Perceptions of branding and design towards product development in the motor industry

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Abstract

The car industry is on the brink of a new era. Carmakers have reinvented themselves significantly at least three times during the last hundred years. First, Ford with mass production, then Sloan with the planned obsolescence and then Toyota with the Lean System have all revolutionised the industry. However, there is much evidence that it is time again for a change towards a sustainable future.

This research brings to light three areas that will certainly have a huge impact on this change: design, branding and innovation. The meaning of design has extended beyond form and function to a new way of thinking when dealing with contemporary issues. Branding has also evolved from a visual representation of goods to an intangible asset of a company, which in many cases is even more valuable than the tangible assets. Thus, innovation is the oxygen that sustains both design and branding.

The main contribution of this research results from an original approach that brings together theory and practice in the demanding area of vehicle design. The central research question is: How can users' perceptions of branding and design be determinant in product development within the motor industry? A unique way of gathering users' insights from a blend of qualitative methods was developed and applied through a series of workshops in Brazil and in the United Kingdom (UK). This approach has been fundamental to the research hypothesis, which proposes that the automotive industry should transfer from a product-driven to a user-centred model when developing their products.

The outcome of this new methodology is presented through an imagery map, which was entirely developed by the participants as their own representation of their feelings and desires about what the future drivers of change might be in the next twenty years. Convergences and divergences were identified from the users' insights and the results were collated into four future scenarios that have, in turn, served as the basis for a brief of fifteen projects developed by the Royal College of Art (RCA) MA Vehicle Design students. The participants then validated those projects by stating their opinions about whether or not the concept vehicles matched with their perceptions. A substantial positive response from the participants gave support to the research hypothesis.

Hence, all the thoughtful designs explored further the users' insights highlighting the importance of design thinking throughout the process. The final outcomes of this research are expected to become a theoretical catalyst designed to generate further constructive knowledge and awareness about the relevance of engaging the user at the early stage of the design process.

This thesis is dedicated to my wife Cintia, for her unconditional love, guidance, and support in every single step of the last sixteen years we have been together. Through her, I have always found myself on solid ground. While I embark on the next chapter of my life, I cherish my family with deep gratitude and love.

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It is perhaps a misconception that a PhD research is a lonely activity. Throughout the last three and half years I had the privilege of meeting some incredible people in the design world who have helped me to build up this project by given interviews and generous comments. A huge thanks to all those I encountered during this research. A special thank you for the field research participants from Brazil and the UK who kindly agreed to take part in this research by sharing their opinions and insights. Likewise, to the MA Vehicle Design students (2007-2009), who immersed themselves enthusiastically in the 'Feel the Future' project and came up with great concept vehicles.

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Author's declaration

1. During the period of registered study in which this thesis was prepared the author has not been registered for any other academic award or qualification.

2. The material included in this thesis has not submitted wholly or in part for any academic award or qualification other than that for which it is now submitted.

Kleber Puchaski
April 2008

1. Introduction

This research 'Feel the future: perception of branding and design towards product development in the motor industry' investigates, in its widest context, the connections between what the motor industry has been providing and peoples' perceptions towards branding and design. The findings of the initial investigation have led to further developments, which resulted in exploring possible ways to narrow the existing gap between what is provided and what is desired.

It is widely known that the automotive industry has, since its inception, been focused on product development. As in most mature industries, it was believed that the expertise acquired through development was enough to create one of the most desirable objects of the last century: the car.

In the early days, passion, determination and, on occasion, an incredible sense of styling, was enough to revolutionise the design of the car. It is not clear when exactly the first vehicle was created. It was part of a development process that followed from our necessity for faster mobility fuelled by the industrial revolution. It is believed that Nicolas-Joseph Cugnot invented the first vehicle in 1769 in France (Figure 1). It had three wheels, was extremely heavy and was used mainly by the military for moving cannons.

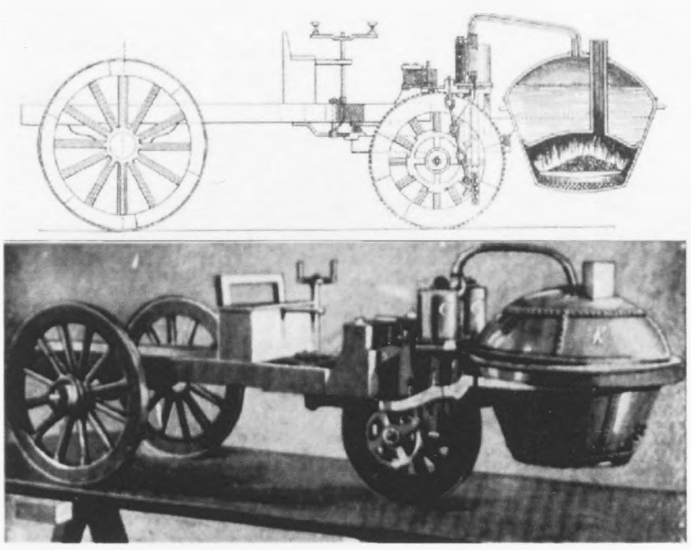

Figure 1 "Fardier a vapeur", the first self-moving vehicle. Constructed by Joseph Cugnot in the year 1769.

François Isaac de Rivaz, a Swiss inventor, designed the first internal combustion engine, in 1806, which was fuelled by a mixture of hydrogen and oxygen and used it to develop the world's first vehicle to run on such an engine. However, it was only about eighty years on that an automobile powered by gasoline engine was built in Mannheim, Germany by Karl Benz. Benz granted a patent in January of the following year under the auspices of his major company, Benz & Cie. founded in 1883. Although several other German engineers (including Gottlieb Daimler, Wilhelm Maybach, and Siegfried Marcus) were working on the problem at about the same time, Karl Benz is generally acknowledged as the inventor of the modern automobile. (Stein, 1967) In Britain there had been several attempts to build steam cars with varying degrees of success with Thomas Rickett even attempting a production run in 1860. In 1890, Emile Levassor and Armand Peugeot of France began producing vehicles with Daimler engines (Wise, 1970).

In 1908, Henry Ford and his Model T became a landmark in automotive history, as the model was the first mass produced car to be built using a moving assembly line (Figure 2). This was the start of the age of the car. Between 1908 and 1928, more than 15,000,000 Model T's were produced. There were different versions, but famously only one colour: black.

Figure 2 Assembly Line of the Ford T Model, 1913. Source: Detroit Public Library

Some of the automotive companies that are well known today also began in this period such as, Rolls Royce, Peugeot, Mercedes Benz, Daimler, and Ferrari. In the following years roads improved and speeds increased; the 1930s saw the streamlining of cars in an attempt to improve them visually and aerodynamically. The rounded forms also gave the bodywork more stability and strength. Styling trends towards

crisper shapes during the 50s and 60s gave cars a more boxy appearance again, and with the continual drive towards more efficient packaging the cars continued to get smaller in Europe; although they became bigger in America. It was also the golden age of the sports cars with many wild and exotic styles shown at the international motor shows. The efficient packaging of the car led to ever smaller and more compact rounded shapes, eventually leading, in 1959, to the introduction of the Austin Mini (Figure 3).

Figure 3 Austin Mini 1959

In the 90s, the general trend of design was towards Retro styles. At that time some carmakers aimed to sell "the lost experience" of the 60s and 70s with some cars representing something like nostalgia. For example, the Volkswagen New Beetle, the Chrysler PT Cruiser, the BMW Mini, the Ford Thunderbird, and more recently the Fiat Cinquecento are some of the most common cars that embody a nostalgic spirit. However most new cars have been reflecting modern design rather than memories of the past because of the market demand for conformity and safety. For the same carmakers the trend for nostalgia has resulted in a hugely successful increase in sales and in a share of the market for their brands; however some specialists' argue that it was a short-term strategy, for once design styles become strongly linked with the past the designers will struggle with new developments. So, how are they going to take it to the next stage? The answer is probably by stretching the brand as much as they can into different models, improving in accessories, different colours or finishing. Nevertheless, it does not seem to be a sustainable strategy in terms of the aesthetics assurance of the brand.

Customisation is also another area which has been seen as a response to the diminishing desire of those who have become blasé about cars. Maslow's hierarchy of

needs, a theory of human psychology, written by Abraham Maslow (1959), explains that individualization is given a high priority when we are looking for something that represents ourselves. In this hierarchy, anything that can tie the brand and its products to the singularity of each client is to be looked for, in some cases within an economically favourable equation in some cases (Kapferer, 2004). Customers increasingly demand more personalisation for their products, and since the car is a key symbol of status and lifestyle, people want to use it as a blank canvas for their own personal expression.

Globalization has also been identified as one of the greatest influences on the automotive industry in the 90s. This phenomenon has been responsible not only for dramatic changes in terms of business strategy but also for breaking with the meaning of national designs. That is, cars would no longer come to recognized as a 'Made in...' but rather as a 'Made by...'. However, it is clear that for some companies national identity is still the most important factor in their current strategy. For instance, in the last three years Fiat has been investing in linking their design with the roots of the Italian design culture. I will discuss this further in Chapter 4, Case Studies. Nowadays, the automotive industry is one of the largest and most multinational of all industries. It is a key indicator of economic growth and a major contributor to the gross domestic product (GDP) of several countries. On a global level, the assets of the top ten multinational automotive enterprises represent 28% of the assets of the world's top 50 companies, 29% of their employment and 30% of their total sales, according to the European Monitoring Centre on Change (2004).

The motor industry has been, and remains, crucial for the economic growth of both developing and developed countries. It employs millions of people directly, tens of millions indirectly. Its products have transformed our society by bringing undreamed-of levels of mobility and by changing the ways we live and work.

In 2003, for example, there were almost 600 million vehicles on the world's roads; roughly one for every ten people. Nearly 80 per cent of these were in three regions – North America, Japan and Western Europe. Almost the same proportion was produced there. Moreover, almost every vehicle innovation, every design and almost every idea affecting the business also originated in these same three places. Thus, in its first century, the automotive industry was largely the property of developed countries. Born

in Europe, it first grew up in the United States, reaching back to Europe and then onwards, to Japan, with the rest of the world trailing far behind (Maxton 2004).

While there is little evidence that people's enjoyment of driving and affection for their cars is decreasing – in fact the opposite is true – it is nonetheless clear that our culture's relationship with the car is becoming more complex. Most importantly, social, economic and environmental issues such as climate change, road congestion, pollution, and rising oil prices mean that we cannot continue to keep increasing the number of petrol-based cars on the road, and the annual mileage they accumulate. Perhaps in response to some of these concerns, drivers have begun to shift their priorities when making purchases.

As high levels of reliability and performance have become standard across almost all car ranges, we have taken them for granted and begun to look to our cars to stimulate feelings. And the desire for luxury for its own sake is being edged out by an interest in cars that meet our own personal demands in an engaging way (Benson, Marsh et al., 2007).

There are many issues that have been pressuring the automotive industry to reinvent itself once again. In the Literature Review Chapter, I present an overview of the current situation and I highlight the issues that have affected its development. To take an example, Maxton and Wormald (2004) state that the lack of growth which the motor industry has been facing can be divided into cyclical and structural aspects; thus, in many of the developed markets the problem is structural. The reasons are twofold. First, it is simply a question of demographics. The population of the countries of Western Europe is mostly stable, as it is in Japan, while in the next fifty years, the number of people in America will grow only slowly, and mostly as a result of immigration. In fact, in many European countries and in Japan, populations will begin to shrink. Add to that the rising costs of car ownership and the growing pressures from environmentalists in some places to cut car use and this drop-off in demand could become pronounced in some countries. Moreover, the population of Japan and of Western Europe is set to start declining fairly soon. This will cause enormous problems of age dependency, with too few young earners to support a swelling proportion of retirees. The strain on European retirement funds is being felt already. The cut-back of

disposable incomes and the consequent change to spending priorities will undoubtedly affect the automotive industry.

Thus, the problems in Europe and Japan are structural. There will be some growth in the US but it will be comparatively small, it will take time to come and may not compensate for the drop-off in the other developed markets. The overall outlook in terms of demographics and so vehicle sales growth is not too good.
The second structural reason for the gloomy growth prospects in the developed countries is market saturation. In most of the major markets there are simply enough cars on the roads already to satisfy most peoples' needs for individual motorised transport, which is why demand has become flat in Japan and mostly flat in Europe. Even worse, congestion, especially in urban areas and at peak travel times, is starting to put a lid on the growth in the use of cars. There is neither the money, nor the space to build more roads to accommodate more traffic.

Carmakers are always keen to develop distinct products and strong brands. However, one does not have to be an expert to see that they have been facing several difficulties in achieving this. In the Literature Review and from the Focus Groups of participants in two countries, incongruence was identified on both sides: that of the industry and of customers. As an example, the industry has failed to act accordingly on the fast changes that have been occurring in terms of social trends. There are some social trends such as individualism, which run contrary to most carmakers' ideas of building a 'global car'. People are more than ever demanding for customised products. In so far as the car is seen to be an extension of individual personality, carmakers must look for tailored solutions in order to attend to this demand. In addition, there is the dissolution, mentioned above, of the sense of national identity in automotive design for most of the players.

The rise of post-materialist values has also had a significant impact on the trend towards personal expression. The youth in particular have an increased desire for personal control and for access to more lifestyle choices.

Connectivity describes the growing importance among consumers of creating lifestyles that are rich in relationships and experiences. This mega-trend is taking on a renewed significance in societies that have become more individualistic. Changing attitudes

and a desire for a greater sense of belonging are the driving forces behind this trend (Datamonitor, 2005). However, in spite of the fact that this trend has been identified and that some companies have addressed efforts to attend to it, it can nonetheless be seen that carmakers are trying to lower the production costs of developing a 'global car'.

Looking at the mass volume production of the automotive industry it can be seem a clear contrast between technological progress and a lack of emotion and aesthetic personality. The historical path shows that most companies were developed around a single innovative idea strongly linked with a remarkable design. Enzo Ferrari, Giovanni Bertone, Ferruccio Lamborghini and Henry Ford are some examples of great names in the history of the automotive industry. However, because these original companies have grown into huge organizations, it has become difficult to link the original ideas to a single innovative person. 'Car consumption is never simply about rational economic choices, but is as much about aesthetics, emotional and sensory responses to driving, as well as patterns of affinity, sociability, habitation and work' (Sheller 2003).

In his book, *The Culture of Design*, Guy Julier (2000) discusses the disconnections between designers, producers and consumers. He argues that when such separations occur, they result in poor products and services, business failures and/or ignorance of user-needs. His arguments may lead us towards considering the discourse of ' good design' and ' bad design' to be centred less on the form of the artefact itself than on the relationships it instigates.

Through a further analysis, the Literature Review (Chapter 2) explores the nature of the three main areas that are believed to influence the motor industry at large: branding, design and innovation. Branding, as defined by Borja de Mozota (2003) is the sum of all tangible and intangible characteristics that make the offer unique. A brand is a set of perceptions that are driven by communications and experiences. It is a distinctive sign, a symbol, and also a source of added value. The importance for the industry of understanding the essence of what a brand is was determinant from the earliest days of those companies that were later to become huge corporations. Branding is about creating and sustaining trust, and it means delivering on promises. The best brands

have a consistency (Figure 4), which is built up and sustained by people inside the organization who are immersed in what the brand stands for (Olins, 2003).

Figure 4 Porsche 911 - Consistent design and brand identity

Using a metaphorical approach, Alina Wheeler, author of *Design Brand Identity*, defines brand strategy as the connection of left-brain with right-brain; a connection that makes the brand work. She also points out that effective brand strategy provides a central unifying idea around which all behaviour, actions and communications are oriented. It works across products and services, and is effective over time. The best brand strategies are so differentiated and powerful that they deflect competition. They are an authentic extension of a company's persona. They are easy to talk about, whether you are the Chief Executive Officer (CEO) or an employee. Brand strategy also builds on a vision aligned with the business strategy, emerging from a company's history and culture, and reflecting an in-depth understanding of the customer's needs and perceptions. The brand strategy defines positioning, differentiation, competitive advantage, and a unique value proposition. It needs to resonate with all stakeholders, from external to internal customers – including employees – to the board and core suppliers. Moreover, it should be a road map that guides marketing, making it easier for the sales force to sell more, and it provides clarity, context and inspiration for employees. Certainly, there are several definitions of what branding is and how to organise a company using this concepts. Again, most definitions are more practical in nature, and little research has been done into how to precisely define branding.

In a broad context, the meaning of design has extended the boundaries from form and function to a new way of thinking when dealing with contemporary issues. No doubt

vehicle design is one of the most exciting areas of design. It is a dream job for many little boys (and big ones) around the world and a perennial source of influences on other areas from fashion to electronic devices. Nowadays, companies are more than ever investing heavily in design to differentiate their products among a crowded market and to create an identity based on their heritage attributes. Until recently, the focus of this business had been addressed to improve the quality of the product. However, the current scenario shows the necessity to go further and build emotional connections with customers. People increasingly want to spend their money on products and services that can improve their emotional wellbeing. They want to live more intensely and pack more experiences into their life times. Design is now less about creating artefacts and more about creating and staging a new compelling story for people to experience (see Crossley (2003). Indeed, carmakers should look at the real desires of their customers and the increasing demand for 'emotional products'.

Although design, branding, and innovation are fundamentally interconnected, it is innovation that feeds the other activities. However, innovation is nothing new, more recently it has come to be considered as the Holy Grail for many companies immersed in the fierce competition over the hearts and minds of consumers.

In Chapter 3, the methodology presents the structure of the research from the initial research questions, objectives, hypotheses and, subsequently, through to the original process of gathering information from the field. The original approach of gathering information from the field was developed throughout the process of this research. Of crucial importance was the recognition of the necessity of including the user, or potential customer from the very start of project development, rather than only asking them to chose between pre-conceived models, as is the common practice in the development process in the automotive industry.

The application of design thinking was immensely significant throughout the research process. Both practical and theoretical issues were deeply interrelated. The collaboration and co-creation process between participants and designers resulted in a practice that was extremely well received by all those involved, from the initial process of gathering and collating information through to its translation into concept vehicles. The entire process was set up to be image-based rather than a word format. Usually, this process of gathering qualitative information ends being presented as a

word format through extensive and dry reports. The new technique, employed here, brought a fresh, innovative and visual outcome in which the participants were able to translate their inner desires into visions of what they were expecting to drive in the future.

A broad overview of branding strategy and design the philosophy is provided in Chapter 4, Case Studies. An empirical observation of four of the major carmakers in the global market Fiat, Ford, Toyota and Volkswagen, offers a general picture of the current scenario and practices within the motor industry.

In Chapter 5, Users' Insight, the entire process of exploration throughout the research is presented, together with the idea of 'collaboration' in mind. Real people were given the opportunity to express their opinions, feelings and desires about what they believe the future might be. This is the essence of this research, where qualitative methods already developed could not fit into the original proposal. That is why a new method was created and became the guiding line of this Doctoral Research. At this stage the hypothesis was tested through a series of focus groups in Brazil and UK involving more than twenty people in very stimulating discussions. They also have kindly provided a visual map, which is a translation of their aspirations and dreams for a better future.

Based on the massive amount of information gathered from the focus groups, a project was set up in order to explore possible solutions, based on the participants' feelings and desires, as shown in Chapter 6. Therefore, the main objective of the project was to visualise those findings and also to experiment on a co-creation process between users and the designers through entirely qualitative methods.

The validation of the developed projects can be found in Chapter 7. The projects had been sent to the participants in order to verify whether or not the developed concepts matched with their aspirations and desires. The participants' responses were positive about the designers' solutions on aspirations and insights about what we might be driving in the future.

The original contribution of this research is based on innovation and communicability. The research was structured entirely by the design thinking approach. It is believed

that the approach will enable both designers and business people to look at the issues that the motor industry has been facing from a different perspective. In most companies, strategy and creativity are radically distinguished. On the one side, there are strategists and marketing people who favour left-brain, analytical and logical thinking. On the other side, there are designers who favour right-brain, intuitive, visual and emotional thinking. Indeed, there is a gap between both sides. With this in mind, this research attempts to bridge the gap between these two worlds.

2. Literature review

The literature review is structured into three main areas with regards to the objectives of this study. Firstly, this study reviews the subject of branding. By aiming to clarify the basic definitions of branding and discussing the role of branding strategy in the automotive industry, the first section of this review covers a broad spectrum of the subject. Secondly, the Automotive Industry is taken into consideration as one of the major subjects to be reviewed. An extended search of the literature by authors from diverse areas such as business, historical studies, branding and design, amongst others, was undertaken in order to investigate the current situation in relation to the studied subject.

In section three of this chapter I provide an extended examination of the importance of design throughout the automotive history and also of how design continues to play the ultimate role, not only as a differentiating factor, but also as a way of thinking in the current climate. Since this research is also directed to explore future scenarios, it is essential to look at how trends and forecasting areas has been working by blending social and cultural studies with design thinking. Methods and techniques are also presented in this section of the chapter.

Finally, the literature review also covers a subject that has been considered by many as the only way companies within any industry are able to survive in the long term: innovation. In this context, innovation is considered as an unfolding process can help designers to better face challenges in the future. A broad overview follows this section, taken innovation into consideration both in its academic and practical aspects.

2.1. Branding

2.1.1. Definition

It is essential to the development of this research to find out the best or the most applicable definition of the term 'brand'. There have been several attempts to define what a brand and what branding is, and what it is not. According to the Oxford English Dictionary (2001), the origin of this word derives from the old English term for "burn". It can be seen thus in the following definition:

Brand. (noun) 1- a type of product manufactured by a company under a particular name. 2- a brand name. 3- an identifying mark burned on livestock with a heated iron. 4 a piece of burning or smouldering wood.
(verb) 1- mark with a branding iron. 2- mark out as having a particular shameful quality: she was branded a liar. 3- give a brand name to.

This illustrates how, over the years, the primary use of the word "brand" has been changing and now it has a more commercially oriented application. However, these definitions also underline a common origin. Almost irrespective of how the word is used today, it has always meant, in its passive form, the object by which an impression is formed, and in its active sense, the process of forming this impression. Wheeler (2004), Landor (2000) and Blackett (2004) define a brand as a promise, the big idea, and expectations that reside in each customer's mind about a product, service or a company. By identifying and authenticating a product or service it delivers a pledge of satisfaction and quality.

Similarly, Olins (2003) suggests that the customers control the brand and that the brand and the processes of branding are the most significant gifts that commerce has ever made to popular culture. Branding has moved so far beyond its commercial origins that its impact is virtually immeasurable in social and cultural terms.

Neumeier (2003) defines branding by saying that 'Brand is not a logo, an identity or a product. It is a person's perception of a product, service, experience, or organization'. Rather and similarly to Wheeler (2004) and Olins (2003) brands are defined by individuals, not companies, markets, or publics. This happens because people are emotional and intuitive beings. In short, the brand is not what companies say it is, it is what customers say it is.

In a thorough discussion, Aaker (2002), examining the term and its applications, suggests that the brand is a 'mental box' and defines brand equity as: "A set of assets (or liabilities) linked to a brand's name and symbol that adds to (or subtracts from) the value provided by a product or service" (Aaker, 2002). In a more holistic manner, Borja de Mozota (2003) defines brand as the sum of all tangible and intangible characteristics that make the offer unique. A brand is a set of perceptions that are

driven by communications and experiences. It is a distinctive sign, a symbol, and also a source of added value.

Other areas of study have already discussed the term brand in a broader way. In sociology for example, the brand is also defined as a dynamic object. An object, surely, is something that is external, fixed, closed; something solid that can be touched. The brand is none of these things. But the brand satisfies some other common definitions of objects. It is something 'to which some feeling or action is directed'; it is an objective in that it is the object of 'a purpose or intention', or even a whole series of purposes; and it is also 'a noun or its equivalent acted upon by a transitive verb or by a preposition'. Put somewhat differently, the brand is the outcome of objectives, it is produced in the tests and trial of objectivity and it is, sometimes, a matter of objection. The suggestion, then, is that while the brand is not itself fixed in time or space in terms of presence or absence it is a platform for the patterning of activity, a mode of organising activities in time and space (Lury, 2004).

However, we must also analyse the managerial side of this huge spectrum. Since brands are now recognised as part of a company's capital (hence the concept of brand equity), they should be exploited. Brands are intangible assets that produce added benefits for the business and also influence buyers. This definition captures the essence of a brand: a name with the power to influence buyers. However, what really makes a name become a brand is the saliency, differentiability, intensity, and trust attached to these associations. We live in an attention economy; there is so much choice and opacity that consumers cannot spend their time comparing before they make a choice. They cannot be certain of being able to determine the right product or service for them. Brands must convey certitude, trust. They are a time and risk reducer. In fact where there is no risk there is no brand (Kapferer, 2004).

It also argued that brands are complex offerings that are conceived in brand plans, but ultimately they reside in consumers' minds. Brands exist mainly by virtue of a continuous process whereby the coordinated activities across an organization are internalized by customers in such a way that this enhances their existence, and, through the organization itself responding to feedback, this in turn enhances the likelihood of brand success (De Chernatony, 2006). This definition is supported by a

broad spectrum of interpretations from De Chernatony's studies on brands to a series of interviews with leading-edge consultants on the subject.

The automotive industry is perhaps one of the main industries that first adopted the idea of branding their products not only to differentiate them, but also to create value. Maxton and Wolmald (2004) not only define brands, but also state the importance of branding for the automotive industry. Brand strength – of the marquee or of individual products – now matters enormously to vehicle manufacturers and is boosted through constantly increasing advertising and promotional expenditures. Branding tries to accomplish something subtle and difficult. The basic theory is simple: to encapsulate a good experience of a product or service in some kind of easily identifiable expression: a brand name, a slogan, or both. The purpose is to remind consumers of that satisfaction – their own or that of others – so that they become favourably disposed towards purchasing or re-purchasing the product, while de-emphasising the competitive pricing aspect. It has to achieve consistency between the real attributes of the offering and the emotional attributes of the would-be buyer, and maintain it over time. Otherwise, no brand value is created. The danger comes when too much reliance is placed on this link as a source of premium pricing and profitability, at the expense of addressing cost problems; when the link is too tenuous, either because the psyche of consumers has been misread, or because the brand proposition is based on nothing of substance; or in trying to transpose a successful branding link from one cultural environment to another; or, finally, in staying with a historically successful theme for too long.

Brands are complex offerings that can be interpreted in a variety of ways. They can be interpreted from a input perspective, as the way managers stress the use of resources to achieve a customer response, or from an output perspective, as the way customers interpret and use brands to enhance their personal existence (Maxton and Wormald, 2004). The fact that there have been so many attempts to define brands suggests that there is a fundamental problem, and perhaps part of that problem is a failure to understand that branding is not a technique, it is a field (Anholt, 2005). However, it seems a misconception, since other authors have not supported this view, even though it is a plausible argument.

2.1.2. History of brands

It is not clear exactly when the history of brand begun. As described above, the meaning of the word brand or burn has perhaps its origin in the time when early humans stamped ownership on their objects. With the development of trade, buyers would use brands as a means of distinguishing between the cattle of one farmer and another. A farmer with a particularly good reputation for the quality of his animals would find his brand much in demand. Some of the earliest mass produced goods were clay pots. In the ancient civilizations of Greece and Rome, there is considerable archaeological evidence for the use of brands, which in their earliest form were the potter's mark. A potter would identify his pots by putting his thumbprint into the wet clay on the bottom of the pot or by making his mark: a fish, a star or cross, for example. From this we can safely say that symbols (rather than initials or names) were the earliest visual form of brands. Some other symbols throughout history had also great recognition as indications of ownership and control. Some examples are the fleur-de-lis in France, the Hapsburg eagle in Austria-Hungary and the Imperial chrysanthemum in Japan (Blackett, 2004).

However, the first great period of branding began in the 1870s and 80s when all the technologies came together. The great consumer goods businesses of the Victorian period (Rowntree, Cadburys and Lever in Britain, Nestlé in Switzerland, Henkel and Liebg in Germany, Procter & Gamble, Heinz and Kellogg's in the US) took branding out of the semi-reputable world of the medicine chest into the kitchen. Many of the pioneers of the branded good business were, in the early days, themselves considerable figures in the advertising world. The media used in advertising evolved quite slowly at first. Initially posters dominated, subsequently colour magazines become significant (Olins, 2003).

