Jeep Black Label$^{2040}$
Formulating future symbolism around hybrid lifestyle

MFA transportation design | Umea Institute of Design | Umea University | 2017
“You see this very often in nature, that many things that when they do different functions, they change the actual shapes of their bodies.”
often in nature, that many things that
functions, they change the actual
to be better doing that function.”

—Frank Stephenson, McLaren
Automotive
ACKNOWLEDGMENT

I would like to thank FCA PATAc Design team for making this project possible.

Special thanks to my colleagues at FCA:
Zoki Zhang
Chris Dong
Jessy Guan
Yihui Guo
Inwoong Lee
Frank Zhang
Zey Zhang
Sean Wang
Flex Zhao
Bill Zheng
Mingfei Zhu

Thanks to the modelling company:
Tengke

Last but not least, I really want to thank my strong support from Umeå Institute of Design:

Demian Horst
Jonas Sandström
ABSTRACT

Propose a new car typology representing a hybrid life style in 2040

The world is becoming more complicated; our lives develop into multiple facets. This master thesis focuses on defining a future typology in vehicle design representing a hybrid lifestyle.

New technologies bring convenience to people but sometimes the amount of information exceeds our needs. Jeep Black Label is designed to escape all that in the year 2040. An unplugged lounge experience for the city and a great analogue getaway into nature.

A holistic research method was used to understand the context for this vehicle. The design process followed an inside-out approach. First a dynamic interior space was generated based on users’ needs. The final step was to ideate and choose a meaningful exterior appearance following the goal to communicate brand identity, automation and hybrid driving modes.

And the expected design result includes a hard 1 to 4 scale model and well illustrated story board showing the scenario together with report which contains the whole process.
Magic, Symbol and future life style

For a really long time I have been thinking that what’s the future? How car design could go a little bit further? In stead of digging into the academic side straight away, I try to first get inspired by what I see, by my surroundings, by my personal experiences and see what happens.

Then I got several areas that I find quite interesting. And I want to carry those ideas into my thesis.

About Magic
This idea hits me after my trip to the Shanghai Disney Land during my internship there. I thought it was mostly for children but that experience completely blow my mind. It’s all about magic, about something that you do not understand how it is been made. The Disney experience lead me into this magic thinking. What if we could create something magical in car design?

We are living in a world that are packaged with more and more technology, what if we could find a more magical way of presenting that?

About Symbol
We all know what symbol is. We use many of them during daily basis. But today I want to do a bit of research based on its meaning in a different context. And I believe that in car design, we can still apply this symbol philosophy as there are also linkages between the design of a car and some other stuff that is existing.

Especially during the time when the car industry is shifting towards the era of electricity and autonomous. We are now defining the new shape of autonomous EV. The package is so different and we can not just apply the old outline as it doesn’t make sense in the new context. We need to start all over again finding a new symbolism of the new era.

My concerns on putting ‘symbolism’ into my concept also comes from the study on design revolution in general.

We all know that the item design was originally from decoration, and firstly perceived as defining shape. Later the Bauhaus era saw the evolution of design towards the stage that design is for usage. And now we already create basic work flows or design process that could guarantee the basic quality, usage, ergonomics of a product. Then what’s the new challenge of designing a product?

I believe that a more postmodern thinking which focus more on the metaphor, context relationship and symbolic meaning could be a new path. You take one step back and have a more strategic level of thinking.
About Future Life Style
Just thinking about how many devices that we need to deal with, how many tasks, how many web accounts you are holding, how many social networks that you are in, I dare you not realize that there are already pieces of you existing on different parts of the digital world and analogue world. You might be a sweet wife in Facebook but a super heroine on rally track. What’s technology bring is not merely new tools but also new lifestyles.

About the influences on design
Meanwhile, the products that surround us, especially cars and the way we design cars at the moment still follows the old golden roles. We still think we are designing a standing-still sculpture. But as stated our lifestyle becomes more hybrid and every piece of our life need a special treatment or reflection on design. This means that we need to change our mindset. We need a dynamic procedure.

