DESIGN

THESIS

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INTRODUCTION

What constitutes my design style? That is a very broad and philosophical question and one which I hope to dive into and try to define an answer for. At first I wasn't sure what did define my style, but after some quick reflection it is clear that there's a plethora of people, movements, design styles and countless other influences which have impacted my design. I am going to explore some of these and talk about what I take from each of them. This will cover my most notable influences, of course there are more but I'd be here all day if I spoke about everything that has ever influenced me.

The first and most important concept that affects my process, strategies and influence is my own personal values. Whilst it is not something I think of or consider often it is critical to understand what they are and where they originate from.

My values may change through time, whether that be through my own self-improvement, development or differing social influences which may be reflected in a shift of my work.

My own values are of course open to interpretation, I may think differently to others as with everything its subjective and opinion based. I like to think everything begins with well-being, if you're not happy or satisfied it will become a detriment to you and those who surround you in other areas. For me, well-being comes from my friends and hobbies, enjoying my time with those whose company I enjoy the most. I strive with company, support, and a circle, therefor I should consider one of my values to be 'family' as that's what I consider my closest friends.

How does this affect my design work though? For starters, sub-par wellbeing and mental health for me always has a direct impact on both my professional career and personal life which is why I value it so highly. I think a majority of the impact comes through in the form of motivation, if I have strong motivation, I am much more determined, focused, and productive. This isn't a direct influence per say, but it will yield better results and more work. My friends and surroundings do of course provide some influence, whether it be through their feedback and comments on my work or their own influences that I pick up on, although it will be of much less significance as my own as we may not always share the same interests and views.

One value I try to live by is honesty, something I believe in strongly as it always leads to better results and communication. This is certainly a value that translates to design, one that many designers follow such as Dieter Rams. Whilst in some instances honesty can feel like it's counter intuitive doing more damage than good that is only short term and temporary. It is evident in the long term that honesty is a fundamental corner stone of wellbeing, mental health, and design to name a few. Honesty is also a key part of integrity, without it how can you stay faithful and devoted to your values if you don't speak and seek the truth?

A value that compliments honesty is integrity, a value which I see in myself. The ability to maintain loyalty and strength to all of my values is critical in achieving my vision, whether that be in the studio designing or in my personal life. Integrity ensures that my outcome is authentic and true to me, my values and influences regardless of any other factors in the process. In essence it makes me and my design reliable and consistent, something of extreme importance where often you're required to follow certain design influence or constraints to meet criteria.

Another consideration that cannot be ignored is culture. It is everywhere we go in one form or another, possibly the biggest influence there is. It is clear if you look at different continents of the world, their ways of life and their unique problems and influences which in turn influence cars they design. There are key features, adaptations, and styling that you wouldn't find elsewhere because it is impacted by their surroundings and requirements. It is important that I understand the cultural influences that surround me, how they work and can be interpreted and used to my advantage.

My first influence, dating back to my time at school studying design was Dieter Rams, an industrial designer with huge presence and knowledge. He devoted his entire working life to designing something better than the last iteration. An attitude any designer aspires to live by, constantly chasing perfection. This chase for perfection outlines his dedication to design.
He was very critical of his own work stating, 'is my design good design?' and to determine that he set out to express his ten principles for good design. His ten principles consist of: innovative, useful, aesthetic, understandable, unobtrusive, honest, long lasting, thorough, environmentally friendly, and as little design as possible. Whilst all of these principles are fundamental in the design process, the ones that I find most useful and relevant are to innovate and be understandable.
Innovation doesn't always find itself at the forefront of the automotive design industry. Especially in current times where a big portion live by 'if it ain't broke don't fix it' making it hard to suggest change. Often the phrase revolves around the unwanted development and forced introduction of the EV sector where a large portion would prefer to keep the characterful combustion engines often depicted as the golden age. This is something that designers are trying to capture in their current work, to reignite that flame inside people per say.
This character as it is often described in engines is their symphony and soundtrack. It is was often the most important part as you could hear it before you saw it, giving a good first impression. This can also be interpreted in a manner that lends itself to the sculpting of the bodywork. Starting with the name for it – 'bodywork' sets out that it is intrinsic whether that be in reference to it being sculpted by people or that's its designed around human forms. Even where a design may not be perceived as natural in its choice of forms, so long as it has recognisable features, unique to a particular brand, model, or line-up of vehicles then it fits the bill.