The automotive companies were one of the major groups involved into the advertisement wave. In the 1920s, and in America, especially, motorcars, in particular the expensive ones, were promoted in an extremely lavish and seductive fashion. Since that time, beautiful women have lounged across the long bonnets while young men sat idly in driving seats. In Europe, automobile advertising was a lot more mundane, but cars were not brands essentially. They were makes or even marques. However significant all these organizations were, they all recognised the primacy of

the FMCG (fast moving consumer group) companies in marketing and branding (ibid, 2003).

Blackett (2004) explains that it was in the period after the end of the Second World War that the real explosion was seen in the use of brands. Propelled by the collapse of communism, the arrival of the Internet and mass broadcasting systems, and greatly improved transportation and communications, brands have come to symbolize the convergence of the world's economies on the demand-led rather than the command-led model. But brands have not escaped criticism. Recent anti-globalization protests have been significant events. They have provided a timely reminder to the big brand owners that in the conduct of their affairs they have a duty to society, as well as to customers and shareholders.

2.1.3. Anti brand movement

Even though brands are largely discussed and accepted by most organizations, from corporations to the public sector, there have also been arguments made by many that there is a down side to them, in which people are trapped by brands.

Of course, anti-branding - and its close relative, anti-corporate feeling - have been around for as long as the corporations themselves. Antagonism to the idea of making money, and consequently to corporations, is nothing new. Nevertheless, in recent years, anti-branding has gained grater currency with the spread of the Internet, which has made more information much more accessible. Companies have had to be more transparent, and campaigns can be organized on a more global scale. Campaigners have been organizing themselves and sharing their views in multiple ways: through the web, through documentary film, and even through branding strategy forms. Adbusters Media Foundation (2007), a not-for-profit anti-consumerist organization, for example, claims that they are dedicated to reinventing the outdated paradigms of our consumer culture and building a brave new understanding of living as a new kind of activism. The movie "The Corporation" (Abbot and Achbar, 2003) based on Joel Bakan's book of the same name, shows that corporations today are just like the Church, the Monarchy and the Communist Party were in bygone times. The film comes to a stark conclusion: if the corporation is viewed as a person then it is undoubtedly a psychopath. It is unsurprising, then, that branding - a tool of big corporations - is viewed with growing concern among consumers.

The anti-globalization movement has taken up the notion of branding in a big way, focusing particularly on the brand as the most public, seductive and manipulative manifestation of the corporations. However, Olins (2003) argues against this movement, saying that there is a certain level of exaggeration in their claims. He explains that it would be absurd to pretend that global companies and the brands they use to seduce customers are only forces for good and that they never do any harm to anyone. Global companies do not claim they are in business for philanthropic purposes. Commercial brands exist because they are a powerful tool to help companies make money. He also suggests that the influences, strategies and tactics of branding now go way beyond this. Branding is playing a large and increasing part in politics, in the nation, sport, culture, and in the voluntary sector.

Gobé (2007) has also seen activism as a positive mater. He states that when people fight against brands, they say they are fighting against ugliness, both moral and physical. They fight brands with powerful tools like films, television, the Internet, and the street. A new genre of 'reality' film making such as Super Size Me (Spurlock, 2004), which exposed McDonald's, or The Firm (Pollack, 1993), another visual essay on the cynical side of the corporate world, is another way for people to scream out with displeasure. Through all these media we realise how much people want things to change. People organise in order to have their voices heard, or they write books that are for most part satires on their world. Why should brands be concerned with social and human movements? The answer is that, unless we look at branding in terms of reality as a transformer and solution provider, it is almost impossible for it to be relevant or successful, to be 'a brand of the time'. One needs to make humanistic messages that resonate with people.

In a global economy, with fiercely competitive firms rapidly commoditizing products, strong brands help companies to stand out from the crowd and differentiate themselves on a basis other than cost. No longer the preserve of consumer packaged goods companies, brands are now taken seriously in almost every industry and at the highest level of management. Even firms that once competed almost entirely on technical excellence or cheap prices are now trying to build and leverage the strength of their brand.

2.1.4. Brand as strategy

In a market where products are similar, branding might have a large effect on the price that customers are willing to pay for certain products. Brands therefore add value to a basic product or service. Brand equity is used to describe both the value of the brand and the brand's component values. David Aaker (2002) is perhaps one of the branding experts who has offered a better definition of the concept of brand equity (Figure 5). He describes Brand Equity "as a set of assets (and liabilities) linked to a brand's name and symbol that adds to (or subtracts from) the value provided by a product or service to a firm and/or that firm's customers."

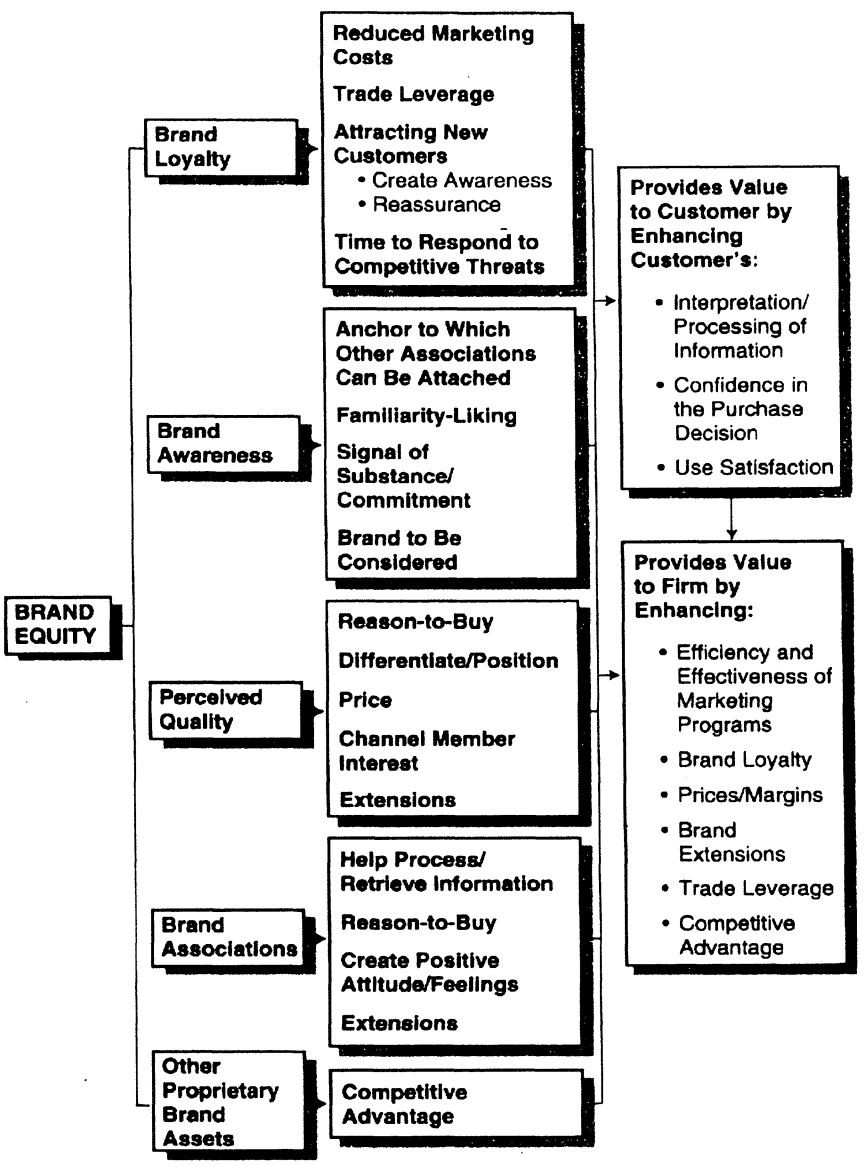

Figure 5 Capitalising on the value of a brand name: How brand equity generates value

Every one agrees that brand equity is important to the sustainability of any kind of business. The value to businesses of owning strong brands is incontestable. Brands that keep their promise attract loyal buyers who will return to them at regular intervals. The benefit to the brand owner is that forecasting cash flows becomes easier, and it becomes possible to plan and manage the development of the business with greater confidence. Thus brands, with their ability to secure income, can be classed as productive assets in exactly the same way as any other more traditional assets of a business such as the plant, equipment, cash, investments and so on (Blackett, 2004).

When defining the nature of brands, however, it is equally important to characterize the disciplines and elements needed to build and manage them effectively. The combination of creative thinking and rational intelligence still forms the best strategy to go beyond the mainstream idea of how to create and maintain a model of branding products and services.

Few brands actually know who they are, what they stand for and what makes them so unique. Classic marketing tools do not help answer such questions. Every advertising campaign is, of course, based on a copy strategy, which varies from one campaign to the other. However, very few brands actually have a brand charter defining the brand's long-term identity and uniqueness. Nor can the answers be found in any graphic guidelines, which often focus only on the brand's outward appearance. Yet understanding what the brand truly represents is not just a graphic exercise. It is investigation of the brand's innermost substance and of the different facets of its identity (Kapferer, 2004).

Wally Olins (2006) shares the same view with Kapferer (2004) regarding the clarity of a brand. Olins says "You've got to know who you are. The key thing is not to pretend you are like somebody else. And if don't know who you are, you've got to find out who you are."

Once you identify the core attributes of the brand, a set of tools must be used in order to differentiate the brand from the crowded market. With the plethora of competitors entering markets it is becoming more difficult to sustain a valued functional advantage, and after a quick glance at competing brands one is struck more by their similarity than their dissimilarity.

The use of eye-catching designs, novel logos and innovative blending of colours gives a brand an attractive outward appearance. The innovative style the brand proclaims may become attractive to customers, and soon other brands come to walk with the trendsetter, clad in a similar fashion in order to ensure that they belong to the group. To continue with this personification analogy, it is in coming to speak with a smartly dressed person that you may start to appreciate that the difference arises more from the person's sense of direction, beliefs and the whole cluster of emotional issues that constitutes his or her personality. Likewise, when considering the brand, its point of difference is not just in its features; it is rather its ethos, its values and its direction that give rise to a unique identity. Just as artefacts are the veneer of a culture, so the design, logo and name are physical manifestations of the soul of a brand. Of more value when seeking to understand the real points of difference of a brand is its identity (De Chernatony, 2006).

There appear to be very few truly global brands with a clear understanding of the importance of differentiation. Mercedes-Benz and BMW seem to have pretty much the same appeal everywhere. And their brand promise is strongly linked to the identifiable physical characteristics of their products – 'The best engineered car in the world', 'The ultimate driving machine': plausible claims that appeal strongly to identifiable groups of consumers everywhere and which, for these manufacturers at least, ensure strong branding, sustainable price premiums and superior financial returns. This condition does not seem to hold in the same way in the volume car market. Perceptions of cars and badges matter considerably for these vehicles – but so do market share and the size and quality of a company's distribution presence. In some cases, there is curiously negative price elasticity for volume vehicles within a given class in a given market – that is, the greater the volume, the higher the price realisation.

The VW Golf (Figure 6) is the best example of this in Europe. People will happily pay more for the car precisely because it is so common. The fact that there are so many around is, paradoxically, what allows the vehicles to command a premium. It is about feeling part of a wide group, about a reassurance of belonging, as opposed to a feeling of exclusivity (Maxton and Wormald, 2004).

Figure 6 VW Golf 2008

Whatever size a company is, it is not easy to build strong brands in today's environment. Aaker (2002) explains how substantial pressures and barriers – both internal and external – can inhibit brand builders. Eight different factors are identified (as shown in Figure 7):

Figure 7 Why is it hard to build brands

Pressure to compete on price: This directly affects the motivation to build brands.
Proliferation of competitors: reduces the positioning options available and makes implementation less effective.
Fragmenting markets & media: At one time being consistent across media and markets was easy. Today, however, brand managers face a micro-segmented environment and maintain a consistent message across all channels is particular challenging.

Complex Brand Strategies & Relationships: The complexity of a brand hierarchy, such as GM (Figure 8) as a corporate brand and its range brands (Chevrolet) and product line brands (Matiz), makes building and managing brands difficult. Each brand must understand its role and position in the organization.

Figure 8 GM brand portfolio

Bias towards changing strategies: The temptation to change a brand strategy is particularly dangerous. The resulting changes can undercut brand equity to prevent it from being established.

Bias Against Innovation: By ignoring or minimizing fundamental changes in the market or potential technological breakthroughs, managers leave their brands vulnerable and risk missing opportunities.

Pressure to invest elsewhere: A position of great brand strength is also a potential strategic problem, because it attracts both complacency and greed. When a brand is strong, there is a temptation to reduce investment in the core business area and improve short-term performance or to fund a new business diversification.

Short term pressures: There are several reasons why a short-term focus might persist among executives, such as the annual budgeting system, planning focused on financial data, or performance measures.

In order to avoid the pitfalls suggested by Aaker, above, Blackett (2004) Group Deputy Chairman of Interbrand, suggests that the following guidelines are eternal truths that can be applied equally to products, services and corporate brands:

1. Protect your brand. Trademark law offers provision for the protection of your brand and corporate names, your logo and colours, the shape of your packaging, smells, and the advertising jingle you use.

2. Honour your stakeholders. Your customers expect attractive, well-differentiated products and services that will live up to their expectations and are well priced. Your employees want to work for a company with a compelling business idea, where they feel engaged and where they can make a difference. Your trade partners want fairness and respect in their dealings with you.

3. Treat your brand as an investment, not a cost. Brands are among the most important assets that a business can own, and strong brands can ensure business continuity in times of difficulty. Brands must remain relevant to their customers, contemporary and appealing.

4. Exploit the financial potential of your brand. As well as seeking ways to extend the brand through new product development, companies should look at opportunities to exploit the equity in their brands through co-branding, licensing and franchising.

The next section of the literature review analyses some brand strategy models through a holistic approach by looking at a wide prospective of practices and processes, from business strategy to brand consultancy.

2.1.4.1. Business consultants

The combination of the increasing economic significance of brands and the number of companies focusing on empowering their brands has led business strategy consultants to develop methodologies not only to measure the value of brands but also to provide a broader range of services. However, the way business consultants have seen brands is mainly as an asset to be managed through logical thinking.

According to Canback (1998), Business or Management consulting is an advisory service contracted for and provided to organizations by specially trained and qualified persons who assist, in an objective and independent manner, the client organization to identify management problems, and help, when requested, in the implementation of solutions.

The business consultancies analysed have a wider range of services in their portfolio in contrast with branding and design consultancies. Clients who require the consultant to bring their own independent perspective to the industry use the purchase-of-expertise model from the business format. In its purest form, the consultant is expected not so much to interact extensively with the client, but rather to provide his or her expertise in a hands-off relationship. Using their often unique experience base and diagnostic skills, consultants quickly assess strategic and organizational blockages. This model leads to an intimate and often trust- base relationship between the consultant and the client (Canback, 1998).

Some business consultants are not focused on branding activity so much as on the whole range of management issues faced by a company. Branding, in some cases, is just one of the elements of a consultants' expertise and this varies in terms of the services provided. Some consultants have strengths in valuating brands. Deloitte, for instance, has developed its own methodology of brand valuation that is divided into four categories: (Figure 9)

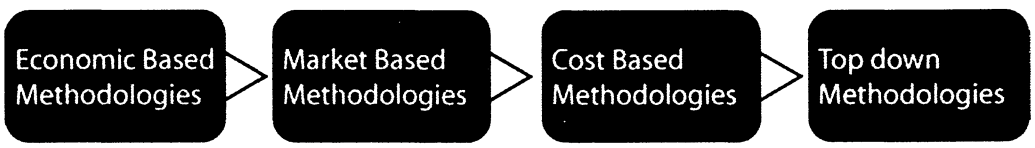

Figure 9 Deloitte model

• Economic based methodologies – which identify the future economic benefits derived from ownership of the asset by identifying, separating and quantifying cash flows attributable to the asset and capitalizing these cash flows.
• Market based methodologies – which value assets such as brands by reference to transactions or benchmarks, involving similar assets that have occurred recently in similar markets.
• Cost based methodologies – which value assets of this nature by assessing the development or replacement cost of the asset.
• Top down methodologies – which estimate the value of a single asset as a portion of the total value of a business. (Carson, 29 Aug 2005)

2.1.4.2. Brand consultants

Interbrand, one of the most prominent brand consultants, suggests that brands do not become and remain successful on their own. Nor are they ensured ongoing leadership without proactive, diligent and detailed management. They work collaboratively with clients to consistently and continually evaluate, create, and manage their brand assets.

The Brand Value Management model is a closed loop with neither a specific beginning nor definite end. (See Figure 10.) The model begins at a different point for every brand, based on business need. However, one aspect does remain constant: once in progress, the model accelerates – generating synergies and capturing new opportunities through carefully crafted and integrated activities. It becomes an inexhaustible source of energy and competitive advantage for every brand. Brand Value Management comprises three distinct, yet interrelated, phases: Evaluate, Create, and Manage – three phases where the brand and market opportunities are painstakingly examined, creatively brought to life, and thoroughly and holistically coordinated.

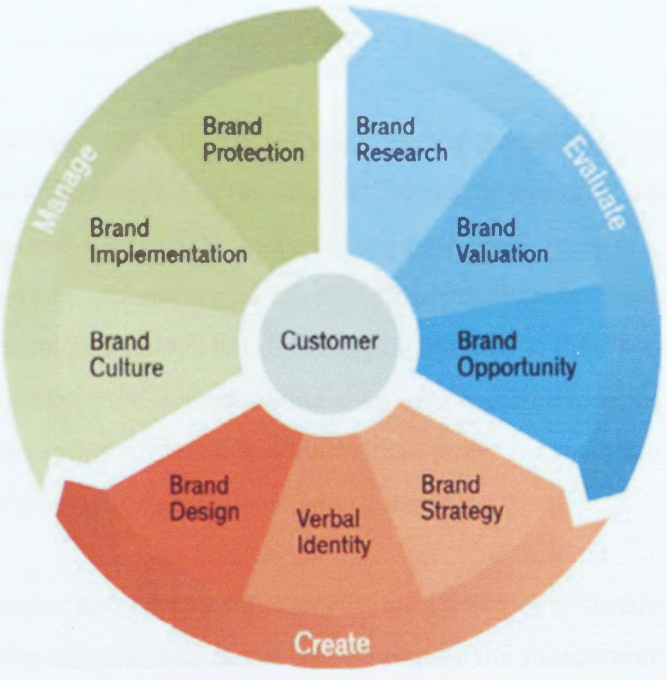

Figure 10 Interbrand model

In accordance with the previous business strategy consultancy model and the monetary value of brands, Interbrand has created a complex formula. Although the

annual ranking of the most valuable brands in the world creates huge PR for Interbrand, there remains an ongoing controversy about how accurate and meaningful these measures are. The difference here is that Interbrand creates, manages and valuates brands. Interbrand adds to the view of brand as asset the view of brand as narrative, as person and as tangible asset which can be protected by IP and design protection.

Saffron Brand Consultants, founded in 2001 by Wally Olins, one of the most experienced practitioners of corporate identity and branding. He headed Wolff Olins for many years and built its core expertise by advising leading organisations and even countries such as Portugal and Poland on branding issues. His views on branding are quite clear and straightforward. Olins (2003) suggests that brands and branding in commerce and industry are high profile, seductive and successful. Everyone everywhere knows the world's great brands. Branding is blamed for making people fat, making people smoke and exploiting the poor in developing economies. The truth is that branding has immense power and influence wherever and however it is used. No wonder the anti-globalisation movement attacks branding as the most public and manipulative manifestation of the corporation.

However, it can be argued that branding is mutating. The practice of branding has now transcended its commercial origins. Its impact is almost immeasurable in social and cultural terms. Branding is beginning to emerge as a powerful tool in the arts, sport, health and education and other social areas. These views make Saffron Brand Consultants somewhat different practitioners in their area in terms of brand strategy since they are not presenting a working methodology, as do most of their competitors. They rather prefer to build individual teams for specific jobs, in order to enhance an equally balanced creative and strategic thinking.

Process and relationship benefits are adding new dimensions for brands to become more exciting, relevant and meaningful. The most common way to achieve this is to shape the brand strategy, starting by mapping out the consumer landscape across multiple dimensions to uncover opportunities for distinctiveness. Consumers can then be analyzed by attitudinal and behaviour segments. This approach identifies the brand's current strength, as well as its greatest future potential. Marketers can then use insights into the target customers' future rational and emotional needs to bring to the

surface process and relationship benefits that should be embedded in customers' experience of the brand. In any case, we see an intuitive approach to the problem-solving process (Puchaski and Mozota, 2007).

2.1.5. Brand Valuation

Since Rank Hovis McDougall (RHM), one of the largest food companies in the UK and home of brands such as Hovis, Mr Kipling, Sharwood's and Bistol, first placed a balance sheet value on their key brands in 1988 and the London Stock Exchange endorsed the concept in 1989 (allowing the inclusion of intangible assets in class tests for shareholder approvals during takeovers), the door has opened for companies to value their brands and include them as intangible assets on their balance sheet. In March 2007, Premier Foods took over RHM in a £1.2bn deal.

A common question is how much does the brand add and consequently, what is the value of the brand? There are a number of methods for calculating brand value and thus for inferring brand equity.

Perhaps one of the most well-known brand valuation methods is that of Interbrand. In partnership with BusinessWeek magazine, they provide 'The Best Global Brand' list, which ranks the one hundred most valuable companies in the world (See Figure 11). Interbrand explains that brand valuation draws together financial analysis, the role of brand analysis and brand strength score in order to arrive at a financial brand value. The resulting value is important, but understanding the themes or forces behind this value is what really drives the brand's performance. Effective brand management means orchestrating these forces to drive the business forward (Frampton, 2007).

2007 Rank	2006 Rank	Brand	Country of origin	Sector	2007 Brand Value ($m)	Change in brand value
1	1	Coca-Cola	US	Beverages	65,324	-3%
2	2	Microsoft	US	Computer Software	58,709	3%
3	3	IBM	US	Computer Services	57,091	2%
4	4	GE	US	Diversified	51,569	5%
5	6	Nokia	Finland	Consumer Electronics	33,696	12%
6	7	Toyota	Japan	Automotive	32,070	15%
7	5	Intel	US	Computer Hardware	30,954	-4%
8	9	McDonald's	US	Restaurants	29,398	7%
9	8	Disney	US	Media	29,210	5%
10	10	Mercedes	Germany	Automotive	23,568	8%

Figure 11 BusinessWeek/Interbrand - The best global brand ranking (Top 10 out of 100 brands from the original list)

The Best Global Brands study provides a brand value that is a top-line measure of economic performance driven by the brand, stating what the brand is worth overall and its worth among competitors. Brand value brings to marketing what "revenue goals" or "financial hurdle rates" bring to other aspects of the business.

According to Interbrand study, the payoff comes when one looks behind the number, because a single number only tells so much. It is important to understand what drives brand value: intangible earnings (the cash flow of a business not associated with tangible assets such as equipment or materials), the role of brand (a measure of how much brand influences purchasing decisions) and brand strength (a benchmark of a brand's relative risk compared to competitors). Understanding the drivers of brand value can inform management action, from overall business strategy to specific marketing tactics. It is an easy-to-understand metric to help brand owners determine where they are, where they are going and how to get there. It helps to make branding a more important aspect of global business management.

The process of valuating the best global brands is divided into three stages, which mix metrics of calculating tangible and intangible assets of the company as follows:

Step one is calculating how much of a company's total sales fall under a particular brand. In some cases the brand encompasses nearly all sales, as with McDonald's. In others it is tied to only one product from a larger portfolio – for instance, Marlboro within Altria Group. Using reports from analysts at JPMorgan Chase, Citigroup, and Morgan Stanley, Interbrand projects five years of sales and earnings tied to each brand's products and services.

Step two is calculating how much of those earnings result from the power of the brand itself. To do this, Interbrand strips out operating costs, taxes, and charges for the capital employed to arrive at the earnings attributable to intangible assets. The brand's role is then estimated within those earnings vs. other intangible assets such as patents and management strength.

Finally, those future earnings are discounted to arrive at a net present value. Interbrand discounts against current interest rates and also against the brand's overall risk profile to factor in brand strength. Considerations include market leadership, stability, and global reach—or the ability to cross both geographic and cultural borders. The final result values the brand as a financial asset. BusinessWeek and Interbrand believe this figure comes closest to representing a brand's true economic worth. (BusinessWeek, 06Aug2007)

The process of valuating is now used in most strategic marketing and financial decisions. There are two main categories of applications:

- Strategic brand management, where brand valuation focuses mainly on internal audiences by providing tools and processes to manage and increase the economic value of brands.
- Financial transactions, where brand valuation helps in a variety of brand-related transactions with external parties.

Although the applications seems to be useful as a strategic marketing tool, Interbrand clearly points out that the values of the brands presented do not necessarily represent the potential purchase, extension or licensing value of the brands.

The automotive brands are often among the biggest brands in the BusinessWeek/Interbrand ranking. The last survey featured two carmakers in the top 10, ranked by brand value: Toyota and Mercedes Benz. (See Figure 12). Toyota has once again taken first place with a brand value estimated at US$32.1 billion, putting the Japanese manufacturer ahead of Mercedes Benz, which has an estimated value of $23.6 billion USD.

2007 Interbrand Ranking			
Top100 Ranking	**Automotive Ranking**	**Auto Brand**	**Brand Value(US $ Bil)**
6	1	Toyota	32.1
7	2	M. Benz	23.6
13	3	BMW	21.6
19	4	Honda	18
41	5	Ford	9
54	6	VW	6.5
68	7	Audi	4.9
72	8	Hyundai	4.5
75	9	Porsche	4.2
92	10	Lexus	3.4
98	11	Nissan	3.1

Figure 12 BusinessWeek/Interbrand - The best global brand ranking. Top 10 Automotive Brands

The big winner though is Honda, which ranks ahead of Ford, VW, Audi, Porsche and a whole lot more. Another notable mention in the top 10 is Hyundai, which has managed to push Porsche out of eighth place. Audi and BMW also made a huge leap in their brand values in contrast last year's values, 17% and 10% respectively.
The report points out the reasons why the Audi brand received such a good evaluation: "Audi's success builds on a story of Demand Creation, Brand Management and Planning Efficiencies. By applying a consistent design philosophy based around quality, sophistication and performance, Audi has developed a unique, distinctive personality in the marketplace. The brand is considered to be hip, cool and understated. In the mind of the consumer, Audi is now a genuine alternative to BMW and Mercedes-Benz, with the brands going head-to-head in many categories. Audi has recently completed a design overhaul of its entire product line. This is a bold move, which modernizes the range with a consistent look, feel and attitude while still maintaining the valuable equity of "Vorsprung durch Technik" (Interbrand, 2007)

On the other hand, although Ford appears in 5th place in the top ten automotive brands, it was the company that dropped furthest in the rankings, compared with the previous survey. In 2006, Ford's brand value (Figure 13) was estimated at $11.056 billion USD. In 2007, however, the brand value decreased by 19%, reaching $8.982 billion USD. Interbrand's report says: "The lessons from Ford are highly indicative of the themes of value creation. The brand lacks focus on Demand Creation, and its product range would indicate that it has not planned effectively to have a portfolio that is in tune with the movements of consumer attitudes and behaviours. Ford, unlike the competition, has not invested in distinguishing itself in any meaningful way."(Interbrand, 2007)

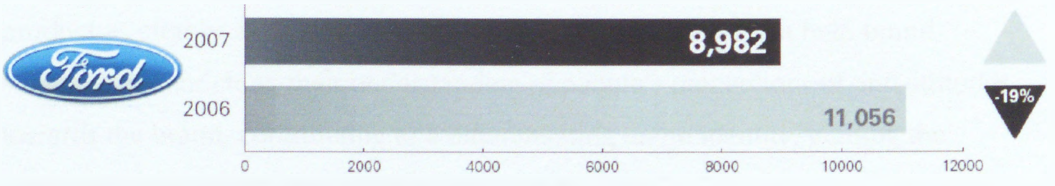

Figure 13 Best Global Brands report by Interbrand. It shows Ford's brand value decline. Brand Value ($m)

De Oliveira (2007) explains why companies such as GM do not appear in the list, despite it being one of the biggest carmakers in the world. She points out that GM does not possess the prerequisites required for analysis. The GM brand is a mother brand from one of the largest brand portfolios in the automotive industry and their annual report does not break down into each brand (Chevrolet, Vauxhall, Opel, etc.), nor does it provide breakdowns according to regional markets (US, Europe and Asia). This is, however, a crucial factor in evaluating a brand. She also explains that Interbrand is keen in evaluating brands, not companies.