Disney and magic  Symbol of automation  Digital lifestyle

*Design as shape, design as use, design as metaphor.*
In the future, People will own less but more meaningful stuff.

What we can learn from the evolution of Iphone?
From June 29, 2007 when Steve Jobs first introduce the first generation iphone, it’s set a bar in many means. If we see it from product design perspective, it also set a reference for car design. Here we can see a clear evolution between iPhone 4 and iPhone 7. We are leaving the old logic of this visible frame surface aesthetic_integrity and moving towards something more abstract. Something that you might not understand how it's been made. It's a inevitable and simple solution to a complicated world.

“Any sufficiently advanced technology is indistinguishable from magic.”
- British science fiction writer Arthur C. Clarke

“Less is more.”
- Ludwig Mies van der Rohe
We are getting away from the real world, how things are actually made, how things are being constructed. The object, the metaphor of an object becomes something that is more recognizable.
3.1 RESEARCH
3.1.1 Symbol and its importance

About Symbols

According to the definition on Wikipedia, Symbols are a mark, sign, or word that indicates, signifies, or are understood as representing an idea, object, or relationship. Symbols allow people to go beyond what is known or seen by creating linkages between otherwise very different concepts and experiences.

Symbolism and post modernism

Different from the austerity, formality, and lack of variety of modern architecture, postmodern architectures focus more on historical, scenario based context and the poetic, motifs and the metaphor behind the object.

Symbolism is commonly considered within postmodern context as an approach to achieve a more meaningful outcome.

Symbolism is the use of symbols to signify ideas and qualities by giving them symbolic meanings that are different from their literal sense. Symbolism can take different forms. Generally, it is an object representing another to give it an entirely different meaning that is much deeper and more significant.
Symbolism in car design and car history

Despite all the signs in cars, in a more general perspective, the volume, stance and silhouette could also contain more information and some of them has become a symbol that represent its era. Follows are some examples.

Car history in a silhouette perspective

Autonomous concepts by different companys

I believe that electrification and automation will definitely bring a new look into car design not just because of package and ergonomics but also because of people’s preconceptions on a new type of vehicle.

Now there are many car makers experimenting different packages and here I found some highlights. All of them share some similarities in terms of the volume which separate them apart from today’s vehicle. We don’t know either one will become the next symbol that represent this new era of mobility yet, but still we should bring discussion on the table.

And going back to my thesis, follows my future scenario I may generate something different. But as I mentioned before, I also need to be aware of the opinions from normal people who are not committed to cars. Maybe, what I imagine is not a still silhouette but a constantly moving outline.
Connectivity and digitalization has changed the world.

“Automotive industry executives agree that connectivity and digitization will be the number one trend affecting their business through to 2025”, according to KPMG’s 17th annual Global Automotive Executive Survey.

As the emerging of smart devices and Internet, our world and the way we experiencing the world has changed completely. These trends signal that major transformation is ahead as the industry continues to adapt to significant changes and challenges coming its way.

This industry transformation is seen to have a significant impact on the production of vehicles as well as the customer relationship – and will enable third party players from the converging information technology sector to intervene in the traditional business model.

A whole new era for the brand Jeep

We believe in a clean and sustainable future.

Nike, long considered to be one of the most innovative companies in the world, has begun to transform its innovation strategy – through sustainability.

Also, in car industry, we believe in a clean and sustainable future. Sustainable innovation is a catalyst for revolutionizing the way we do business and an opportunity that’s been integrated across our business in policies, processes and products. Like Nike who has built a closed loop ecosystem, we need to think thoroughly about the whole process and create some truly innovative solutions.
Connectivity and digitalization has changed the world. A whole new era for the brand Jeep facing automation and electrification.
3.1 RESEARCH

3.1.3 A life on wheels

Cars give people the freedom to travel where they like and when they like. The cars of today are the result of more than 120 years of development and improvement.

