes and forms similar to this one with sharp angles and smooth curves.

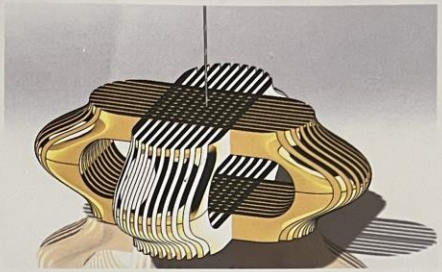




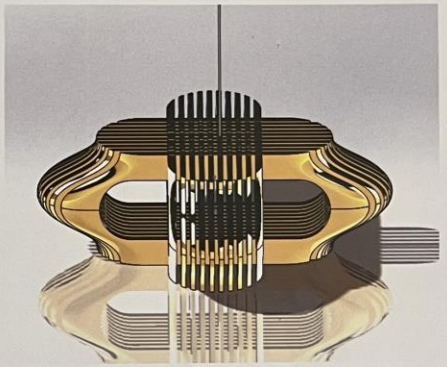




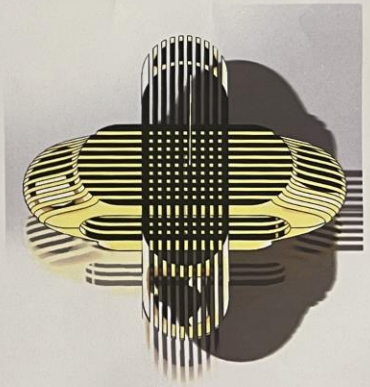




Based upon the Moder light cage pendant lamp I made a development on my previous idea. The use of the same shape rotated at 90 degrees creates a simple geometric grid pattern where they meet to make the design more intricate and catch the viewers attention. I am very happy with how this design looks and the concept of one shape overlapping the other could create a very nice lamp if I choose to develop it. To develop it further I could play with the different sizes of the forms to make the design more interesting.







Development



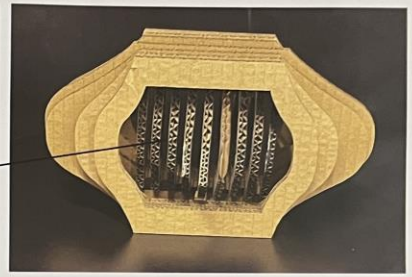




I have developed my initial ideas into models by laser cutting cardboard to create a 3D lamp. In theses first models I am experimenting with different forms and ways in which this lamp could further be developed. The first model is developed from my 3rd initial idea with the modular design moving from wide in the center to narrow at the front. Also, the smooth curve on the sides and straight lines on the top create an interesting contrast as my initial idea does.
The other design has a very similar concept however is using much simpler as it uses more geometric shapes. I really like both these models and believe they can be developed further into a beautiful lamp design.





Based upon my final idea which has two of the same shapes connected in the center perpendicular from each other I have created this model. However, this model has a smaller shape which fits into the same larger shape. This is done to create a more intricate design and I really like how the smooth curves overlap through the middle of the larger shape. This development would make the lamp more functional as it would diffuse light around the room more evenly and this would create interesting shadows. Despite this I believe this model looks bulky due to the square shape which is created from the top. This can be improved by the straight lines getting smaller as the pieces get wider.

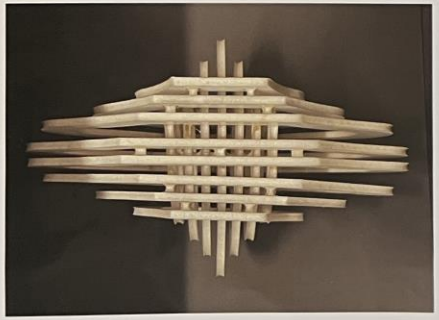










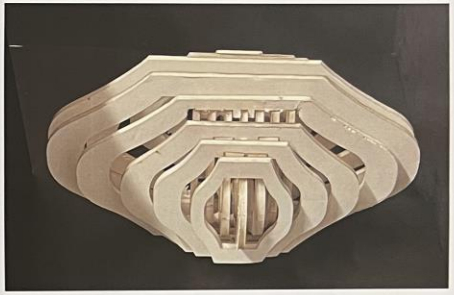


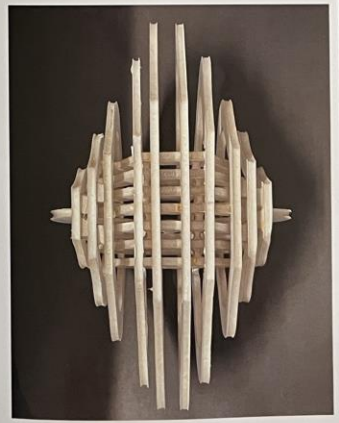
I am very pleased with this development I have made moving towards a final. I used foam board for this model as it is more resistant than cardboard and is closer to acrylic which my final will be in. The main change between this and my last model is the straight lines get gradually smaller as the individual pieces get wider. This creates an interesting design as it looks like the larger form is surrounding the smaller form and gradually engulfing it but still leaves the widest curves.





This is my final development before my final and am really pleased with how it works. I introduced a slotting system so each individual shape on the outer form is attached to the smaller form. This really improves the design as it know looks like 1 product rather than 2 models put together.

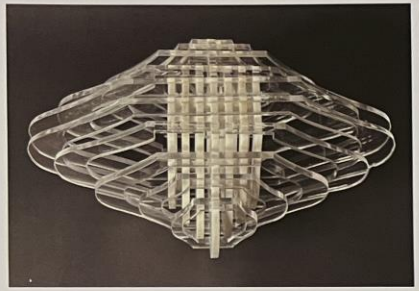


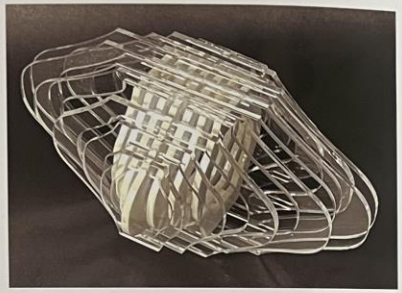




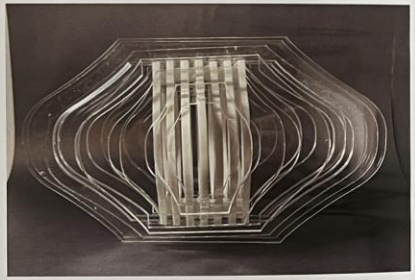
Final

I am very pleased with my final lamp design in response to Verner Panton's UFO pendant lamp which has been developed greatly since my first model and solid works drawings.

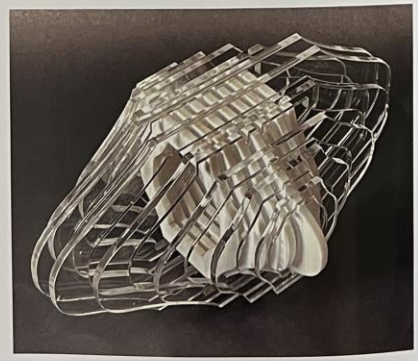


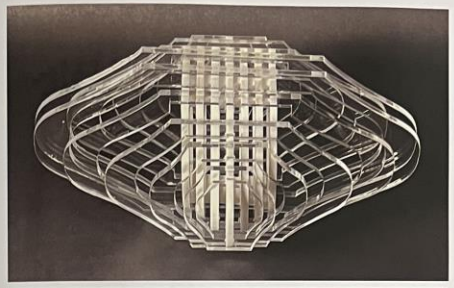


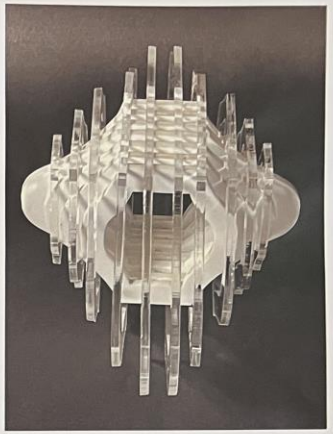
I decided to laser cut the outer shape from clear acrylic and the inner shape from white acrylic. This is so that the inside shape stands out as in my previous models it sank into the larger model with only the very widest parts being at all visible. This small change gives a lot to the form of the lamp as it looks as if the smaller shape is almost floating which gives a very futuristic design. Also the white shape has a very similar pattern to the UFO pendant lamp which originally inspired my lamp designs however has a more intricate form which is added to by the outer layer.

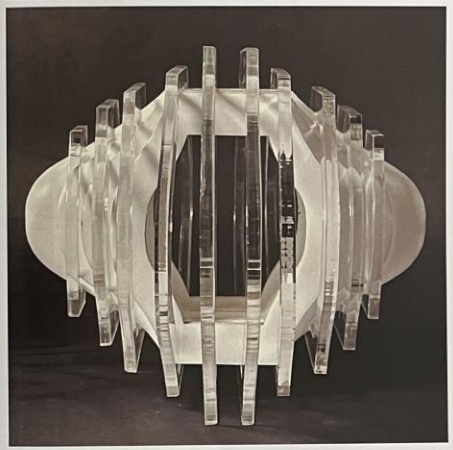














The use of a slotting system incorporated into this design makes the model look much more elegant as the outer layers are connected and follow the shape of the white form. Also the use of a slotting system means that the outer shapes don't have anything connecting them so it looks as if they are levitating around the white shape especially when it is hanging as it would when being used as ceiling lamp.

Artichoke PH pendant lamp – Poul Henningsen

Information
Function
Form
Context
Material/Process

In 1958, Poul Henningsen designed the PH Artichoke for the Langelinie Pavilion, a modernist Copenhagen restaurant, in which the PH Artichoke continues to enchant guests to this day, where the pendant is regarded as an international design icon.
The distinctive shape and design of the pendant ensures a completely glare-free light no matter from which angle it is viewed. This is due to the 72 carefully placed leaves which form 12 precisely positioned rows that hold six leaves each. The fixture ensures the light is distributed inwards as well as outwards, thereby emitting a beautiful and comfortable light.
They have also inspired the name of the pendant.
Today, the PH Artichoke is still partly assembled by hand to ensure high quality. And yes, it is true that it takes up a lot of space. However, the quality of light and the sheer elegance is truly unparalleled. The famous luminaire is still available in its original cobber finish. Over time, versions in brushed and polished steel, brass and white metal have been added, and these continue to emphasise the versatility and timeless silhouette of the pendant. The PH Artichoke Black is introduced in 2020. With a perfect matt black finish, this version consolidates a bold look for an edgier interior without compromising on either design or quality of light.

It is a stamen piece based on its design targeted at a high-class restaurant.





Henningsen was revolutionary in his thinking, so his designs are still relevant and regarded highly due to its versatility and perfect design which pays great care on both Form and function.

"The fact that you couldn't see the light source was very revolutionary," says Rasmus Markholdt, product and design director of Lois Poulsen. "At the time, people didn't see a lamp as a nice object; they simply needed light. Henningsen was one of the first to think of both."

"The PH is constructed with the most difficult and noble task in mind: lighting in the home. The aim is to beautify the home and those who live there, to make the evening restful and relaxing."

Artichoke PH pendant lamp – Poul Henningsen

Information
Function
Form
Context
Material/Process

In 1958, Poul Henningsen designed the PH Artichoke for the Langelinie Pavilion, a modernist Copenhagen restaurant, in which the PH Artichoke continues to enchant guests to this day, where the pendant is regarded as an international design icon.
The distinctive shape and design of the pendant ensures a completely glare-free light no matter from which angle it is viewed. This is due to the 72 carefully placed leaves which form 12 precisely positioned rows that hold six leaves each. The fixture ensures the light is distributed inwards as well as outwards, thereby emitting a beautiful and comfortable light.
They have also inspired the name of the pendant.
Today, the PH Artichoke is still partly assembled by hand to ensure high quality. And yes, it is true that it takes up a lot of space. However, the quality of light and the sheer elegance is truly unparalleled. The famous luminaire is still available in its original cobber finish. Over time, versions in brushed and polished steel, brass and white metal have been added, and these continue to emphasise the versatility and timeless silhouette of the pendant. The PH Artichoke Black is introduced in 2020. With a perfect matt black finish, this version consolidates a bold look for an edgier interior without compromising on either design or quality of light.

It is a stamen piece based on its design targeted at a high-class restaurant.



Henningsen was revolutionary in his thinking, so his designs are still relevant and regarded highly due to its versatility and perfect design which pays great care on both Form and function.