2.1.6. Brands as a lifestyle

At one level this could be dismissed as incredibly superficial. But people have always sought to express themselves through their clothes and possessions. People like possessing badges, with the corresponding feeling of belonging and the sense of identity with a group, however distant this may be from their reality. This use of brands as a means of expression has grown in recent years. In today's economy, brands say something about what is important to us, about our values and our lifestyle. They are much more than superficial statements of taste. What they express is much

more important, more personal. The Body Shop, First Direct, Virgin, Amazon.com, Quicksilver, and Home Depot are all brands that have intentionally created products and services aimed at particular consumers and their lifestyles. Brands have moved from being simply names of products to being badges of success or a means of enjoying the kind of life we wish from ourselves (Smith and Wheeler, 2002).

Aaker (2002) points out that brand personality is a set of human characteristics associated with a given brand, which include gender, age, and socioeconomic class, as well as such classic human personality traits as warmth, concern, and sentimentality. Furthermore, he explains that customers often interact with brands as if they were people, especially when the brands are attached to such a meaningful product as clothes and cars. The brand personality construct can help brand strategists by enriching their understanding of people's perceptions of and attitudes towards the brand, contributing to a differentiating brand identity, guiding the communication effort, and creating brand equity.

Many carmakers are extending their brands into other areas of lifestyle products in order to explore the full potential of their brand attributes. BMW is one of the carmakers that has been systematically moving into this area. Over the past few years, the BMW Group has begun to differentiate itself through the creation of a number of lifestyle products (Figure 14) in the automotive industry. Most specifically, both the BMW and Mini brands were used for these lifestyle product extensions. In 1994, BMW acquired Mini, a brand that has reached iconic cult status since the 1960s. In extending these powerful brand identities, an example of successful collaboration was the new Mini motion shoe introduced at the Frankfurt Motor Show in 2003. Many products were developed through collaboration between BMW, Mini, and a broad range of partners. But the lifestyle product programs of the two brands differ in focus. While the BMW program is focused on mobility and technology, Mini is built around a trend setting urban and post-modern way of life. The product lines are a unique opportunity to further differentiate both brands (Seidel, 2007).

Figure 14 BWM Lifestyle - Skateboard

Following the essence of a lifestyle brand, companies need to consider the implications of this merging of work and play, not just in terms of the design of their products, but also in the entirety of their overall brand message. Brands have largely been based on a rigid "push strategy" with the prime objective of getting as much product into the hands of the consumer as possible. For mass consumer brands, the days of selling one product to one targeted market are no more. One-product brands are dinosaur brands with no future in a dynamic, global marketplace. To succeed they must evolve into fluid and playful "lifestyle" brands. Lifestyle brands bring freedom for all of us because they exist dynamically in real time and in multiple places. They are more purposeful and meaningful than commodities alone because they exist in culture at all levels, and are therefore truly relevant to their audience.

Forward-thinking brands will continue to develop creative ideas and solutions that will allow people to exchange (interact with each other) and express (explore and share creative opportunities). They will exploit emerging technologies and social networking software to design new products and innovative experiences to responsibly involve and include the consumer. They will also enter contextualized partnerships with other brands that share similar brand values and foster seamless and well-integrated marketing campaigns in non-obtrusive consumer spaces. (Ford, 2006)

According to Aaker (2002), lifestyle brands as also seem as 'badge' brands. They have a substantial impact social impact. The presence of a brand, or even the attitude held towards it, can serve to define a person with respect to others, and when social identity is involved, what is expressed can be very important to the individual. Thus, products such as cars, cosmetics, and clothes lend themselves to the expression of

personality because their use occurs in common social contexts. Individuals evaluating and interpreting another person's identity will observe the car driven and the clothes worn.

2.2. Automotive industry

The automotive industry is one of the largest and most multinational of all industries. It is a key indicator of economic growth and a major contributor to the gross domestic product (GDP) of several Member States and the EU. On a global level, the assets of the top ten multinational automotive enterprises represent 28% of the assets of the world's top 50 companies, 29% of their employment and 30% of their total sales, according to The European Restructuring Monitor (ERM) (2005).

It is often argued that the motor industry works on a scale so remarkable and has an influence so immeasurable that it is often difficult to quantify. Roughly a million new cars and trucks are built around the world each week – they are easily the most complex products of their kind to be mass-produced in such volumes. The industry uses manufacturing technology that is at the cutting edge of science. It uses 15 per cent of the world's steel, 40 per cent of the world's rubber and 25 per cent of the world glass. The vehicles themselves, these emotive icons of success, use a staggering 40 per cent of the world's annual oil output. The motor industry is the world's largest single manufacturing activity. These staggering figures say a lot about clime change and sustainability issues, which will be discussed in the next session 2.2.1 Environmental issues. In 2002, the industry's most recent peak, it produced almost 56 million vehicles worldwide. Each contained up to 8.000 individual parts of widely varying materials, made in highly specialised factories across the world. Every year, almost 460 billion parts are needed just to manufacture new vehicles. Massive capacity is also dedicated to the production of replacement parts, for when originally fitted parts wear out or become damaged. There is a range of business that focuses on vehicle distribution, sales and the service and repair aftermarket too, as well as a massive network of industries involved in the supply of fuel, financing and insurance. The automotive industry is a huge consumer of energy and raw materials. It is also a vast source of employment (Maxton and Wormald, 2004).

Throughout most of the twentieth century the motor industry expanded rapidly, moving in parallel with the development of the biggest economies in North America,

Europe and Japan. As people became wealthier they aspired to owning a car and the industry made that possible through lowering the costs and prices of vehicles as volumes grew. Yet, even today, the industry and the vehicles themselves remain a feature of life only for the world's rich. More than 70 per cent of all cars and trucks are still sold in the developed world.

The level of car ownership in any country is driven almost entirely by two factors: the percentage of the population who have crossed the threshold of minimum income needed to able to afford their own vehicle; and population growth. In others words, and perhaps unsurprisingly, the industry's development is mainly a factor of economic development. There are some exceptions, especially in the short term where markets can be boosted or cut for other reasons. As rule a thumb, though, it is economic development, which fuels the industry (Ibid, 2004).

There is a critical question, of course, behind the downturn in growth that the automotive industry is experiencing, a question which the industry needs to ask itself. Is this slowing in the industry merely cyclical or is it structural? According to Maxton and Wormald (2004) the answer is that it is both. They explain that in many of the developed markets it is structural. The reasons are twofold.

First, it is simply a question of demographics. The population in the countries of Western Europe is mostly stable, as it is in Japan, while the number of people in the US will grow only slowly. In fact, in many European countries and in Japan, populations will begin to shrink. Add to that the rising costs of car ownership and the growing pressures from environmentalists in some places to cut car use and this drop-off in demand could be pronounced in some countries.
Moreover, the population of Japan and of Western Europe is set to start declining fairly soon. So the problems in Europe and Japan are structural. There will be some growth in the US but it will be comparatively small, will take time to come and may not compensate for the drop-off in the other developed markets, the overall outlook in terms of demographics and so vehicle sales growth – is not too good.

Maxton (2004) explains that the second structural reason for the gloomy growth prospects in the developed countries is market saturation. In most of the major markets there are simply enough cars on the roads already to satisfy most people's needs for

individual motorised transport – which is why demand has become flat in Japan and mostly flat in Europe. Worse, congestion, especially in urban areas and at peak travel times, is starting to put a lid on the growth in the use of cars. In this sense, there is no money, no space, nor the inclination to build more roads to accommodate traffic.

The cyclical problem the industry has been facing is usually related to the growth of the developing countries. Maxton (2004) argues that the constraint is, of course, the levels of income. There has been a weight of expectation on developing countries, mainly BRIC (Brazil, Russia, India and China). However, until these countries reach the equivalent levels of income, is suggested that they will not see any Western-style mass motorisation. China, for example, has a GDP (Gross Domestic Product) per person that is a tenth of the level needed for motorisation. While everyone talks about markets like China and India as having mass potential because their large populations, rapid rates of growth and comparatively few cars today, such thinking is naive. The sales opportunities in developing countries, even ten years from now, will be far too small to compensate for the stagnation in the biggest markets.

The automotive industry has passed through its first century of existence. During this time many changes have occurred towards a more sustainable model in respect of every period of time. The first great automotive revolution was that of Henry Ford, when he overtook hiss craft-based competitors by using mass production techniques. Years latter, in the 1920s, Alfred Sloan changed the direction of GM by establishing annual changes in styling, from which came the concept of planned obsolescence. This segmentation pattern was a simple one, reflecting demand. People would generally start with a small car and, as they became wealthier, they would trade up to bigger models. A car manufacturer would offer a product ladder for consumers to climb, to meet their aspirations. Then Toyota introduced the concept of Lean manufacturing, which is a generic process management philosophy focused on the reduction of the original Toyota 'seven wastes' in order to improve overall customer value.

Based on this timeline of automotive industry revolution, Maxton (2004) suggests the necessity and also the opportunity for what he calls the fourth revolution. His views about what the automotive industry must do in order to sustain itself are mainly concerned with the radical changing of its business models.

A special report on the motor industry that was published in the Financial Times (Simon, 2007) states that industry analysts are now virtually unanimous in their opinion that, overall, the automotive industry will not match the 2006 sales figures. The US car markets alone, which reached 16.6million cars in 2006, are forecasted sales of 15.9million this year with little, if any, improvement in 2008. Besides slowing demand, the industry must cope with a seismic shift in buying patterns and preferences, which is lead by an alternative-fuel technology, and a drive among regulators for tighter fuel-economy and safety standards. It is also estimated that carmakers will launch more than 170 models in North America only between 2008 and 2011, making an average of 45 models a year or one-fifth more than the annual pace over the last two decades. The most profound manifestation of this trend is taking place in the 'big three' (GM, Ford and Chrysler) Detroit based companies, where the management staff have been concentrated by sliding market shares, huge financial losses and sinking credit ratings.

2.2.1. Environmental issues

In recent years the environmental consequences have also pushed the motor industry into the heart of the debate over wealth generation and sustainability. Evenden (2007) discusses our expectations versus the damage that their fulfilment may actually cause. Helen Evenden argues that our expectations for travel are high and yet we are increasingly aware of the environmental damage we cause by travelling. It seems highly likely that our grandchildren will look back on our generation as the decadent ones who wasted crucial natural resources fulfilling our insatiable desire for global travel and our consumption of imported goods. We have to ask whether is it really necessary to attend that business meeting in Sydney when a videoconference in London is possible, or to eat that avocado in December. Greenpeace and other environmental campaigners recognize the need to re-educate us to change our behaviour so that we are less dependent on long-distance and petrol-powered travel.

On the other hand, the industry has been responding to our expectations for a more environmental responsible way to travel with new technologies. Over the last five years, production cars powered by gas, alcohol or hybrid engines have increased significantly, though admittedly from a very low base. Although the option of hybrid power is still a rarity in the vast majority of new cars, the psychological effects of such

high-profile hybrids as the Toyota Prius is not to be underestimated. Toyota and Honda still lead the way in hybrid technology, but most of the major European and North American markets have been forced to include some form of hybrid in their future plans. Sadly, the take-up to production car is still slow; yet this does at least show some attempt by manufactures to raise public awareness and to ready the consumers for future power systems (Newbury, 2006).

It was recently reported by Reed (2007) in the Financial Times that clean-vehicle technology offers carmakers the same worrying mix of threats and opportunities. Some companies' claims of sincere commitment to green goals stretch credibility, and current global sales of hybrid cars, which are barely half of one per cent of the total, are so small as to make them seem more like fashion statements than commercially viable cars. Behind the marketing hype, however, carmakers are extremely serious about developing the cars people will be driving in 10 or 20 years' time. With the European Union forging ahead on stricter emissions standards and the US Congress drafting rules on fuel economy, the car companies have little choice but to make cars greener and smaller. Almost all the big companies have been presenting at least one low emissions vehicle at recent motor shows. Carmakers are watching each other's investments and announcements about the future development towards a greener car and towards possible technologies that will be more suitable in the long term. However, after all, it will be the customers who decide on the cars they want, whether they are hybrid, plug-in electric cars, diesel or even ethanol. Amid the legislative squeeze on carmakers to build cleaner and smaller vehicles, there lurks an inconvenient truth: most drivers go for the most powerful, fastest, and thus highest emission car they can afford. Higher petrol and vehicle road taxes are probably the answer over the long term. Most carmakers support this, but in contrast they also worry about the future of their profitable big vehicles.

In some developing countries, some sustainable initiatives from the past have been paying off. That is the case of ethanol fuel in Brazil. Brazil is the world's alternative fuel pioneer. It started down this road during the oil crisis in the 1970s. At that time, the government provided incentives and the state oil firm installed pumps and it took off. However, nowadays the industry is subsidy-free. The benefits to the environment from an ethanol-fuelled car are substantial. Bioethanol engines produce 15 per cent fewer carbon dioxide emissions. For example, there are nine General Motors models

in production at the giant Sao Paulo assembly plant. GM dominates this market in Brazil where some 95 per cent of its Brazil sales are flex-fuel.

And the bioethanol word is spreading around the world. In India there is a real prospect the tropical Jatropha plant could power vehicles. Encouragingly, this short stubby plant grows in arid areas where other crops won't. Both BP and GM are actively developing this. Canada's top biotech firm, Iogen, is working with Volkswagen and Shell to produce cellulose ethanol made from non-food agricultural residue. This can cut carbon dioxide emissions by 90 per cent compared with conventional fuels (Mathiason, 21 May 2006).

Some authors argue that the best solution to date is the hybrid car, which combines a petrol engine with an electric motor (Sparke, 2002). To date the Japanese are ahead of the Americans and Europeans in this area. However, most proposals for eco-cars tend to ignore the dimension of aesthetic experimentation that characterised developments in the 'horseless carriage' in the early 20h century. The problem of most hybrid models lies in developing a car with the appropriate technology that also appeals to consumers. The challenge to designers is to create an aesthetic that is 'of the moment' and symbolically in keeping with the spirit of an age in which people value the planet they inhabit and the resources it has to offer.

As suggested by Dunn (2007), car makers are at last putting some serious money into developing electric or hybrid cars, partly because of the serious criticism that they are not doing enough to combat one of the causes of global warming. Another source of pressure cause is the European Union's regulations threat to bring down the CO2 emissions of all new cars to less than 120g/Km. However, the biggest reason perhaps is oil. Recently, the price has reach the highest for twenty years ($80 per barrel) and most of economists do not expect that to come down by much. Battery technology is crucial to the speed of electric car development because it determines a car's range, performance and recharge time.

2.2.2. Customer preference

Since 1999 KPMG Automotive, one of the leading global consultant group, carry out a survey asking to 150 top executives from around the world their views on the subject.

Momentum 2007 KPMG Global Auto Executive Survey (Figure 15) shows that with many area of the industry having changed significantly over the past half decade, consumer preference as perceived by executives have changed remarkably little, with two notable exceptions. Whether this indicates the industry is still largely product and process centric or that consumers continue to buy cars pretty much the same way is beyond the scope of the KPMG's survey. However, it is also suggested by this study that the answer contains large measures of both ideas. Executives still believe 'quality' is hugely important but in no longer the top priority. That spot now belongs to 'fuel efficiency'. Constant favourites 'safety' and 'affordability' stayed within or close to the range registered in previous years. A new category, 'vehicle styling and design', came in at a strong position with 68%. That is a clearly recognition that industry executives believe many consumers form strong emotional and aesthetic bonds with vehicles they own, and other issues being equal, will often buy a vehicle on looks alone.

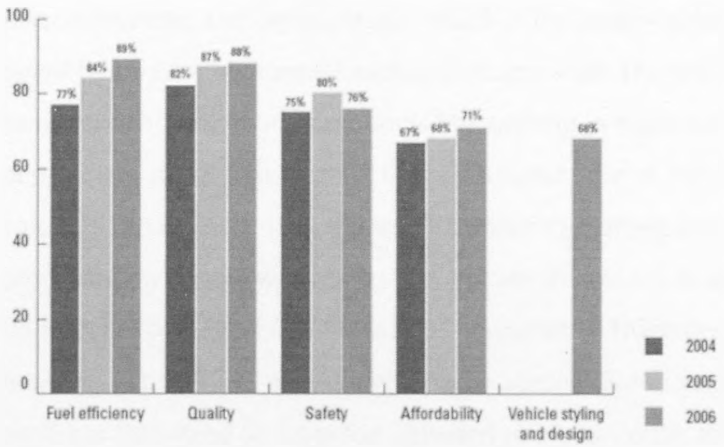

Figure 15 Source: Momentum 2007 KPMG Global Auto Executive survey, 2007

The subject of consumers' preference is largely discussed and quality still as the main topic among the carmakers executives. Perhaps there has been a misunderstanding on what type of quality customers are expecting from the industry. Maxton (2004) explains the difference between passive and active quality: Success in the industry clearly does not only rest on what we call 'passive quality', i.e. that the products work properly and reliably. If it did, the up line brands would not be objectively able to sustain their price premiums, now that the quality of run-of-the-mill volume cars improved so much – incidentally one of the industry's great triumphs. Passive quality is not difficult to measure, using breakdowns statistics and the consumer satisfaction surveys. The marketplace quickly punishes dropping below acceptable standards. But very high levels of passive quality are now a sine qua non of being in the game at all:

a qualifier for being a player. They are no longer in themselves a differentiator. 'Active quality' is that differentiator: the factor that gives the owner and driver of a car satisfaction with the product and which creates desire in the non-owner. But is elusive and much, much more difficult to measure, because it is rooted both in the characteristics of the product and in the complexity of our personal characters and motivations.

Under social perspective, Marc Gobé (2007) explains the reasons why customers and demanding a major changing. There are many factors for impeding and ongoing design revolution: An improved economic climate, and, most importantly, a societal change that has evolved from modernist theories to postmodernism ways of thinking that privilege the well being of the individual. So customers are in change. They want and have choice. They demand to explore new products and seek innovation, personalisation, and performance. Much of the business world has been caught off guard by this massive social and aspirational shift. The self-inflicted brand-wound of sameness and commodity products languishing in supermarkets, at strip malls, and department stores fails to meet the new expectation of the emerging, and most valuable, consumers. Its suggested the more discerning the customer, the fatter the profit margin is. No wonder consumers are so anxious to snatch up the little bits they find in an Apple iPod or a Starbucks mocha latte. These products are better than nothing, but they are not enough. In the automotive industry, however, there are few products that stand up from the crowded market in order to fulfil the customers' expectation.

2.3. Design

Design tends to be one of the most important steps on the development of any product, service or brand. In this context, the definition of what actually design means is needed. Unfortunately, many people continue to think of design in very narrow terms. Industrial products and graphics are outcomes of the design process, but they do not begin to describe the boundaries of design's playing field. (Brown, 2005)

A broad definition of what is design, is given by Ewing (2002) "Every thing that is made is design. Design is a process or a method of converting an idea or a need into a product." In the traditional understanding 'design' is often associated with a person who is involved in both the design production of an object. This concept began to

change with the outset of the industrial revolution, which initiated the division of work and the need for specialization Resulting from this, two strands of design evolved, 'design as art' and 'design as engineering' each with different meaning. (von Stamm, 2003) In the light of that, she then defines design "as the conscious decision-making process with information (an idea) is transformed into an outcome, be it tangible (product) or intangible (service)."

Using a broad experience in cognitive science, Don Norman (2004) suggests that there are three basic components of product design: Usability, Aesthetics, and Practicability. In creating a product, a designer has many factors to consider: the choice of material, the manufacturing method, the way the product is marketed, cost and practicality, and how easy the product is to use, to understand. However, what many people do not realize is that there is also a strong emotional component to how products are designed and put to use. The emotional aspects of designing a product or service is further developed and presented in session 2.3.5 Emotional design.

Marc Gobé (2007) defines design as the activity that conveys innovation in the most potent way, addresses our social and personal expectation, and builds loyalty for a brand. However, it also agued that the amount of money invested in new products or in the manifestation of a visual identity is abysmally small compared to the budgets spent in broadcast media.

Design is the glue between people and corporations, while the style is the message that makes the brand special and true. But brands can sometimes give splintered messages and forgettable offerings that do not excite people. Between advertising, packaging, product design, public relations, web communication, and the look and feel of their company's workspaces, every message must fit together. Nothing can be left to interpretation. Designers' best asset is not the ability to be brand specialists, but their instinct to see the interconnectedness of the world in a humanistic way. For designers, a logo is a shape, a smell, a colour, a product, and a massage. The best work must be the one that connects and unify the 'voice' of a company and excites the customers. (ibid, 2007)

Design-driven companies revolutionise their industries, trailblazing the way for others to change the way they do business. Yet their great design is not sui generis and does

not fall from the sky. Every design-driven company must cultivate its own culture while also drawing from the outside for that special edge, that unique look. Design leadership and design hybridization are one and the same. (ibid, 2007)

It is well know that design plays a crucial role in the battle for differentiation. It is design that structures customer expectations, design that evokes brand values, creates visible differences and develops new favourites on mature markets. This is why it has to observe several key principles of design according to Kapferer (2004).

• The principle of radicalisation. Design cannot be vague – since strategy is to attack the market with a small number of brands, they must be clearly defined, with a specific design, all the more so since organisations have a natural tendency to soften the hard edges, which leads to a resemblance on the shelves that has a dramatic effect on perceived differentiation.
• The principle of externalisation. If the company is responsible for defining the story to be told by each brand, that is, creating its identity, it is important to seek outside help for the design itself by appointing a designer for each brand who is totally committed to that brand. This is why, within an organisation, design must be positioned at brand level, not corporate level, even if this requires robust coordination to avoid replication between brands, a tendency that is all too frequent.
• The principle of business. The function of design is to promote and develop business, not art. Design should not become self-absorbed. In short, the purpose of design is to enable the brand not just to look good but no function efficiently.
• The principle of courage. The key question in design is whether a design can be properly tested. Certainly, the ergonomics and functionality of a product must always be tested at user-status level. But apart from that, what is the relevance of a few individuals' (interviewees') opinions of a design when it is, by definition, the opinion leaders (the press) who decide whether or not a product is in good taste when it is launched in a few months' or years' time? Design is a risk. In the car sector, for example, how can you predict which design will be perceived as avant-garde in another four years, in the event that the brand could be said to be a trend setter?

Bruce Mau (2004) has a broader view on the design definition in the book Massive Change. He points out that design is evolving from its position of relative insignificance within business (and enlarger envelope of nature), to become the

biggest project of all. Empowered as such, we have the responsibility to address the new set of questions that go along with this power. We are designing nature and we are subject to her laws and powers. This new condition demands that design discourse not be limited to boardrooms or kept inside tidy disciplines. He suggests that instead look at product design, graphic design and so on, we must explore system of change, or design economies.

2.3.1. Automotive design

This research has no intention to define what a good looking car might be. However, it is important to review what the experts from industry believe what it is. When arguments raised about beauty, in this case the beauty of the car, it is very easy to fallen trapped into a matter of taste and perception. Paolo Tumminelli (2004) suggests that design critique can take a scientific form. However, more than often it is our feelings that either enable or prevent us from giving an objective opinion about design of a product or a brand preference.

In light of that, car design is not much about creating an industrial style as fulfilling dream. In the first half of the twentieth century, cars were a luxury item and available only to society's elite. In the pos-war era, cars became a popular consumer good. No such a product has had such a strong influence on society as the automobile. Its importance is not only a result of its economic significance, but rather its social function. Cars connect people and places, they define how our world looks, and they link private and public interest spheres. Cars boost the personality: I drive therefore I am. (Tumminelli, 2004)

Interviewed by Livingstone (2007), Martin Smith, Executive Director of Design at Ford Europe & Ford Asia Pacific and Africa responsible for the success of the 'Kinetic Design' strategy explains the basic premise to end up with appealing aesthetic.

"The basic premise is: either you know what a good car looks like, or you don't. You can talk about it for a long time but if the end result of what you do - when it stands there at Geneva or wherever - people don't walk by and say: 'that's a damn good looking car' then you've failed, in my mind. There are no rules and it's an intuitive - hopefully it's an intuitive thing. As I described it earlier on: our job is not to polarise, not to provoke, and not to challenge people's aesthetic sensibilities."

With a similar thinking, Tumminelli (2004) argues that automobile design does not follow strict rules. Instead, a fluid confrontation of continuity and innovation, simplicity and extravagance in some cases, determines its scope in developing a car. There are dream cars, concept cars, and car series. No matter whether they are successful or not, many cars have faded into obscurity, others have started short-lived trends, and some became legends. Thought the time design themes can be organized into groups, which are connected each other. (Figure 16) Their individual complexity often results from the combination of global trends and regional cultures.

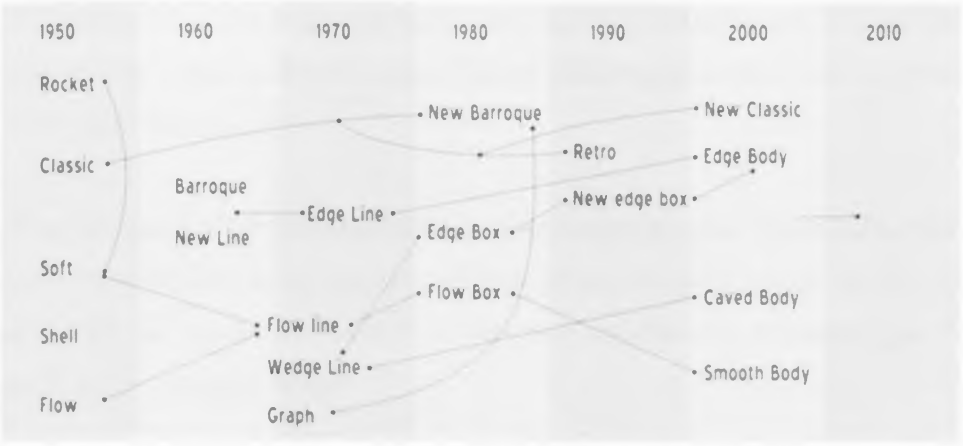

Figure 16 Trends in modern car design adapted from 'Car design' by Paolo Tuminelli (2004)

Automotive design is the consideration of aesthetics during the product development of an automobile. Therefore, it encompasses almost every aspect of a vehicle's design that is readily visible to the customer - from the seats and steering wheel through to the door trims and the dashboard (Clements and Porter, 2007). Evenden (2007) explains even further that typically, the vehicle designer is seen as the stylist of sleek and desirable exterior shapes, engineered to drive sales curves upwards. While design is still at is most competitive in the luxury sector, other, less aesthetic factors are also driving change. Design solutions are needed for cleaner, safer travel, eco-friendly power sources and materials, more secure environments for drivers, passengers and pedestrians, less waste an better opportunities for the recycling and reuse for parts. In terms of competitiveness, there is massive potential for product differentiation in both interior forms and details.

Similarly, it is argued by Bangle (2006) that the role of automotive design needs to encompass a healthy balance between social, economic and environmental issues.

Once vehicle is our avatar, and that is the work of designers, we must consider that design equals meaning. Improving design empowers people's rights and capabilities, promotes consumption and changes the world.