Whilst from a technological front, innovation may not be favoured by some it certainly takes main stage in a designer's mind. To some extent there must be technological innovation to fuel the innovative design. Often, I find myself looking to the past for inspiration where designs were more rudimentary. I find it is simplicity that creates a blank canvas for innovation, 'Less, but better' encapsulates this perfectly, how can you do better with less, suggesting a minimalist influence, something that was clearly engrained in Dieter Rams' design philosophy if you look at his work.

His principle of understandable design demonstrates his influence of minimalism, something I too involve heavily in my design thinking. Whether you're making use of complex shapes, curves and volumes or simplifying the design language, if it doesn't flow and present as readable it's not good design. There are many ways to interpret what Rams means by understandable, whether that means understanding why a shape or form has been used in a physical sense like its aerodynamic effect or on the other hand understanding the design language and the approach a designer has taken to design the product. Both are very important; every curve of a form should have a purpose otherwise why is it there? If you cannot look at your design and explain or depict why the shapes are the way they are it is not good design as Rams would say.

Another of my preliminary influences was Bauhaus (House of building), a design school, but more importantly for me a massively influential design movement in the early 20th century headed by Walter Gropius. The movement revolved solely around the 'unity of all the arts' with an emphasis to combine 'architecture, sculpture and painting into a single creative expression'. This philosophy resonates with me as automotive and transport design is a combination of all kinds of art, styles and expressions, and I have applied this forward thinking into my design process. In terms of automotive design, some values can be interpreted in a new and unique ways, involving some critical thinking to be adapted to suit the field, although in my eyes it's not as easy as it first looks. Most values can also carry multiple meanings and interpretations depending on your approach or views which further expands the thinking.

Painting is not often a term you come across in transport design with the same context and meaning as in other art mediums, however I believe you can use some intuitive thinking to circumvent the traditional stereotypes, you can paint on more than canvas. Whilst most vehicles are painted in one solid colour, what can be done to extrapolate the most from a single colour is the use of different surfaces, positive or negative, reflections and more importantly shadows. This combination allows for the designer to paint with light, and the lack of light instead of the traditional colour palette.

Every curve or edge picks up a different amount of sunlight and environment and the surfacing between them make up perfect transitions from one shade to another. In that sense the car is a live exhibition, never showing the same twice. This could perhaps explain why so many people consider automobiles works of art. This overlapping of shapes and subsequently the contrast it creates that makes up some of the most well-known pieces from the Bauhaus design movement.

A great example of the ingenious design that came of the Bauhaus movement was the Tea infuser and strainer by Marianne Brandt. A uniquely small yet powerful device in more ways than one, a design that looks more at home now than it did at its conception in 1924. The abstract design taken right back to its pure forms is what makes this design so important and timeless, arguably an essence designers are still trying to capture in contemporary works today. The design was essentially made using one shape, the circle which goes to demonstrate how correct Rams was when he cited that good design is as little design as possible, there was no need to complicate the design any further but instead be creative with the design you already have.

I think the Bauhaus movement also sparked my 'Back to the future' design approach where I take heavy influence from movements and eras from the past, allowing me to create my own retro-modernism style which can be found on many current vehicles. There is something special about how less is more and the way it has continued to shape design over the years, including mine. I think this is in part due to the large attachment and nostalgia that older cars carry, something designers want to capture now to help increase their brand awareness.

Another early inspiration was Marcello Gandini, from the first time I laid eyes on the Lancia Stratos HF Zero I fell in love with his style. Gandini was synonymous for his success with multiple automobile manufacturers, most notably Lamborghini and Lancia, where my interests mainly stem from. His own influences started early when he had an ‘encounter with a coffin-nosed Cord with its pop-out hidden headlamps’ which ‘had young Gandini completely fascinated’. This initial influence has very evidently shaped his design career making use of significantly more bold shapes than the previous design movements creating designs that would be considered conceptual even today. So much so Lamborghini released a reborn Countach.

Gandini’s style is most notable to me for his profound ability to transform sharp and stiff forms into ones with tension and flow whilst maintaining the abstract forms he was known for. His unique ability to sculpt primitive shapes into futuristic forms like the Stratos HF Zero and Autobianchi runabout challenged my perspective on what was possible with such shapes.