We used to say that cars are box on wheels. It is true and there is nothing wrong with that. But nowadays, digitalisation, electric power and automation is definitely making a shift. For the first time, we don’t need to constantly hold the steering wheels. We could be able to have other activities within the vehicle while the car is moving. And we start to value more about the experience while we are in the vehicle because we can do more stuff. Meanwhile, we are questioning should all the instruments still being fixed at the same position? Should the shape of the car looks the same when we driving and when we entertaining? The answers are open of course. And I believe that cars are evolving into something called “room on wheels”. It is not against the previous one, it is a natural evolution.

But again, if we think ahead, what will happen then? Will cars become our companion? Will we build some kind of personal and emotional relationship with our cars while living with them? Will our cars just grow, evolve as we grow up, become mature? Will cars evolve into the stage which can be called “life on wheels”? 
A life on wheels
Our lifestyle can be quite unique in the future, as means of transportation become more convenient, our life span extends and working from home or working while travelling could become more and more popular. And a more flexible lifestyle needs a different design or shape to formulate.

Colourful as our life becomes, cognitive load reduction will also become something that we all agree on. People tend to own less but more meaningful stuff, the stuff that you build personal relationship with. Nowadays Consumerism, a social and economic order and ideology that encourages the acquisition of goods and services in ever-increasing amounts, seems to conquer the world, however, I believe a stream of being against consumerism oriented expounds will become more popular in the future.

Just imaging if there is a fire and you need to run in seconds, what is the thing that come into your mind and you want to grab. A fancy yet expensive coat you bought because your favourite instgram blogger recommended or just a small toy that you have been carrying for years as a souvenir of your best friend?
“More and more people buy cars not just because they need to cover distances with them in the future. Cars must fulfil many needs. They must reflect their owner’s personality. Finding the ideal degree of individualization is not easy.”

—Chris Bangle, former director of design, BMW Group

As human beings, we tend to have the ability to express our emotions through enormous facial expressions, we understand, continue our conversations through words, sentences, but also through facial expressions, motion and emotion.

So, what if we could try to transfer this principle into auto industry, I believe that it will definitely make the car-to-car communication and car-to-people communication more meaningful and more interesting.
Hybrid mode_semi-autonomous

Why semi-autonomous? Why not going straight into fully autonomous? We know that there are many brands that proposing fully autonomous concept car already and Google driveless car is already on the road for testing. But I think that's not the answer for Jeep.

Cars are always a symbol of freedom. People always want to have a control of the vehicle. So being able to offer different level of control would be a proper evolution for the auto industry. And thinking of the brand Jeep, it is for sure a nature process of enjoying driving and getting rid of some annoying parts like traffic jam.

Hybrid mode_Pure relaxing & sheer driving

Being one of the most influential car brand of all time, Jeep contains something special. With the huge success of the revolutionary Wagonner and its follower, Jeep set up a new category, SUV. And the product itself is an interesting combination of luxury wagon and off-road accessibility.

I believe that this can be achieved by a new way of thinking. Is there another way of presenting this idea instead of stepping into the so-called Switzerland sword trap?

This is for sure a tough start, as it challenge our conventional thinking. But I think there might also be the place for new opportunities.
Pure relaxing

Sheer driving

Hybrid mode_semi-autonomous

Pure relaxing

The future goes hybrid!
Predicting the future is always difficult - technologies that seem certain winners end up consigned to niche markets, or are soon forgotten, whereas technologies such as short messaging service (text messaging) that were not initially promoted take off and become ‘killer’ applications. Sometimes it is a challenge to see beyond the hype of a new technology, or in this instance the convergence of two technologies.

Meet Plugless

Wireless charging could be a big deal for electric vehicles, allowing drivers to top up their car’s batteries just by parking in the right spot, but right now the technology simply isn’t available.

But I believe that wireless charging for the vehicle will be the future. It will give e-mobility a big boost, it will set new, sustainable technology apart from old gasoline-based technology. I imagine a future in which wireless charging plates are as ubiquitous as Wi-Fi hotspots, even suggesting highway charging lanes, where electric can top up their batteries as they drive. It’s an ambitious dream of course, but deals like this bring it just a little bit closer.