"For automotive design, in the 1970s the focus was on bumpers and other aspects of vehicle safety. In 1980s the attention was on aerodynamics, in 1990s on quality, and in 2000s on pedestrian safety. The next issue will probably be finding a new package contents. The conventional pattern is divided in two: design for industry and design for humanism. There is a need for new contexts and packaging for integrating these two, to combine them into industrial humanism, looking not backwards but forwards establishing a new world and expanding the influence into other worlds." (Bangle, 2007 apud Nagata (2007)

"Cars are our avatars, and instead of defining design in terms ' form follows function' as it conventionally is, we should say 'form follows meaning'. Based on this new definition, we can expect much from the role of the designer. Committing to this will build pride." (Bangle, 2006)

Another designer with strong views about the automotive industry is Lutz Colani. He says: "amongst today's car industry management there is not one that understands the real problems". Colani believes the whole emphasis on new vehicle development is wrong: "We have hundreds of electric motors to do jobs normally done by human hands. Car design should not be about the small details. It should be about the bigger picture... Cars should be "simpler, less features, streamlined, lightly built." Colani believes the mainstream manufacturers are all missing the point, "to build cars to go from A to B with a smile... to give answers to problems of our time". Colani, 2007 apud (Patterson, 13 Jul 2007)

2.3.1.1. Stylist or designer?

In 1963, Ford defined a car designer's job as follows: the 'stylist' is a 'catalyst between nature and technology'. He must possess multi-faceted skills and know-how. 'He is a textile designer, sculptor, glass and plastics designer, architect, interior designer, artist, production and installation designer' – nobody less than Leonardo da Vinci is introduced as the model version of such a stylist. (Tumminelli, 2004) It is argued by Tovey (1992) that stylists tend to be more intuitively controlled and holistic,

concerned with the creation of the initial concept and its being worked to a fully defined form and appearance specification. It involves non-verbal, intuitive processes, which are difficult to externalise. They are expected to display visual flair using a controlled yet changing vocabulary. Between them they use a shares but exclusive language, which involve tacit knowing, a subliminal appreciation of what is appropriate in the creation and development oh the automotive form.

It is known that the two halves of the brain process information differently. Therefore, Tovey (1992) argues that stylist, or car designers, process of thinking are dominated by one of these, the right hemisphere. The right hemisphere is usually described as: non-verbal, synthetic, intuitive, holistic, timeless and diffuse. On the other side, the left hemisphere is usually described as: verbal, analytic, logical, linear and time-orientated. It could be argued that automotive designers display some separate characteristics, which distinguish designers in a more extreme form than other practitioners. Their thinking has less in common with that of no-designers. Even before the term 'stylist' was coined by Ford, the early aesthetic evolution of the automotive industry witness the passion of engineers translated into good-looking machines. Some of then have been taken out of the car design field and placed into the classic icons. As an example: Pierre Boulange's Citroen 2CV, Ferdinand Porsche's VW Beatle, Alec Issigonis's Mini and Sergio Pininfarina's creations for Ferrari.

Sparke (2002) suggests that the term 'stylist', which has been extensively used to describe the car designer's 'art', has been one of the causes of the marginalization of the work of the car designer from his peers. She argues that an assumption has been made that the stylist is more superficial and less responsible than his more serious furniture and product designer contemporaries. The strong commercial context of car manufacture has reinforced this view. However, once the term 'car designer' replaced 'car stylist', there is a growing recognition that the process of designing cars is just as holist and thorough as that of creating a chair or a household product.

Nowadays, car design is the result of a long and complex process: the design department of major company often employs well over a thousand people, whose work has to be carefully coordinated. This is when a brand signature replaces the signature of an individual designer. As Tumminelly (2004) argues: "the mother, or the brand, is always known, but the father, the designer, is in many cases disputed."

The world of car designer, located for the most part within the largest manufacturing companies primarily for reasons of secrecy, was generally separated from that of industrial designers, largely inhabited by freelancers. As a result, car stylists became specialist and company men. They also developed a particular philosophy of design, exclusively car-oriented and stressing the visual component of the designing process, the sculpture impact of form, and the attention to visual details, such as fall of lights on a piece of sheet metal and the shape and position of a headlight. Inevitably a level of introspection entered into this highly specialised field of activity. Product designers approach their brief in a different way from the car stylist. They tend to think conceptually first and visually second. They are trained to think about meaning in the objects they create, and about the emotional/psychological impact of, for example, pulling a handle or turning a knob, whether on a food mixer or a piece of hi-fi equipment. While the task of all designers is to combine the technological with the cultural, the functional with the expressive, the product designer's priorities when approaching the challenge of designing a car can be very different from those of the car stylist. The late 20th century saw several examples of products designers creating cars that made these cultural differences very clear. (Sparke, 2002)

Recent experimentation in car design by product designers and architectures include Philip Stark's Toto car, Marc Newson's 021C concept for Ford and more recently Zaha Radid's hybrid Z.CAR. The Z.CAR is a two-seater, three-wheeler city car. Using Hydrogen as a source of energy it is a very quiet zero-emission vehicle.

2.3.2. Design methods

There are many definitions and models already developed in order to explain the design process in product development.

Design theorists such as Bruce Archer published a series of articles on 'Systematic method for designers' in early 1960s in the context of industrial design, and opening comments on the nature of designing reflects his orientation. For him, design activity is based on the formulation of prescription or model, which represents the intention to create some artefact, and the activity must include some creative step. The core of Archer's model is a six-stages process: programming, data collection, analysis, synthesis, development and communication. "In practice", he writes, "the stages are

overlapping and often confused, with frequents returns to early stages when difficulties are encountered and obscurities found". (Archer, 1963 apud Cross, 1994)

Ewing (2002) argues that in order to design correctly, the designer needs a model, which is the method, or process of design and the model(s) is generally accepted by all those involved in design as the way design is carried out. These design models are the 'Rules of Design' and guide the designer through the products design stages from the concept to the product being produced and on sale. According to Ewing the two most commonly referred to and used are Pahl and Beitz (Figure 17), and Pugh's models (Figure 18).

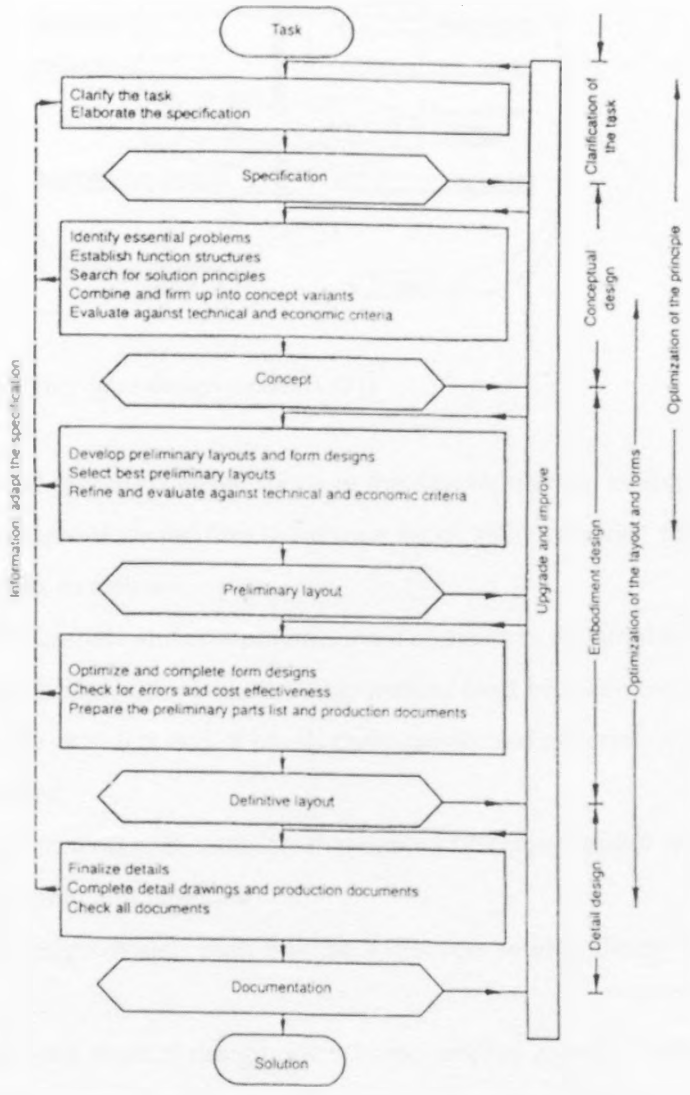

Figure 17 Design models by Pahl and Beitz (1984)

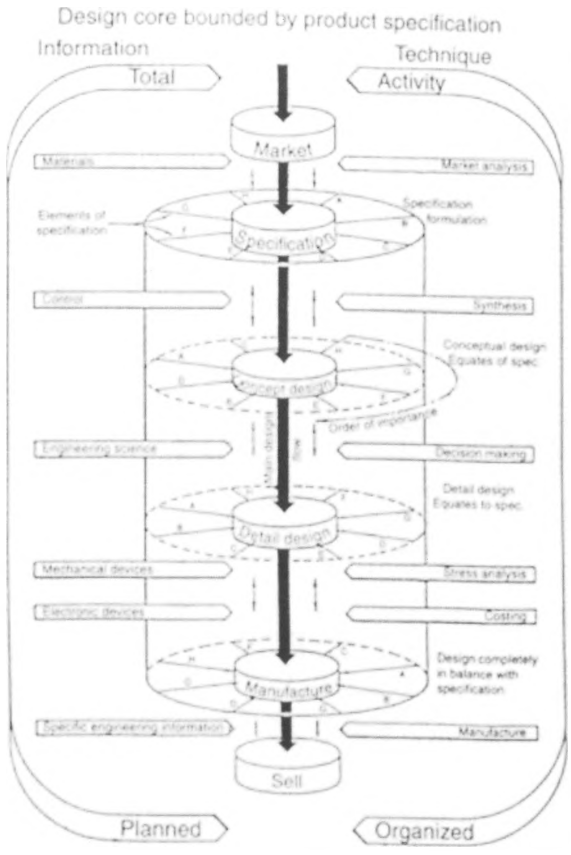

Figure 18 Pugh's design model (1991)

Several questions were crucial in the development of Ewing's model (Figure 19). Those questions led him to set up a list of 'must consider' facts when developing a product as follow:

. All materials and components must come from sustainable sources

. Social implications of all design actions must be taken into consideration

. At the products end of life its components and materials must be reused and/or recycled

. Components and materials that cannot be reused and/or recycled must be disposed off cleanly and carefully

. All design models must now be a lifecycle systems design model

In essence most of design practitioners employ a design method in terms of making use of the best from their skills when developing products or services. Some of the most prominent design consultancies in the UK were also analysed in order to provide a broader overview by contrasting academic theories and practices in the field.

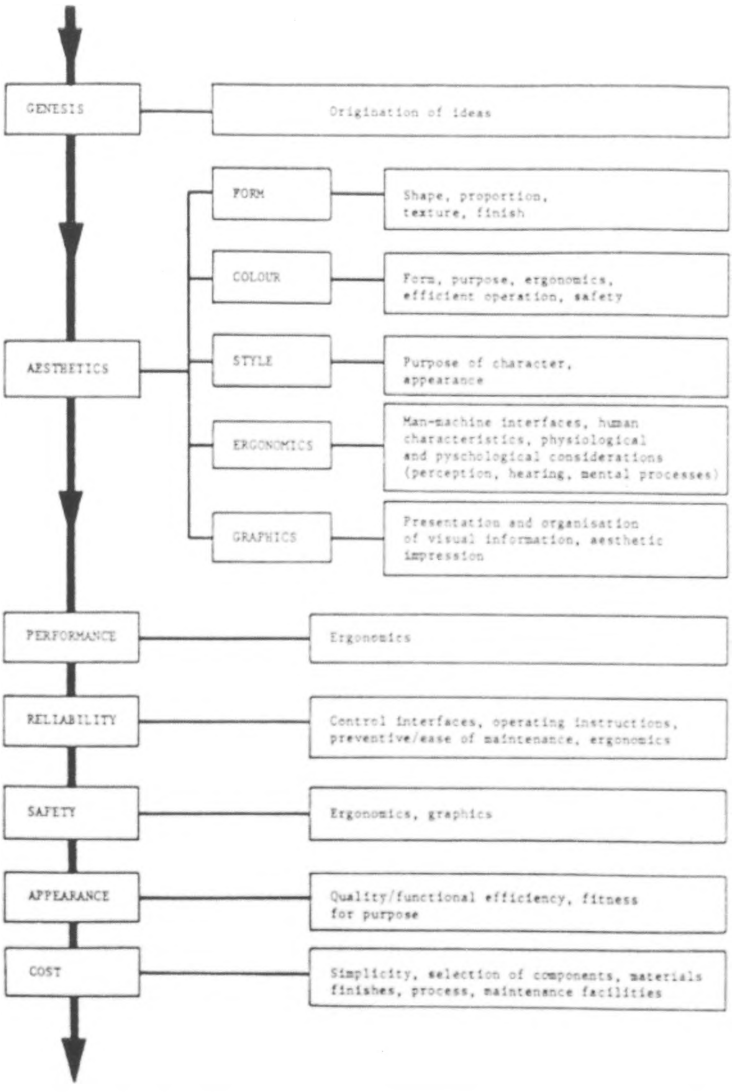

Figure 19 Ewing's design model (1980)

2.3.3. Design consultants

The main objective of most design consultancies is to translate the brand attributes into something tangible, mostly through innovation product design. With the exponential growth of the design profession from 1980, alongside that of other creative industries, a point of 'critical mass' is produced whereby it now takes a prominent public and commercial role. At the same time, this expansion is matched by ever-increasing diversification of its practices. The breadth and heterogeneity of design markets coupled with the need for design consultancies and designers to differentiate themselves from each other mean that it is difficult to ascertain singular

models of design consultancy. (Julier, 2000) In the light of this, two of the most significant design consultants in the UK were analyzed through their design process.

PDD is a design consultancy that specialises in the transfer of knowledge and skills across a wide range of industries such as consumer, telecoms, medical and packaging through product innovation. A subsidiary company of PDD Group called Carbonate is responsible to bring new and innovative technologies to market. The Carbonate team combines commercial skills, market understanding and product design to turn great ideas into real business.

As shown in Figure 20, core skills are at the centre of its business: design, technology and a deep understanding of clients' business and customers. This gives clients access to a new type of innovation partner where understanding human behaviour, creativity and technical knowledge are fused in a single process to deliver outstanding solutions. The vibrant, inventive culture focuses on the full new-product cycle from innovation planning and brand strategy, behavioural research and visioning, detailed design and engineering through to prototyping and manufacturing liaison. Despite the fact that PDD does not present a methodology model focused on brand strategy, the way they describe the process of product innovation seems to be aligned with the forefront of change in terms of developing products that are translations of the brand attributes.

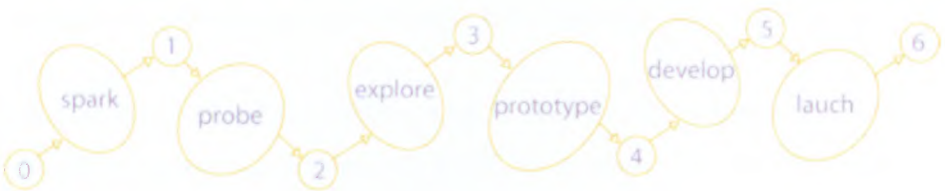

Figure 20 PDD - Design consultant. Model for product development

Another design consultancy with a great reputation in product development and transportation design is Seymour Powell. Their approach is well recognised in developing design strategies for consumer product companies, by helping them to see the future first and act decisively through fusing marketing and design thinking from the outset. They aim to in help companies strike the right balance between the potential of technology, market realities and people's desires, by combining designers' instinct with rigorous analysis and strong opinions. Seymour Powell acts as facilitator to clients in scoping the problem, identifying opportunities and building better design briefs.

It was never easy to define how far design practice should stretch their remit. Nowadays, it has certainly been even more difficult. Design consultants are required to use their design skills not only to translate brand attributes into physical problem, as we see above, but also to solve business problems in a very wide range of industries.

At the cutting edge of this trend is IDEO. IDEO is an innovation and design firm that uses a human-centred, design-based approach to help organizations generate new offerings and build new capabilities. Independently ranked by global business leaders as one of the world's most innovative companies, IDEO aims to create positive outcomes for people and organizations. The methodology applied in developing products and services has four distinctive phases: Observation, Brainstorming, Prototyping and Implementation. (Figure 21)

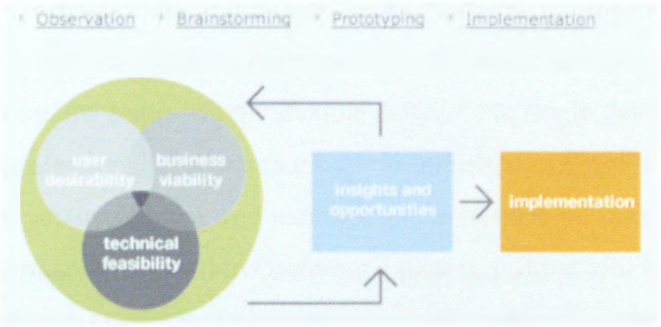

Figure 21 IDEO's model of product / service development

User observations are the starting point for every design program at the IDEO. While Human Factors specialists lead the effort, all designers are seasoned observers of people and how they interact with the world. Engaging with end users throughout the design process to evaluate the desirability of new ideas and possible solutions, IDEO argues is the true way to innovate and therefore create strong customer experience.

The second stage of IDEO's method is Brainstorming. They suggest that at IDEO brainstorming is part art, part science. It is not just a good idea but an inexhaustible source of inspiration and fresh thinking.

The third and perhaps one of the most important phases in IDEO's method is Prototyping. It is described as a problem-solving in three dimensions. You can prototype just about anything — a new product or service, a website or a new space.

Ranging from simple proof-of-concept models to looks-like/works-like prototypes that are practically finished products, prototyping lets you fail early to succeed sooner.

Finally, Implementation completes the cycle of ideation to drive the concept to its final form. All the possibilities have been evaluated, the prototypes validated and refined, and what is left is to do it. The project team performs detailed design and engineering, chooses manufacturing partners if necessary, and works with the client to perform a timely and successful launch.

2.3.4. Design Thinking

Despite being considered the most prominent trend in business, some studies about "design thinking" can be found from the early 1990s. Richard Buchanan (1992) well describes the early stages of the investigations in the area of design thinking:
'Despite efforts to discover the foundations of design thinking in the fine arts, the natural sciences, or most recently, the social sciences, design eludes reduction and remains a surprisingly flexible activity. No single definition of design, or branches of professionalized practice such as industrial or graphic design, adequately covers the diversity of ideas and methods gathered together under the label. Indeed, the variety of research reported in conference papers, journal articles, and books suggests that design continues to expand in its meanings and connections, revealing unexpected dimensions in practice as well as understanding. This follows the trend of design thinking in the twentieth century, for we have seen design grow from a trade activity to a segmented profession to a field for technical research and to what now should be recognized as a new liberal art of technological culture. ...liberal arts are undergoing a revolutionary transformation in twentieth-century culture, and design is one of the areas in which this transformation is strikingly evident.'

More recently, the term design thinking can be found not only as an explanation of how designers work but also in several business publications as the new way of solving problems. The role of design, and consequently designers, has been expanded even further. Designers are now challenged explicitly to help companies explore and visualise directions for their future offering that evoke and support specific qualities of experience. The work of design today is increasing to research skills, creativity, and insight to determine 'what is right to design' in support of business objectives.

Another way to explain creative thinking has been broadly developed by Edward de Bono. In the 1960s Edward De Bono, a British neurologist, introduced the world to the concept of "lateral thinking," a fresh way to think about creativity. De Bono (1971) observed that in attempting to solve problems, most people think "vertically," in a straight line, probing deeper and deeper until the solution eventually presents itself.

In problems involving a creative response, however, he noted that the solution is typically not at the end of a linear thought process, digging the same hole deeper and deeper. Instead, it involves "lateral thinking," digging a new hole somewhere else. Shifting the framework of the process often results in new and creative solutions. (Johnston and Bate, 2003) When everything becomes a commodity what is going to matter is the ability to design and deliver value. That needs creative and design thinking. (De Bono, 2005)

Nowadays, design is not only an activity to translate people's desires in something tangible or even intangible. Design is rather a new way of thinking in order to solve problems in such an array of areas.

As define by Nigel Cross (1992), Design Thinking is the cognitive process that is manifested in design action. It has become recognised as a key area of research for understanding the development of design capability in individuals and for the improvement of design practice and design education.

Those academic thoughts and definitions from 1990s are taking off currently with practitioners who realised how important it is to the sustainability of the business. Recently, Bruce Nussbaum (2007), design editor of BusinessWeek addressed a lecture at Innovation Night at the Royal College of Art. He stated his definition on design thinking and also stressed the importance of changing in the business mentality. He says:

"Design is popular today because Design Thinking - the methodology of design taken out of the small industrial design context and applied to business and social process – is spreading fast. Hate if you will, but I am a believer in Design Thinking. In the world of business, there is no value proposition left for most companies in controlling costs or even quality. All that outsourcing has levelled this playing field. Cost and quality

are commoditised today, merely the price of entry to the competitive game. Design and Design Thinking – or innovation if you like- are the fresh, new variables that can bring advantage and fat profit margins to global corporations.'' (Nussbaum, 26 Jun 2007)

Tim Brown (2005) IDEO's CEO, argues that organizations need to take design thinking seriously. He says; 'we need to spend more time making people conscious of design thinking - not because design is wondrous or magical, but simply because by focussing on it, we'll make it better. And that's an imperative for any business, because design thinking is indisputably a catalyst for innovation productivity. When you bring design thinking into that strategic discussion, you join a powerful tool with the purpose of the entire endeavour, which is to grow.'

Another strong advocate of this type of thinking is Roger Martin, dean of the Rotman School of Management in Toronto. Martin (2006) suggests that it is time for a third-generation management model. Rather than supplementing modern analytical management with design sensibilities, it is time to integrate design into management practice. The job of executives is not to protect designers from line management, but to help line management become Design Thinkers. It is time for the management discipline of Design Thinking.

So we must consider the possibility that if Design Thinking is critical, maybe restricting it to designers and protecting them from business people is not actually the most productive avenue to pursue. Perhaps eliminating the need for protection by turning business people into Design Thinkers would be more effective.

Furthermore, it also can be argued that the role of design is no longer at its most potent at the production end of the (product or service development) cycle, not even during the creative development phase. There is a growing argument that designers need to work right at the front end of innovation as shapers of innovation strategy, participating more fully in the initial phase of bringing new products and services to the market. What a focus on the front end means in practice for the design community is a whole new outlook in which they must target their arsenal of design skills and techniques much higher up the food chain. There have been clarion calls before for designers to behave more like management strategists. But this time they are

not required to jump right over the fence into business consulting. The good news is that it is 'designerly' thinking that is prized at the front end of innovation where the 'discoverers' have decided they need to behave more like designers. (Myerson, 2007)

In contrast with the design thinking way, most of traditional companies and consultancies utilize and reward the use of two kinds of logic: *inductive* – proving through observation that something actually works – and *deductive* – proving through reasoning from principles that something must be. However, any form of reasoning or argumentation outside these two forms is at a minimum discouraged mainly because they are driven by results rather than generating new ideas or ways of thinking. On the other hand, design consultancies generally use a third way of logic: *abductive* reasoning, which can be explained as the logic of what might be. Designers may not be able to prove that something is or must be, but they nevertheless reason that it may be – and this style of thinking is critical not only to the creative process, but also to the entire company. (Martin, 2005)

To create a Design Thinking organization, a company must create a corporate environment in which it is the job of all managers to understand customer needs at a deep and sophisticated level and to understand what the firm's product means to the customer at not only a functional level, but also an emotional and psychological level. It must also create a culture in which line managers are not satisfied with merely serving customers, but insist on delighting them and making them feel the company is their partner, friend, and confidante. (Martin, 2006) Nowadays, design is not only an activity to translate people's desires in something tangible or even intangible. Design is rather a new way of thinking.

2.3.5. Emotional design

"Cars today are almost the exact equivalent of the great Gothic cathedrals: I mean the supreme creation of an era, conceived with passion by unknown artists, and consumed in image if not in usage by a whole population which appropriates them as a purely magical object." Roland Barthes

The fuel crisis of the 1970s precipitated a movement in car design that, from the perspective of the early 21st century, can only be described as bland and lacking in character. While the commitment to ecological awareness did not disappear in the

90s it was joined with a new attitude towards car styling, which believed it was possible to be conscientious and fun-loving at the same time. The principal impetus behind the 'character car' of the 1990s was the recreation, on the part of the manufacturers, that the technological aspect of cars was so refined that customers could no longer make their purchasing decisions on the basis of it alone. Furthermore, it had become virtually impossible to distinguished between different models. Manufactures also perceived that a new emotionalism was entering the world of car purchasing and that consumers were increasing being led by their hearts rather than their heads in deciding on a car. This was partly a result of the increasing number of woman and young people who are making choices about car purchases and requiring cars that were meaningful for them. It meant that the look of the car was becoming paramount and that the symbolic meanings were acquiring a new, exciting challenge to car designers. (Sparke, 2002)

From late 1980s we witnessed the development of a series of 'character cars' as described by Penny Sparke (2002) right above, such as the Nissan's Figaro, which recalled a French car of the 1950s, Ford KA of the mid 1990s pioneering the New Edge look, and VW's new Beetle in late 1990s. All those developments are often cited as synonymous of an emotional design. Therefore, it has been concerned among the designers the importance of being even more emotional when developing any product or service, in special attention to cars.

Gobe (2007) explains that emotional design is visibly sensorial and reaches our emotions faster than any other means of communication, yet it is the most underleveraged of all communication approaches.

The American cognitive scientist Don Norman (2004) has extensively written about the emotional connections between people's feelings and products. He explains that human behaviour towards likes and dislikes in terms of products is subconscious, beneath conscious awareness. Consciousness comes late, both in evolution and also in the way the brain processes information, many judgments have already been determined before they reach consciousness. Both affect and cognition are information processing systems, but they have different functions.

The senses are the fast track to human emotions. The senses speak to the mind in the language of emotion, not words. Emotions alert us to how important the findings of our senses are, not only to our well-being, but indeed to our survival. All of our knowledge comes to us though the senses, but they are far more than sophisticated gatherers of information. The senses interpret end priories. When we feel emotionally connected, we say, 'that makes sense.' The senses alert us, enflame us, warn us, as well as fill our hearts with joy. They have protected and enriched us throughout our evolutionary story. (Roberts, 2004)

Brands need to connect with all five senses, but in a disruptive and sometimes 'explosive' way, suggests Gobé (2007). Sensorial research leads to emotional states that help bring a new set of communications on how people experience brands. There is loyalty to a brand when the brands connect with our senses. A richer and more compelling message can connect profoundly if discovered through all of our senses in a positive way.

What is important today is to engage with realities of emotions. We must work out what they mean to us. How they affect behaviour. And then do something different because of it. Roberts (2004) suggests that marketing people talk about emotions, however in a different way. They present charts and diagrams, even raise their voices and wave their arms, but fundamentally they treat emotion as out-there, felt by someone else and able to be manipulated. Analysing other people's emotions and refusing to acknowledge our own dumps us in the same old rut. What a waste. The emotions are serious opportunity to get in touch with customers, and best of all, emotion is an unlimited resource. It is always there waiting to be tapped with new ideas, new inspirations, and new experiences.

Consumers who make decisions based purely on facts represent a very small minority of the world's population. They are people without feelings, or perhaps people who put their hearts and emotions in the fridge when they are leaving home in the morning, and only take them out again when they go back home in the evening. Although even these people, there is always some product or service they buy based on impulse or emotion. The vast majority of the population, however, consumes and shops with their mind and heart, or of you prefer, their emotions. They look for a rational reason: What the product does and why it is a superior choice. And they take

an emotional decision: I like it, I prefer it, and I feel good about it. The way this works is very subtle. Most of the time before seeing something in detail, you have a sense of what it is. Before understanding, you feel. And making people feel good about a brand, getting a positive emotion, is key. This is what males the difference. To get emotion back into business in this period when cost cutting is king is very difficult. People making decisions are tense, under pressure and rationally is reassuring. But emotions are more rewarding, both in the short and long term. (Levy, M. apud Roberts, 2004)

Some authors have developed models of how to untapped the peoples' emotions through design. Gobe (2007) proposes a program designed to connect the emotional brand meaning throughout all materials and environments where it would resonate with people. He suggests that the three most important emotional connections with consumers, head, heart, and gut. This process has already been tested with the visual program fro Coca-Cola and its visionary progress as shown in Figure 22.

Figure 22 Head / Heart / Gut graphic

Head graphics – Need to make a rational connection and are used in literal communication, brand identity, corporate branding and presentation templates. These are the graphics that need to be visible and recognisable.

Heart graphics – Created to be less about impact and more about contact. They make a connection that is more sensorial and socially connected. These graphics are created to live in social areas, family outings, or sports events. They celebrate the product.