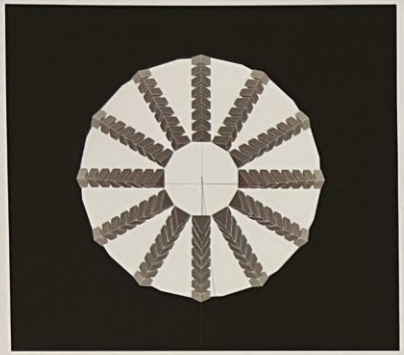


"The fact that you couldn't see the light source was very revolutionary," says Rasmus Markholdt, product and design director of Lois Poulsen. "At the time, people didn't see a lamp as a nice object; they simply needed light. Henningsen was one of the first to think of both."

"The PH is constructed with the most difficult and noble task in mind: lighting in the home. The aim is to beautify the home and those who live there, to make the evening restful and relaxing."

Henningsen seems to have been uncannily sensitive to the effects of light, a characteristic that entwined with his radical leftist interest in social improvement. The result was more than 100 lamp designs over the course of his career, all intended to improve daily life through the controlled diffusion and reflection of artificial light.

Initial Ideas







In response to Poul Henningsen's artichoke lamp I have designed a range of ceiling lamps. My first initial idea has a very elegant design due to the sharp edges. However, unlike the artichoke lamp the smallest parts are at the top and the largest pieces are towards the center which allows it to stand out more. The very rigid pattern is very aesthetically pleasing due to the symmetrical design.











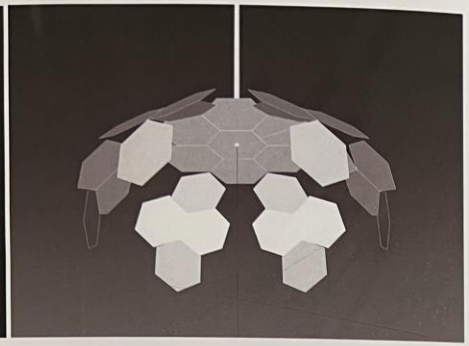


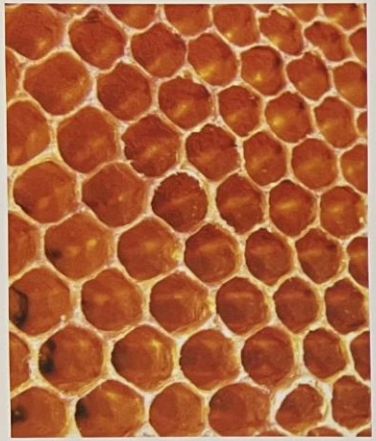
My second resembles different lamps in the PH range from Paul Henningsen. This design has a similar structure to the PH ¾ lamp. This is because rather than having individual petals the lamp is made of ring shapes which gradually enclose around the lightbulb. The sharp edges in contrast to the smooth curled shape of each ring gives it a very delicate look much like a rose.



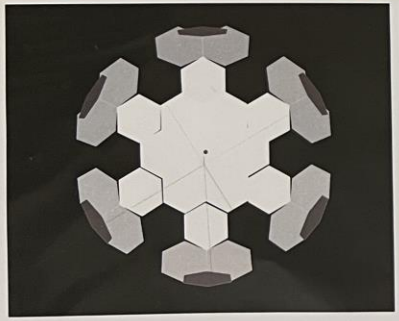


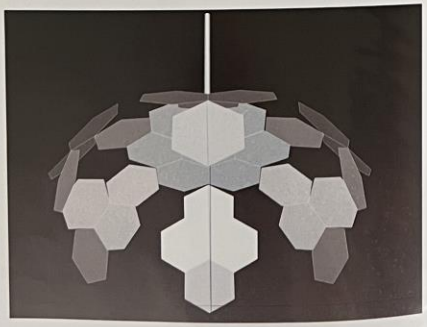




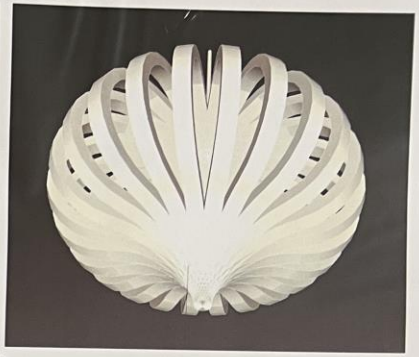


My third idea uses a honeycomb structure, as opposed to the petals in which make up the artichoke lamp, to create an interesting symmetrical pattern. The simple geometric fit together to create an aesthetic overall design which partly covers the light. In the future I could experiment with the hexagonal shapes being interchangeable so the function can be dictated by the user depending on how they would like the light to spread around the room.



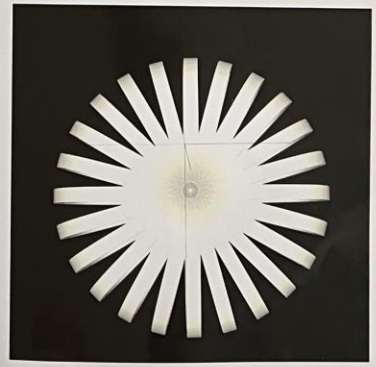








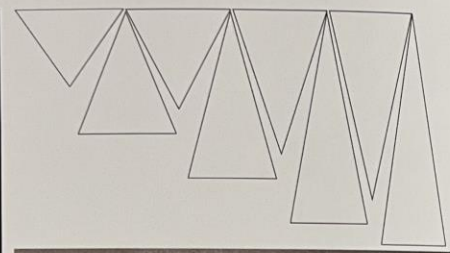
My final lamp idea is inspired by the natural form of a tulip with the gentle curves. The way the design hangs is very elegant and beautiful as it is similar to a flower.



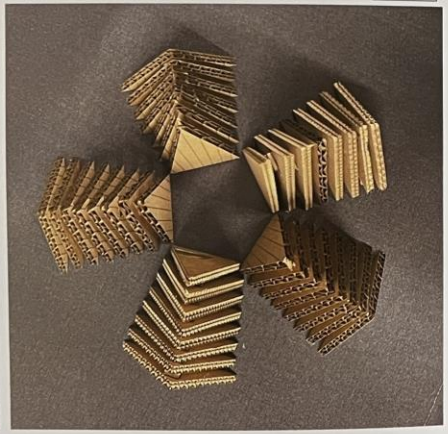


Development









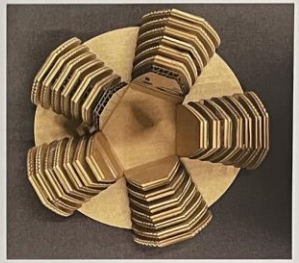


My first model is very similar to my initial idea with a few subtle changes. Firstly, Not only are the pieces getting taller as they move towards the center but also narrower, this is because it fills the negative space between the modular designs. This also creates contrast as in one direction its gradually getting taller and in the other it is getting wider. Secondly, I reduced the number of the modules to 5











I made a change to the form of the individual pieces inspired by the natural form of a leaf. This can be seen with the wide base with a smooth curve towards the top. This makes the overall composition look like a plant with leave shaped forms hanging from the top. Moving forward I may experiment with the possibility for each layer to move so the user can control how the light is emitted depending on the environment.













I have developed my model further by working on the interactive element of the design. The artichoke lamp's leaves can be moved in order to spread light as the user would like. The changes I have made allow this as each separate Hexagon with petal shaped forms hanging from it can be rotated exposing or hiding the light source depending on the what the user wants. However, moving into my final piece I may change the form of the hanging shapes to be narrower so the inside shapes can be seen more clearly, and the interactive element will be more changeable to create interesting options for the user. The changes to this lamp design make it look like a flower with the layered composition around the center where the light would be emitted.









Onion lamp – Verner Panton

Panton's 1977 Onion lamp, originally for Japanese company Yamagiwa, is as the name suggests inspired by the curves and layers of an onion bulb. Strips of metal curve round the concealed lamp while acting as reflectors to softly diffuse light.

Verner Panton's unique lighting designs display astounding qualities that attract attention everywhere. The beautiful pattern of the Panton Onion Lamp was inspired by Verner Panton's Onion textile pattern for Mira-X; a further development of Verner Panton's Spectrum (Wave) textile design from 1969. With the design of Onion, Verner Panton designed a pattern that mimics the natural design of an onion bulb with its layered composition. It has a diameter of 17.7" which makes it perfect when used as a dining room pendant light. This beautiful lamp is handmade by Verpan in Denmark.





This is the Mira-X textile design which inspired the onion lamp. The psychedelic wave pattern creates a very interesting piece which is almost an optical illusion with the gradual fading of the wave into the background.

Verner Panton designed the Onion Lamp in 1977 for Yamagiwa in Japan. The original Onion Lamp was never sold outside Japan and the first editions now fetch handsome prices at galleries and auction houses. Yamagiwa ceased production in the early 1990s and the license was transferred to Verpan which finally made the lamp available again with the original finishes Verner Panton had in mind when he designed this lamp. The Verner Panton Onion Lamp is made with strips of bent metal that hide the bulb while also acting as reflectors to softly diffuse light around the room. An object cannot become a design icon until it has stood the test of time and appears quite naturally in different settings, giving it a symbolic aura of its own. The Panton Onion Lamp has done just that. Of all the lamps Verner Panton designed, Onion stands out as some of the most elegant and memorable designs. Verner Panton Onion's simplicity and coolness proves to be of lasting value.

Panton was taught by Henningsen, in his early years, at the Royal Danish Academy and started by designing lamps for Louis Poulsen – his luminaire designs are extraordinarily diverse. What they have in common, of course, is that like Henningsen's creations for Louis Poulsen, they show a profound grasp of how light works and how it can be controlled by the lines, structure and materials of the luminaire. He designed the Panthella lamp for LP in 1971 – an elegant mushroom, its hemispherical acrylic shade and slim stalk both producing homogeneous, diffused illumination.

Much of Panton's luminaire designs are very similar to the PH range of Henningsen's lamp designs. This is because they both hide the light source to spread light evenly and the designs are both often very natural and organic.

Verner panton 'Light and color are closely linked. The colors can make a crucial change, if you switch from daylight to artificial light or just from strong to weak illumination. In addition, color perception is affected by the material structure. Even if a piece of textile has the same colour as a shiny enamel plate, they will act completely different.'

Verner Panton in his own words: "The main purpose of my work is to provoke people into using their imagination. Most people spend their lives living in dreary, grey-beige conformity, mortally afraid of using colours. By experimenting with lighting, colours, textiles and furniture and utilizing the latest technologies, I try to show new ways, to encourage people to use their imagination and make their surroundings more exciting".

The structure and finish of the lamp is designed with great intricacy to produce beautiful light which is clearly something which is very important to Verner Panton and his work based on these two quotes of his.





Verner Panton has not been etched in people's minds as a representative of Danish modernism like many of his compatriots. He was, above all, a pioneer of a new, international futuristic trend. Panton's playfulness and fantastic sense of color was not always understood, and at times he was downright ignored. However, there was a Panton renaissance in the 2000s. As a result, many of his classics are back in production – from chairs to lighting fixtures.

Panton was revolutionary in his thinking and design which has resulted in much of his work becoming design icons which can be found in a range of different environments and are very popular to this day.

Information
Function
Form
Context

https://kalidesign.fr/wp-content/uploads/2016/02/VERPAN150831_VERPAN-lighting_1.pdf
https://www.scandinavia-design.fr/onion-verner-panton-verpan_en.html
https://www.laboutiquedanoise.com/en/blog/the-history-of-danish-design-b48.html
http://www.designcurial.com/news/lighttech-verner-pantons-lighting-8018085/
http://www.moderndesigninterior.com/2013/02/verner-panton-design.html
https://www.finnishdesignshop.com/design-stories/classic/verner-panton-a-boisterous-pioneer
https://www.metmuseum.org/art/collection/search/491744
https://www.scandinavia-design.fr/onion-verner-panton-verpan_en.html

Initial Ideas

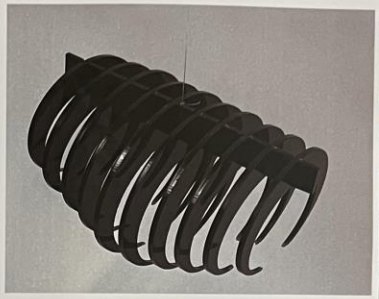
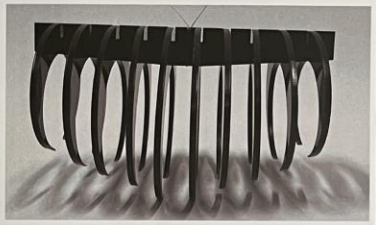








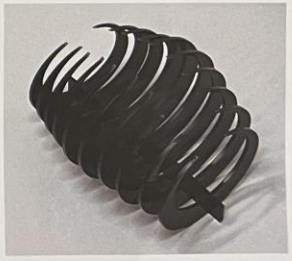
Based on my visit to natural history museum and my essay on Verner Panton's Luminaire designs I designed this lamp which resembles an ammonite. This lamp has some similarities to Verner Panton's onion lamp with curved lamella which are layered to produce a very natural form. However, Verner Panton's moon lamp is more like this design with the gradual decrease in size of the individual pieces to create smooth movement in a circular pattern around the light source. I choose the ammonite to inspire my lamp as the continuous spiraling towards the center is very suited to a lamp with light being emitted from the inside.