The Wearable Movement

Here’s Jony describing the motivation behind AirPods:

“We believe in a wireless future. A future where all of your devices intuitively connect. This belief drove the design of our new wireless AirPods...We’re just at the beginning of a truly wireless future we’ve been working towards for many years where technology enables the seamless and automatic connection between you and your devices.”

On the surface, Apple’s focus on a wireless future seems to describe the company’s efforts to remove wires from our lives. But it is definitely far more than that. The success of airpods marks the beginning of a movement of the wearable devices. And it is definitely relevant in auto industry as it could bring all the services closer to the human body.
We believe in a truly wireless future

- Apple  product release fall 2016
Race car aficionado Enzo Ferrari once said, “Jeep is America’s only real sports car.” Ferrari’s assessment speaks volumes, considering his personal interpretation of the sports car is vastly different from the boxy and utilitarian Jeep line-up.

What Ferrari hints at is something that emotionally connected to American’s history and culture. Young people grow up and explore unknown land on Jeep, this is exactly what Jeep is.

When we think of a Jeep, what we are thinking about?
For Jeep, there are three assets that could really draw our attention, they are the brand itself, the unique products and the rich history.

Recognizable as a brand, the name Jeep has created a imprint in many people’s mind as a name of real SUV. Starting from the American Army, the brand Jeep has been a symbol of freedom and denture.
Talking about its product, from Wagoneer, Wrangler to Cherokee, Jeep never follows the normal path, go wild and go weird always remains a slogan in Jeep.

But like many other car makers, Jeep is also facing the great shift in the car industry. As a brand based on power and utilitarian, how could Jeep find its way through electrification and digitalization?

Freedom!
3.2 BRAND
3.2.2 Brand History

A HERITAGE OF HEROES
For 75 years the Jeep brand has been indelibly linked to freedom, adventure, authenticity and passion.

The Jeep core values are embodied in every Jeep owner's mind, and they have long known that “Go Anywhere. Do Anything.” Is a way of life, not just a slogan. The Jeep badge stands for more than a brand. In truth, it's a badge of honour.

"Jeep belongs to the heroes and heroines"
FCA US LLC(2016, February 7)

CURRENT PRODUCT RANGE

In today's product line-up, we got Wrangler which is about fun, freedom and open skies. And then we got Renegade, which is about a young, collective, light-hearted way of bucking conventions, and we got Grand Cherokee, which is often individual and imbued with a feeling of capability and success. Then we got Cherokee, which is about spurring you to live moments outside the "cage" of normal life. And we got compass, which is about searching for freedom in style.
Here I imagine a complicity new line-up setting for the brand Jeep which focuses on three areas. Jeep Vintage focus on maintaining and rebuild old cars and launching new parts, accessories for customize, targeting on heavy users and loyal Jeep folks. Jeep brand covers most of today’s product, facing mass market. And here we get a new line called Jeep black label focusing on electric, autonomous and future lifestyle. Instead of merging it into the Jeep brand, I am thinking a new sub brand would bring more freedom on shaping the product.

Here on the commercial is the Jeep Wagoneer, the first luxury 4x4, sold and produced for Jeep from 1963 to 1991. A “sport utility vehicle” (SUV) for decades before the term was even invented. It’s an icon marked the glory in the early years of the brand’s history.

Interestingly, in the history, the company has explored the luxury lounge direction of the brand as well as the joyful adventure direction of the brand. I pick up one specific design from each side as a target.
Hybrid lifestyle in the year 2040

3.2.3 Customer

A GREAT ESCAPE IN THE URBAN FLOW

Great that I could enjoy a peaceful moment in my car.
My Jeep really protects me from the outside, from the chaos.
I feel like I am resting in a castle.