Both cars originate with a simple wedge shape, a staple in his design work from the time. A combination of soft and sharp edges gives the appearance of motion and aggression without the need for complexion and unnecessary clutter making the surfaces harder to read. It is quite apparent he, like many others finds simplicity and contrast a huge part of his design language. Exaggerating those sharp edges and undercuts to create contrast, making it abstract in appearance which allowed his work to stand out from the crown and gained him his reputation.

It is described that he started 'the most innovative, the most fascinating and the most controversial: the golden years of amazing shapes, styles and automotive architecture'. That legacy would inspire any designer, no wonder why so many people are influenced by his numerous, timeless classics. He did what no one else dared do, with so much confidence and as a result pioneered an entire movement for years to come, from being influenced to being the influencer. Such confidence and self-belief are an enormous feat to achieve and something I have started to develop with my recent work, you never know what someone else's opinion might be about your work.

He has introduced a whole new step to my design process by where I explore less traditional, abstract shapes and ideation and how they can be portrayed, also influenced by the Bauhaus movement. Often, I even take inspiration from artwork or architecture and other spaces where there is a similar balance and unique takes on forms.

Another hugely influential figure to me is Giorgetto Giugiaro, arguably more important than Gandini, with cars designed for nearly every notable automobile manufacturer. Giorgetto was 'Known for marrying form and function' a task notoriously hard for even the best designers. Often form and function are referred to as choices, you sacrifice one to the other, creating a space for both to co-exist was unheard of at the time which would explain his success and respect within the industry.

He was not dissimilar to Gandini in his design style however the differences quickly appear. For Giugiaro 'proportions top the list' describing it as a 'game'. This approach explores the avenue that there are different levels to this supposed game, there is always a goal in sight. Each time you complete a level there is another one, slightly more challenging to beat. This is a very down to earth and relatable approach to break down your goals that I have adopted recently. Breaking down your goals is a very effective way to stay focused, keep motivated and help you succeed.

Centring the approach around proportions is a method I have also taken on board, setting out the guidelines, acting like a template you can experiment with potentially outlandish and new ideas, something he was fond of. Whilst some look at proportions as a restriction he saw it the polar opposite. His obsession to the technical aspect was perhaps his break-through, brought upon him by his father.

His unorthodox approach to car design derived almost entirely around numbers is one he says grows from 'beautiful women; people all have the same general features' but it's the smaller changes that 'can make a world of difference'. Like many other designers he takes influence from humans but in a completely different perspective, one that is unique to him, where it is more about their relative proportions as opposed to their overall proportions and volumes they possess. Where most designers use the human reference for biomimicry, he veers down a different path which could explain the success in his unique approach. I find this approach very insightful and influential, especially in the later stages of design, where the proportions are already set out and it's a case of playing with the smaller details and adjustments to fine tune the design.

This leads me onto Claus Luthe, perhaps a designer whose ethos and outcomes differ most from the other ones in this piece, however this does not mean his influence has less significance, he brings a completely different skillset to the table that I was eager to learn more about.

Luthe has possibly the most diverse and interesting portfolio of designs out there. His inspirations started early on in his life when he began coachbuilding buses at just aged six. This clearly had an imprint on his ideology and most likely gave him some of his signature motifs found on his later work.

He loved to use a long, sweeping, accentuated belt line, found on his very first design the NSU Prinz 4. From there on that became his motif and was found in various forms on many designs going forward, becoming a staple of BMW's design language even to this very day. This subtle design hint became incredibly popular and became iconic on cars for decades to come.

Luthe 'championed an evolutionary approach to BMW design' in his time, tasked with establishing the brand as a competitor to Mercedes. This left him the challenge of adapting the sporty, 2-door design language to a much larger, more refined chassis to suit more passengers and most notably more doors without infringing on their overall aesthetic. His ability to maintain such design language whilst still fundamentally changing a majority of the cars proportions was second to none.

It is clear, like Giugiaro his approach stemmed from making small changes to the already determined proportions especially during his stint at BMW where the brand already had an established design language, making sure he observed the design language he was following and trying to be as out the box as possible.

Another influence that played a big part of my inspirations as of late is the ‘Super silhouette racers’, an unofficial classification of race cars that bear a superficial resemblance to their road-going sibling. Specifically, the ones running rampant on track in the 70s and 80s.