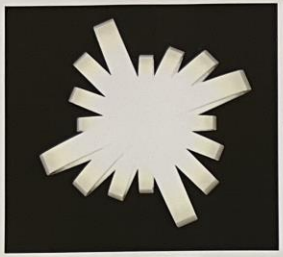


My second design is inspired by the natural form of the skeleton with rib shaped acrylic pieces gradually going from thick in the middle to thin much like a skeleton. The ribcage is suited to a lamp design as the ribs curl around, creating aesthetic smooth lines. The ribs protect the vital organs of the body, this space is perfect for the lightbulb to be held. I made this model by laser cutting the design from black acrylic. I included contrast between long smooth curves and sharp sudden edges to interest the viewer on certain parts of the design.









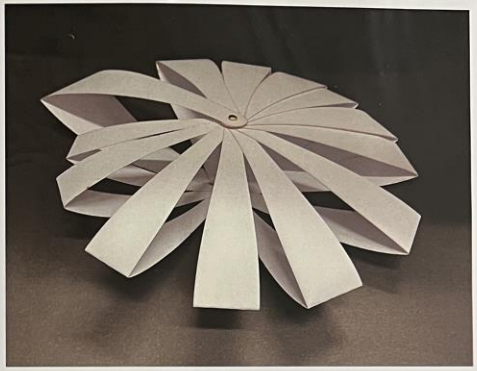


My third lamp design takes inspiration from a tulip with a very smooth rounded base then curling back towards the center which meets much more sharply. This design is very similar to the onion lamp with the layered composition getting smaller moving inwards towards the light source. However, I really like the pattern of my model as it starts spiraling towards the center. If I was to develop this model further, I may think about having that pattern continuously which would cover the light source better and produce even light distribution.





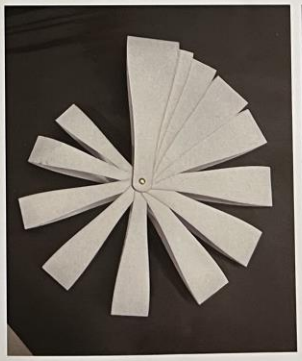
Development – First Model

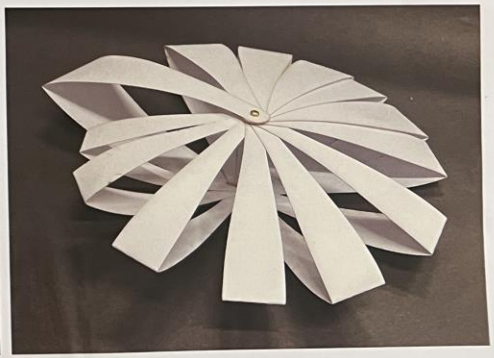




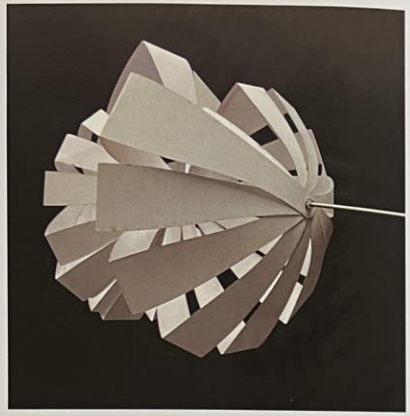


I choose to develop my first idea further through laser cutting card to create 12 forms gradually decreasing in size curling back into the center. I really like the way the user can manipulate the form depending on how they want light to be emitted around the room by simply moving the individual shapes which is seen in Henningsen's Artichoke lamp. This design also included the curved expanding in size and width as they move outwards. However, my first model has some weaknesses. Firstly, the design lack's structure so it is difficult to keep in a fixed position. Also moving forward, I will need to use more shapes as currently the center of the lamp is completely exposed where I would want it covered.













I have developed this idea further by using an axel going through the center of the design to give the model structure. The axel is a threaded rode and hex nuts are used to hold all the strips in place allowing the user to determine the width of the lamp and be able to move the forms so it will hold in a fixed position. Also, the axel allows me to create patterns as I used here with two of the same shapes however, they are gradually decreasing in size in opposite directions which will produce interesting light and shadow. To develop this design further I will use a range of different forms inspired by organic materials to make the individual shapes more interesting. Finally, I will use more of the individual shapes so the center of the lamp where the light would be is not exposed.

Second model







Inspired by the natural form of snake's scales I changed the form of the individual shapes that make up this lamp. This can be seen by the way each shape comes out from underneath the previous one just like scales. This gives an interesting hypnotic pattern as it looks never ending. Also, I have added many more of the individual shapes so that the light source would be completely covered. Finally, the sharp edges in the middle create contrast between the smooth gradual curve moving towards it as well as the overall form. Moving towards my final I will need to experiment with how to make the design function as a working lamp.





Third model

I have made developments with this lamp in order to make this design function as a working lamp. I have done this by making the largest form drop to the ground with smaller forms swirling back into the starting form. This change means the lamp will be used as a desk lamp which the current size of this lamp is suited too. However, this design has some clear problems as the spacing between each form is too small meaning they can't be moved and can't be spaced evenly. I will solve this with my next model by making bigger spacing and each form thinner and longer. This will allow for each layer to be moved at the will of the user.

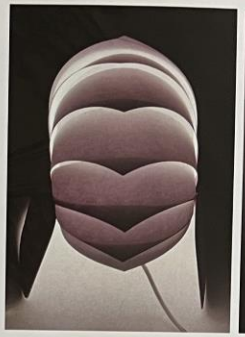








First and second prototype





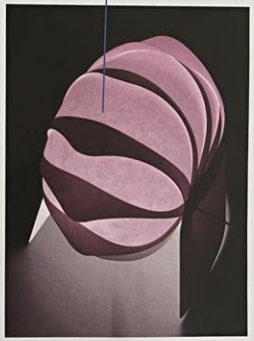




This is my first prototype using a real light in the center. The main change with this lamp is the spacing is much larger so each individual piece can move around the axis independently. However, the harsh sharp edges are not suitable for the function as the lamp is for everyday use inside the home therefore a smoother gentler design would be more suitable.

I made these developments with my next lamp by making the harsh edges smooth to create a more aesthetic pattern to release soft ambient light. However, the shadow cast from the back of the previous piece creates a straight line which I believe takes away from the smooth curves. Moving forward I could make the back of each piece follow the curve, so it bends back in.







Final prototype





This is my final prototype using card before my final piece. In this design the back of each piece follows the smooth curve of the front of the larger one where they overlap. This creates interesting shadow which adds to the design rather than previously were the shadow took away from the design. My final piece will use a different material to card, possibly polypropylene due to its flexibility so it can be bent and moved to suit the user.



Final polypropylene







I have fulfilled my intentions with my final lamp to explore “lighting inspired by natural forms.’ This lamp was inspired by the natural form of an ammonite, which I choose to design my lamp off having seen them in the natural history museum. This is because I really liked the swirling hypnotic pattern as it gently getting smaller towards the center. The layered scale like forms of each individual piece is inspired by a snakeskin with the next piece coming from underneath the previous one. This lamp is a desk lamp and is designed to complete the function perfectly, this can be seen as the light source is hidden so diffuses light gently with no glare. Also, the lamp is adjustable so can be positioned to accommodate a range of tasks.











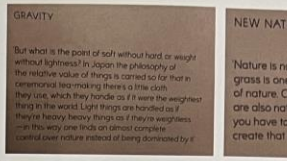




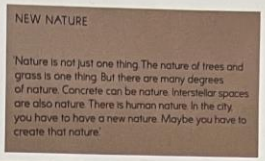
I was inspired by Verner Panton's lamps as many of his lamps were also inspired by natural forms which is my statement of intent. The onion lamp and moon lamp were two of his most famous pieces which inspired my lamp. The main thing these lamps and mine have in common is how the light source is hidden to diffuse soft ambient light. The interactive element of the moon lamp was something I choose to include in my design to improve the function as a desk lamp.

I am very pleased with my final piece which has achieved my aims of making a lamp based on the natural form of an ammonite. The smooth lines and gentle curves give a very aesthetic feel and creates interesting shadow which follows the pattern, this can be seen where the individual pieces overlap casting a shadow on the piece above. The undulating swirling pattern is very interesting and looks never ending as it gradually gets smaller moving in towards the light then sinks into the much larger base. Finally, I choose to use Blue polypropylene as the material for this piece due to its flexibility despite being strong and stable so it can support the weight of the lamp. Overall, I am extremely happy with how my final lamp came out and how far it has come since my first models.

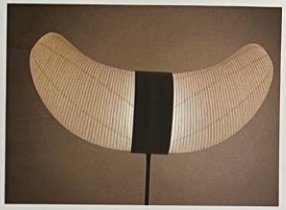
Noguchi Firsthand research


GRAVITY

But what is the point of soft without hard, or weight without lightness? In Japan the philosophy of the relative value of things is carried so far that in ceremonial tea-making there's a little cloth they use, which they handle as if it were the weightiest thing in the world. Light things are handled as if they're heavy, heavy things as if they're weightless — in this way one finds an almost complete control over nature instead of being dominated by it


NEW NATURE

'Nature is not just one thing. The nature of trees and grass is one thing. But there are many degrees of nature. Concrete can be nature. Interstellar spaces are also nature. There is human nature. In the city you have to have a new nature. Maybe you have to create that nature.'







I visited the Barbican to see an exhibition on Noguchi where over 150 works were presented which saw a range of sculptures and lighting. Noguchi uses light within his sculptures to give depth to his design. He makes people question the object through size and material as his largest forms look lightweight as he uses paper whereas his smallest lamps are made from stone and look much heavier. He also uses nature in a very interesting way using very simplified natural forms. Each Akari is handcrafted beginning with the making of washi paper from the inner bark of the mulberry tree. Bamboo ribbing is stretched across sculptural moulded wood forms, which gives a layered pattern to his designs. Noguchi intended the Akari light sculptures to be modular, customisable and extensibleWith the warm glow of light cast through handmade paper on a bamboo frame, Isamu Noguchi utilized traditional Japanese materials to bring modern design to the home. Like the beauty of falling leaves and the cherry blossom, Noguchi wrote, Akari are "poetic, ephemeral, and tentative."

EARTH

'In our times we think to control nature, only to find that in the end it escapes us. I for one return recurrently to the earth in my search for the meaning of sculpture — to escape fragmentation with a new synthesis, within the sculpture and related spaces. I believe in the activity of stone, actual or illusory, and in gravity as a vital element.'

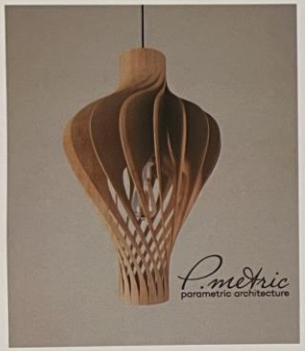
'What I did was to bring an ancient art into our modern art by integrating it with electricity (as I had done with lunars). I coined for them the name AKARI, which in Japanese means light as illumination, just as our word light does. It also suggests lightness as opposed to weight. The ideograph combines that of the sun and moon. The ideal of akari is therein exemplified with lightness (as essence) and light (for awareness). The quality is poetic, ephemeral, and tentative.'