Name: Franca
Age: 29
Job: New start-ups investor
Interests: outdoor adventure, new media
Marital Status: Married
What she (and her husband) wants: a car fits weekend shuttle, daily business and heroic moments

“We just got too much information every single moment, life pace has reach the speed that we can barely catch. We

“Screens are everywhere, ads are everywhere, our brain are filled with information fragment and there is no space for thinking.”
My heroic moment at weekends

Finally I am free! I just wanna enjoy the freedom! My Jeep bring me strength and power! It is always nice to go wild and have a great escape!

“We really enjoy my experience with my Jeep as it did offer alternatives in this digital virtual reality world.”
3.2 BRAND

3.2.4 Brand Identity

When thinking about how to showcase electricity in a meaningful way, I notice that the traditional air intake area might be a good place to start.

In electric cars, there is no need for any traditional grill to be functioned as air intake. Also the original metaphor of large grill - power is vanishing. The electric motor is small and efficient. So as a designer, we all need another way of thinking. How to remap the function of the giant grille in the front? Or do we really need a grille? Does giant grille still mean more power like V6 or V8?

When we talk about something more specific, like the brand Jeep. We talk about something that is strong and powerful. So that's why I pick Greek pillar as my start point, and we go through all the revolution and my proposal is to go digital.

Here are some form studies on the brand Jeep, I try to catch the essence of the brand and see how far I could go with these results.
For the new brand Jeep black label focusing on electrifier, autonomous and future lifestyle, I believe that a new logo could really help deliver the message. The idea behind the new logo is to show a hint of the new brand while stay relevant in the current Jeep UI system.
GOALS

EXPERIMENTING NEW TYPOLOGY IN SEMI-AUTONOMOUS CONTEXT

EXPLORING FUTURE INTERPRETATION OF UTILITARIAN AESTHETIC

EXPERIMENTING KINETIC BODY SWITCH ENHANCED BY NEW TECHNOLOGY
WISHES

DOING SOMETHING THAT IS OUTSIDE THE BOX AND SOMETHING THAT IS LESS AUTOMOTIVE

DOING IT IN A SIMPLE WAY, PROVIDING A SIMPLE SOLUTION FOR SOMETHING COMPLICATED

PAYING MORE ATTENTION ON THE DETAILS AND HAVING A NICE EXHAUSTION
Neo Utilitarian aesthetic

In our traditional mindset, utilitarian style mostly means something practical, something which the shapes are defined by ergonomics and cost, engineering instead of design.

I believe the emerging of new technology will gradually change the situation. It will release the restrictions that previously define the product and then we as designers need to give it a meaningful shape. We still want to keep it within the scope of utilitarian as it is the property of certain product, for example, Jeep, a brand which is known for its utilitarian usage.

Then we need to think of what could be the metaphor of this neo utilitarian style?
There is something interesting about this image, it is a piece of crystal but get a quite rough surface which give people a hint of toughness. This is not what are expected from something like crystal which really interests me.
3.4 CREATIVE DEVELOPMENT

3.4.2 Package Ideation

Introducing a new Symbol of automotive freedom really need a new package study from inside out.

As I believe that the future we will have a hybrid life style, I really want to explore if there exist a new type of layout that could represent this new lifestyle. Due to the research before, I got the result that are listed below.
Jeep Black Label

Jeep Future Lifestyle
Here I am thinking where my design could fit into their product line-up. As a brand that is born to go off-road, Jeep already has a quite complete typical SUV product line from the icon Wrangler which represent the off-road utilitarian spirit to their urban city attempt Cherokee.

But here I am thinking what if we could go a little bit further into this urban sleek direction while keep the typical Jeep off-road capacity? I feel like this might be something that is still missing here.

Plus, due to all the research that I am having at the moment which lead to hybrid lifestyle in the future, I am thinking the city mode of the vehicle could be in the urban and sleek direction.

So, this also create something that is quite interesting. The hybrid modes of this vehicle each occupies one scope of the line-up end.
I pick up these references as the benchmarks of my design for several reasons.