These cars often lack traditional design philosophy and are more than likely ‘designed’ with the sole purpose of gaining an advantage on track. However, the outcome of these cars has created their own design movement to a certain extent. The styling of these cars clearly revolves around form follows function, with the sole purpose of the body modifications being to increase performance, but in doing so they make the appearance much more aggressive, often to an almost conceptual level. This style often accentuates features, functions and bodylines that would have otherwise been ruled out all together or compromised due to regulations and budget implications.

This out of the box approach, quite literally, allows for more freedom and space to design the car you want to see which allows you to really push your creative freedom and experiment further than traditionally seen.

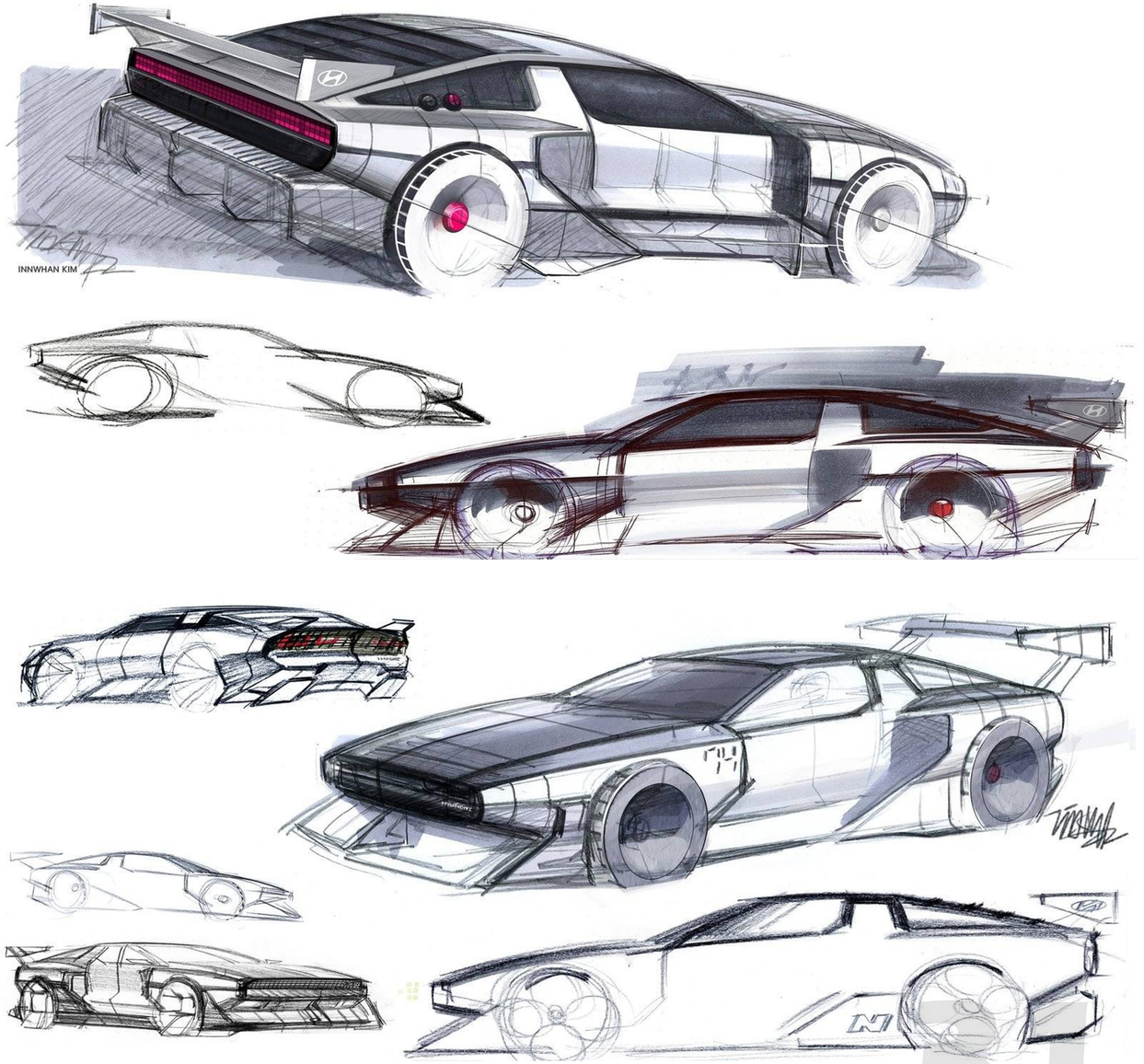
Often the design language chosen for these is perceived as rudimentary, however it allows for a retro styling approach, where often blockier shapes are more commonly found as design is not at the forefront of their mind. However unknowingly they have created a design style and movement, one implicated in many modern car designs and body kits. One that has heavily inspired and influenced me with their use of protruding surfaces and shapes, exaggerated air channelling and aerodynamic functions in places you would not expect. It is still very much a creative avenue that should be recognised.