Gut graphics – Created to emotionalise the brand and connect it with youth and the vitality of their lifestyle. You find great gut graphics in sports and music. Those graphics live in a different life, and they bridge the gap between our reality and a higher perception of life. Gut graphics is about bold statements and badge a status. Of course that all of these elements are fitting in the context of the Coca-Cola campaign. It must be adaptable for different case studies.

Often described as a the symbolism of this generation, the iPod's casing and interface were simple and beautiful evoking people's loyalty not only to the product, but also to the company's brand. New users were willing to spend more time exploring and making mistakes than they were when confronted with uglier old MP3 players. The same is true of a Dyson cyclone cleaner, Frank Gehry's Guggenheim Museum in Bilbao, or Philippe Starck's orange squeezer; beauty does not just have to be an aesthetic 'extra' – it helps get results. It is argued that designers take human actions and emotions as their starting point, and then the objects they design will have this magical coalescence of attractiveness and efficacy. What makes us happier works better, and vice versa. Many designers and analysts of human behaviour have been instinctively working with these basic assumptions for some time, and as consumers we have come to expect usability and good feeling from the objects we use, and the things we experience. There is underway a paradigm shift in the way we see design; it is not, as is sometimes suggested, a question of learning to appreciate beautiful forms, but rather one of understanding how beauty, form, function, pleasure and effectiveness can come together. (Benson, Marsh et al., 2007)

Not only the object car but also our driving is affected by new emotions and new experiences on the road as the day wears on. Our feelings towards the car may change too – indeed, these feelings are more likely to be in flux than those we have for most other objects, because we often identify with cars 'somatomorphically'. Somatomorphism is a psychological term for a human tendency to identify with certain objects as if they were alive, animate and conscious – another being, or an extension of ourselves. (ibid., 2007)

The emotional process still in permanent discussion and exploration from varies areas. Emotions are part of consciousness and reflect the complex interaction of mind and body. In the article The design of emotion, Cupchik (2004) suggests that psychologists have always seemed to disagree about the nature of emotion, or in other words, how the mind and body interact. While a unified theory of emotion remains elusive, the main theories can be divided into complementary 'action' and 'experience' orientated groups. The simplest contrast is between top-down and bottom-up processes relating the mind and body in the figure / ground manner.

Top-down processes are typical of the Action mode whereby the mind is the central figure dominating the body as ground. Based on this, it can be argued that in the Action mode, feelings are the shadow of cognition. When the pattern of ideas is coherent, then there is a feeling of calm and pleasure. When the ideas do not fit together harmoniously, there is the experience of tension. In a sense, feelings are almost mechanically related to changes in the context of cognition.

Bottom-up processes are more characteristic of the Experience mode in which the body is focal and the mind serves as a background context. This reflects the body's spontaneous emotional response, as if conditioned, to meaningful social events. From this perspective, cognitions serve as a context for emotions. In the bottom-up model, feedback from bodily states and muscular memories lend coherence to the overall experience, just as form or styles provide an overall structure for an artwork. (ibid, 2004)

2.3.6. Cultural aspects in car design

Cultural aspect is an important factor, if the not on of the most important to consider when designing a car. However, before we explore the meanings and differences in the cultural aspects from different brands and nations we must define what culture is. According to Kroeber and Kluckhohn (1952) 'Culture consists of patterns, explicit and implicit, of and for behaviour acquired and transmitted by symbols, constituting the distinctive achievements of human groups, including their embodiments in artefacts; the essential core of culture consists of traditional (i.e. historically derived and selected) ideas and especially their attached values; culture systems may, on the one hand, be considered as products of action, and on the other as conditioning elements of further action.'

In understanding the concept of culture, three aspects of this definition, are of particular importance: (a) that some of the cultural patterns are implicit; (b) that those patterns have evolved time (historically derived); (c) that these are based on their experience and influence by their environment. This in turn means two things: first, to someone within a country, within its culture, particular traits might no longer be obvious. He or she is so used to them that certain values are built into products without questioning. That is the way they always have done it. At the national level one might want to think of engineering-driven solutions in Germany, with an emphasis on quality and durability, design-driven solutions in Italy, and so on. (von Stamm, 2003)

Despite the International nature of car design, national trends remained in place as well. As exemplified by Penny Sparke (2002), the United States led the way of aggressive, 'macho' cars, rooted in its popular heritage of drag racing and car-customizing, while Japan, with it congested cities, went down the minicar route. The character car, based on earlier classics such as Citroen 2CV, re-emerged in new guises to demonstrate to the public that car could be a friend as well as an enemy. The classics to end all classics, the Volkswagen Beetle and the BMC Mini, were revived to prove to consumers that heroic period of automobile design was not dead but merely sleeping. Paradoxically, just at a time the world was becoming increasingly aware of the motorcar's role in destroying civilization, as we know it, the object itself, in the hands of skilled designers, experienced a cultural revival. By reinvigorating the public's relationship with the automobile, designers, described by the American automotive designer Freeman Thomas as 'cultural architects', showed us that, while scientists, technologists, and politicians were the ones who would have to provide the real answers to the problem of the car, culture can lead the way and show that change is possible.

2.3.6.1. European car design

The automotive industry is often described as 'the engine of Europe' because of its economic and social importance and the historical role it has played in the development of the old continent. The European automotive industry is the leading employer in manufacturing in the EU. The industry fosters economic activity and facilitates mobility, necessary for employment, social and cultural life.

The most significant shift in the history of European car design in the period of post-war was the demise of the coachbuilding tradition in practically every country, except Italy. The changing in car markets in countries such as Britain and France happed because the increased taxation on luxury cars, and the spread of car ownership. Added to these market orientated changes were others deriving from technological shifts in car manufacture, especially the widespread impact of the mass-produced car. The shift in thinking that necessarily came with this re-conceptualization of the car was grasped and exploited by the numerous of the talented Italians who rose to this new challenge. They brought a sculptural approach to car design, a contribution that may be explained as the historical Italian genius is for sculpture. It was a skill that was certainly manifested in car design in the decades after the World War II. (Sparke, 2002)

Italy's appetite for design and its long-established reputation for nurturing some of the world's most exciting designers are world-renowned. Italian style is recognizable the world over, with sleek proportions and racy lines, its sexy-looking modern feel and luxury materials. The design of exceptional cars deep-rooted in motor-racing heritage is what has helped to make such marques as Ferrari, Maserati and Alfa Romeo into the icons they are today. Understanding the theory behind what makes Italian car design so special is more complex. The very careful development of vehicle proportions plays a vital part, together with a through understanding of how different intensities of light interact with surfaces at different times of the day. (Newbury, 2006)

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No feature about Italian design would be complete without considering Ferrari, the legendary supercar manufacturer that has become a symbol of Italy itself. The majority of Ferraris designs over the last forty years have been outsourced to Pininfarina, whose uncanny ability to communicate the Ferrari values of speed, sexiness and handling. Current demand for Ferraris models is at an all-time high. Important factors in a Ferrari's make-up include everything from wheels design though to the way the visual

masses are placed along the car. Lamborghini is another example of the famous Italian car design with a brand born out of the early racing cars. It is now controlled by Audi, itself part of the Volkswagen Group, although Lamborghini tries hard to maintain its association with Italy.

Not only high performance cars are linked with the manifestation of the Italian design. There has been throughout the year a series of developments aimed to city cars, and all the other way of the spectrum from the performance type of the car. Take the Fiat Uno and the Volkswagen Golf, which was designed by Giugiaro as an example. Both were very small everyday hackbacks, widely accepted and sold millions, both set trends that would pervade the whole industry. In this sense, what hangs Italian design together is the ability to connect with the brand values and the fans of them.

Perhaps not as influenced as Palmer in terms of styling, but strongly concerned about the functionality of the car, Alec Issigonis is the best known British car designer because of his landmark design for BMC (British Motor Company): the Mini.
His approach to design is not theory laden, but a piece with his believes in the common sense and abilities of a practical engineer. Issigonis was perhaps the last major motor industry designer to be able to originate new cars in an idiosyncratic and personal way. He never believed that a designer should work in response to market researchers, product planning committees and academic ergonomists, and was lucky to be able to develop his projects with small teams, which he controlled directly. Issigonis's Mini provoke at the time the wide development of a new class of car in imitation, through the reluctance with which other manufacturers followed suit showed that there were high costs in building such a tightly packed assembly of parts. For the consumer, the car was genuinely novel and highly attractive. In production terms it was almost a step too far. (Nahum, 2004)

As example of the Mini, the car design offered an opportunity for individual countries to define their national identities. The growth of the economies in the main countries of western Europe required each nation to distinguish itself both as a means of consolidating a modern identity for its own people and so that it could show a distinctive face to the rest of the world.

France took a lead in this respect and developed a number of cars that were unmistakably 'French' in character. Perhaps the most recognisable example of this time is the Citroen DS showing that the country that had pioneered luxury car styling before the war could the transaction into the world of production cars with equal aplomb. Germany also demonstrated that it understood the important link between a sense of national identity and car design in the post-war years and used its strongly engineering cars and distinctive marques, especially Mercedes-Benz and BMW, to show that it saw itself as a leader in the arena of advanced technological applications and automotive brand development. In order to emphasise continuity with its pre-war pre-eminence in progressive modern design Germany developed a simple, functionalist product aesthetic, which embraced both its cars and its household goods. (Sparke, 2002)

By blending a strong social awareness with functionalism, a strong identity was established through car design in Sweden. Prodigious design efforts have been made since the 1960s by the in-house design departments of export manufacturers such as Volvo, Saab and Electrolux. These have designed cars and household products rooted in the Scandinavian traditions of simplicity and functionalism but also influenced by ever more powerful international trends. As with many other national identities, however, it provided as attractive outside the country as within, and both firm quickly acquired an international following of those who admired the quirky character and the strong reliability and safety features of Swedish cars.

2.3.6.2. American car design

Henry Ford took the first major step towards the emergence of the modern mass-produced car at the end of the first decade of the 20th century. He decided to abandon the workshop practice and adopt instead the moving assembly line. It transformed the manufacturing process and brought into being what we have referred to ever since as 'mass production' on an unimagined scale.

However, Ford was less an aesthetic innovator than someone who understood that utility has its own inner beauty. The appeal of the 'tin lizzie', as it came to be called, lay in its reliability. Ford's famous statement that his customers could have his car in any other colour 'so long as it's black' carried with a promises that, although they

would not get variety. The owner of his car would know that every Model T was as good as every other Model T. (Sparke, 2002)

The point of all cars being painted in black is remarkably misinterpreted, as argued by Stephen Bayley (2007). He points out that it was not a decree intended to limit consumer choice, but a matter of fact response to contemporary technical circumstances. In the days when freshly painted cars were put in the sun to dry, the thermal properties of black made for faster desiccation, which in turn, allowed the metal to be shifted with maximum efficiency and minimum cost.

The first stage of the automotive industry in 1920s, witness market saturation in terms of models produced, mainly by the Ford's assembly line and the strong link with functionality and efficiency leading the philosophy of building cars at the time. In order to maintain unit sales up, General Motors head Alfred P. Sloan Jr. devised annual model-year design changes to convince car owners that they needed to buy a new replacement each year by following the fashion industry model. Thai is the early days of the strategy called planned obsolescence. Sloan preferred the term 'dynamic obsolescence'. This strategy had far-reaching effects on the auto business, the field of product design, and eventually the American economy.

Along with Sloan's views of the new strategy, Harley Earl, designer in charge of this changing, created the Art and Colour section of the General Motors Company. Since he was responsible for the very first concept car - the Buick "Y" job of 1938, which had concealed headlamps and prefigured later Buick design motifs - Earl is credited as being the father of the concept car approach. That was his idea of making a car prototype to showcase. Before this period, a new vehicle's styling, technology and overall design decisions have to be taken by engineers.

Earl saw his contribution to auto design in more general aesthetic terms. He noted that all through his career his purpose had been to lower and lengthen the car, because according to his sense of modern proportions, oblongs were more appealing to the eye than squares.

The move from the discovery of the scientific principles of aerodynamics (the study of the interaction between air and solid objects moving through it) to their application to

automobiles and their influence on the shape of cars took between twenty and thirty years. With the developments towards a more scientific approach, came the need on part of car producers to improve the appearance of their products. That was the begging of the Streamlining styling period. At the time, early 20th century, the evocative shape of the dirigibles airship were pointed to be the reference of the teardrop shape, which was synonymous of speed.

The new car body form came to be characterised by rounded edges, smooth surfaces, and low horizontal profiles. The emphasis was on the elimination of all protuberances such as door handles, fenders, running boards, and vertical grilles. The concept of 'continuous flow' was all-important, as were a rounded front and the tapering rear in the imitation of the teardrop. 'Streamform', as it came to be called, was as much a symbolic aesthetic denoting modernity and progress, as it was a scientific principle facilitating greater speed and efficiency.

Streamlining in the US was perhaps where this style had the most significant impact despite the fact that in the world of production cars, its role was almost exclusively symbolic. In the United States streamlining fired the popular imagination more quickly than in Europe and the custom coachmakers were quick to move into the production of lower, sleeker cars that appealed to a wealthy clientele keen to participate in modern living. (Sparke, 2002)

It is often discussed that car design in the US had its highest or lowest moment in terms of creativity in 1950s. According to the harshest critics, it was a time when car styling was at its most superficial, preoccupied with decorative surfaces and excessive detailing and aimed at a market interested only in acquiring conspicuous status symbol. On the other hand, others describe the period as the heroic age of car styling, when imagination were at their most unfettered and when large-scale manufacturing gave stylists their greatest freedom to create some of the 20th century's most potent icon. Symbolism was at its most sophisticated, and the link between automobiles and contemporary popular culture at its peak.

2.3.6.3. Japanese car design

Contemporary Japanese design is hailed internationally as exciting, innovative and highly desirable. Many of these characteristics of modern Japanese design spring from

time-honored aesthetic principles and practices. The design approach the form and the function of many items that westerns accept as standard are the result of Japan's unique history and cultural development, argues Siân Evans (1991). The physical appearance of contemporary objects matters immensely to the Japanese, as it always has done. Furthermore, Japanese designers actively cultivate the concept of *mono no aware* when creating stylistic alternatives to suit the perceived lifestyle of their chosen customers.

Mono no aware is the key to understanding how Japanese design has made such a massive impact on the West. Contemporary Japanese objects are deliberately designed to attract the aesthetic sensibilities of the consumer and to stimulate the imagination while meeting, indeed exceeding, the technical expectations demanded of them. At a time when professional designers all over the world are attempting to provide efficient and attractive items for the public, Japanese designers and manufacturing companies are increasingly producing technical innovation with an intensely personal appeal.

Until the last couple of decades, cars created by Japanese and Korean, and lately Malaysian and Taiwanese manufacturers have been considered somewhat second-rated in design terms. Although cars from Far East were linked with advanced manufacturing techniques and affordability their reputation, where their appearance was concerned, was for being derivative, unimaginative, and aesthetically unsophisticated. Despite their uniqueness craft and design traditions in areas such as architecture and product design, its car designers seemed unable to translate a similar level of sensitivity into that complexity of the car. Gradually, however, things have changed. The design impact of Far Eastern cars is fairly recent phenomenon and one initiated by the 'retro' movement of the 1980s and 1990s. The roots of the cars emerging from the Far East lie in deeper history with Japan leading the way in automotive manufacture. Several of its leading manufacturers were established in years between the two world wars. Mitsubishi was producing cars back in 1920s while Nissan and Toyota both created cars in the 1930s. (Sparke, 2002)

Despite the fact that Japan became the second largest manufacturer by 1980s after US, design was still not a key issue as very few Japanese cars could be viewed as having any level of sophistication in this area. In this period, however, there was a shift in Japanese car manufacturing as it transferred its energies from production technologies

to considering the market, both at home and abroad. A new emphasis on marketing led to a fragmentation of automobile production, so that small passenger cars were joined by larger ones as well as cars for a specific group of consumers, such as women and young people. Competition from American and European manufacturer lay behind these developments to a certain extent, but the sophistication with which Japan targeted its cars at different lifestyle was based on its deep understanding of the changing market for cars. Before anywhere did so, Japan understood that the car was, in essence, simply another product that could be marketed alongside fashion goods and hi-fi sets. As a consequence, it launched into manufacture of a number of new automobile types, including MPVs (multi-purpose vehicles), SUVs (sports utility vehicles), sedans, microcars, and small passengers cars, in the knowledge that each one would fit a different lifestyle. (idid, 2002)

The usual stereotypical image of the Japanese people is one of polite restraint, of group homogeneity and of a lack of personal spontaneity or overt eccentricity. Indeed, the Japanese regards these characteristics as worthy attributes, but the Japanese also greatly prize wit and humour. The last decade has seen the resurgence of a light heartedness in many field of the Japanese design, and the freedom from physical restrictions afforded by technological advances has led designers to explore more diverse, personal approach to their work. It is as though in recent years the Japanese have begun to reassess their own past and to return to it the values and forms seem appropriate. However, some authors argue that still a sense of reticence about Japan's own experiences in much of mainstream product design, and here the interest in retro styles is largely sublimated into the cult of 1950s Americana. Naturally, one person's idea of humours and sparking wit may not appeal to another, and a particular feature of Japanese 'fun' design that is largely lost on western design community is the concept of kawaii culture. Kawaii means cute or winsome: small babies are cute, but so are dewy-eyed cartoon characters, fresh faced, clean-living girls and cameras whose extendable legs end in diminutive baseball boots. A Nissan spokesman once commented that they have made some mistakes about cars for women in the past. Men often think that women might want cars that are humorous, or coloured yellow or pink. That was a largely mistake. (Evans, 1991) Nissan's response to this new initiative is the development of 'cute' car concepts without specific gender. Perhaps the greatest example is the Nissan Figaro which is a small retro car manufactured by Nissan using the underpinnings of their Micra supermini.

The area of transportation design is the most difficult to relate to traditional Japanese cultural values as the product was so clearly imported wholesale from the West. Many of the characteristics of Japanese cars in the 1960s and 1970s derived, however, from the problem of approaching this complex, high technology object from a Japanese perspective. The Japanese love of rectilinearity has already been mentioned, as has the tendency to concentrate on visual details rather than the overall form. These perceptions made it difficult for Japanese car designers to find a comfortable starting point for the development of an indigenous car aesthetic. Instead, they concentrate on what they did the best in the post-war years: high efficient and cost-effective mass production, the prominence of advanced technological details in products, and intensive marketing. In all these areas the Japanese car industry has succeeded and, as result, Japanese models can now be found anywhere, competing with models from other countries on price, on efficiency and, above all, for their high technology extras. What happened in recent years is that the stereotype of copy culture and poor design skills has changed and we can find some Japanese brands as one the most appealing in the marketplace.

2.4. Trends and forecasting

How can companies be prepared for future changes? How can they anticipate and capture requirements for future products and services? Do customers know what they want and what their futures needs are? No matter how risky future planning is, without a vision companies can be shocked by the unexpected.

Without having a product planning strategy that prepares for the future, companies can be left behind and fail to deliver new products, as demand for their current ones dries up. Most of changes are incremental, which means that designers have great scope to improve aesthetics, functionality and performance as well as manufacturing processes. Forecasting tools and methods exist from scenario building to brainstorming to anthropomorphic studies, but it is the interpretation of the information produced that will separate out the future winners from the losers. Nonetheless, companies that invest in future developments are likely to turn their 'dreams into realities'. (Bruce and Bessant, 2002)

Among the many new trends to emerge recently, one of the most striking is the huge number of people spotting emerging new trends. We have always tried to avoid the shock of the new by anticipating it. It has gone the time when the fashion industry set up its trends by attending the industry's key trade fairs and catwalk shows and coming away with a series of sketches or complimentary kit of trends boards, with appropriate fabric swatches attached. But increasingly the industry is moving away from this rather inaccurate and intuitive model of trend prediction and onto more ethno and sociographic versions. These us a range of marketing tools, observation methods and techniques to underpin the look and lifestyle of an ever increasing number of brands and labels we are encountering on a daily basis.

To do this properly, Bruce and Bessant (2002) note that trend prediction agencies 'braille' the culture – as in reaching out to touch, feel and sense its emerging subcurrents. This, for the moment, and the immediate future is about glamour, irony, optimism, retro power dressing or the idea that we are living a twenty-four-hour day. A core of extreme trend can boil for a year before the mainstream even gets wind of it. In many cases, this trend waves began as social-artistic experiments, blue skies research, or as ideas that started on the counter-cultural periphery and worked their way in to become part of the accepted mainstream. How we find out about these things, and how they are subsequently catapulted into the greater culture, is what trending is really about: not seeing into the future, but searching the present for potentially viral items that are set o infect and pollute tomorrow's fashioscapes.

Trend researchers scan cultural contexts, and travel the globe for early signs of activities that may become seminal, trying to identify major trends that brand leaders and designers need to know about and incorporate into their design philosophy. Futurologists, ethnologists, cultural analysts, lifestyle consultancies, all eschew an instinct-only approach to trend analysis in favour of a more scientific approach to lifestyle predictions. As an example, the most prominent trend research company in the UK is The Future Laboratory; in the US Brain Reserve is led by famous futurologist Faith Popcorn.

von Stamm (2003) explains that this scientific approach are linked to some techniques from market research. There are basically two different approaches: quantitative and

qualitative. The former involves surveys and questionnaires, the latter interviews, focus groups and observations.

Traditional approaches to market research all have one thing in common, they are based on asking the consumer what he or she wants, through the collection of either quantitative or qualitative data. Under the quantitative research we find different distribution methods of survey and questionnaire: per mail, over the telephone, in person, either in home or office, or 'on the street' and more recently, via e-mail or on the Internet. The three main qualitative market research methods are interviews, focus group and observations, or in fact, a combination. Qualitative approaches have the advantage that they generate a deeper level of understanding of consumer needs and viewpoints. However, artefacts such as drawings, prototypes, or the finished product can be used for either. In both cases, the reliability of the data will vary from industry to industry, and with varying user groups.

According to Rogers (2003) the group of people responsible to diffuse the trends are divided in some clusters. Innovators are those people who see new ideas and adopted it. Early adopters are those who are as fashion orientated and adapt things to suit them. Then, we have Late adopters, the high street mainstream who need to be reassured that what they wearing, in case of clothing of course, is not too outlandish or likely to go out of date so quickly they will not get enough wear out of it. Finally come the Laggards, who talk about clothes rather than fashion and who believe that clothes are about looking presentable and never worn to stand out. A more in depth analysis of all categories from Everett Rogers (2003) theory will be discuss in further in this thesis. This theory and trendsetters classification were used to recruiting people during the field research. It is surveying these groups that the new generation of trend consultancies get a feel for how a specific trend is set to move and trickle through the culture.

Gladwell (2000) presents these categorization in three specific types of people: mavens, connectors and salesmen. In short those who know (marvens), those who pass the idea on (connectors) and those who sell ideas in ways that are more culturally and socially acceptable. The way of some trends happened from counter-culture to mainstream is true for all areas, not just fashion, but design in most broad way, technology, and art. In fashion terms then it is easy not just predict the next big trend,

but get it right; we know that chartrooms, bulletins boards and target youth groups are live with the re-emergence of the brand as king. We know too that it is a lifestyle issue rather than a fashion one. We know that words and phrases like ethical responsibility are in the air, ditto sustainability, accountability, the hollow corporation, relationship selling, so the next big trend must surely be towards the citizen brand concept or trend, product, looks or ideas that reassure us.

The great indicators are there, on the cultural periphery. It is only a matter of seeking them out, not guessing them out. A case of applying science to the requirement of futurology, along with instinct, intuition, and a broader appreciation of things from other aspects of our roots. (Bruce and Bessant, 2002)

Kelley and Littman (2001) suggest, similarly to Bruce and Bessant (2002), that in order to know what is next in term of trends, it is not purely a matter of guesswork. Know enough futures and it is a little putting together a puzzle. However, if you really want to know what tomorrow holds, seek out the early adopters and make a camp at the ground zero. Every industry has its spots, places where the buzz is, where you make connections and hear the latest. Yet it is not always so obvious. Observing and listening are crucial, as well as finding the leader users and quirky enthusiasts is even more essential.

They also suggest some guidelines of how to make connections with near-future ideas. Those connections, especially with early adopters, help companies to uncover also clues to more distant future, things they can build and services they can roll out within a year or so. One of the techniques presented by Kelley and Littman (2001) is a movie trailers. The goal of doing a short video is to capture the essence of the project, the heart of the emotional experience you are seeking in a product or a service. It is a visual prototype that can be as short as thirty seconds, but with a high potential insights.

An interesting way to get a broad sense of the distant future is the science fiction. Think how great writers such as George Orwell's (1949) 1984 book and Aldous Huxley's (1994) Brave New World have influenced our worldviews. Arthur C. Clarke (1980), who wrote The Lost Worlds of 2001, predicted communication satellites decades before they were invited, and neatly framed the dilemma we face today in

making our machines ever smarter without threatening our humanity. Neal Stephenson, author of Snow Crash (1993) and The Diamond Age (1995), seems to be on of today's hottest sci-fi writers, spinning out visions of future societies. However, you must keep your eye out for them yourself in bookstores, theatres, and on the web and separate the pulp and the prophets on your own.

Several are the futurists who make a very handsome living tracking trends and emerging technologies. Unfortunately, that is the easy part of the future game. With no doubt, the toughest job in trend market is filter and interpret all the information and ideas and knowing or having a gut feeling of which futures are going to come true. That is why, perhaps the most traditional way to look at the future trends still the market research. Market research tends to be an important part in a company's armour to develop and verify new products and services. Not least because best practice literature has shouted for years about how important is to meet consumers' needs for a product to be successful. Most companies translated this into the need to conduct market research and involve consumers throughout the development process. However, what managers need to be careful about is what kind of approach to market research they take, and how much they let results influence their decision. Particularly in the context of innovation, there is a considerable problem with market research: if you ask people what they want, they will refer to something they are familiar with. It is important to understand the limitation of market research, and more importantly, to understand the need to match the approach taken to market research with the development aim in mind.

2.4.1. Trends in branding

Interbrand developed a survey to assess the current and future trends in brand management (Figure 23). The survey was made available to branding experts and industry opinion leaders via the leading website on branding, brandchannel.com. This first annual survey explores a range of questions regarding the industry and the practice of branding. The experts could express in their own words what they believed to be the most critical aspects of successful branding. Consistency was far and away the most cited practice. This represents a uniform presentation of the brand externally and across touch points. The experts cited Understanding of Customer/Target frequently. This mirrors the finding in this report that metrics and brand research are

key tools. Communication and Creative effectiveness were also frequently mentioned as critical aspects of successful branding.

Aspects of Successful Branding	
Consistency	36.0%
Understanding of Customer/Target	18.2%
Message/Communication	14.7%
Creative/Design/Brand ID	12.8%
Relevance	12.4%
Differentiation/Uniqueness	12.0%
Key Stakeholder Buy-In	10.9%
Positioning	9.7%
Clarity	8.9%
Connection to Customer/Target	8.9%
Awareness/Recall/Memorability	8.1%
Focus	7.0%
Authentic/Truthful/Honest/Accurate	7.0%
Leadership	5.4%
Budget/Cost	4.3%
Strategy	3.5%
Product	3.5%
Research	3.1%
Innovation	2.3%
Simplicity	2.3%
Delivering on Promises	2.3%
Public Relations	1.6%
People	0.8%
Marketing	0.8%
Advertising	0.4%
Other	93.8%
Total	290.7%

Figure 23 2007 Interbrand's Annual Survey on Brands and Branding

The benefit of envisioning a distant future is that it enables managers to consider what role the brand needs to play to bring about this future. The core to envisioning a new future is to move the focus away from re-engineering and restructuring the organization to reinventing markets and acting in a different manner. New brand strategies are required which are not about better returns on investment through cutting costs, nor about better returns through efficiencies gained by re-engineering value adding processes. Rather, they are about superior returns through thinking differently and reinventing markets. (De Chernatony, 2006)

2.5. Experience economy

Over the last two hundred years, we have witnessed a shift from an Agrarian Economy based on extracting commodities, to an Industrial Economy based on manufacturing goods, to a Service Economy based on delivering services, and now to an Experience Economy based on staging experiences. Nowadays consumers increasingly desire neither goods nor services but sensation-filled experiences that engage them in a personal and memorable way. That is why there has been so much attention to the experience side from the purchase decision process to the usage of the product or service. In terms of transportation, people still waiting the point of some other industries have already reached.