First, I believe that in premium or luxury segment, the metaphor of the product is something that is important. When people think about something luxury or premium there are always some metaphors hanging around their mind, either long hood old cars or old castle, either sleek sculpture or obsidian. Here I picked the sleekest proportion in the off-roader segment use that as my reference.

Also, I feel that a sedan or wagon proportion could be a proper reference if I want my car to do the switch between two modes and doesn't look odd.

As I plan to show my final model from an off-road manual driving aspect, I start my benchmark research from these so-called all-road or cross-country thing. And I believe that my concept could defiantly bring a whole new dimension into this segment.
Direction 1

This direction focuses on the toughness combined with mysterious and unsuspecting.
I start my imagination from the mood board that I choose and the package that I created. I try to go from a different approach this time, starting from the metaphors that I believe suit the character of the vehicle and try to apply that into abstract shape then try to refine that.
For this direction I want to focus on showcasing the intelligent part of the vehicle which is mode-switching and body transforming.
Jeep Black Label
Proposal 1
I separate the driving unit and battery together with the power-trian chassis for this proposal. So we get a clean space for living and driving and a highly integrated tech support.
Proposal 2

For proposal 1, I go for something unsymmetrical. It is a natural extension of the unique interior space.
For the styling part, I want to keep it as simple as possible. The design below get inspired by the metal extrusion. That's the most simple way that I could imagine to form metal. And this moulding technology could become a refreshing aesthetic direction.
Proposal 3

For proposal 3, I go for something different. I start my thinking from this driving and driveless mode-switch issue. What if I follow the traditional metaphor of the "autonomous car" but create a kinetic cabin which is highlighted during driving mode but almost invisible during driveless mode?
Adventure driving mode

Urban driveless mode
Moving components
Proposal 4
Proposal 4 is a natural extension of my early research and interior exploration. For this proposal what I am thinking of is how to form a honest and meaningful shape that could cover the interior layout. So I come up with this exterior design with a non symmetry shape.
Urban driveless mode

Adventure driving mode
Moving components
The decision making process

Here comes the design decision phase. I have got 2 solid proposals containing various ideas that I got during ideation process.

I got more people involved in the decision making process and listen to their critiques and advice. So here I could be able to step back and have a strategic view on this project and analyse the pros and cons of each proposal and make a final decision.
Proposal1
Pros: a natural extension of my early study and styling process
  - Non-symmetric shape hints the dynamic interior layout.
Cons: the existence of hood during autonomous mode
  - Need a intellectual solution for the door switch on the driver side

Proposal2
Pros: magic way of drive and driver-less mode switch
  - Simple and intuitive design language, easy to understand
Cons: a little bit away from the early design ideation.
  - Need serious refinement on details.

So the majority of the audience chose the proposal2 from their first impression and deep analysis. Appealing as it is at a glimpse, it really offers a fresh perspective in car styling combining intellectual solutions.
4 RESULT
Here comes my design result. A simple design with attention to the details. With its transform feature, it could switch easily between off-road driving mode aiming to enjoy the driving experience and being exposed in the nature and urban driveless mode aiming to protect the passenger, give them privacy and offer ease times. The front bumper shows in different colour with a hint of the storage space inside.
4.1 The design profile & Function illustration

Lamp movement according to mode switch

Left Door opening

Front Storage area

Rear Storage area
4.1 The Design profile & Function illustration
How it works?

Wheel cover

Powertrain
4.2 Package & Interior indication

PACKAGE_URBAN MODE

PACKAGE_OFF-ROAD MODE
A fusion of interior and exterior

If you have a glimpse of this vehicle, especially during driving mode, one thing that draws you attention would be the semi exposed driving unit and enclosed passenger unit. And the driver's view doesn’t stick to the front, he could be able to look all round without any boundaries. If he want, he could even lain his body outside from the vehicle and have a better vision on the side.