These cars were so influential themselves that they kickstarted another movement in the automotive world all together, 'bosozoku' and 'Kaido' racers from no other place than the car mecca, Japan.

Whilst Kaido racers took subtle hints and nods to the Super silhouette racers of the era, bosozoku took it to a whole new level. Essentially taking the racer style and extending it even further with extravagant paint jobs and lowered on extremely wide wheels, transforming these cars into rolling works of art for the road.

A design movement that encapsulates my style well is modernism. Modernism was described as ‘A rejection of history’ and instead pushing a philosophy of ‘experimentation’ and ‘innovation’, a new way of thinking if you will. This critical shift in thinking and philosophy really helped to shape what we think of as modern design, taking inspiration from other relevant movements such as Bauhaus to push design forward into the future.
It focused on the forms that made up art, much like my other influences and gravitation towards the styling throughout the 80s and 90s.
Something I consider heavily throughout my design process is how I can create a new style or movement through experimentation and innovation, whether that be by exploring the endless possibilities of forms, their proportions and position, like Giugiaro so heavily played with in his extensive career or taking a more abstract approach as was common in the modernism movement.
To me modernism is more about the actual shift, the urge to make a difference, pushing for change by being yourself and thinking outside the box, something car design is lacking significantly in the current climate. Of course, there are other factors limiting designers but they’re not pushing for change like people once did and that’s what is missing, a spark that needs reigniting. Every company can publish an attractive concept car, but it never translates to their production vehicles which is where the real challenge lies.

Concept design is an interesting topic, often the only time where designers' visions reach full scale prototypes without interference or compromise although they set out a false premise. Often showcasing a manufacturer or design groups capabilities, ideas, and vision to create buzz and excitement around their products and ultimately bring them more customers.
The idea of concept cars is to bridge the gap between ideas and production, showing what they're capable of and demonstrating their research and development on a new platform that could potentially see production in the future.



Malcolm Sayer, an engineer turned designer post war, penned some of jaguars most successful cars. Sayer had a unique approach to designing cars at the time having graduated as an Automotive engineer then studying WW2 aeroplanes during his early years in industry.

Once joining Jaguar post-war he brought onboard an entirely new philosophy and 'unique method' to the way cars were designed, mostly revolving around the aerodynamic characteristics, and creating the most efficient forms.

This use of calculations and physical principles leads to the gentle, flowing curves and forms that Sayer and Jaguar became recognised for at the time.

This mathematical approach isn't too dissimilar from Giugiaro's however their style is completely different. Where Giugiaro focused his mathematical efforts into the proportions, therefore leading to a very rigid design process by comparison, Slayer purely used it to refine his surfacing and the surface proportions leaving the creativity up to him.