Secondhand research

Ron Arad Ge-Off sphere
In 2000 the computer tool opened new horizons to Ron Arad's formal inventiveness and allowed him to design the Ge-Off Sphere ceiling light in the Not Made by Hand Not Made in China series. Ron Arad said "Who are these people who create software capable of satisfying our every whim? How were they able to predict from their valley that a designer from Chalk Farm (in London) would want to build, for example, a spiral ball with an ever-changing diameter, make it recoil, accurately record its distortions in a series of models then develop them into solid objects in a tank of epoxy resin?"
I really like the spiral pattern that Arad uses and the way that it can be moved by the user from a basic 3D form to a complicated form when the sphere is expanded.







These lamps by Dennis Homyakov have very interesting parametric forms. The layers flow with the movement of the design around the light source. In this way it is like my previous ammonite lamp design.



The D'Light is a kinetic lighting device that adapts its style based on the kind of mood you're trying to set. With the ability to orient itself in various shapes, each with a completely unique character, the D'Light works beautifully as a table lamp, a floor lamp, a hanging pendant lamp. the lamp has a honeycomb paper pattern on the outside that can freely rotate and comes mounted on a specially designed frame that turns via a motor.
It is very interesting how one form can be moved into so many different forms due to the honeycomb structure.



Twist lamp
With the rotation of a discrete, wooden knob, thin, white strips twist and tighten around a central axis, perfectly synchronized to squeeze together and deflate the form, changing the amount of light allowed to escape. A twist in the opposite direction re-inflates the shade, opening the spaces within the array of strips, and brightening the room once again. Polypropylene has been used for flexibility as well as being strong which is the same reason I used it for my previous lamp.

Meadow by studio drift is a moving lighting installation. The kinetic sculpture consists of 18 mechanical flowers that open and close in a harmonious way creating an interesting light from below.

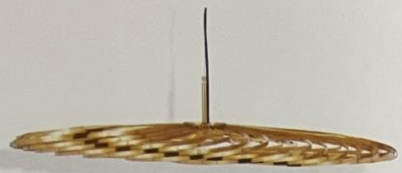




Called Horah, the Milan design week installation consists a group of about 30 'dancing lights' crafted and engineered by wonderglass Each light is assembled from multiple casted glass curved 'leaves' which rotate to dim the light. As a result of this movement the strength of light is dimmed, the shape of each light is constantly transformed.

Research into spiral lamp designs







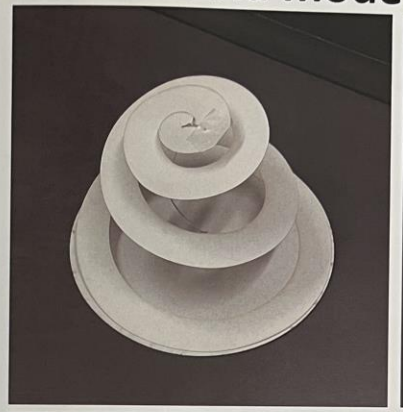
This is the spring pendant light by Tom Dixon. Spring is a series of three pendant lamps made up of stainless-steel strips. Pliant ribbons of stainless steel have been arranged in a spiralling shape that allows the design to be extended and compressed to be suited to any room it is found in. I really like the idea of a spring like design which can be manipulated by the user to be used as they would like.



For the creation of his Swirl collection, the Danish designer Øivind Slaatto was inspired by nature and basic mathematical principles. With this technical and fascinating design, Slaatto wanted to find a way to integrate the detailed construction of a snail's shell with his fascination for fractals, which are mathematical objects that look like curves. The use of natural forms such as the snail shell inspired my previous model and the Fibonacci sequence that can be seen creates a very interesting form.



1st and 2nd model







Inspired by Ron Arad's Geoff sphere I started experimenting with laser cutting spiral patterns. These models are simple linear spiral patterns. The second model has smaller spirals inside the larger one so it is more condensed where the light would be. Also this creates an interesting pattern. However these spirals are very open so I could have multiple spirals of the same size to hide more of the centre.

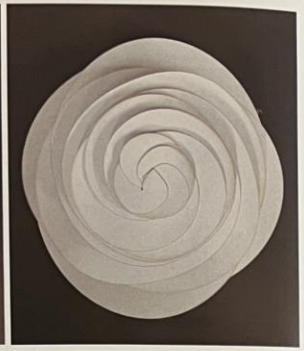






3rd and 4th model





For my third model I used 4 repeated spirals which created an undulating pattern similar to that of a rose, with the tightly coiled spiral at the top and centre. However for my fourth model I used a Fibonacci spiral as opposed to a linear spiral. The Fibonacci sequence creates a spiral which is constantly found in nature for example a snails shell. I decided to do this so the spiral would open out towards the top. Also, this model has much fewer turns which emphasises the spiral form.







5th and 6th model





To develop my models the spiral goes in both directions along an axis, which is very aesthetically pleasing due to the continuous smooth line. As the spiral is on an axis the height can be adjusted by the user to suit the environment it is in. My 6th model uses two spirals which are similar to the double helix of a DNA strand with two strands winding around the centre. In my next models I intend to use spiral patterns of varying sizes attached together to create a more elongated and substantial form.







7th model







With my Seventh model I used the same top half as my 6th model which has a very gradual spin but added a much faster spiral pattern to the bottom section. This creates a form similar to a conch shell with the slowly tapering spiral form. Moving on I will need to create space for a light source by opening up the spiral around the centre.







Model 8 and 9 material testing







I experimented with coating the card in clear resin while being held in a solid structure. However, despite 4 separate coats of resin the paper didn't hold its shape and slumped down when taken away from the structure. This means when moving forward there must be some form of internal structure holding each spiral in its position.



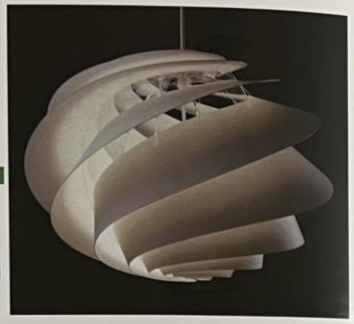




In my 9th model I experimented with the use of wire to control the speed of the spirals. I did this by sticking the wire between two card spiral designs. This allows the form to be adjusted and moved depending on the user. This design was successful as the card model held its shape which is what I was intending. However, the design is very messy where the two card pieces meet.

Øivind Slaatto swirl lamp research

The Swirl medium pendant is a work of the designer Øivind Slaatto for the publishing house Le Klint.
For the creation of his Swirl collection, the Danish designer Øivind Slaatto was inspired by nature and basic mathematical principles. With this technical and fascinating design, Slaatto wanted to find a way to integrate the detailed construction of a snail's shell with his fascination for fractals, which are mathematical objects that look like curves.
With his natural design, Slaatto created a luminaire that is evident in its shape, transparency and spiral panels made of plastic and acrylic. The Swirl luminaire makes total reference to the unique style and perfection of the Le Klint house, which is always appropriate and aesthetically pleasing in any room of an interior.
The transparency and shape of the lamp and its spirals distribute the glare free light comfortably and evenly, while the design conveys elegance to every room.





I really like how Øivind Slaatto hides the light source to distribute light using individual forms in a pattern.

Øivind Slaatto's challenge in designing the Swirl series was to create a contemporary lamp reproducing the aesthetic fundamentals of the traditional Le Klint lamps: rigorous geometry and paradoxically soft and organic shapes. The Swirl collection succeeds this, with its round shapes resulting from the skilful superposition of strips that are arranged according to fractals. This lamp collection, launched in 2013, was immediately a success and Le Klint has expanded the family over the years.

The organic feel to this design really interested me as my previous lamps are focused on natural forms. Also, the Fibonacci sequence that occurs in shells is something I explored in my last lamp which was inspired by an ammonite.



The geometry and mathematics of a snail's shell never cease to fascinate me – it's a minimalistic structure that is also extremely clever and poetic.

The pleated lamp shade is still at the very heart of the 75-year-old design company. To this day the craftsmanship of the cross pleated lamp shade is unique and is a handicraft that is only mastered at Le Klint's original Pleating Studio in Odense, Denmark. To become a skilled pleating technician at Le Klint takes approximately three years and most of the employees in the pleating studio have been with the company for more than 25 years. Due to the vast experience within this group, they are often consulted when new ideas are brought to the table. All parts are made from the best materials and often produced by local companies situated close to Le Klint. The parts are put together at the facility in Odense.





The high quality is evident in the deign with 8 lamellae hand folded into a perfect symmetrical pattern.

Simplicity, functionality, and elegance are the basic aspects of Danish design. Nature is often part of the inspiration, and sustainability is key. Danish design is known all over the world for its sleek lines and sophistication. It first became popular in the 1940s and 1950s, when the light and simple style of Danish furniture proved a good fit for the clean lines of the new International Style architecture.
Chairs, lamps, silver, glass, and textiles from Denmark were soon sought after by design lovers everywhere and still are.

This design has clear links to other Danish designer's work for example poul Henningsen's PH range of lamps which also have a very organic feel and hide the light source to distribute light evenly.

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https://www.hotelmanagement.net/design-trends/catching-eye-patera-by-oivind-slaatto-for-louis-poulsen
https://www.leklint.com/en-GB/About-LE-KLINT.aspx
https://www.skandium.com/collections/oivind-slaatto
https://www.nedgis.com/en/products/pendant-light-swirl-medium-copper-o45cm-h33cm-le-klint
https://www.scandinavia-design.fr/le-klint-swirl-floor-table_en.html
https://www.leklint.com/en-GB/Products/Show-Product/SWIRL-1.aspx?VariantID=VO101
https://www.nest.co.uk/le-klint

Factual info
Process/technique
Form
Function
Context

Model 10 material testing







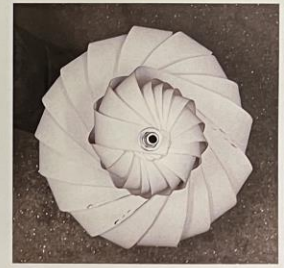
My 10th model was inspired by the swirl lamp by Øivind Slaatto. This can be seen by the way a spiral pattern which is created by many lamellae which gently curl around the light source. The flexibility of polypropylene allows the strips to be bent into position and this form which makes up the lamp can be held. The natural form of a pear can be seen in the overall shape of the design with the large rounded base which comes in towards the center. The flexibility of polypropylene is very important to the design however as it is very expensive while I am experimenting with different designs, I will continue to use card.

Prototype 1













I really like my first prototype with the overlapping lamellae which surround the light source. The smooth curves from the large rounded base into the top is very aesthetically pleasing. However, the light is not spread evenly throughout the design as the light is clearly only projected through the bottom of the design and not the top. Also, there are gaps in-between the lamellae which means the light source is visible at some angles. I can solve this problem in my next prototype by having lamellae which are wider at the bottom and narrower at the top as opposed to the widest point being in the middle.

Prototype 2





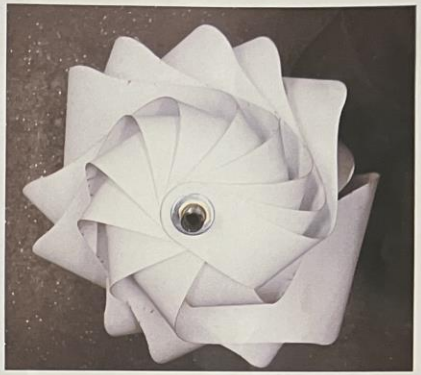




My second prototype uses lamellae which are wide at the bottom but narrow towards the top. This is because the light falls on the lower part of the lamp so by doing this the light should be more evenly spread through the design. Also, the shape of the lamellae means they have more structure so a smooth even shape is made rather than the flat base that can be seen in my previous prototype.

Prototype 3





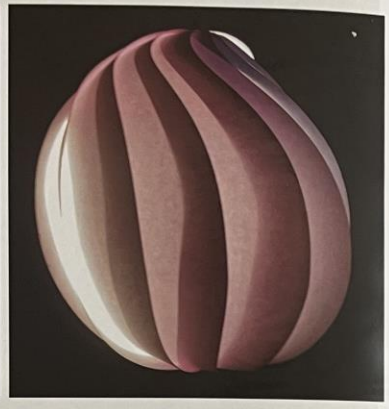
I really like the layered form of this prototype as I believe the form of the individual lamellae is perfect as they cover the light source as well as create an interesting form. This is done through the smooth curves from the widest point of each lamellae. However, where the first and last piece meet a big gap is left in between and breaks the pattern which this design follows. In my next prototype I will solve this problem by making each form get a small amount larger so it can cover the first piece and stop a big gap being left.