I could say that this do matters within typical Jeep off-road scenarios and it is this level of freedom really makes Jeep as it is.
I always believe that speaking and texting are the most direct and efficient way to communicate. So other than creating abstract signs showing different messages, I directly put text on.
4.4 Scenarios

A SHELTER WITHIN URBAN FLOW AND A WAY EMBRACING NATURE!
I think the biggest takeaway from this project is that if one want to become a car designer and complete projects. One need to not only be able to present good ideas, breathtaking sketches, but also build a framework of the whole process, understand the importance of timing and respect deadlines. One need to be able to communicate ideas precisely with others in a verbal and visual way.

Also when it comes to, for example, hard model project where people from different backgrounds getting involved in it, one need to select the right collaborators and trust them.

Those are simple rules yet are certainly not easy to follow.

For example, during the modelling stage of my project, the company let their supplier Tengke build the hard model. It is a out source company that FCA do not have any control of. Also it is located at the far end of the city which one would take 3 plus hours to reach. All these increase the uncertainty of the modelling process. New problems emerging everyday as there are many details that we didn’t pay attention to becomes problems in physical model. The thickness of the material, how to design the inner structure so it could stand on its own, where to fix the yet floating cool surfaces, colour choices and the how to achieve that.

**Design strategy from my learning process**
My design internship in FCA certainly is a learning process. What I learned from that is you need to have at least plan A and plan B so if your ideal proposal can not be achieved because of timing or the limitations, budget, you have another thought through concept that is more feasible and hold the bottom line.

And then the tricky part is how you balance the time and effort on plan A, maybe the one you love, and plan B, maybe the plan you think is not bad and doable. And during this project, each review they require at least 2 or 3 different proposals on each part of the project, ranging from proportion to details. I learned a lot about building my own design strategy about making proposals and showing my work.
It’s all about execution.
This is another major takeaway I got from this project. When it comes to sketching, sometimes one can get a bit lazy and cheat on the details and corners. But then if this sketch is being chosen. You have to figure every details out on your own.

We know that some company’s may have a different approach where designers create a vision and digital modellers together with physical modellers complete the design basically. But if one wants to control more of the final result, one needs to have a clear understanding how the surface goes in every detail.

Design execution seems easy but hard to achieve. The hard part is that you need to be as close to your sketches as possible but you also need to be flexible about that as you need to respect the physics and some surfaces just exists in 2D.

Alignment to the goals and wishes
When compare with my original goals and wishes and my final outcome. I believe that I do fulfil those. Do something that is outside the box and something that is less automotive but closer to the users, keep in simple and pay attention to the details.

Also at the beginning of the project, I want to experiment new typology in semi-autonomous context, explore future interpretation of utilitarian aesthetic, and experimenting kinetic body switch enhanced by new technology. And I keep thinking all these goals throughout every stage of my project and I am proud to say that all these aspects have their place in the final outcome. The project results in a simple design with attention to the details. With its transform feature, it could switch easily between off-road driving mode aiming to enjoy the driving experience, embrace nature and urban autonomous mode aiming to give passengers privacy and offer a shelter escaping the heavy urban flow.

A clear vision on the future
Throughout this project, I get a clearer vision on the future of car design as well as what kind of designer I want to be.

At the beginning of the project, I wish my degree project could project me as a designer who want to take risk and be sharp and bold. I really want to show my unique approach into thinking and design during this project. And now my vision on positioning myself as a designer who think bold and take risk becomes clearer.

Also the ethical and societal relevance of the project I studied during my project bring me a clearer thoughts on where this industry is leading towards, and my design is a clean and clear statement about the future I propose.
1. ABSTRACT

Frank Stephenson (2016, January 12); "TEN YEARS LATER - Frank Stephenson, McLaren Automotive"; https://www.youtube.com/watch?v=brIOOpI864
Image: http://joshchilders.com/#item=gatorade-molecule/

2. INTRODUCTION

2.1 Personal motivation

Arthur C. Clarke (1962); Clarke’s three laws; https://en.wikipedia.org/wiki/Clarke%27s_three_laws