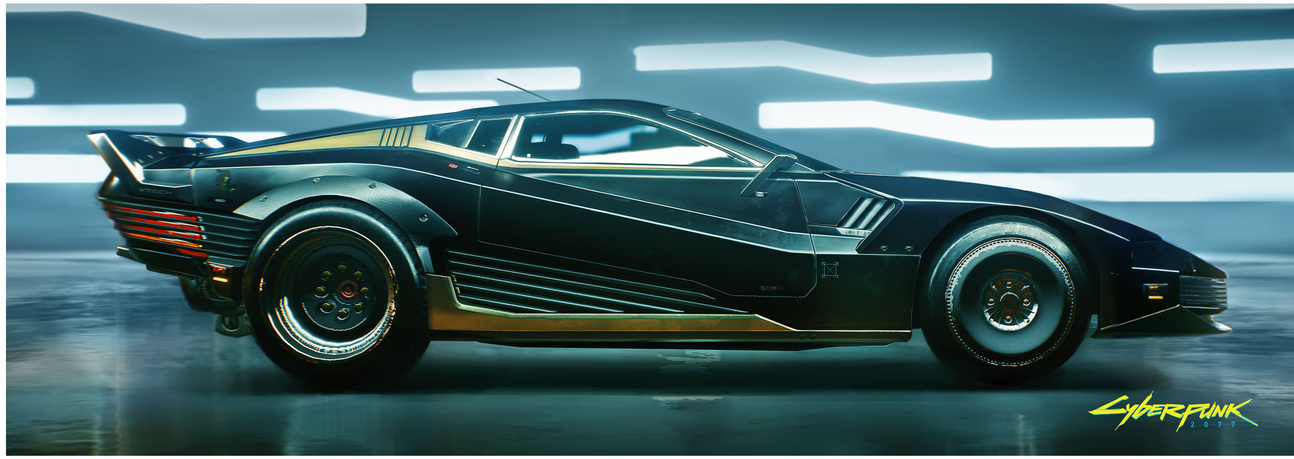
This approach at the time led to a very sexy, sleek, fast, and flowing design. Every curve was continuous and beautifully crafted, something I'm yet to acknowledge from any other designer in any industry. Almost like it was designed as if it were energy, it cannot be created or destroyed, only changing form which I think is a fantastic approach to ensure fluidity and continuity throughout the design of a vehicle. This is a theory that has stood the test of time and incorporated into current design philosophy.

‘He was one of the first designers to apply the principles of aerodynamics to cars’, and whilst car aerodynamics have drastically changed through the years with various advancements in discoveries and technologies, there is something about being the first, being the beginning of a new era. Sometimes change can do that, whether it be as big as changing roles or not I think change is important and not something to overlook. Changing areas in your process’ and day to day life can introduce new influences, new opportunities, and new results which could lead to the breakthrough and success Sayer had at his time with jaguar.

He was truly a motivated man. Motivation is another of my key values that is crucially important to being successful at anything. It is all about the right mindset and mentality to get something done no matter what challenges you face, like Sayer did when he transitioned from engineering to designer. Judging by his breakthrough in aerodynamics on cars he was probably one of the first and was pioneering a way for decades to come, the coefficient of drag was a hugely popular topic of car manufacturers in the race for higher top speeds and better performance on the track, all thanks to him.

The ability to be flexible and adapt to any situation or circumstance has proved invaluable to Sayer and something I always like to think I can do, which is almost a requirement for an automotive designer. You need to be ready at a moment’s notice to change subject, present ideas, generate ideas or move to a completely different field. Being an automotive designer teaches you about all aspects of design, designing for people and accounting for all sorts of accessibility and ease of use which are applicable in a broad range of design roles, all you have to do is apply your knowledge.

Steampunk is a retro-futuristic mashup of 1800s designs, styles and influences driven by the modern technology of today whilst also making use of steam power as the name suggests. The style is mainly made up of dirty, dingy, brown hues which depict how a dystopian future could look. This style influenced popular movies and books such as Mortal Engines.
This was a style I first discovered and explored in Minecraft where it was a hugely popular building style. Most recently this style has influenced the video game Cyberpunk 2077. Whilst not being completely true to the steampunk name it is a very similar depiction, with the same crossover between past and present in a dystopian nature. This combination of past and present is an idea I play with very frequently and features heavily in influencing and directing my design and their forms. The use of historical shapes and vehicles 'jacked up' combining futuristic surfacing with the appearance of being crude and purposely mismatched to create unique outcomes often leads to these one of a kind, trendy and 'hip' vehicles.
As a designer this is an incredibly hard style to replicate as you don't have the same starting point but it's a very inspiring aesthetic to chase and use as reference, especially in my style where I am already heavily informed by iconic classic cars and designers as evidenced. It is also an incredibly popular trend lately to design or re-design an existing car into a contemporary version or base your design around that of styles and aesthetics used previously with a modern touch. This is something that I'm hugely inspired by and ties in with the steampunk and cyberpunk philosophy of combining two eras of design whilst still maintaining the qualities of both.



An architect who caught my attention was Frank Gehry, specialising in sculptural works with ‘unusual expressive devices’ to create ‘unique, quirky structures’. He was associated with movements like deconstructivism and postmodernism because of his style and unique work he created, focusing on light and air. He loved to use abstract shapes and volumes, often asymmetrical, creating a different view from every angle.