When experiencing products, people's emotions are trigged through the senses, through knowledge or expectations, as well as through an established connection with a product or service over time. Our experience with a product evokes an overall emotion or impression. Our association or reaction to it fosters the emotional response we develop towards a product, service or brand. Givechi and Velázquez (2004) call these series of connections and responses as a Positive Space.

The positive space represents the sum of its physical attributes plus its intangible essence for each of its users. It is the space where what the product offers and what people expect to meet and to interact, forming a new and ideally strong relationship. The intangible essence of the positive space on the person's sensory experiences, memories, moods, preferences, skills, goals lifestyle and rituals

In terms of transportation, passenger journeys in cars, on buses and coaches, aboard subways and trains, in aeroplanes and boats, should be much more enjoyable experiences, rather than ordeals. Issues of maintenance and durability may necessitate a more utilitarian design approach to that of the private car, but if anything the design challenge is greater and more complex. Due to advances in ergonomics, materials, lighting and communications, passengers need no longer be trapped in a static environment. Journey time can now be part of the working day. Commuters can talk on the phone, send emails and be highly productive on their way to work or foreign appointments. The negative side of such advances obviously includes annoyance to fellow passengers, so designers are increasingly generating techniques to zone areas for privacy and concentration. Perhaps our most memorable journeys are for pleasure.

Many critics lament the lost romance of air, sea and train travel, although access to such privileges was restricted to the affluent few. (Evenden, 2007)

However, in any different levels of economic situation, customers are looking for services experiences that complement their lifestyles, and brands that say something about their aspirations and desires. Put these two things together and you have a truly brand customer experience. The benefits of an organization are enhanced by loyalty, higher profit margins, and increased share of spend. As an example, the total cost of the coffee in a £2.25 cappuccino may only be 18p. However, what you are really paying for is the experience of having a coffee in a comfy environment listen to a nice music and so on. (Smith and Wheeler, 2002)

Tim Brow (2005) explains how narrow some companies may see the route of a total experience: "Very often, you can build an entire strategy based on the experiences your customers through in their interactions with your organization. Service brands have a horrible habit of focusing on the one interaction where they think they make money. If you're running an airline, there's an awful temptation to focus all of your attention on what it's like to fly a particular route on a particular aircraft. In fact, you can track backward and forward a whole series of interactions that consumers have with you that are very relevant. If you start to map out that entire journey, you begin to understand how you might innovate to create a much more robust customer experience."

Kapferer (2004) exemplifies the essence of a good experience must be 'the embodiment of all brand values in 3D'. Anyone who has visited a Nike Town cannot forget this experience. The same holds true for the House of Ralph Lauren, for Ikea and for Virgin Megastores. These places deliver a memorable sensual experience. In developed countries, people have met their needs, and are now looking for exciting experiences. This creates a new source of growth: increasing experiential benefits. The concept of experiential marketing has not emerged by chance over the past few years. Consumers in developed countries and mature markets try to build thrills into their existence. This is why, for instance, they love to patronize thematic restaurants and amusement parks and want to discover New World wines. Through these consumptions, their minds and senses are stimulated. They live differently through the product.

Marketplace is increasing in product and services uniformity. Some companies stand out for their individuality and their passionate pursuit of creating not only a product experience, but also an entire experience throughout all touch points between the company and the customer. In each sector there are products brands that differentiate themselves and attract a loyal, and in some cases, evangelical following of customers. Sometimes this is simply because the product is perceived o perform better, as Dyson vacuum cleaners, or because the product is enjoyable to use or even cool like most of Apple products, or even further because not only the product, but the brand as well provides a desired lifestyle for a specific target audience like Harley-Davidson motorbikes (Figure 24). (Smith and Wheeler, 2002)

Figure 24 Harley-Davidson lifestyle

One distinction that is often made between product and a service is that the customer is actively engaged in experience in a service but only acquires and uses a product. Things change and the world of neat definitions also changes.

One way to determine what business you are in is to consider what you charge for: If you charge for raw materials, you are in commodities; if you charge for physical things, you are in goods; if you charge for activities you perform on behalf of another, you are in services. However, if you charge for the time people spend with your product or service, then it is fair to say that this is an experience driven business. Today, consumers seek to spend less time and money on goods and services, but they want to spend more time and money on compelling experiences.

Ollins (2006) argues that the motor industry gradually began to understand the importance of the experience through good service. He argues: "It's all about service. If I sit in a motorcar company in France or in Germany, I'm surrounded by the product, by engineers, by designers... I'm surrounded by people making the product, so I'm obsessed by the product. But if I'm a customer, I'm not obsessed by the product. I'm very pleased with the product... and that's all about. It's not about me, or the product. It's about the services."

That way of thinking is a quite hard for an organization that has spent entire life making products. It requires a massive change in the culture of the organization, but they have to do it. That is perhaps why some of carmakers have been investing in new ways of presenting themselves to customers. More recently, companies are discovering that by using the retail channel not only for dealerships to seal the deal with customers, but also for promoting their brands from creating museums that celebrate the magic of past models e allowing to experience the brand intensively. Two outstanding examples of this practice is VW Autostald in Wolfsburg, Germany and Mercedes-Benz World at the historic Brooklands Circuit in Surrey, UK.

VW's theme park presents a general perspective of Volkswagen group and the unique identity of each of its brands through the brand pavilions. In their architecture alone, each is a statement of the respective brand philosophy drawing the visitor into its interior. The pavilions are designed to allow visitors to walk through and experience all brands of the Volkswagen group.

Mercedes-Benz World in Brooklands (Figure 25) offers driving experiences on five purpose-built courses, from learning advanced skills with qualified instructors to feeling the thrill of an AMG. Uniquely, Mercedes-Benz World offers driving lessons to anyone over 1.5m tall. This means children as young as 8 or 9 can drive on part of the original Brooklands Circuit. The enphasis is on taking the guesswork out of choosing a new car, so visitors will be able to view no fewer than 100 examples, including every model and colour in the Mercedes, Mercedes-AMG, and Smart ranges, as well as Maybach and Mercedes-Benz SLR McLaren models. A brand gallery and special heritage trails tell the stories of landmark Mercedes models past, present and future, and of the rich history of the oldest car company. One highlight is the immersive

factory experience in which the visitor 'travels' along a virtual production line. (Anonymous, 2006)

Figure 25 Mercedes-Benz World - Brooklands in Weybridge UK. Offers a unique brand experience.

BMW has also been investing in new ways to make customers and also employers experiencing the brand. The new BMW plant in Leipzig was designed by the London-based Zaha Hadid and built what is now considered one of the most interesting modern architectural works. She described the building as "a powerful vision of a mobile society". The Central Building is the active nerve-centre or brain of the whole factory complex. The mixing of functions avoids the traditional segregation into status groups that is no longer conducive for a modern workplace.

The new BMW Museum is part of the new brand experience at the Munich site being created in the direct neighbourhood of the group headquarters and the Olympic Park. At the BMW Welt - the group's new experience and delivery centre - as well as in the new BMW Museum, and as part of the new plant tour, visitors can experience the full fascination of the BMW brand.

This new paradigm of creating an emotional-driven space is about brands embracing people's needs rather than a passive approach. It is about allowing the customer to play an active role while the brand plays a more passive role, that of creating an inviting, emotional place that the consumer can discover on his or her own initiative. The idea is ultimately to create something of value and meaning for the consumer, something that will be a contribution to the consumer's life. The idea is nothing short of creating a humanistic brand heaven that reflects people's values and allows them o feel at home and experience a moment of relaxation from the harried demands of their lives. (Gobé, 2007)

2.5.1. Morgan's experience

Product experiences are not all about being high-tech. As an example, I would like to illustrate a personal experience of visiting Morgan Motors in Malvern Link, UK. Morgan welcomes visitors and customers into their premises in order to make them part of the process, and consequently promotes a memorable customer experience, through interaction with craftsmen, understanding product methods and materials, and seeing the product itself take shape.

In the early days of the last century, Mr H.F.S. Morgan started up a small car factory in Malvern Link, Worcestershire – UK, to produce a rather innovative three-wheeler car. Such an innovative product was produced until 1953. Nowadays, The Morgan Motor Company still producing cars in the same way they have done in the early days. Every single car has been produced as a unique piece of art by mixing a tradition of the earlier coach building skills, using the famous ash frame, and aluminium panels modelled by a highly skilled metalworker's hand (Figure 26). (Puchaski, 2005)

Figure 26 Hand crafted Morgan classic range 2008

Until recent changes were made to the Morgan production process, the aspiring owner could wait for more than five years for their car to be delivered due to a strong demand and limited supply of these handmade cars. So the question is: why would anyone spend so much and wait so long for a car that is, by any rational analysis, hopelessly outdated? The answer is simple: because the experience. What other sports car brand allows you to wander around the factory unescorted and speak to the craftsman hand beating the panels for your car or chat with the lady who is sewing the leather panels for your seat; or, when your car is finished after about three months, visit the factory again and to take personal delivery from Charles Morgan, the owner and grandson of the founder, and be presented with a photographic record of each stage of the build? Owing a Morgan is more about the ownership experience than the product in a way that modern sports car driver might find hard to understand.

This raises an important point. Branded customer experience is at their most powerful when they are designed to meet the needs of clearly identified target groups. The fact is, the Porsche and Morgan owners are likely to value vary different things from their automotive experiences. Because of the quality improvements and the huge cost of development, cars are becoming increasingly alike. We are fast approaching the point when the only true brand differentiation will be the ownership experience.
In this process, those experiences are become more memorable when it is combined elements of product, process, and people into one seamless experience. (Smith and Wheeler, 2002)

2.6. Innovation

Innovation is a subject with a high importance in the course of this research. Whether this coming from theoretical source or from practice experience, innovation matters for every stage of the design and branding process.

Gaynor (2002) in his book, *Innovation by Design,* defines innovation as invention plus implementation/ commercialization. Invention involves the process of taking an idea and developing it into a concept, which finally leads to an innovation.

Innovation is the brand's oxygen, as well as the key to its growth and future proofing. It is about time this fact was fully appreciated. Curiously, however, most books or brands hardly mention innovation, as though the brand was first and foremost a

communication issue. Remember that the brand has its beginnings in innovation. The brand is the name of an innovation that has succeeded and conquered the market. After all, at the birth of any brand, in the absence of recognition and image, one thing alone is capable of convincing retailers and opinion leaders: the innovate nature of the concept or product. Not only did this not exist before, but in addition, the concept or product appears to satisfy a real, strong expectation which had gone unheeded until then: it become obvious on first sight of the product or concept. (Kapferer, 2004)

Several areas have already discussed the importance of innovation in our society. An American sociologist, Everet Rogers (2003) developed in the 1950s the 'Diffusion of Innovation'. In his book he describes: " Innovation is an idea, practice, or object that is perceived as new by an individual or other unit of adoption. It matters little, so far as human behaviour is concerned, whether or not an idea is "objectively" new as measured by a lapse of time since its first use of discovery." even further he explains: "The perceived newness of the idea for the individual determines his or her reaction to it. If as idea seems new to the individual, it is an innovation."

A different approach to innovation, based on principles of business, design and creativity can be found on Betina von Stamm's (2003) book. She argues that creating an innovative company requires more than understanding the design of an efficient new product development process, more than how to write innovation into a company's strategy document, and more than maintaining an active research and development department. As suggested by von Stamm (2003) innovation, design and creativity need to permeate every aspect of an organization. It is the uttermost important to be aware that creating a more innovative organization is much more about changing one's frame of mind than it is about a changing the company's processes or vision statement. Innovation, design and creativity have to do with curiosity, a taste for experimentation, dissatisfaction with the status quo, and the desire to continually improve things. However, very often the meaning of innovation and creativity are misinterpreted. von Stamm (2003) argues that creativity and implementation, are the two components of innovation.

Implementation can also be described as putting ideas into practice, is made of three aspects: idea selection, development, and commercialization, and of course creativity is needed here too. What do organizations need to achieve implementation? They

need process, procedures, and structures that allow the timely and effective executions of projects; implementation is about team effort. But even companies that have all the right processes, procedures and structures in place are often unable to be innovative.

If implementation is putting an idea into practice, creativity is coming up with the idea in the first place. Creativity is essential part of innovation, it is the point of departure. One of the big concerns for many companies is therefore how to generate more and better ideas, in other words, how to become more creative.

It is suggested by Kelley and Littman (2001) that we all have creative side, and it can flourished if you spawn a culture to encourage it, one that embraces risks and wild ideas and tolerates the occasional failure. The levels of risk accepted by the executive leaders of the organization define the level of innovation that a company is willing to commit to. (Sylver, 2006)

Thus, Bettina von Stamm (2003) summarizes explaining that implementation is about being organized and about the methodological and systematic approach of a 'hare brain'. It needs to be structured and cannot be left to chance. Time is of the essence – you need to be fast. Creativity, on the other hand, is less straightforward than implementation, it is not about a new process or establishing a new structure. In order to be creative people have to think differently. To be innovative people have to behave differently. And to be successful organizations have to employ people that think and behave differently. Creativity is about being different, think laterally, making connections. Creativity can be encouraged, not forced. Time is of the essence too, but in as much as creativity cannot be rushed, you need to allow it. Organizations that want to embrace innovation therefore need to find ways of reconciling the tension that lies in the juxtaposition of creativity and implementation. Innovation then, is a frame of mind.

Kelley and Littman (2001) approach innovation in a less structured way. They describe as: "our 'secret formula' of innovation is actually not very formulaic. It is a blend of methodologies, work practices, culture and infrastructure. Methodology alone is not enough." The detailed method is explained in section 2.3.3 Design consultants.

Technically, "innovation" is defined merely as "introducing something new." There are no qualifiers of how groundbreaking or world shattering that something needs to be; only that it needs to be better than what was there before. (Sylver, 2006)

However, there has been some confusion between what innovation and evolution mean. As suggested rightly by Sylver (2006), see above, that 'innovation is introducing something new (to the market)' is not enough to define the real meaning. Today, innovation is about more than new products. It is about reinventing business processes and building entirely new markets that meet untapped customer needs. Most important, as the Internet and globalization widen the pool of new ideas, it's about selecting and executing the right ideas and bringing them to market in record time. In the 1990s, innovation was about technology and control of quality and cost. Today, it's about taking corporate organizations built for efficiency and rewiring them for creativity and growth.

As it was discussed before, innovation has been overused to describe from new process to a new product, not necessarily a true innovative one. Not surprisingly, given all the hype, a period of disillusionment about innovation appears to be setting in. According to the 2007 BusinessWeek-Boston Consulting Group annual survey of senior executives, just 46% of respondents said they were satisfied with their return on innovation spending, down from 52% last year. Perhaps due to their disappointments, executives are making innovation less of a priority: Just 23% of respondents called it their top concern in this year's survey, down significantly from 32% last year. James P. Andrew, a senior vice-president at BCG who leads the firm's innovation practice, believes the results reflect what he calls innovation fatigue. "When you talk with people who have been at this a while," says Andrew, "they'll tell you it takes years. It's rewiring the company." (McGregor, 2007)

The leaders of companies on this year's BusinessWeek-BCG list of the World's Most Innovative Companies recognize that developing breakthrough products, revamping operational processes, and coming up with new business models does not happen overnight. Instead of relying on gimmicks or incremental line extensions, they are working to build organizations that are capable of sustained innovation. They understand that requires taking risks and investing for the long term. And they focus on

the things that really matter, such as hiring the most talented employees and providing them with the environment they need to thrive. (ibid, 2007)

The results of this survey clearly illustrates that how concern managers are becoming with the overused term of innovation. For most of the companies, the greatest challenge of innovation is not a lack of ideas, or creativity but rather, successfully managing innovation so that it delivers the required return of the investment of money, time and people. It is part of the nature of innovation process that cash is not always produced immediately. However, Andrew and Sirkin (2006) point out several intangible benefits that the company might think it is difficult to capture, but nevertheless still very valuable. There are four of them:

• Knowledge: The innovation process always produces knowledge.
• Brand: innovation can enhance a brand, thereby attracting more customers and enabling companies to charge a premium.
• Ecosystem: Innovators can create exceptionally strong ecosystems of partners and associated organizations.
• Organization: People want to work for and contribute to innovative companies, and being innovative allows companies to attract and retain more of the best people.

2.6.1. Tools of innovation

Leading companies continuously seek out and institutionalize the insights and tools they will need if they are to stay at the leading edge and be top-rated stars in their sector. Some companies build enduring capacities for breakthrough innovation. They find ways to circumvent the years, if not decades, it can take to move from invention to commercial exploitation of a new technology. They manage the associated risks and continuously enhance their ability to solve the complex engineering and business process design problems that would otherwise place limits on their ability to envisage, and then create sustainable value from, the next generation in their industry. Far from a sporadic creative event, leading organisations, whether product or service centric, treat innovation as a systemic and systematic process.

Tom Kelley (2001), general manager leading design consultancy IDEO, describes how innovative teams immerse themselves in every possible aspect of a proposal for a new product or service. For IDEO, research from the perspective of clients, consumers and

other critical audiences is central to innovation. IDEO has institutionalised a *process* for innovation – from creating hot teams, pioneering ways to see through the customer's eyes, unique brainstorming methods and rapid prototyping.

For cool and fast IDEO, whose mottos include "one conversation at a time", "stay focused on the topic", "encourage wild ideas", "defer judgment", and "build on the ideas of others", the innovation process is a blend of methodology, work practice, culture and infrastructure. Shadowing, behavioural mapping, consumer journey, extreme interviews, storytelling, deep dives and body storming are a few of the terms IDEO personnel use to describe what they do.

One of IDEO's most useful creativity tools is the Tech Box, a combination library, database, Web site, and organisational memory of parts, mechanisms, and materials. As IDEO's innovators discover new technologies in one industry, the Tech Box allows their knowledge to be distributed throughout the company so that it can be applied on projects in other industries. The Tech Box really is in daily use. It's a creativity amplifier for IDEO and customers. And IDEO has created specialised Tech Boxes for their clients as they become aware of the central role of knowledge management in innovation.

Method cards are one tool IDEO use to help explore new approaches not only in the design process, but also in any kind of problem solving. They are used to take a new view, enhance creativity, communicate among a team, avoid a roadblock or turn a corner. IDEO have hundreds of techniques they employ during their total immersion in the process of innovation. (Smith, 2005) Here are four:

Card sort: On separate cards, name possible features, functions, or design attributes. Ask people to organise the cards spatially, in ways that make sense to them. This helps to expose people's mental models of a device or system. Their organisation reveals expectations and priorities about the intended functions.
Scenarios: Illustrate a character-rich story line describing the context of use for a product or service. This process helps to communicate and test the essence of a design idea within its probable context of use. It is essentially useful for evaluation of service concepts.

Still-photo survey: Follow a planned shooting script and capture pictures of specific objects, activities, etc. The team can use this visual evidence to uncover patterns of behaviour and perceptions related to a particular product or context.
Character profile: Based on observations of a real process, develop character profiles to represent archetypes and the details of their behaviour or lifestyles. This is a useful way to bring a typical customer to life and to communicate the value of different concepts to various target groups.

Bruce Mau (2004) argues the old fashion the notion of an individual with a dream of perfection is being replaced by distributed problem soling and team based multi disciplinary practice. The reality for advanced design today is dominated by three ideas: distributed, plural, and collaborative. It is no longer about one designer, one client, one solution, and one place. Problems are taken up everywhere, solutions are developed and tested and contributed to the global commons, and those ideas are tested against other solutions.

However, for decades companies pursue development activities, either a new product or a new strategic direction within their own boundaries. Collaboration seems too risky, and if a company decide to collaborate, this would generally manifest through a merge or acquisition, as it happens in the 1990s mainly. von Stamm (2003) quote a survey undertaken by Innovation Exchange in 2002 that a trend (at that time) towards collaboration found out 37% of participating firms indicated that they were currently collaborating on small percentage of their projects with direct competitors, and in the future as much as 49% envisage this form of collaboration.

Crossley (2003) points out that in recent years, many companies have experienced problems trying to build effective multi-disciplined teams around a shared vision. Collaboration can be problematic; communication across disciplines and designers joining research too late in the process has been noted as a challenge to effective integration of users experiences. That is frustrating for everybody involved and often leads to situations where insightful research leads to 'sour' design. In the process of product development, traditionally, researchers have the contact with user/consumer and then pass relevant information to the design team, which is usually in word-based format. The design team then tries to use this information as inspiration to inform new ideas. Pigeon-holing people in traditional roles of researchers doing research,

designers creating ideas, users using things and consumers buying things limits their ability to what and how they contribute. Much opportunity and time is lost between key members through strict boundaries on how they participate. Moreover, a more useful process requires a blurring of roles and boundaries in which discoveries, creators and people contributing flitting in and out of roles, but dismissing individuals' core skills.

The suggestion is that anybody can creatively contribute to the process of seeking insight and inspiration. Partial adoption of these three core areas builds empathy: the designer appreciates a more structured approach to research and their role within the development of tools to gain inspiration; the researchers empathizes with how to findings should contribute to an inspirational outcome and everyday people are given frameworks to express their feelings and ideas. (Ibid, 2003)

Besides the demand for empathy, Johnston and Bates (2003) suggest that collaborative working environment must encourages everyone to "build on" or help improve any idea or concept that has been created. By the time the concepts are fully developed, many of the participants have their fingerprints on them and feel part of their development. This is not an environment where anyone tries to push a personal agenda or pet project. It is not one of internal coalitions or behind the scenes manoeuvring for support for different positions. Ideas are created from new information and insights that the team discovers together. At the inception of the initiative, the canvas is blank. Through collaboration, the team creates the mosaic of the future together. Collaboration is a critical element of the development process.

2.6.2. Methods to achieve Innovation

According to Everett Rogers (2003) in his book Diffusion of Innovations, the process of an innovation consists of a sequence of five stages divided basically in two phases: Initiation and Implementation as shown in (Figure 27) His studies have shown that later stages in the innovation process cannot be undertaken until earlier stages have been completed, either explicitly or implicitly. The first two of the five stages, agenda-setting and matching, together constitute Initiation, defined as all of information gathering, conceptualizing and planning, leading up to the decision to adopt.

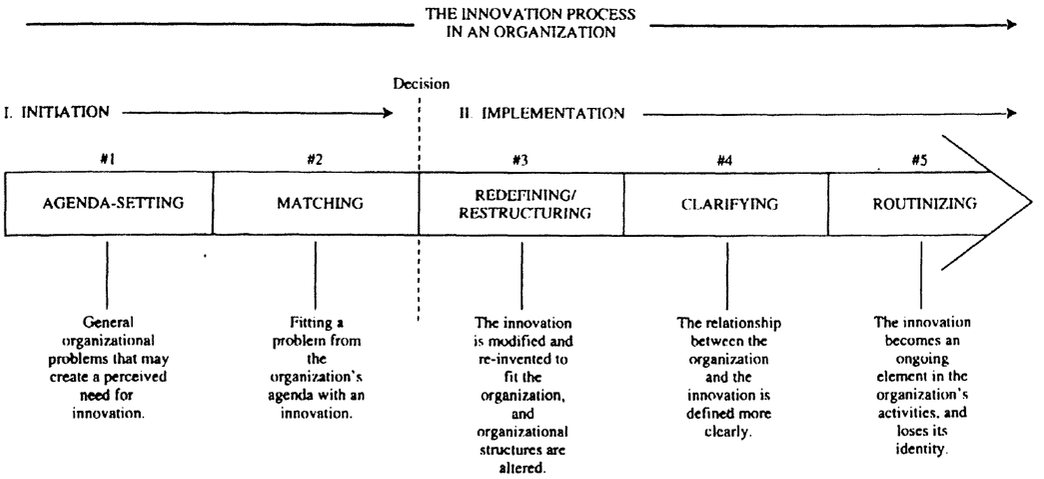


Figure 27 Five stages in the innovation process

1. Agenda-setting – occurs when a general organizational problem is defined that creates a perceived need for an innovation. The process is continually under way in every system, determining what the system will work on first, next and so on.

2. Matching – It is defined as the stage in the innovation process at which a problem from the organization's agenda is fit with an innovation, and this match is planned and designed. At this second stage in the innovation process, conceptual matching of the problem with the innovation occurs in order to establish how well they fit.

3- Redefining / Restructuring – at this stage, the innovation imported from outside the organization gradually begins to lose its foreign character. It occurs when the innovation is re-invented so as to accommodate the organization's needs and structure more closely, and when the organization's structure is modified to fit with innovation.

4- Clarifying – occurs as the innovation is put into more widespread use in an organization, so that the meaning of the new idea gradually becomes clearer to the organization's member.

5- Routinizing - occur when an innovation has become incorporated into regular activities of the organization and has lost its separate identity. At that point, the innovation process is completed.

Johnston and Bate (2003) also suggest a five step process to achieve innovation in the corporate world. The Discovery Process is a series of phases, not a linear series of steps as shown in Figure 28. By carrying out the phases, your company will avoid some of the process pitfalls that arise when doing cross-functional work at the strategic level. The specific steps to be taken within each phase must be determined by each company individually, as will be explained later in this chapter.

Figure 28 Johnston and Bate discovery model. Five steps for innovation.

A summary of the five phases is as follows:

1. Staging Phase - In this phase, the Discovery team is selected, key roles are identified, the objectives of the initiative are established, and the team is prepared for the process.
2. Aligning Phase - The Discovery team and senior management align themselves on the focus and scope of the initiative, agreeing on the "strategic frontier(s)" to be explored.
3. Exploring Phase - The goal of this phase is the collection of new insights on the strategic frontier that can form the basis of new, value-producing business opportunities in the future.
4. Creating Phase - Using the new insights gained, the Discovery team will create and refine a portfolio of new business opportunities for the future.
5. Mapping Phase - In this final phase, the team will create a strategic road map outlining key events, trends, market discontinuities, and milestones to move the company into its new strategic future.

Kelley and Littman (2001) highlight also some steps of how to create great products and services through the essence of the innovation process. They have witnesses and participate actively in thousand of projects, which taught them some valuable lessons.

Rather than a formal method, they present some of the objectives they try to keep in mind when starting work on a new thing. Those objectives are:

Make a great entrance: Good buildings, Websites, and products make it easy to find your way about. They leave no doubt about which door to open or button to click. Strive to make the people who use your product or service feel welcomed.

Make metaphors: Try coming up with metaphors to inspire your new product. Thinking up metaphors or phrases to guide your design and product objectives work even on small, internal projects. More and more companies have playful code names for products under development.

Think briefcase: it is a great way to think about products that bridge the gap between work and home. Devices that cross over between work an home will always resonate stronger than purely office-based equipment. Imagine that your ideal customer is on the commuter train, headed home after a long day. Make him or her want to bring your offering on that journey.

Colour inspires: colour works best when it's pivotal, early step in design. The key is starting early in the prototype stage when it can be a such thing defining a colour element in a product that certain companies seem to own their piece of the rainbow. Think Ferrari and Kodak.

Backstage pass: Let your customer know what is going on behind the curtain, and then they will reward you with business and even loyalty.

One click is better than two: Make your product or service work faster, and it will probably succeed. Off-line and online, there are several examples where companies make a leap by reducing clicks or eliminating steps. People are usually busy and impatient, so do not let complicate things and processes blur the simplest, most common use of your product.

Goof-proof: All good products help to prevent mistakes, but the real winners help you recover after you are misstepped. A good example is the foldable side mirror on some cars.

Checklist: Make a checklist of the essentials before you begin a project, the minimal elements your product or service needs in order to be accepted in the marketplace. Periodically check to make sure you have not forgotten one of the basics.

Great extras: great accessories or minor elements can make a huge difference upon a product perception. People respond to the right small touches. It is up to you to come up with these surprises and fine details.

By creating a clear pathway, Everett Rogers (2003) suggests that the steps of value proposition during the innovation process help a company identify and describe where it creates value for the customer, starting from the moment a potential customer evaluates a value proposition all the way to the moment a customer adopt that product or service.