Prototype 4

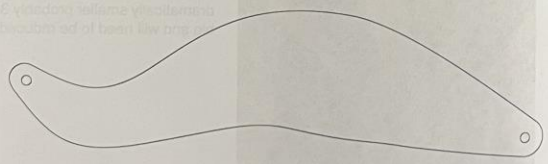








I am pleased with my fourth prototype which rather than being bent and twisted to create the spiraling form it is created using s shaped lamellae which when fixed at both ends creates the spiral form. They overlap to create an aesthetically pleasing undulating form. However, the spiraling form is only visible at the top of the model so in my next prototype I will have more balanced curve. This is important as this lamp is meant to be a pendant lamp so the bottom will be the most visible part for the user. Also, the first lamellae does not overlap the final one as I would like despite each form getting 1% smaller each time. Therefore, in my future model I will use a more dramatic reduction in size between each lamellae, so the center is completely enclosed like a snail's shell creating a seemingly endless pattern.



Prototype 5

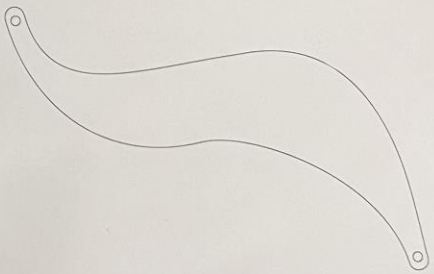






With this design the spiral pattern is much more prominent as each lamellae has a symmetrical continuous curve from the top to the bottom. This means the spiral can be seen from all angles which is important as this lamp is a pendant lamp. Also, with this model I considered how the user would view the design so as a pendant lamp the viewer would see from below, so I made a cap to cover the screw which continues the form of the lamp. However, this design still doesn't work where the first lamellae overlaps the last which means in my next prototype, I will need to make each diminish by at least 3 or 4%. Also, this lamp is much too large and will need to be reduced in size as each lamellae droops down and to conserve materials while I am still developing the shape.





Prototype 6

This is my final prototype made in card as I have got the spiral form of the model correct. I have made each lamellae gradually smaller with each piece 4% smaller than the last. This means that the last lamellae is underneath the first creating the continuous effect which can be seen in shells. In my next models I will be using polypropylene as opposed to card.











Final Prototype in polypropylene

In this prototype the lamellae diminish in size by 4% each. However due to the strength of polypropylene the final piece does not overlap as I would have liked. Therefore, with the last 4 pieces there is a more dramatic increase in size between the lamellae with the first getting 9% larger and the last 24%. This keeps the gradual movement from small in the center and large on the outside while creating the undulating form.

Without larger lamellae internal structure and light source visible





With larger lamellae with internal structure and light source hidden









Experimenting with titles and logo's



Conch lighting

The inspiration for this lamp design was the natural form of a conch and the similarities are clear between the lamp and the shell. For this reason, I believe conch should be the focus of the design therefore is the title.



For my first logo I traced the smooth lines of the lamellae which makes up the lamp. The title is within the design following the smooth curling lines. This creates a simple yet aesthetically pleasing design which catches the attention of the user. Also, the basic form created through line in this piece clearly resembles a conch shell.

This is my second logo which incorporates the smooth curves in a spiraling design. This creates a hypnotic pattern which will attract the user to the design. The orange has a gradient from a warm dark orange in the center where the light would be to the light yellow on the edge which resembles how the light is diffused around the room.



This is my third logo which is very similar to the second logo with the background gradient and radial pattern. However, this logo has each shape in the pattern diminishing in size as the lamp does. This means the natural shell inspired design is recognizable.



Curlicue light

Curlicue means a decorative curl or twist in calligraphy or in the design of an object. I really like this as a title because this lamp has many curlicues, as each lamellae overlap, which create a beautiful design. Both these logo's have the curlicue following the shape of the central design. The font used also represents the meaning of the word with decorative curls.



Final logo for lamp collection

This is my final logo which is a mixture of all the initial idea's. The name I choose to go with was conch lighting as the inspiration of the lamp was a conche shell. Also, as the logo has a similar form of a conch shell, the name is fitting. The title follows the curved structure of the form seemingly coming out of the gap between the largest form and the smallest form as they overlap. I believe the black and white design was the best giving the design a simple yet sophisticated feel.



Research into lamp collections



This is the PH 3½–2½ lamp from Louis Poulsen designed by Poul Henningsen is made as a floor lamp a desk lamp and a pendant lamp. Henningsen has made the structure around the light source the same in all three designs as the light is dispersed evenly due to the three-shade system. The black metallised base and hanging holder gives the lamp a modern look.



This is the Panthella lamp collection from Louis Poulsen designed by Verner Panton where the lamps come in all different colors to suit all environments. The colours are drawn from the last project Panton worked on before his death in 1998, the Light and Colour exhibition at the Trapholt museum of modern art in Kolding, Denmark. The variation in colours makes the design very adaptable giving off different illuminations. The black and white colours have a very modern sophisticated feel whereas the more colourful designs have a more playful fun feel.

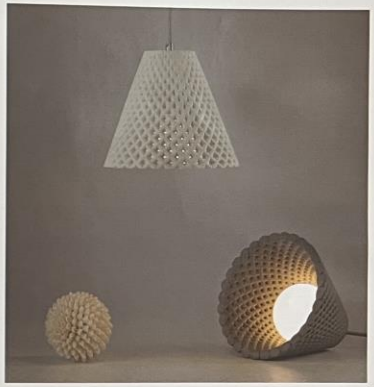


Verner Panton's moon lamp comes as a pendant lamp or a desk lamp. There are small changes between the lamps as the structure is harder to hold as a desk lamp as opposed to the pendant lamp. The general structure between this lamp and mine are very similar



This is the cylinder collection by LE KLINT. The series includes three pendant lamps and two table lamps in different sizes. Due to the symmetrical forms the designs can easily be adapted from a pendant lamp to a table lamp or standing lamp.

HELIA is a pendant and table light fixture simulating weaving of concrete. The design was inspired by the fascinating sunflower seed pattern
of Fibonacci spirals. This lamp is made as a table and pendant lamp with no difference in the designs from one to another.

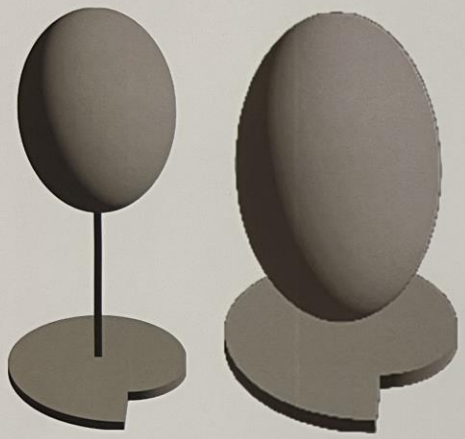




Normann Copenhagen, Grant Lighting Series. The series consists of lamps for wall mounting, ceiling, floor and table, each with an timeless quality and cool, very versatile appeal. By slightly changing the angle and size of the lamp shade yet keeping the same overall form the design can be used in all different functions.

Developing lamp collection

Having done research into different lamp collections I have decided a range of lamps which include my original pendant lamp, a desk lamp and a floor lamp would compliment the design the best. To make this possible I will need to make slight adjustments to the structure and consider how the lamp sits.



This is the first design which is a desk lamp. The structure is very similar to any other desk lamp. However, the base of the stand is the shape of my logo for the lamp which is very interesting creating the shell form.

My second design has a similar structure as a floor lamp with the shell like stand directly underneath the lamp. I really like the stand as it will follow the shape of the design as each lamellae diminishes in size so does the spiral form underneath. When I laser cut the base, I may engrave the logo onto the surface

These two designs are possible desk and floor lamps. However, the design has the axis running parallel to the ground where the pendant lamp is adjacent to the ground. The first design is a desk lamp which has 2 legs at each end to support the design. The floor lamp has two curved rods which attach to the ends which follows the curved structure of the lamp. This would allow the design to rock and move creating movement of light around the room.



Floor and desk lamp prototypes



Having done research into lamp collections I decided a floor lamp and desk lamp would look best to go along with my pendant lamp. The floor lamp uses plastic which is heated and bent into position following the form of the lamp with a flat base so it can stand. I really like this design as the base continues the undulating pattern. However, the base is not even on both sides therefore with my final I will focus on creating a symmetrical base bending it around a fixed shape.

The desk lamp is particularly interesting as the base follows the form of the lamp. The logo of the lamp collection is engraved onto the surface and the smooth continuous lines look like a shadow of the conche form created by the overlapping lamellae. However, the design and the base are gradually decreasing in size in opposite directions so in my final I will have to flip the base, so it follows the conche form.



Final piece evaluation



Final desk lamp

Final pendant lamp





Final floor lamp

Throughout my final project I have been focusing on designing lamps inspired by natural forms which can be moved based on the environment they are in. Throughout this project I was experimenting with spiraling forms with my first models' simple linear spirals which were positioned to create a lamp like structure. However, theses designs would hardly cover the light source and would have created uneven light. My final piece uses flat curved forms which when bent around an axis creates an undulating spiral like form.







The use of spirals was originally inspired by Ron Arad's Ge-off sphere lamp. This is because the way the lamp could be extended and shortened and how this affected how light was emitted fascinated me. Having done further research into spiraling forms in lamps the swirl lamp by Øivind Slaatto caught my eye by the way he created the spiral like pattern through use of multiple lamellae curling around the light source. This influenced me to bend lamellae into around an axis which when together creates a spiral form as opposed to using linear spirals as the design. Also, the way the swirl lamp completely hides the light source is something that I wanted to use in my own work to distribute even light.

I am very happy with my lamp collection as each design offers something different and fulfils there function perfectly. The floor lamp is the largest 20% larger than the pendant and wider than the other two. The base follows the structure of the design creating the never-ending affect and means the floor doesn't break the pattern that is created. The desk lamp is the smallest being 20% smaller than the pendant so it suits the desired environment. The base has the logo of the collection engraved on the surface which follows the pattern of the lamp almost like a shadow. Finally, the pendant is a perfect center piece diffusing even light in any environment. The undulating form is visible from all angles below. The conch shell which inspired my design is evident in all three of these designs by the way the center can never be seen. Also, the ever-changing design that I wanted to include is possible by the way the lamellae overlap.











Personal study

Lamps inspired by natural forms



This study investigates the work of three different designers who have designed lamps based on forms found in nature through the 20th and 21st Centuries. The theme of movement and interactive design is present throughout all three of these designers work and particularly drew my attention to them. This study discusses how these designers guided my lamp designs inspired by a range of natural forms.

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The Artichoke PH pendant lamp by Poul Henningsen

Poul Henningsen lamp designs were revolutionary in terms of light, shadow, glare and colour reproduction, which can be seen in his PH range of lamps. The PH *Artichoke Lamp* (Fig:1) was designed in 1958 for a Copenhagen restaurant (fig 2) named the Langelinie Pavilion, where these lamps are still in use today. The original lamp was made in copper.



The Artichoke lamp (fig 1)



The Artichoke lamp in use at Langelinie Pavilion (fig 2)

a natural material was chosen by Poul Henningsen in copper, to spread a warm luminescence around the room diffused by the 72 different leaves that surround the light. Also, copper is a relatively soft metal so allows the leaves to be shaped to follow the curve of the frame. A chrome inner diffuser was also used as it reflects light in certain directions as in some directions the light will look very brighter. The lamp is mounted on steel aircraft cables which makes the design durable and strong, giving the product great longevity. Over time, different materials have been used such as, brushed and polished steel, brass and white metal, and these continue to emphasise the versatility and timeless silhouette of the pendant that can suit almost every environment.

The leaves which make the lamp are currently laser cut to create uniform shapes with rounded edges and sharp lines reflective of modern design, however the original lamp was made before the laser cutter so would have been cut by hand. Also, the leaves are curved so that they follow the curve of the frame which makes the design more aesthetically pleasing. The original pieces that were made for the Langelinie pavilion are completely unique, however Lois Poulsen has manufactured many more in different sizes and styles to be used by a wider range of people. The product costs between £5,000-35,000 depending on the material and size. I believe this is value for money as it is a beautiful statement piece that is impossible to replicate due to the extremely intricate and flawless design. The price reflects the target audience as a statement piece in prestigious concert halls, universities, parliament buildings and penthouse apartments, in addition to private homes, where it is often passed down from one generation to the next.