Ludwig Mies van der Rohe (1947); a precept for Minimalist design and architecture; https://en.wikipedia.org/wiki/Minimalism#Less_is_more._28architecture.29
https://thenounproject.com/term/self-driving-car/29693/
https://www.lifehack.org/507669/7-ways-virtual-reality-will-change-the-future
http://gadgetmac.com/gallery/phone-4-4s-ipod-touch-4g-wallpapers/
http://blog.zarki.net
https://www.apple.com
http://www.top13.net/most-beautiful-minerals-and-stones/

3. PROCESS

3.1 RESEARCH

Wikipedia; Symbol; https://en.wikipedia.org/wiki/Symbol

Chris Bangle; TED; https://www.ted.com/talks/chris_bangle_says_great_cars_are_art


Apple (2016, September 7); Introducing AirPods; https://www.youtube.com/watch?v=AdIHX15sXfU
Image:
http://www.i-mad.com
https://impactdesignhub.org
https://www.recodex.net/2014/5/27/11627254/qa-google-self-driving-car-head-chris-urmson-on-building-a-car-from
https://www.youtube.com/watch?v=BJ6SvfOx528
https://core.score.org/resources/social-marketing-enhancing-social-networks-small-business-marketing
https://rctom.hbs.org/submission/nike-innovating-with-sustainability/
http://www.tmitim.com/view/drawing_id/297
http://www.archiepxo.com/architecture-design-manufacturer/leather-sofa-2.html
http://arnoldzwicky.org/2012/11/24/barbara-kruger/
http://www.clerkenwelldesignweek.com/cdw-project/palau/
http://www.ahealthyfitness.com/facial-exercise/
http://newatlas.com/jaguar-c-x75-concept-four-wheel-drive-electric-supercar/16518/
https://www.knoll.com/product/tulip-arm-chair
https://www.apple.com/airpods/

3.2 BRAND

4WD.com (2016); Jeep History Through the Years; https://www.4wd.com/article/content.jsp?childEventId=jeep-history


Image:
http://www.jeep.com.cn
3.3 SUMMARY

3.4 CREATIVE DEVELOPMENT

Image:
http://longstreet.typepad.com/thesciencebookstore/art_history/page/23/
http://whitepebbleday.com/MarcNewson.htm
http://pinquity.net/t-36/559853797400279947/
http://www.carmagazine.co.uk/car-news/motor-shows-events/shanghai/2015/audi-prologue-allroad-concept-car-veers-off-road-at-auto-
shanghai-2015/
https://www.netcarshow.com/audi/2015-a6_allroad_quattro/
http://www.autoblog.com/2016/04/26/mazda-cx4-china-official/
http://droidhere.com/01/2017-volvo-v90-d5-cross-country-perfect-suv-alternative/

4. RESULT

5. REFLECTIONS AND CONCLUSIONS

6. REFERENCES

7. APPENDICES
Time plan

15th Dec. Design brief  
15th Jan. Degree project kick-off  
10. Feb. Research review  
10th Mar. Mid review

Dec | Jan | Feb | Mar
---|---|---|---
research  
Scenario building  
Concept modify  
Freeze/ Slides  
ideation sketching  
theme search/ mood board  
theme choose  
ideas of package  
1,2,3 feature  
design proposals  
package  
tape drawing & clay models  
models  
feature  
Remote presentation  
In person presentation
10th Mar. Mid review

examination report

degree show

April

May

June

Total cost

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flights</td>
<td>29,035 SEK</td>
</tr>
<tr>
<td>Hard Model</td>
<td>apx. 80,000 SEK (FCA Sponsor)</td>
</tr>
<tr>
<td>Accommodation</td>
<td>18,960 SEK</td>
</tr>
<tr>
<td>Model shipping</td>
<td>10,000 SEK</td>
</tr>
<tr>
<td>Poster</td>
<td>400 SEK</td>
</tr>
<tr>
<td>In total (own spend)</td>
<td>58,395 SEK</td>
</tr>
</tbody>
</table>