These collaborations of forms and shapes creates an incredible almost random, natural appearance yet somehow, they’re all cohesive and connected. This is quite the feat and something that is an idea I want to continue exploring in my work, whether that be deconstructing and ‘exploding’ my designs, making use of the air and light more carefully, as negative space has become a popular feature of many aspects of design it is something I’d love to translate into automotive forms, using Gehry as an inspiration.

The idea of negative space for a automotive design may seem like a foreign idea to many however is most definitely an area to consider when designing, not just where the light and reflections will be but where they wont be, negative space is as important as any other surface or feature on the car. How can you use those gaps to your advantage.

His love of air and light that he had when designing the structures coincides with automotive terms similarly to the painting mentioned prior with a focus on creating that wide range of colours with the use of clever surfacing.

All these designers, architects, movements, styles, languages, generations, and values are what influence me every time I sit down, giving me fresh visions and ideas. Whenever I put pen to paper I am designing based on what I have taken a liking to, putting my spin on it. They have allowed me to create my own style and shaped my own language which is constantly revolving with new additions to the mood board in my head.
Now given that I think now is an appropriate time to make a fair assessment on what my design principles would be. I think it would've been wrong to set them out at the start as they could and most likely would have made my research less authentic, biased and directed it in a way I did not want. My design principles are contrast, strength, depth, tension, and exaggeration. These are what sculpt my thoughts and process' throughout the design process, from inspiration to completion. Each one has been carefully selected and developed incorporating my own style, taking influence from a plethora of influences from all corners of design, automotive or not.

REFERENCES

Winton, A.G. (2016) The Bauhaus, 1919–1933, Metmuseum.org. The Met. Available at: https://www.metmuseum.org/toah/hd/bauh/hd_bauh.htm (Accessed: October 26, 2022).

Vitsœ (no date) Good design | about us | vitsœ - vitsoe.com, Vitsœ. Available at: https://www.vitsoe.com/gb/about/good-design (Accessed: October 26, 2022).

Sen, G. (2022) Marcello Gandini: At The Cutting Edge of Automotive Design, deRivaz & Ives. deRivaz & Ives. Available at: https://magazine.derivaz-ives.com/marcello-gandini-cutting-edge-automotive-design/ (Accessed: October 26, 2022).

Gurung, V. (2022) Giorgetto giugiaro- 10 iconic products - RTF: Rethinking the future, RTF | Rethinking The Future. Available at: https://www.re-thinkingthefuture.com/product-design/a4257-giorgetto-giugiaro-10-iconic-products/ (Accessed: October 26, 2022).

Marcus, T. (no date) Giorgetto Giugiaro: The most influential automobile designer of the 20th Century, Dyler. Available at: https://dyler.com/posts/21/giorgetto-giugiaro-the-most-influential-automobile-designer-of-the-20th-century (Accessed: October 26, 2022).

Vorano, N. (2016) For Giugiaro, it's more about creativity than the car | driving, Driving. Available at: https://driving.ca/auto-news/news/for-giugiaro-its-more-about-creativity-than-the-car (Accessed: October 26, 2022).

Shoar, P. (2019) Design: The cars of claus luthe, Curbside Classic. Available at: https://www.curbsideclassic.com/automotive-histories/automotive-history-the-cars-of-claus-luthe/ (Accessed: October 27, 2022).

Modernism (no date) Tate. Available at: https://www.tate.org.uk/art/art-terms/m/modernism#:~:text=Modernism%20refers%20to%20a%20global,values%20of%20modern%20industrial%20life (Accessed: November 1, 2022).

Hsu, B. (2016) Motorsport: The super silhouette nissans that inspired a generation of Bosozoku, Japanese Nostalgic Car. Available at: https://japanesenostalgiccar.com/motorsport-the-super-silhouette-nissans-that-inspired-the-bosozoku/ (Accessed: November 2, 2022).

Malcolm Slayer (2016) Malcolm Sayer. Available at: https://www.malcolmsayer.com/malcolm-sayer/ (Accessed: November 8, 2022).

What is steampunk? (2017) The Ministry of Peculiar Occurrences. Available at: https://www.ministryofpeculiaroccurrences.com/what-is-steampunk/ (Accessed: November 10, 2022).

The Editors Of Encyclopaedia Brittanica (1999) Frank Gehry, Encyclopædia Britannica. Encyclopædia Britannica, inc. Available at: https://www.britannica.com/biography/Frank-Gehry (Accessed: November 11, 2022).