Henningsen used colour as pale-pink paint was applied to the underside of the leaves to give an alluring, comforting rosy glow. Also, he created a pattern through the gradual decrease in size of the 72 leaves which form 12 precisely positioned rows that hold six leaves each. The form of this lamp clearly represents an artichoke or a pinecone, as it got its name, as the lamp was originally called the PH Kogle, which translates as conifer cone but now is known as the 'Artichoke lamp.' This is due to the large, dispersed leaves towards the top and the small tightly packed leaves at the bottom which creates a very smooth, perfectly balanced, and symmetrical form.

The artichoke lamp fulfils its function perfectly as the placement of the leaves ensures light is distributed evenly, moving inwards as well as outwards at all angles due to the symmetrical form. This lamp is designed to be a central piece for a high-class restaurant however smaller versions manufactured by Lois Poulsen may be more suited to a wider target audience as this lamp would be very nice in the home setting as Poul Henningsen said 'The PH is constructed with the most difficult and noble task in mind: lighting in the home. The aim is to beautify the home and those who live there, to make the evening restful and relaxing.' (2) Henningsen has clearly achieved this target as the artichoke lamp is used in a huge range of different places. This is because of the beautiful light which is emitted as well as the potential for the user to adjust the angles of each of the leaves to control the spread of light based on the room it is.

'The fact that you couldn't see the light source was very revolutionary,' says Rasmus Markholdt, product and design director of Lois Poulsen. 'At the time, people didn't see a lamp as a nice object; they simply needed light. Henningsen was one of the first to think of both.' (2) As Markholdt highlights, design at the time during the middle of the 20th century was much more focused on function rather than form, this may be because of the Bauhaus movement and art deco of the time at the start of the 20th century which focused on function and used very geometric forms which responded to the mass production which was made possible by advances in technology. This lamp was from the late modernist period. Modernism was developed in the early 20th century and opposed previous styles using new technologies, the design promoted sleek, clean lines and eliminated decorative additions. Form follows function was a phrase which was the principle of modernism. *The artichoke lamp* however did not follow this principle with the form equally relevant in this design.

The artichoke lamp was one of a series of glare-free lamp designs under the name of the PH lamps. The PH lamps set out to create glare-free light, using incandescent bulbs hidden in the middle of the design creating gentle shadows. The *artichoke lamp* is the most different from the other PH lamps (fig 3) as all the others used round shapes surrounding the light whereas the artichoke used individual leaf shapes. However, the concept of using a layered structure gradually enclosing around the light source to create interesting soft shadows through different patterns is consistent throughout Henningsen's work. The logarithmic scale that is derived from natural, organic shapes is used by Henningson in order to direct the light so beautifully throughout the range of PH lamps.



This is the range of PH lamps (Fig 3) which clearly follow a repeated pattern using relatively basic, repeated forms which each follow the logarithmic scale to distribute light evenly.

I believe this product is defined by the form due to the inspiration of the natural form of a pinecone which is instantly visible when someone sees the lamp. The product is very successful in creating a high-quality lamp which can beatify a room without having the light exposed directly. I really like this product due to the balanced aesthetically pleasing form that Henningsen has created.

The Onion Lamp by Verner Panton

Verner Panton was an influential Danish designer born in Denmark. He studied architecture at the Royal Danish academy of fine arts in Copenhagen. *The Onion lamp* (fig4/5) was designed by Verner Panton in 1977 for Yamagiwa, the leading Japanese lighting manufacturer. The lamp is made from Aluminium making it durable yet environmentally friendly material that can be easily recycled.





Figure 4 and 5 The onion lamp by Verner Panton

Aluminium was used by Verner Panton to bend individual lamellae in a convex form around the light source, which are layered much like an onion to hide the bulb and distribute light evenly around a room. The properties of aluminium are suited for the design as it can be easily shaped which means Panton could bend the lamellae into position to give the smooth form of the piece. Despite being easily shaped, it is durable and strong which is important for any functional design. Also, Aluminium is light in comparison to other metals which is necessary for a pendant light which hangs from the ceiling. However, these desirable properties make it a relatively expensive material. Panton may have also chosen to use Aluminium because it is the most cost-effective material to recycle, because of the huge energy savings of up to 95%. The original lamp was made in very small batches and originals fetch huge prices at auction. However, Yamagiwa ceased production in the early 1990s and the license was transferred to Verpan who continue to manufacture the same design today by hand.

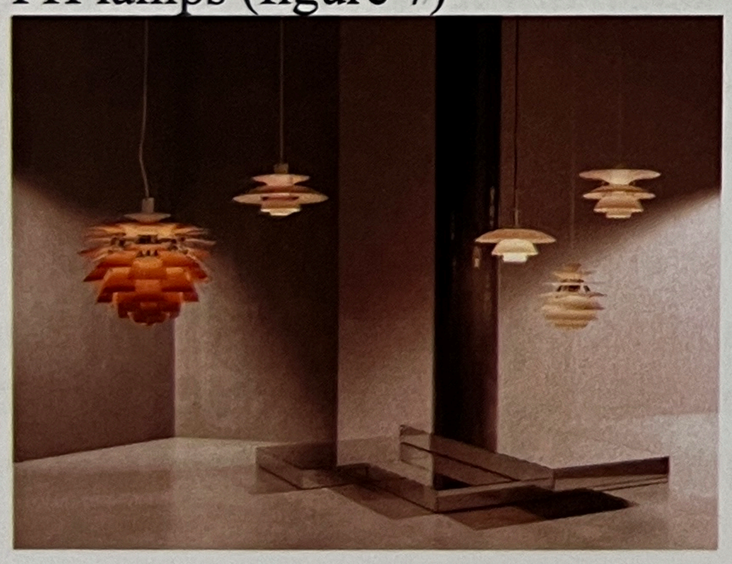
The beautiful pattern of the Panton *Onion Lamp* was inspired by Panton's Onion textile pattern for Mira-X which was a further development of Panton's *Spectrum Wave textile design* from 1969 (Figure 6). The wave textile has thick bold lines in the centre which diffuse into the background to reveal the form. This is replicated in the onion lamp with tightly compact lamellae around the light and gradually get more dispersed. This undulating pattern creates a very pleasing aesthetic with smooth elegant gentle lines. The lamp's layered composition clearly resembles an onion. Panton said, 'By experimenting with lighting, colours, textiles and furniture and utilizing the latest technologies, I try to show new ways, to encourage people to use their imagination and make their surroundings more exciting'. Panton has achieved this with the *Onion Lamp* with the elegant natural form that catches the eye which certainly makes any surrounding more exiting. I really like the overall form with the balanced symmetrical structure and the organic feel of the design.



Verner Panton's Mira-X textile design which inspired the form of the onion lamp with the wave pattern using sweeping lines. (Figure 6)

The lamp is designed to suit the function of a lamp as the individual lamellae are layered to hide the light source but still diffuse warm light around a room. For this reason and the elegant, organic and simple design I believe Panton has achieved a perfect balance of form and function. This the lamp clearly shows Verner Panton's great understanding of how light behaves. The design is 17.7 inches in diameter which makes it perfect for a dining room pendant light. The price varies from between £1,000, to £5,000 depending on the size and finish for the Vepan remakes. Therefore, the target audience are the upper class for which the lamp would be a statement piece. I believe this is value for money due to the high-quality materials and the fact each piece is made by hand as well as being a timeless design with a very long product life that stands ~~out~~ in any environment~~.~~

PH lamps (figure 7)



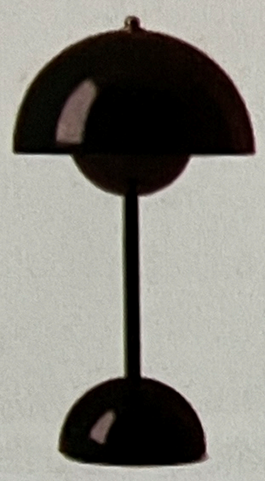
Panton was taught by Poul Henningsen, in his early years, at the Royal Danish Academy and Panton started by designing lamps for Louis Poulsen. What they have in common is that like Henningsen's creations for Louis Poulsen, they show an incredible grasp of how light behaves and how it can be controlled by structure and material. There are great similarities between the *onion lamp* and Henningsen's range of PH lamps (figure 7) which were revolutionary as they were some of the first lamps in which the light source was hidden and form played a more prominent role in the design of the lamp then it previously would have done. This can be seen in all of Panton's luminaire designs. Another of the main similarities between *the onion lamp* and the PH lamps is the gradual visual movement using repeated forms which get larger or smaller to create undulating form with each layer.

Many of Panton's lighting designs were inspired by natural forms. Firstly, the *Flowerpot Lamp* and *Panthella* (figure 8 and 9) both resemble a mushroom with a single large, rounded form curling from the top around the light source. This is done as they are both desk lamps so the light should be focused on the ground and not visible from the top, this means when working

the user can't directly see the light but can clearly see what is on the desk. Secondly, the *fun lamp* (figure 10) is made from a canopy of hanging pearl discs which gently sway in the wind. The discs are layered in a way that completely hides the light source and as the lamp moves the lighting will be changing constantly. Finally, the *moon lamp* (figure 11) is the most similar to the onion lamp with Its fan-like design made from 10 ring-shaped aluminium lamellae which can be moved to create a spherical shape that gets smaller towards the light source. The everchanging forms that can be created by the moon lamp, to suit the environment, particularly interested me. Not only are all these lamps inspired by organic forms, but they also all hide the light source-in order to provide a soft, ambient and glare-free illumination, showing Panton's great understanding of light and how it behaves using a range of materials and forms.



Flowerpot lamp (figure 8)



Panthella lamp (figure 9)



Fun lamp (figure 10)



Moon lamp (figure 11)

Verner Panton's lamp designs, especially *the moon lamp and onion lamp*, fascinated me as the natural forms that he creates were made from multiple forms which come together to make a beautiful composition. The multiple forms together create interesting light and shadow.

The Swirl lamp by Øivind Slaatto

Image 12 *swirl lamp* by Øivind Slaatto

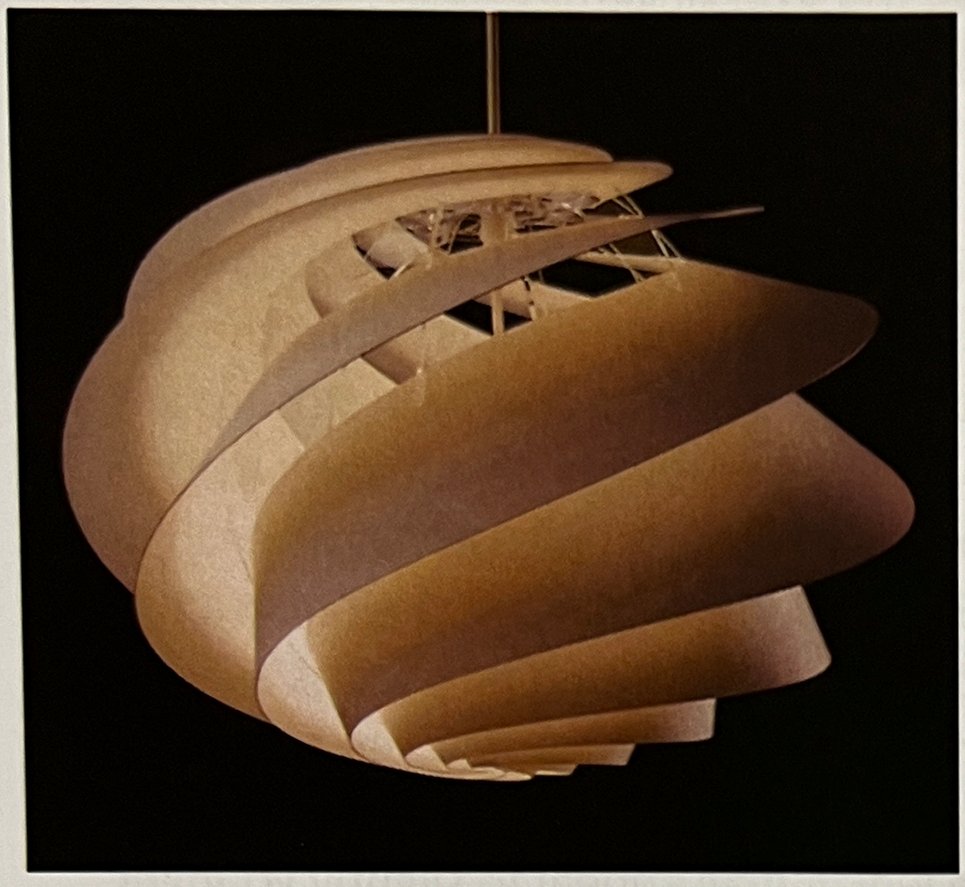


Image 13



Øivind Slaatto designed the *Swirl Lamp* for Le Klint in 2013. Le Klint are a Danish design company known for their beautiful pleated and folded paper lamp shades. Today Le Klint has a large range of stunning designs based upon the simple, beautiful handmade ethos of its predecessors.