The value proposition must then be articulated in terms of the 'marketing mix' - often referred to as the '4Ps' - **P**roduct and service features, **P**rice, **P**romotion and **P**lace (distribution strategy) (Kotler, 2005).
The value proposition must be communicated to entice customers to try the product / service. If the offering is developed properly, it should lead to satisfaction and re-purchase. Before potential customers can buy a product / service, they must learn about it. This learning is called the *adoption process*.
The Innovation-Adoption Model consists of:

- **Awareness** - The company has to create awareness of the brand, and its products / services.
- **Interest** - Customers need to be stimulated to seek information about the brand's uses, features and advantages.
- **Evaluation** - Customers consider whether the product / service will meet their particular needs. Personal sources such as word-of-mouth from friends, colleagues and opinion leaders become important influences at this stage.
- **Trial** - The customer tries the product / service for the first time and decides whether to adopt it based on their *expectations*, and the product / service's *perceived performance*.
- **Adoption** - The customer is satisfied and decides to make regular use of the product / service.

Traditionally, companies have used the tools of the promotions mix - advertising, direct marketing, sales promotion, personal selling and public relations / publicity - to move customers through the adoption process. Advertising and public relations can be effective in generating awareness and interest. Sales promotions and sampling are often used for encouraging evaluation and trial.
It is beneficial for companies to accelerate the adoption process before competitors emulate the benefits they offer. Enticing customers to purchase again and adopt the brand not only requires a successful trial experience, but also enhanced customer interaction through relationship building.

2.7. Conclusion

The Literature Review covered a broad area which included design, branding and innovation. Through this review it can be concluded that the meaning of design has extended the boundaries beyond form and function. Design is usually seen as the visual or physical representation of what a brand stands for. However, more recently there has been a trend, which defines design as a new way of thinking when dealing with contemporary issues.

Although the motor industry has always been very design-conscious, it seems that the meaning of design is still based on its original definition: i.e. form and function. However, the huge gap between a logical and a creative thinking has been narrowing since decision-makers in the motor industry have been paying more attention to other industries which have themselves taken design thinking in the direction of branding strategies and in general producing consistently superior results. Examples here would be Apple in electronics and Procter & Gamble (P&G) in consumer goods. This concept of design thinking is spreading fast, highlighting the importance of design not only as the translation of brand attributes, but as a primary part of the strategic thinking of a company. The reason that this is so significant to the sustainability of the motor business is that design thinking delivers holistic solutions, and it is essentially the core of innovation.

Branding is another complex subject which involves all stakeholders within the company in delivering a particular message. Whether a brand is defined as a promise, a 'mental box', or an idea that resides in people's minds, the message must be

meaningful and consistent. Because our society has moved from an economy of mass-production to an economy of mass-customization, our choices have multiplied. As a result, the method of comparing products or services – by comparing features and benefits – no longer works. Our choices are made more on intangible attributes. Therefore, in order to provide a successful brand experience, it is not enough to reach customers' expectations, but it is also essential to exceed them.

Thus, in the motor industry, one of the major industries, branding and innovation are critical if carmakers are to stay at the top of their game. However, there is a disjunction between designers, producers and users/consumers. Not only that, there is a discrepancy between what the motor industry has been providing and what the potential customers/users want from the carmakers. The next Chapter, Methodology, explains how the research was planned and undertaken based on the discussion above.

3. Methodology

3.1. Research questions

In light of the previous literature review, it is crucial to study user perceptions on the subject of branding, design and innovation. Much has been said about both the academic and practical approaches to these subjects. However, most of the literature has failed to investigate the actual opinions of the user in a general sense. In this sense, it can be said that all of the areas reviewed are subjective to the practice. In other words, there is no right or wrong strategy when companies are developing their views about the future. This unpredictability thus makes this area of study even more challenging. However, as the Literature Review shows, success might be achievable in companies where the customer plays an important role in the process. On the other hand, when companies are driven by product development, as is the case with most companies in the motor industry, a gap between what the brand communicates and what the user thinks about it still a determining factor in any possibility of success. As a consequence, this research has been set up to answer the following questions:

How can users' perceptions of branding and design be determinant in product development within the motor industry? Is it possible to include their views, opinions and aspirations for future developments?

What kinds of opinions on developments in the motor industry do users have? And what would the consequences be for future models? Do their perceptions match with the messages communicated by the motor industry? Are the brand attributes clearly communicated through the new concept cars?

3.2. Objectives

This research project has been developed throughout the last three and a half years in an organic format. The Royal College of Art, and the Vehicle Design department in particular, is a place where students have been breaking with predefined formulas since the very inception of the college, over one hundred and fifty years ago. During the course of this research, and throughout the process of finding new perspectives with which to approach the topic of design, branding and innovation, the guiding principle was always experimentation. As is the case for most designers in the world,

especially those involved in academic research, the primary objective of most projects is to make the world in which we live into a better place, and this particular study was no exception.
However, the objectives outlined made it easier to narrow down and, so subsequently, to tackle specific problems that were discussed in the Literature Review.
Consequently, I have directed the project towards the following research aims:

. To understand the current scenario within the automotive industry through an in-depth literature review from academic and practice-based specialists in design, branding and innovation.

. To look at leading carmakers through a series of case studies in order to attain a global overview of practices in terms of design and branding.

. To create a new approach in product development based on user-centred methods by exploring the creative and emotional side, over the logical and rational.

. To discuss with potential customers the relationship between what the motor industry has been providing and what the users really desire.

. To instigate a discussion with trendsetters about their opinions on what we might be driving in twenty years time.

. To explore new concepts in vehicle design through a user-centred approach by using customers' insights

3.3. Hypothesis

Most traditional research utilizes two kinds of logic when developing a research hypothesis: the *inductive* – proving through observation that something actually works – and the *deductive* – proving through reasoning from principles that something must be the case. Any form of reasoning or argumentation outside these two forms is discouraged mainly because traditional research is driven by results.
However, this research has been developed through a third logical principle called *abductive* reasoning, which can be explained as the logic of what might be.

It is crucial not only to the practice of design, but also to research in order to achieve a balance between the proven results and the generation of new ideas or ways of thinking. For this reason, design thinking, as abductive reasoning has been called, serves as the fundamental logic that gives direction to this research. Hence, the research hypotheses could be stated in the following way:

H1: 'It is believed that there is a discrepancy between what the motor industry has been providing and what the potential customers/users want from the carmakers.'

H2: 'It is suggested that peoples' perceptions of some brands differ from what carmakers attempt to communicate through their brand attributes and design styles.'

H3: 'By changing the approach to designing concepts, the automotive industry would provide more thoughtful products that would be aligned to the peoples' aspirations and desires'

H4: 'The motor industry might benefit from a long term strategy and achieve a sustainable future if their practices were to change from a product-driven to a user-centred approach.'

The research was undertaken through qualitative approach techniques as a main foundation of gathering primary and secondary information.

The Association for Qualitative Research, defines the practice of undertaken qualitative research as 'research designed to help organisational decision-making, focusing on understanding the nature of phenomena and their meaning, rather than their incidence. It tends to have the following characteristics: direct face-to-face contact between the primary researchers and those being researched; in-depth examination of small-scale samples or small numbers of observations; unstructured interviewing guides which are responsive to context and may be amended throughout the project; the researcher and his/her interpretative input is key to the process' (Anonymous, 2007)

One of the original parts of this research concerned the development of a qualitative methodology based on a participatory design technique. Participatory methods

involve consumers in the development of products and services or brands that they will hopefully buy in the future. They are inherently flexible, taking on whatever shape is required in order to suit the needs of the designer. With all forms of participatory design research, the challenge is to keep people's input fresh and representative. The temptation to turn the consumers into designers is hard to resist, but that is a quick way to doom this type of qualitative research (Ireland, 2003). The idea in this case is certainly not to turn the customers into designers, but to let the users express their desires and views about what the future of transportation might be.

From the designer's perspective, it is also a rich experience in that they gain pure information in a format that they are used to working with. It is believed that by presenting the relevant information from the field already transformed into a visual format, the design team will be able to communicate at the same level with people's aspirations. Some In-depth interviews with experts from the industry were also set up in order to elicit rich, detailed material that was used along with the literature review in order to understand the broad view as well as the complexity of the subject. Such interviews were conducted mostly face to face, although in some situations telephone interviewing was used.

The methodology was divided into six stages, as follows: a Literature Review, Case Studies, User/Customer Insights, Evaluation & Analysis, Project and Conclusions & Recommendations (Figure 29). These phases are described in detail in the next section.

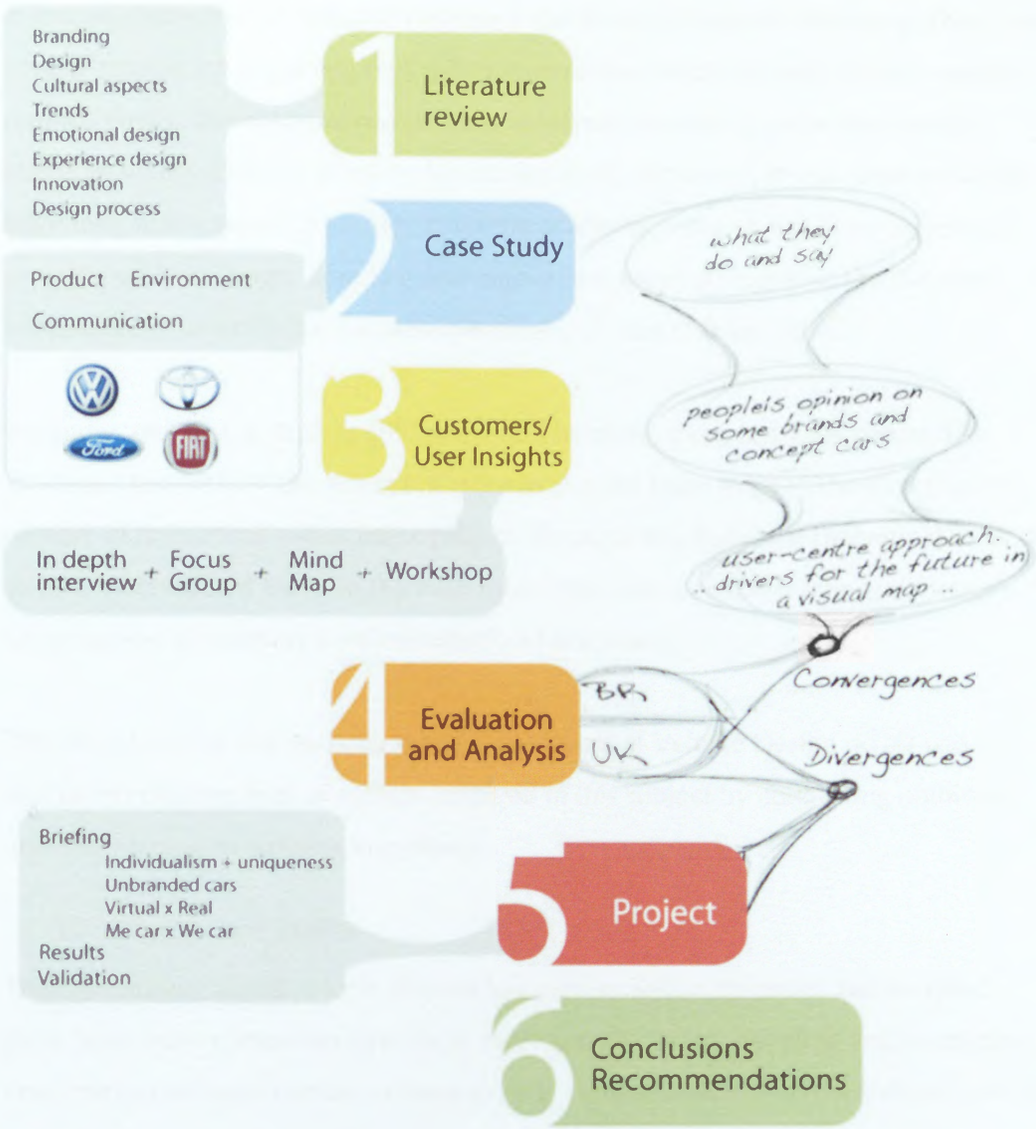


Figure 29 Research framework

3.4. Stage 1 Literature Review

The literature review has been organised from the early stages of this research. It was divided into four broad areas of study: the Automotive industry, Branding, Design and Innovation. The necessity of exploring all the subjects as deeply and broadly as possible, has demanded an extended review of a variety of literatures from traditional sources such as books and academic journals to more novel formats such as blogs and web forums.

A crucial element of all research degrees is the review of relevant literature. There are several reasons for beginning with a literature review before embarking on a research project. Firstly, the literature review aims to identify possible gaps in the currently literature which could be filled by the current study. However, it was observed at the beginning of this research journey that little academic research has been undertaken on areas such as design, branding and innovation, taken all together. On the other hand, there is research that focuses specifically on one of these areas.

Secondly, the area of study is still incipient. Therefore, there is a huge demand for academic research on the subject in order to expand knowledge in the direction of a mixture of theoretical and practice project. Through this study, the theoretical basis of each subject studied and also the most up-to-date issues on the practices of design, branding and innovation were identified and discussed.

The importance of this research to the Department of Vehicle Design (RCA) was crucial in collating most of authors involved in this subject by contrasting opinions and contributing to building knowledge.

3.5. Stage 2 Case Studies

The case studies aimed to look at some key players within the motor industry and show how those companies have been dealing with design, branding and innovation. Four companies were chosen in order to give a global overview of the industry and its practices that are, in most cases, very similar. The companies were: Fiat, Volkswagen, Ford and Toyota.

Fiat is a good example of a company for a case study. In the last three and a half years it has changed dramatically in an attempt to return from a state near bankruptcy. Practices in design, branding and innovation have several differences from markets to markets as was observed in the contrast between Fiat's Brazilian operations and their Headquarters in Italy. To some extent, the flexibility that Fiat has in its operations in Brazil makes it an agile company that has been consistently innovating in that market. Last year, Fiat Palio became the best selling car in its category, overtaking VW Gol, which had held this position for more than twenty years.

The second company considered in this case study was Volkswagen. The reason in choosing VW is that throughout the company's history it has maintained the strongest consistency in terms of design and branding. Given that consistency is one of the golden rules of establishing a strong brand, the analysis of the VW history as well as its current practices would be essential to the discussion.

On the other hand, it seems that Toyota has not been particularly focused on developing a strong image through design. Recently reaching the top of the chart in terms of numbers of cars produced and sold, especially in the US market, the message from Toyota's brand is rather different from its competitors. It can be described in brief as a reliable and innovative car. This image has been built since the year 2000 when Toyota promised to change history by launching the first mass-produced hybrid car. Seven years on, the Toyota Prius has become a green statement to those who want to embark on building an environmental friendly image. Since this research also concerns people's perception of the current climate, Toyota should not be omitted in the analysis and discussion.

Another iconic brand analysed during the course of this research was Ford. The famous quote by Henry Ford - 'you can choose any colour, as long as it is black' – still has resonance today as the quintessential statement summing up the era of mass production era. In my particular perspective, Ford has an interesting position in the global market in terms of branding positioning since it has different images in different markets. It has an image in the US that is completely different from its image in Europe. This flexibility sometimes seems to constitute a considerable problem in terms of Ford's global strategy, however it should be seen as an opportunity to strength this historical brand in local markets.

3.6. Stage 3 Users' insights

The Customer/User Insight stage aims to identify visually convergent and divergent aspirations, beliefs and perceptions in potential customers by mixing qualitative methods such as interviews, group discussions, mind mapping, and designing future scenarios. More broadly, this phase intends not only to contrast the existing scenario provided by the motor industry with the desirable scenario, but also to explore visually the aspirations and dreams of people questioned in the research.

During the process of finding the best way to gather information through a qualitative method, a unique technique of looking at users' perceptions and desires was developed. At this stage, I will describe only the methodology that was chosen, leaving the results to be explored and discussed in Chapter 5.

The research is an attempt not only to understand people's perceptions through qualitative methods but also to explore new ways of gathering information from the field. Bearing this in mind, the author started to look at a series of research techniques, which may better fit the objectives of this research. No single technique would fulfil the author's basic requirement. Then, a blend of techniques was put together in order to maximize the stage of gathering information from a chosen audience.

This methodology is a unique attempt to put together different qualitative methods aimed at translating thoughts into images. It also intends to become a useful tool for the industry in so far as it concerns a user-centred approach to product development.

The methodology was set up according to four distinctive steps: (1) in depth interview; (2) Focus group; (3) Mind map; and (4) Workshop.

3.6.1. In-depth interview

An in-depth interview is a qualitative research technique that allows one to one conversation on the chosen subject. It was considered to be part of this process to increase the understanding of the participant's lifestyle as well as to involve the participant in the next step of the exercise process. The in-depth interviews were performed in the participant's home or work environment in order to capture the essence of that person's particular lifestyle. This type of interview is often unstructured and therefore permits the interviewer to encourage the respondent to talk at length about the subject.

The in-depth interview was used as a flexible approach. It was aimed to ask questions that explore and verify whether or not participant's profile matched to the type of people the study requires.

This stage was also directed to confirm whether or not the participants are part of the targeted group. General questions must be addressed in order to understand the

innovativeness and lifestyle of each person. It is also a good starting point, serving to 'break the ice', in order to direct people towards the main objective of the task. The interview must be carried out for one to two days before the group discussion, and preferably it should be carried out either in the participant's work or home environment. By doing this ethnographic interview in their own environment, the strategy was intended not only to make the interviewees feel more comfortable to talk about themselves but it was also an opportunity to observe the environment in which they are immersed.

3.6.2. Focus group

Once the individual information was collected from a one-to-one ethnographic interview, a group discussion was set up in order to explore convergences and divergences among people's thinking.

The group discussion was designed to take the participant on a journey through past experiences by capturing the hidden emotions the object car has played in their lives. The group discussion started with broad questions concerning the participants' early memories of cars and the feelings that were associated with those memories. Subsequently, the participants were asked to remember and describe a memorable journey, either good or bad. Then, a question about what brand comes to mind when you think about a car, and also what kind of feelings could be related to that brand of car. In order to make this activity more dynamic, four pictures from concept cars (Fiat, VW, Toyota and Ford) were shown and they were asked to identify what brand would fit the design best. They were also asked why they associated the particular clues of the design with the brand that they thought it was, and equally, what culture they thought the designs hailed from.

Another tool intended to make the discussion richer and to capture the participants hidden perceptions was developed to reach their memories. Brand associations were used in an effort to bypass the inhibited thinking process of the participants. This useful approach aims at relating the brands involved in this study to other kinds of objects such as buildings, animals, magazines/newspapers, people and movie styles.

3.6.3. Mind map

Mind maps are tools that help us thinking creatively, solving problems and taking action through a wide range of opportunities and ideas that might come up from this exercise. The mind map encourages creativity and flexibility. They help you to avoid thinking linearly and open you up to new ways of thinking. According to Tony and Barry Buzan (2006) mind mapping is an expression of a radial thinking, and therefore a natural function of the human mind. It is important in the development of a mind map to keep in mind some of the main characteristics of this exercise: a) The subject of attention is crystallised in a central image. b) The main theme of the subject radiate from a central image as branches. c) Branches comprise a key image or key word printed on as associated line. d) The branches form a connected nodal structure.

The main reason for using this method in the process of exploration of new possible ways of developing a product – in this case, a new concept of transportation – is that not all ideas can be organized tidily into an outline format. Equally, the ideas can be explored more deeply in each of the emerging subjects. Furthermore, a traditional linear thinking approach is usually limiting when the process of developing new products, services or brands demands a vast quantity of ideas. Therefore, the idea behind the mind map is to think creatively in a non-linear manner, exploring the hidden ideas in our minds.

In this research, the participants used an unlined piece of paper and they were asked to start with the central idea in the middle. In this case, the central idea was the object car. Coming out from the centre, five arms (hearing, sight, taste, smell and touch) were added to enable them to explore each of the senses, whether in a positive of negative way.

The reason for the five senses being chosen in this exercise was that we usually rely on our five senses to provide information about the world around us. Then, the starting point of this exercise involved asking the participants to think of good or even bad experiences that provoked their feelings through the senses. Then, they were asked what experiences or things amused or even repulsed their senses.

The moderator guided the group to a brainstorming session where those past sensations, dreams and aspirations were used as a source of inspiration for the design

team when developing the concept vehicles. Those ideas were organized according to the five senses (sight, sound, smell, touch and taste) as well as divided into positive and negative experiences and or sensations.

3.6.4. Workshop

It is common people say that a single picture tells a entire history and it has been largely known that visual imagery is the primary tool which designers use to communicate ideas. Based on what was discussed during the focus group and also the mind map brainstorming session, the participants were invited to choose five words to be used by drivers in the future. These words are essentially the summary of the whole exercise being the drivers in which the workshop was to be based on. Once they had chosen the five words, the participants were invited to translate those words into an imagery map. Certainly most of the participants were not familiar with design techniques and vocabulary. Then, a group of six design students were invited to help them out to find out the right images and also to design their visual map. The design student would act only as a tool in order to translate their words into images. They had to be absolutely neutral in order to follow the participant in terms of what image might be used as well as the layout and proportions.

Copyright is always a concern when using images. However, the copyright free website www.sxc.hu was used in this task. SXC is a friendly community of photographers who generously offer their works to the public free of charge.

Once the visual map was done, the participant was invited to explain the meaning of their visual representation of their drivers and why they had chosen those words (drivers for the future) as well as the relationship between words and images. In other words, the participant explained the history behind the picture. It was believed that by involving the participants at this level, the nature of the exercise would allow them to provide a more thoughtful response than they might have done had the research been carried out only through a passive form of gathering information such as ethnographic study alone.

3.7. Stage 4 Evaluation and analysis

In this section, the analysis contains the discussion of the results from the Customer/User Insight stage. All the information gathered from the field research was collated in order to better understand the findings. All the massive amount of qualitative information from interviews, from the focus group, from the mind map

exercise and also from the workshop were also used to set up the brief for the next stage: the project.
The discussion was addressed towards the convergences and divergences emerging not only from a cross-cultural analysis of the participants' drivers for the future but also the visual maps and quotes.

At this stage, the author role was crucial to the next phase in creating a narrative to make the information understandable for the design team. In order to create a structured format, some clusters were created from similar thoughts from the participants. Despite the fact that there were twenty-three people and therefore twenty-three different opinions and visual maps, similarities were found.

Certainly the method of collating the information was done in an unorthodox way. It was relying considerably on an instinctive and intuitive manner when placing the participant outcomes into the clusters. It is perhaps difficult to explain how the division was done if we consider the meaning of word or image may differ from my understanding to anyone else. It was a risky move, although this was evaluated in the end of this process by the participant's him/herself through the validation of the project.

3.8. Stage 5 Project

Once the field research was collated and analysed, a project was required in order to take the people's insights to the next level. A briefing was prepared in which the most relevant information was given to the design team.
A design brief was written in order to set the scene and to provide an explanation of the objectives of the project outlining the aims and milestones of the design project.

A comprehensive and articulate design brief is a critical part of the design process. It helps develop trust and understanding as well as serving as an essential point of reference for both parties. Above all, the design brief ensures that important design issues are considered and questioned before the designer starts work.

The design team was comprised of first year students of the MA in Vehicle Design at the Royal College of Art, and it also involved kind support from the Senior Tutor

Richard Winsor. Once the briefing was validated and approved by the department a seminar was prepared to launch the project.

The seminar was aimed at presenting the entire methodology of this research and to present to the design team the objectives of the project and to hand in the written briefing. During the seminar some examples of the deep involvement from the participants were presented in order to embrace the designers in the same way that the participants were involved.

The project was set up to finish two weeks later. This is a very short length of time for a vehicle development. However, it was crucial to the success of the entire project to be assertive in explaining the brief, in order to galvanise the design team. With this in mind, a very open attitude towards the design team was necessary because the time was short and the volume of information was massive.

Creating the clusters or future scenarios, enabled us to easily divide the vision maps among the designers. The designer worked individually by taken one scenario as well as one or two participant's visual maps within the scenario. It was left to the designers to decide what scenario and which participant they would work with.

In order to follow up the development of the concepts, an interim presentation took place one week after the project launch. The designers had presented initially their understanding of the briefing, the chosen scenario and participant visual map as well as the initial sketches of the concept vehicles. Comments on, and discussion of, the concepts were made by Richard Winsor and myself in order to ensure that the quality of the final concept would match with the questions that the briefing was asking. It was also the opportunity to motivate the team and prepare them for the final stage of the project.

Once we had only two weeks to work on the concept designs, it was requested to he designers to hand in the concepts on a format there are more familiar with. It could be a rough sketch or a 3D digital model. However, they should bear in mind that the image should be 'readable' not only by designers but also to the general public once a validation with the participants were demanded.

A final presentation took place on 22nd Oct 2007 involving all the design teams involved in the project. The designers presented not only their concepts but also the entire design process and the reasons of having chosen that particular theme and participant. We requested that they produce a banner, 60cm by 160cm, for further exhibitions, a one hundred word statement about their concept, and also that they provide images in a digital format.

Fourteen concepts were developed out of the twenty-three visual maps, which should be validated by the focus group participants (see Chapter 6).

3.9. Validation

This is the last stage of gathering primary research. At the end of this looped process, when originally were asked to the people what they really want in terms of the future of transports, a validation of the entire method is necessary.

Usually a validation process of qualitative research demands at least thirty individuals, who should be exposed to the same type of stimuli in the qualitative phase. However, the projects were sent to the person who had inspired the project. As suggested by Pupura (2003), validation can be enlightening or it can be disastrous. The reasoning behind validation is to confirm what you think you have learned from the qualitative stage of your studies. Using qualitative methods to measure the research hypotheses is like shining a flashlight in the darkness. You are not going to sense as much as you did with your qualitative study. The goal of qualitative study is to reduce rather than add complexity.

Even though it is suggested that certain difficulties in measuring the hypotheses through a qualitative method might be risky, it is hard to believe that at this stage of the research it would be necessary to quite dramatically change the process of validation. A quantitative method would say very little about the results.

The participants of the Customers' Insights Stage then validated the conceptual projects. It was sent to them in an email containing the image of the concept vehicle, a short description about the project and also contained their own visual map and drivers (five words) aimed to refresh their memory about what was discussed at the time of the focus group.

4. Case Studies

In this Chapter I explored the world of the automotive industry through the empirical observation of four of the major carmakers in the global marketplace. Two European companies were chosen (Volkswagen and Fiat), as well as one American company (Ford) and one Asian company (Toyota), in order to give a global overview of the automotive industry.

There is no doubt about the extent and influence of this industry on our daily life. Increasing global trade has enabled the growth in the world of the motor industry, which has also expanded global competition amongst these companies not only towards technological development but also in terms of attracting customers through a significant shift in terms of design, and the ways in which the product is branded.

Since this study has taken purely qualitative methods into consideration, it was necessary to take an in-depth look at the historical path as well as the current situation of the industry by means of a global perspective. All of the companies analysed in the case studies have largely been operating in the developed and developing world. The case studies present a glimpse of the historical trajectory and some highlights of these companies as well as the current scenario and in some cases a vision of the future. The difference between the approaches in both markets was also explored through an analysis of their portfolio and practices.

4.1. Fiat

Fiat is one of the biggest industrial groups in the world, with a presence in more than one hundred and ninety countries and with more than one hundred years' experience in the motor vehicle field, designing, manufacturing and marketing cars, trucks, tractors, agricultural machinery, construction equipment, motor vehicle engines and components, and production systems. Fiat Group Automobiles produces and sells cars under the labels Fiat, Alfa Romeo, Lancia and Fiat Light Commercial Vehicles. It provides financing services for its dealers and suppliers and provides rental services for its customers. The Fiat Group also controls Maserati and Ferrari. These two companies produce luxury sports cars that are famous for their exclusive characteristics, technology and performance (Anonymous, 2006).

4.1.1. Fiat's history

Fiat has maintained a leading role in the automotive industry since its conception, which dates back to the very beginnings of the era of Italian industrialization. From the moment it first appeared on the market, Fiat has been extensively developed and is recognized worldwide. Its logo is a great status symbol because of the superior cars the Company produces and the prestige of its history and tradition.

The charter of Societa Anonima Fabbrica Italiana Automobili Torino was signed in 1899. Giovanni Agnelli, a key founder was determined to ensure that Fiat would be a highly successful company, and he had a great strategic vision. In 1912, Agnelli took a trip to see American carmakers in Detroit. Once there, he could see the extraordinary vertical integration of production at Henry Ford's Highland Park plant, which achieved costs pre car at almost half of those at Fiat.