Individual Plastic lamellae are used as they are flexible and can be bent into the 3D swirling form from their original 2D shape. Also, clear acrylic has been used for the internal structure holding each of the lamellae ~~in~~ because of its strength as well as its transparency, which creates the effect that each lamella is floating around the light source making the composition seem weightless. This design is made of a mix of new technology and traditional Le Klint handcrafting as the plastic is laser cut into 2D lamellae which are then bent into position. Le Klint have been crafting their iconic lighting designs since 1943, using techniques in the brands pleating studio in Odense, Denmark that have been handed down through generations.

In the *Swirl Lamp*, Slaatto uses long smooth ~~line~~ to produce a very aesthetically pleasing design. The design comes in two colours white or copper. The Copper coating on the upper surface of the shade helps to highlight the curved form of the lamp, whilst the white model has a very contemporary aesthetic. Oivind Slaatto was inspired by nature and basic mathematical principles such as the Fibonacci sequence, which are very common in nature and seen in shells and flowers. 'The geometry and mathematics of a snail's shell never cease to fascinate me, it's a minimalistic structure that is also extremely clever and poetic,'(16) shows how Slatto experimented with such simple common patterns to capture beauty through his designs. When looking at the lamp from below the design reminds me of a rose by the way the spirals meet at the bottom, however at the top the spirals are spread much wider like the petals of a rose. The Le Klint design and craftsmanship are obvious when you look at the lamp. This can be seen through the use of geometric forms which appear to have soft and organic shapes. He also seeks to imbue characteristics such as rationality, logic and harmony to his designs. The dramatic spiral form is created by changing the angle of the lamellae. For instance, at the top the lamellae run parallel to the ground which makes the

design much more open, whilst at the bottom of the lamp the lamellae twist to be more perpendicular to the ground, creating a denser composition which covers the internal light source. This is done so when the spiral form is seen from below the design morphs from narrow and dense to wide and dispersed. I really like the overall composition of the *swirl lamp* due to the smooth aesthetically pleasing design with the repeating overlapping spiralling forms which make up the symmetrical pattern.

The spirals completely cover the light source diffusing glare free, warm light around the room. The transparency and shape of the spirals distribute the light evenly, while the design conveys aesthetic elegance in every environment it is placed in. The beautiful closure at the bottom of the lamp also makes it perfect to hang high in any room as a pendant lamp, although the lamp can also be a table or floor lamp. It is made in small batches as each one is handmade~~.~~ and for this reason~~,~~ it costs between £300-600, depending on the finish and the size. The target audience is upper class people who may use the pendant lamp as a centrepiece in a dining or living room, or a table lamp in a high-class study. The modern design may mean the target age is likely 30-year-olds. This is because of the cost which is quite expensive as well as the contemporary design which may appeal to slightly younger audience.

Another of Øivind Slaatto's designs, the *Patera Pendant Lamp* (image 14) is also based on the Fibonacci sequence, emphasising his great interest in nature. The lamp provides a different impression from every vantage point by the varying intensities of light created by the shape of the lamp. Just like the *spiral lamp* the light is enclosed, allowing glare free light to be diffused around the room. His designs are very simplistic which gives an elegant feel.

Simplicity, functionality, and elegance are the qualities associated with Danish design. There are similarities between the swirl lamp and the PH lamps (image 15) by another Danish designer, Poul Henningsen, as both designs were inspired by nature using simplistic forms arranged in a pattern around the light source to gently diffuse light around a room. However, Slatto uses lighter, modern materials in his work for example the plastic used in the swirl lamp which can be bent by hand into the final form-to lighten the form as though it is floating around the light source. In contrast, Henningsen used aluminium and steel in his PH range of lamps, making the design durable and strong. This choice of material means the design is much more prominent as a centre piece whereas Slatto's *swirl lamp* is much more diverse as it is designed as a floor lamp, a pendant lamp, a ceiling lamp as well as a desk lamp.

Image 14 -*Patera Pendant Lamp*

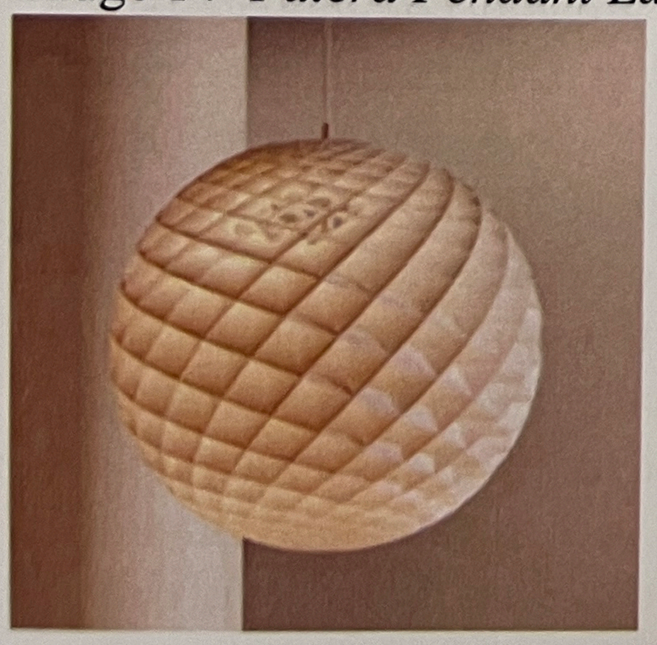
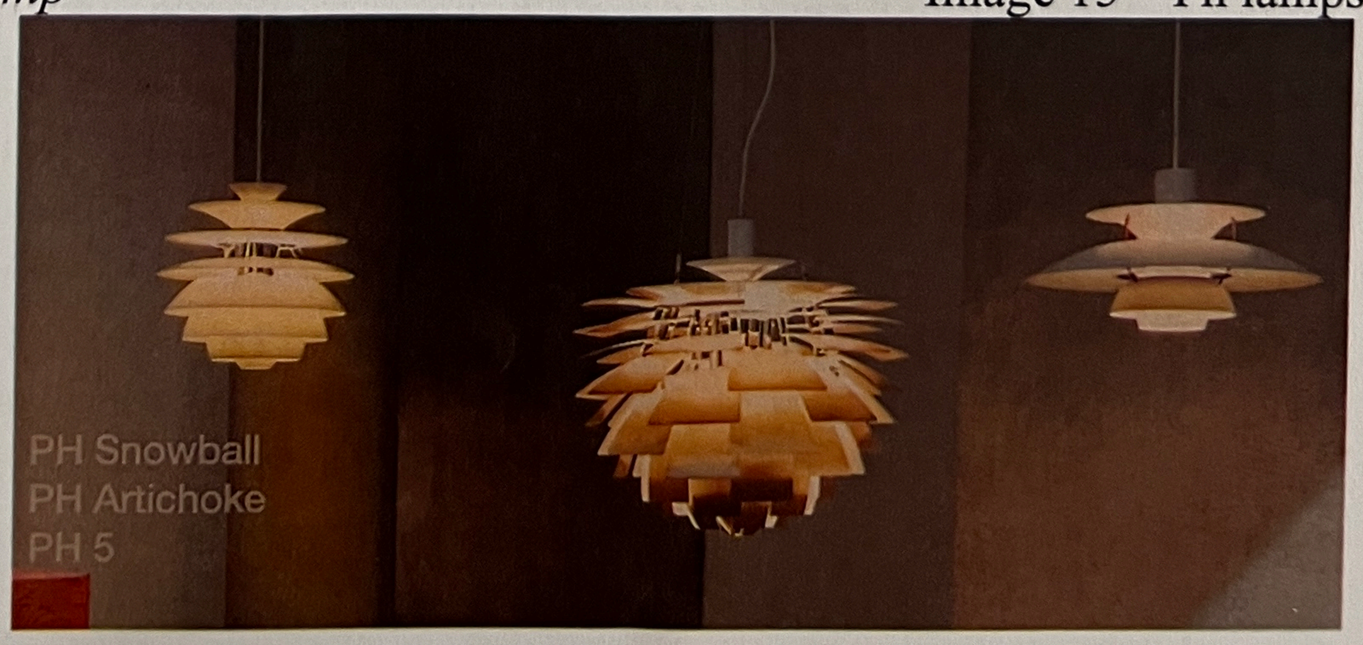


Image 15 – Ph lamps



I believe this lamp was designed with the form being the focus. However, I believe the design is very successful in terms of both form and function, as Slaatto has created a beautiful design which also hides the bulb and diffuses the light evenly around the room. I particularly like the smooth line which is seemingly never ending and how this repeated pattern creates the overall layered spiral composition, giving a very organic feel to the piece.

Chapter 2

My intention at the start of the project was to design lamps inspired by natural forms. During my broad research into this topic, I found many different designs inspired by a variety of different forms, but *the artichoke lamp*'s undulating form around the light source and how it can be adjusted by the user to create different intensities of light caught my eye.

Poul Henningsen's lighting was revolutionary in terms of light, shadows, glare, and colour reproduction, which is evident in his PH range of lamps, especially the *Artichoke Lamp* (fig 16). *The artichoke lamp* has an elegant natural form created by large, dispersed leaves towards the top and the smaller tightly packed leaves at the bottom which creates a very smooth, perfectly balanced, and symmetrical design. In response to the artichoke lamp and my statement of intent 'lighting inspired by natural forms,' I designed a lamp which has a similar layered form (fig 17) with a symmetrical pattern around the centre. The design was made of two forms, one larger than the other, which could overlap to hide the light source. The forms look like petals which surround the light, creating the effect that the warm light source is the stigma of a flower. The angle of the *artichoke lamp's* leaves can be controlled to spread light so user can adjust the intensity of the light released to suit the environment. I incorporated this into my design as each separate Hexagon with petal shaped forms hanging from it can be rotated exposing or hiding the light source depending on ~~what~~ the user's needs.

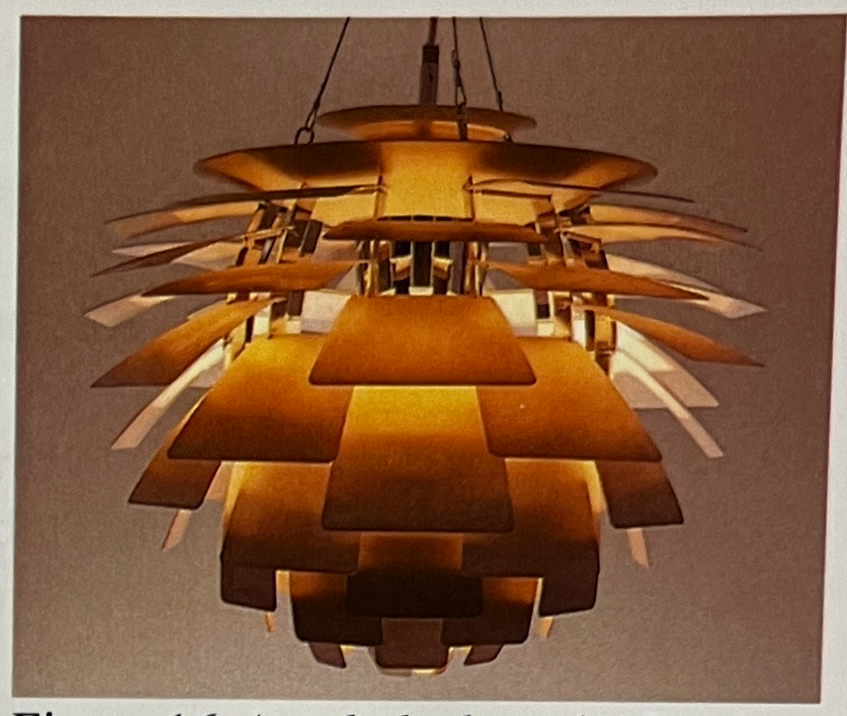


Figure 16 *Artichoke lamp* by Poul Henningsen

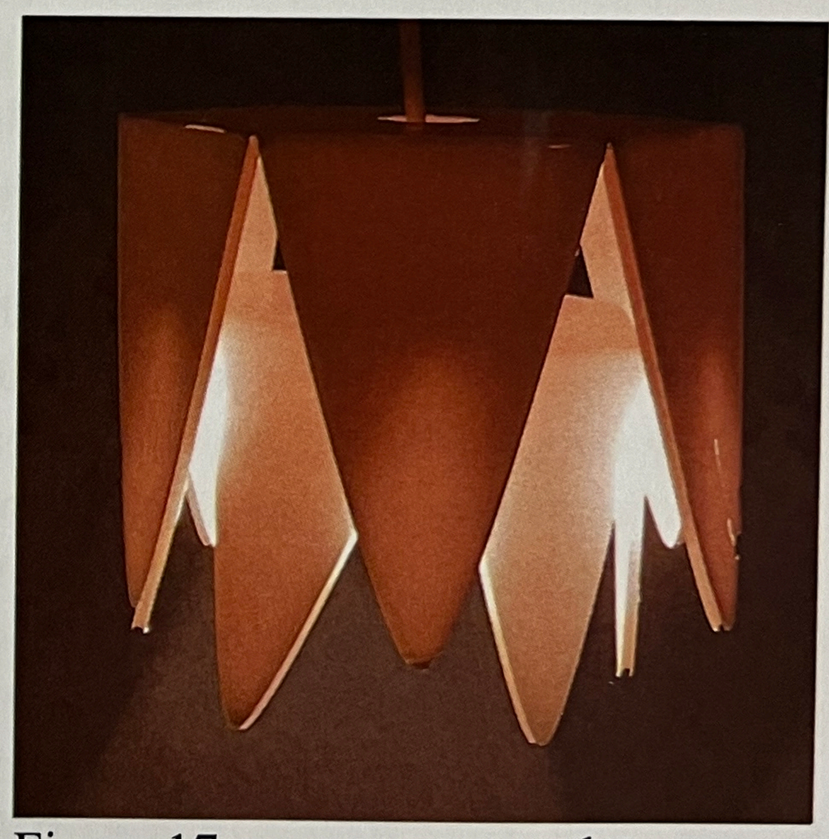


Figure 17 my response to the artichoke lamp.

Further research into lamp designs which cover the light source while evenly distributing light revealed Panton's luminaire designs, which are extraordinarily diverse with natural forms at the forefront of his designs. What they have in common with Henningsen's creations is that they both show a profound grasp of how light behaves and how it can be controlled by the structure and materials of the luminaire. The undulating natural forms created by Panton's *onion lamp* (fig 18) and *moon lamp* (fig 19) particularly interested me. My second lamp (fig 20/21) was inspired by the natural form of an ammonite, which I recorded firsthand in the Natural History Museum. I really liked the swirling, hypnotic pattern which gently diminishes towards the centre. The layered scale like forms of each individual segment on my lamp were inspired by snakeskin with each segment movable to change the light intensity and shadow. This idea of individual lamellae revolving around the light source was used by Panton in *the moon lamp*. My desk lamp was designed to

function perfectly as the light source is hidden to diffuse the light gently with no glare. Also, as the lamp is adjustable it can be positioned to accommodate a range of tasks. *The onion lamp* and *moon lamp* were two of his most famous pieces which inspired my lamp. The main thing these lamps have in common with mine is how the light source is hidden to diffuse soft ambient light. The interactive element of the *moon lamp* and how it can be adapted to suit the environment was something I chose to include in my design to improve the function as a desk lamp.



Figure 18 *onion lamp* by Verner Panton



Figure 19 *moon lamp* by Verner Panton



Figure 20 and 21 my response to the *onion lamp and moon lamp* by Verner Panton

Henningsen and Panton's use of kinetic forms to produce beautiful everchanging lighting, made me realise that nature was constantly moving as all living organisms moved to suit the environment and survive. The concept of moving based on environment was something I wanted to focus on in my final piece.

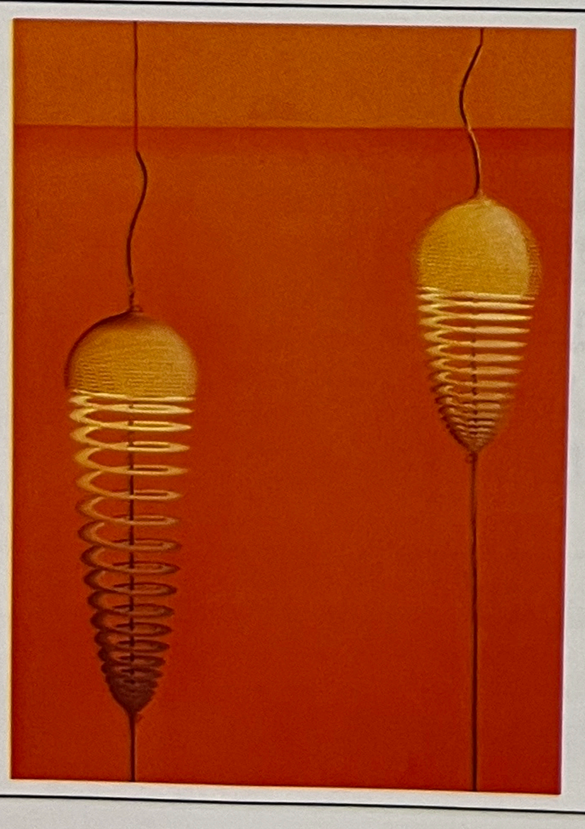


Figure 22 *Ge-Off sphere* by Ron Arad

Ron Arad's *Ge-Off sphere* (fig 22) originally inspired my interest in spiraling forms with the tight coil creating more gentle soft light ~~and~~ loosely coiled producing harsher light.
Deeper research into spiraling forms, informed my next design as another Danish designer Øivind Slaatto, influenced my work with his *swirl lamp* (fig 23). What stood out for me was the way the spiral form is created through overlapping lamellae and the angle of each lamella. Slaatto, much like Henningsen and Panton, was heavily inspired by nature as the Fibonacci sequence is evident in a lot of his designs. Another thing all these lamps have in common is the way the designers have covered the light source with multiple forms which come together to form the natural form, creating interesting light and shadow. The natural form of a conch shell is visible in my final pieces (fig 24,25,26) by the way the largest lamella engulfs the smallest, which creates the continuous rhythm. I created the spiral form using a flat curved lamella which when bent into position curls around 90 degrees creating the twisting illusion.



Figure 23 *swirl lamp* by Øivind Slaatto

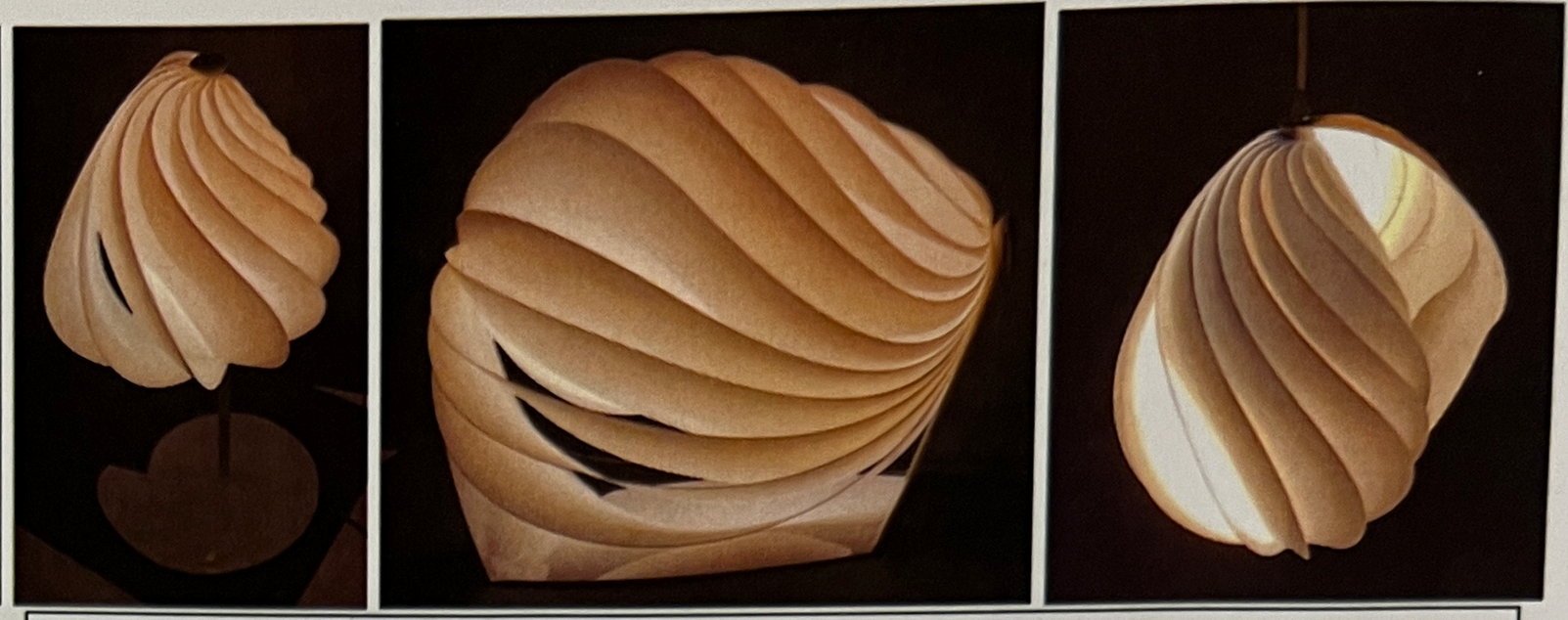


Figure 24/25/26 table lamp, floor lamp and pendant lamp in response to *swirl lamp*

The undulating form created by multiple lamellae of differing sizes and how that affects light, and shadow inspired me throughout my work and became a particular focus of mine. I believe my final piece achieved my intentions to create lighting both inspired by nature with everchanging forms which revolve around the light source.

Reference list

Reference number	Link	Date
1	https://www.scandinaviandesign.com/poulHenningsen/	13/09/21
2	https://www.dareclan.com/post/scandinavian-design-the-danish-romance-and-the-evolution-of-the-artichoke	13/09/21
3	https://www.vam.ac.uk/articles/what-was-modernism	13/09/21
4	https://www.atrium.ltd.uk/products/ph-artichoke/	13/09/21
5	https://www.innes.co.uk/ph-artichoke-480-pendant-light-by-louis-poulsen.html	13/09/21
6	https://www.pamono.co.uk/stories/poul-henningsen-artichoke-lamp-story	13/09/21
7	https://www.louispoulsen.com/en-gb/press/ph-artichoke-black	13/09/21
8	https://kalidesign.fr/wp-content/uploads/2016/02/VERPAN150831_VERPAN-lighting_1.pdf	17/11/21
9	https://www.scandinavia-design.fr/onion-verner-panton-verpan_en.html	17/11/21
10	https://www.laboutiquedanoise.com/en/blog/the-history-of-danish-design-b48.html	17/11/21
11	http://www.designcurial.com/news/lighttech-verner-pantons-lighting-8018085/	17/11/21
12	http://www.moderndesigninterior.com/2013/02/verner-panton-design.html	17/11/21
13	https://www.finnishdesignshop.com/design-stories/classic/verner-panton-a-boisterous-pioneer	17/11/21
14	https://www.metmuseum.org/art/collection/search/491744	17/11/21
15	https://www.scandinavia-design.fr/onion-verner-panton-verpan_en.html	17/11/21
16	https://www.ft.com/content/bceb377a-c86d-4832-bbe0-0c65a5d9a040	17/02/22
17	https://www.hotelmanagement.net/design-trends/catching-eye-patera-by-oivind-slaatto-for-louis-poulsen	17/02/22
18	https://www.leklint.com/en-GB/About-LE-KLINT.aspx	17/02/22
19	https://www.skandium.com/collections/oivind-slaatto	17/02/22
20	https://www.nedgis.com/en/products/pendant-light-swirl-medium-copper-o45cm-h33cm-le-klint	17/02/22
21	https://www.scandinavia-design.fr/le-klint-swirl-floor-table_en.html	17/02/22
22	https://www.leklint.com/en-GB/Products/Show-Product/SWIRL-1.aspx?VariantID=VO101	17/02/22
23	https://www.nest.co.uk/le-klint	17/02/21