Based on the experience gained during the US trip, Fiat began to weave itself into Italian national life with the development of the immense Lingotto plant, destined to be the biggest monument to Fordism in Europe. At Lingotto, through the 1920s, and 1930s, Fiat emerged as one of the major, lower cost European carmakers, and a landmark of Italian industry. After the Second World War it revived this position with intelligently engineered, good value cars under the design leadership of Dante Giacosa. This approach was epitomised by the Fiat Cinquecento (Nahum, 2004). The 500 came out in 1936 and was lovingly dubbed the Topolino, by Italians, for its toy-store looks and roller-skate wheels.

In 1957, the car was reissued as the Nuova 500 and helped to revive the spirits of Italians who were recovering from the destruction of World War II. Until it was discontinued in 1975, the 500 sold 3.6 million units in various versions. Thousands remain in use, valued as ideal cars for negotiating narrow medieval streets. Fiat experienced a dramatic growth of production in the mid 1960s, as well as a growth in exports, which led the ratio changing from one car for every 96 Italians to one in 28. Fiat took advantage of the increase and established several factories in southern Italy, however, trade union conflicts became the frequent.

The grandson of founder Giovanni Agnelli, Gianni Agnelli, became President of Fiat in 1966. He ensured the Company followed a trend toward increased automation in the

production process. This helped Fiat continue on the path of technological innovation while coping with the global oil crisis. Between 1978 and 1990, Fiat setup numerous operations as independent companies. These included the Fiat Auto, Fiat Avio, Fiat Engineering, Comau, Fiat Ferraviaria, Magnet Marelli and the Teksid.

The Fiat Panda, perhaps one of Fiat's best selling cars, was styled by Guigiaro in 1980. The Fiat Uno, which became the emblem of Fiat Auto's renewal, was introduced in 1982. The Uno featured radical changes in its electronics and choice of the material used to build it. The 1000 Fire engine was introduced at this time.

Fiat continued to have stars in the small car segment on into the 1990s with the Tipo and Punto, but top management decided to increase the group's industrial diversification. Earnings in this period were spread into many new, non-automotive businesses in an attempt to provide counter-cyclical profits to the car business (Nahum, 2004). Some argue that the diversification of the business was the cause of the deep crisis that occurred during the 1990s. In order to cope, the company expanded further into the international market. It successfully attained a global presence and achieved more than 60% of sales outside of Italy.

In 2000, the Fiat Doblo was introduced at the Paris Motor Show as both an informal car and a commercial vehicle. The Fiat Stilo was released in 2001, with numerous options and highly sophisticated technology, as well as a new design. In the caming years New Fiat Ulysse, the Fiat Multipla and the Fiat Stilo MW were restyled. The new Punto was launched in 2003 with an innovative 1.3 Multijet 16v. In January 2004, the Fiat Idea made its debut. It was the first MPV built by Fiat and the design was truly unique. The Idea was made taller to improve visibility and its interior was enhanced for flexibility. In Brazil, for example, the Fiat Idea led the segment since the second month of launching.

However, over the years, Fiat has been rolling out dozens of models across the group always in an attempt to recover from the crisis. In 2004, the future of Italian auto maker Fiat looked pretty bleak. After losses of $12 billion over six years, the carmaker was struggling mightily to come up with hit models, and had seen its European market share shrink by more than 50% since 1990 (Edmondson, 2006). That was the time for

dramatic action from the top management. A new strategy was demanded and it was called 'Rinascimento'. The targets were quite simple:

1. To create a coherent and sustainable brand image
2. To rebuild distribution capabilities
3. To build a range of consistent, complementary products and manage their lifecycle effectively.

4.1.2. Rinascimento

In June 2006, Luca de Meo, Head of Fiat Brand, presented the progress of the 'Rinascimento' strategy at the Morgan Stanley Automotive Conference in London. The figures behind the strategy were the most important aspect of his presentation. He started presenting the situation that Fiat was in 2003. It was illustrated by showing two influential business magazines covers speculating about the large losses and the possible results that these scenarios would cause.

The turnaround of this low performance came in 2004 when Sergio Marchionne, the new CEO of the Fiat Group, started to introduce his plans about what a Fiat brand should look like in order to reassure its future.
The key drivers of the new Fiat were set up under five topics:

Simplicity: life is complicated; let's make it simple.
Style: Italy is known for style, so is Fiat
Speed: in a fast world, speed (of decision) makes the difference
Surprise: the challenger has more room to make his mark
Smile: smiling brands are more fun

However, a good plan must be followed by a good action; otherwise it is a worthless effort. Based on the five topics presented above, the original plan has been putting on action through a clear programme.

4.1.2.1. Simplicity

In 2006 De Meo forged an agreement with IKEA to redesign Fiat's showrooms in the Scandinavian company's crisp, modern style for its sales and distribution network across Europe. The design philosophies of an Italian company and a Swedish one may not seem immediately compatible, but both are emphasising their desire to offer

products that simplify people's lives by adding the brand attributes along new ideas, style and appeal.

Fiat says that its dealers across Europe will be able to take advantage of the furnishing concept studied with IKEA, which will enable them to manage the sale of products and services in a comprehensive, structured way, with innovative an IT system. There is also the possibility of exploiting the ideas and capabilities of individual dealers as much as possible, strengthening areas that are considered strategic with its branches and opening new sales points in Europe, which are a key point in the new company strategy.

4.1.2.2. Surprise

Perhaps one of the latest surprises in the automotive marketplace, with a potential to become a great hit, was the Fiat 500 (Figure 30). Fiat re-launched the Cinquecento, 50 years to the day after the original was introduced. The company hopes it can do with its iconic centrepiece what BMW did with the Mini Cooper: turn a car into a fashion icon, one that young people will want to own, customize, and accessorize. "It will create the basis on which the Fiat brand can grow," says Marchionne. "Everything else we've done in the past three years, they've been successful cars, but the brand will find its roots in the Cinquecento."

Figure 30 Fiat 500

Designed by Frank Stephenson, the American designer responsible for the Mini and the Ferrari F430, the new car is larger than the original, sharing its platform (and two-thirds of its components) with the Panda. Comparisons with the Mini are inevitable.

That trend-setting little bundle of energy may well be the world's first true premium small car and it is certainly the world's best-loved new small car. It is the machine that Fiat studied hardest. The 500 occupies the same premium life-style baby car class. Unlike the old 500, it has no ambitions to be a national best seller. It is more likely to play a part in mobilising the more fashion-conscious districts of Rome, Milan, Paris and London. The new Mini and the new 500 became chic and stylish over time. In order to win over such urban sophisticates, the 500 has to look sharp looking. It is based on the Fiat Trepiuno concept car previewed at the 2004 Geneva Motor Show, and was honed for production under the guidance of, at that time, design chief Frank Stephenson, designer of the Mini. Stephenson wanted a car that 'you fall in love with straight away', a car that has a real substance, a car that is fun and affordable, even though it is not cheap. It is an urban and ultra-Italian car that will also appeal internationally.

It is argued by Gavin Green (2007) that even that same winning formula of the brand strategy from the BWM Mini has been applied to the process of development of the new 500. Because the Mini is so associated with British-ness, BWM bosses say that building the Mini in Britain is so central to its authenticity and appeal that they did not even consider shifting production or adding a second plant in a country with lower cost when they recently revised the car and increased capacity. The new 500 has been built in the appropriately named Tychy plant in Poland. However it is still a Fiat, and the Fiat brand is more closely bound to its homeland than any other.

Another interesting 'surprise' to the market is the Panda Monster, which is the fruit of a partnership between FIAT and DUCATI. This Special Series will be a limited edition - with just 695 vehicles. Its design takes inspiration from the new Ducati Monster 695 motorbike, which was given a worldwide preview in 2007 at the Motor Show in Paris. So this really is an exclusive product and Fiat is willing to break away from traditional sales techniques for it. In fact, the Panda Monster is not available in car showrooms and there is just one-way to get a better look at it: through the website. Here, the general public can access the photo gallery, find out about the car's technical features and actually 'see' the interior of the vehicle thanks to video footage and animation.

Joint ventures and alliances like this are another hallmark of the new Fiat. Following the pioneering model of French automaker PSA Peugeot-Citroën, Fiat aims to keep

new models flowing at the lowest possible development cost. Fiat and Ford will jointly produce two different minicars on the same platform, the Cinquecento and the Ford Ka, in Fiat's Polish plant. Fiat has also teamed up with India's Tata Motors and recently inked an alliance with a Chinese partner (Anonymous, 2006).

4.1.2.3. Speed

In contrast with the previous development process, which usually took up to thirty-two months, the development of the Bravo from first sketch to production line took just eighteen months – an industry record, according to Marchionne, achieved through an exclusive use of virtual engineering with no physical prototypes. First units were built directly on the assembly line using actual tooling (Faris, 2007).

Until now, it was widely thought that virtual verification could not completely replace the tests on physical prototypes used to reach the final approval of a project. At most, people recognised that virtual verification eliminated a few experimental cycles on the first mock-ups, which were known to be of little significance, and that they could be useful during fine-tuning and problem solving. Which is why, even with significant disadvantages (slowness, high costs, need for test tracks and laboratories), physical prototypes continue to be used, even when they were obsolete with respect to the stage of development of the project. This was certainly the case at Fiat until recently.

However, a new approach to design was needed in order to cut time and cost, while respecting the demands of an innovative, top quality project. So, taking into consideration the increase in hardware performance which has stimulated the growth of increasingly sophisticated calculation applications, the team used the latest resources in this field, drawing on the expertise gained in this field by Fiat Auto in years of experience, also verified outside the automotive field. The Bravo was the first car to be developed adopting exclusively virtual verification systems. Another myth was that virtual verification could at most replace the corresponding physical experiments; in actual fact there is more to it than that. Virtualisation of the vehicle creates a practically infinite number of prototypes, which can be subjected to a practically unlimited number of tests. This also makes it possible to apply the most advanced statistical methodologies in the field of optimisation and 'robust design'. It means that the Fiat Bravo has been subjected, virtually, to many more tests than would have been possible using traditional methods and physical prototypes; plus the fact

that with these tests it is possible to measure a quantity of information that cannot normally be managed by classic experimental measurements. In practice, the construction of the mathematical models and their interactive use, allows the Fiat Auto engineers to acquire a much more detailed understanding of the vehicle than in the past, and to explore its behaviour in the tiniest detail. The project is therefore 'optimised' (i.e. with greater quality, obtained with less trouble and cost) as well as being 'robust' (the end product will be more insensitive to the inevitable manufacturing deviance and changes over the years of its use by the customer).

4.1.2.4. Style

Fiat cars must remain affordable, says De Meo, but the rise of carmakers in low-cost countries means that Italian-made cars can no longer compete on price alone. "We are trying to transform Fiat from a popular brand to a pop brand," he says. "We should be totally consistent with the values normally associated with 'Made in Italy'. When you enter a shop to buy a suit or jeans, you never expect the Italian product to be the cheapest one. Yes, you have Prada, but you also have Diesel. You have Miss Sixty." In January 2007, Fiat launched the Bravo, the first car Marchionne has overseen from its conception. It is a culmination of his reforms, sharing two-thirds of its components with its predecessor, the Stilo, which continues to be offered as a station wagon.

4.1.2.5. Smile

In early 2007, the Fiat brand has implemented a new brand strategy, which is underlined by the many new products that have been presented and is also significant for its new brand positioning.

"In this important, dynamic context, we have decided to acknowledge the progress achieved so far, by changing our logo, as a tangible sign of the new impetus that is projecting us towards future challenges. This is why the new logo will make its debut on the front of the new Bravo, before being gradually adopted on all Fiat models."
Luca De Meo, President of the Fiat Brand

Created jointly by Robilant Associati, an Italian agency specialising in strategic design, and the Fiat Style Centre, the new symbol is derived from the famous shield that adorned the front of Fiat cars from 1931 to 1968, with the vertically elongated letters of the word FIAT standing out against a ruby red background, encased in a chromed

frame. It has a three-dimensional effect which conveys an idea of technology, Italian design, dynamism and a strong personality, while it also harks back to the round logo (white wording against a red background, surrounded by laurel leaves) that identified powerful, high performance Fiat models for many years.

The new logo is therefore designed to convey ongoing change, a sign of the past re-written in a modern key, which is particularly representative of Fiat today, a brand which is focused towards the challenges of the future, but is also proud of its historical identity. For Fiat cognoscenti, the two main elements of the new logo will evoke memories of the Fiat 524 of 1931, which was the first Fiat product to use a rectangular logo that blended into the new grille in the shape of a shield with vertical elements. For over 100 years, Fiat Auto has been building attractive, accessible cars. This logo is designed to encapsulate a proud history as well as a renewed focus on the future (Anonymous, 2007).

In the attempt to communicate its new logo and also to maintain an appealing presence in the marketplace, Fiat announced recently that it would sponsor the Yamaha racing team in the next MotoGP season. The main reason is that the team's number one racer is also a renowned and sympathetic Italian citizen: Valentino Rossi. "This guy is the image of the smiling, winning, simpatico, simple, young Italy," says De Meo. "He's a kind of human representation of what Fiat would like to be." Fiat also signed a three-year $44 million deal with Juventus, a football club owned by the Agnelli family, which also happens to be Fiat's biggest shareholders.

Perhaps the most important part of the Fiat's turnaround was the attempt to reposition the entire portfolio in the current market situation. After years in which the design aspects of the brand had come to lose their appeal for consumers, a new plan was presented in order to reconfigure all Fiat brands from a more traditional to a modern and distinctive quadrant, according to the following graphic (Figure 31).

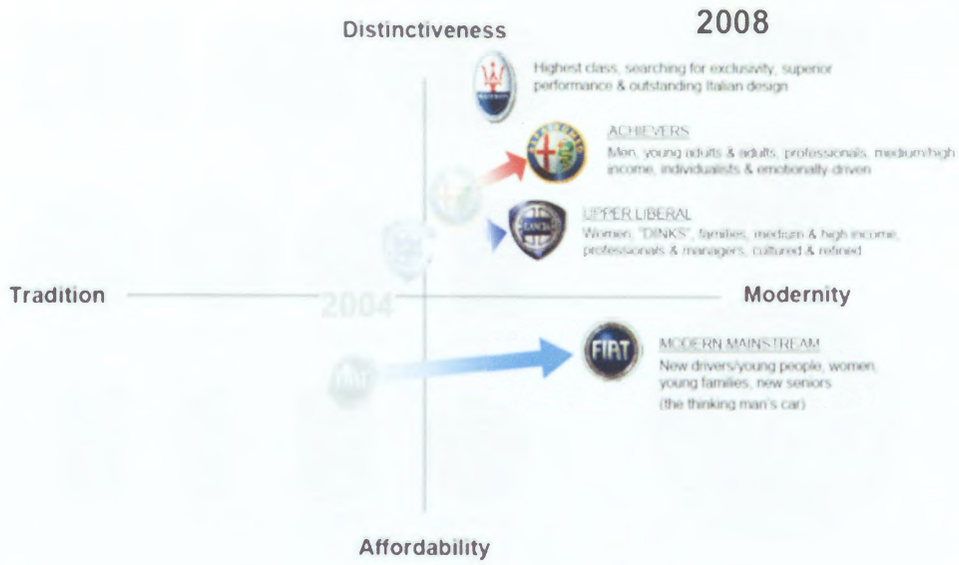


Figure 31 Fiat brand positioning

4.1.3. Turnaround through branding and design

Both the Grande Punto and the New Bravo were the tangible results of the promised turnaround and were also the starting point of a new area at Fiat. It was the milestone in the process to update the brand's product range. This period of changes is also symbolised by the new logo that makes its debut on the front of this new model, with which Fiat will tackle the challenges of the future, without turning its back on its past century of history. This essential sign, full of references to tradition, was created to express 'change in continuity'. In 2006, Fiat launched a new logo (Figure 32) as part of their new strategy by returning to the company's original mission, namely to build cars with attractive styling and exciting engines, cars that are accessible and improve the quality of everyday life.

Figure 32 Fiat's logo evolution

A brand that has seen a profound change in corporate culture and mentality, so that it is now focused on a continuous, rapid overhaul of its products, on technological research, on the quality of its designs and on a new, constructive relationship with the customer. With this new approach, Fiat has decided to create a new brand logo, which is strong, and yet communicates the essence of Fiat. It sums up the brand's new philosophy and historic continuity, through a modern reinterpretation of the famous shield that graced Fiat cars between 1931 and 1968.

Designed by the Fiat Style Centre, the Grande Punto and the New Bravo sets out to attract the public with its uncluttered, smooth lines, which on one hand confirm Fiat's determination to create a new 'family feeling' with authentic good looking lines that is reassuring and easy to understand. The raked, forward windscreen, the drop-shaped headlights, the sporty grille that frames the new logo, and even the colour chosen for the launch campaign, known as Maranello Red, which is a clear tribute to the best-known symbol of Italian automotive excellence: Ferrari.

4.1.4. Fiat in Brazil

Since Fiat arrived in Brazil about 32 year ago, the Italian brand has been recognized by a series of innovative products introduced specifically into the Brazilian automotive market. For example, Fiat was the first pick-up derived from a car (Fiat 147), the first company to provide cars equipped with ethanol engines in 1979, the first offering air bags and also the first to sell cars with 1.0 engines, latter known as the 'popular car

segment' in Brazil. According to Mr Cledorvino Belini, CEO, 'Fiat Brazil stands for Innovation. Consumers are rewarding our pioneering role in the market, our courage to dare, our energy to drive the difference.' By adding this to the internal culture, Mr Belini has led Fiat to the top position in the marketplace with the Palio (same as Punto in the UK) and undertakes the hegemony of twenty year of Volkswagen in this segment.

The marketing strategy is clear and simple in that it communicates the brand attributes in a smart and fun tone of voice. The result has been that, over the last 10 years the image of the company has changed dramatically. Nowadays, the young generation of buyers has come to see Fiat as a lively, fun and innovative company, that very often delivers on its promises through a range of new products.

This trustworthy image is also the result of the flexibility, in terms of design, that the Headquarters in Turin has granted to the Brazilian branch. Fiat Brazil is the only company in the Group Fiat, which has its own design studio outside Italy. Lead by Peter Fassbender the studio has recently presented its first ever concept car, called the FCC.

The FCC (Fiat Concept Car) is an adventure concept car, which was developed by Fiat's design studio in Brazil with the aim of being an off-road lifestyle vehicle for a younger generation. The concept vehicle has salient mudguards, a lift back rear hatch, and ultra-wide 18in Pirelli PZero tyres. Inside, the vehicle continues the outlandish theme set by the exterior including two-tone leather that matches the bright orange paint scheme, silver highlights on the steering wheel and centre console plus the addition of five-point harness seatbelts for the bucket seats. Powering the FCC is Fiat's five-cylinder 2.45L engine from the Stilo Abarth that develops 167hp. The car rides on an independent suspension set-up with multilink units at the rear and is fully adjustable. The FCC is unlikely to make it to production in its current form. However, we may see some of the design elements carry over for a new version of the Stilo designated for Brazil only. The new car may even feature the 1.8L flex-fuel motor that's capable of running on up to four different fuels.

4.2. Volkswagen

The history of the automotive industry would not be the same without the popularization of the 'people's car': Volkswagen. The motorcar is an icon of the 20th Century, and few car manufacturers have produced perhaps so many legendary cars as Volkswagen. The Beetle - the best-selling car of all time; the Volkswagen bus - symbol of a generation; and the Golf – one of the most reliable cars, are automobiles that have become an indelible part of the cultural and personal lives of millions.
In an era of privilege for the few, the Volkswagen was conceived as an affordable and reliable means of transport for the many. Ferdinand Porsche created the concept of the first peoples' car for Europe in 1934 and a working prototype was launched in just a year.

Because it was uncompromising as an engineering object, everything about the new car was unusual: its appearance, its air-cooled rear engine, the funny clattering noise it made, it willingness to cruise at 100 kph on the new Autobahnem just then being constructed all over Germany. Even its name was unusual. Kraft durch Freude (Strength through Joy) was the name of the German Labour Front organization that sponsored the new car and that was also responsible for hiking, touring, cruises and lots more holiday fun for the German labouring classes. The KdF Wagen was to be purchased through a coupon scheme, but very few cars were actually built at the newly created factory town of Wolfsburg in 1939, on the eve of the Second World War. In the war period Wolfsburg factory built military versions with some success and after the war the British army, which found itself in charge of the plant, hawked the car about, first to the British motor industry, which summarily rejected it, and then to Ford in Detroit which did the same. It was the car's various unorthodoxies, together with its deeply discredited origins, which nearly finished it off. No serious motor manufacturer thought it had a chance in the world markets. The ownerless and virtually nameless organization was eventually handed over to a group of German production engineers, accountants and salesmen led by Heinz Nordhoff, previously from Opel. By the time they finally came to develop and market it, however, the VW had become the finest product in its class in the world. It was impeccably built, virtually indestructible and backed by superb service. These remarkable qualities enable the VW to overcome its monstrous provenance and the unhappy connotation of its more or less unpronounceable and rather displeasing name. Over a decade (1948-1958) the VW established itself as the world's most popular car (Olins, 2003).

The car manufacturing group Volkswagen is extremely centralised in respect of marketing, but when it comes to advertising, it allows great freedom of expression within a strong brand framework. For example, each country can produce a different film (based on the same strategic and creative brief) for the market's most popular models, because creative advertising is not centralised. However, for less 'mainstream' products such as the 4 x 4 Touareg or the Phaeton, the German group's corporate headquarters produced a single film. The new polo provides a good example of the productive process. It is based on the very strong Volkswagen brand platform. In the past, the brand concept was centred on reliability and the tone was characterised by an implicit understanding of the consumer, with a dash of humour included. Today, due to the presence of the Skoda and Seat brands, the brand concept has evolved – it is now based on the democratisation of excellence (Maxton and Wormald, 2004).

VW BRANDS

In the last fifteen years of the millennium Volkswagen have emerged as a true global force in automobiles, with the acquisition and re-development of famous names such as Audi, SEAT, Skoda, and Lamborghini.

VW FOX

The Volkswagen Fox is a super-mini designed by VW's design studio in Brazil (Figure 33) and sold in Latin America and Europe. Currently the Fox is produced as a three-door and five-door hatchback. There is also a version called the CrossFox, and a mini MPV/station wagon model called Suran, SpaceFox, SportVan or Fox Plus depending on the market.

Figure 33 Fox sketch

In South America, it fits between its two super-mini brothers, the low cost Gol and the Polo. Despite its height (1545 mm), its inner room is quite similar to that of its competitors Opel Corsa, Fiat Palio, Ford Fiesta, Renault Clio and Peugeot 206. In Mexico it is called the Lupo, due to the last name of the then-current President Vicente Fox.

The very early days of the VW Fox conception came up during an informal conversation between three members of the design studio staff in Brazil. In an attempt to revive the essence of the people's car, Mr Luis Veiga, Design Director, Mr Jonas Silva and Mr Gerson Barone, realised that VW Brazil should have again a model to fulfil the people's expectations by using innovative solutions and local ecologically friendly materials. The design philosophy (Figure 34) of this concept was then developed under four drivers defined to embrace the original concept: Simplicity, Functionality, Versatility and Beauty.

Figure 34 Volkswagen's design philosophy

Fox is not only a concept aimed at a young audience, but also one which is intended to appeal to the Brazilian family requirements: dynamism, versatility, and economy. It should also be compatible with the elegance of the modern woman who currently accounts for 70% of car choice in Brazil, in which she is the buyer 45% of the time, or, at 25%, has a strong influence on the decision of the couple's choice of car.

Another issue to bear in mind was that the car has to perform well on Brazilian roads. Once it is able to deal with Brazilian roads, it can be used anywhere else in the world.

In a sense, this model was originally developed to be marketed in emerging markets such as Brazil, China, India and Russia. However, the acceptance of this car in Brazil was so great that it was considered for Europe and North America.

The oyster and pearl metaphor-concept was used as a starting point for the Fox development; it was build from inside out. The idea is that the pearl would be the passenger/user who in our view is precious, and the oyster would be the car, which functions to protect the pearl.

Originally the VW Gol platform would be used because it was established as one of the best platforms for irregularity of the Brazilian roads. However, it would not be possible to compete or even export to other markets such as Europe once the platform was not aligned with the European regulations. A brand new platform would demand time and it could cost too much to be developed. On the other hand, Polo's platform fits into the European standards and it has been produced in Brazil for many years.

The biodiversity present in Brazilian botany was used as a source of inspiration for colour & trim. It was influenced by some elements of the Atlantic forest such as a bird's eye view of the forest, a microscopic image of a Bromeliad flower, the structure of beeswax and also an image of wheat plantation.

Some of the internal panels were developed through the use of a plant called Carauá (Figure 35), which is found mainly in the northeast area of Brazil. The fibre of this plant is incredible strong and it can be moulded once heated. By using this material it helps local producers as well as avoids the use of chemical components.

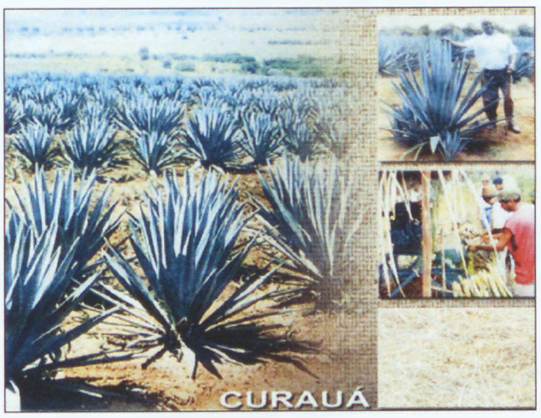


Figure 35 Carauá plant used in some interior panels of the VW Fox

According to Luiz Veiga (2006), the initial development was done entirely in Brazil until the construction of the full-scale model. Then, they took the model and presented it entirely unannounced at the Headquarters in Wolfsburg. Veiga remembers that meeting quite vividly, since he was not allowed to finish his presentation and the model was not approved straightway. However he was given a green light to keep developing this project with the support of one key figure of the management team. Fast-forward 3 years, and the VW Fox was launched in Brazil and in a few months it became one of the best selling models.

It was introduced to the European market in 2005, replacing the ageing Lupo city car as the entry-level car in the lineup and at a far cheaper price. When Volkswagen launched the VW Fox in Europe it chose Copenhagen because it is believed that the car has similar attributes from the city: young, hip and vibrant. To match the young target audience – the car sells for less than €9,000 in Germany – VW formed a partnership with a 3-star hotel, renamed it Hotel Fox and brought in 21 student designers from across Europe, all untried in hotel design, to create the interior of the property.

The message was: people make their cars individual and individuality was the trademark of the hotel. The launch took place over three weeks, and guests stayed at Hotel Fox. Not only was there a legacy in the decoration of the rooms but the property also agreed with VW that it would maintain a level of pricing for two years so that young people could afford to stay there.

Journalists arrived at Copenhagen airport and had the opportunity to test drive the Fox before being given lunch at Club Fox, a disused warehouse in Copenhagen docks. During the meal, the artists, who had decorated the hotel, painted white Foxes; when Spanish journalists were having lunch, there were Spanish artists painting the cars. In the evening, catering school apprentices created interesting cuisine to underpin the messages of the car and seating was designed around three open kitchens. In addition, Studio Fox displayed cars that were created by students from universities across the world, including Brazil and the UK.

4.3. Toyota

The Toyota Motor Co. Ltd was first established in 1937 as a spin-off from Toyoda Automatic Loom Works, one of the world's leading manufacturers of weaving machinery. At that time, one the most respectable Japanese inventors, Sakichi Toyoda, headed The Toyoda Automatic Loom Works. The patent rights to one of his machines had been sold to Platt Brothers (UK) and provided the seed-money for the development and test building of Toyota's first automobiles.

August 1997 marked the 60th anniversary of TMC. The fledgling company founded by Kiichiro Toyoda, Sakichi's son, has since blossomed into the leader that it is today. In 1950 the company experienced its one and only strike. Labour and management emerged from this stoppage firmly committed to the principles of mutual trust and dependence, and that corporate philosophy still guides our growth today.

Production systems were improved in the late 1950s, culminating in the establishment of the 'Toyota Production System.' It became known as TPS in 1970 but was established much earlier by Taiichi Ohno. Based on the principles of Jidoka, Just-in-time and Kaizen, the system is a major factor in the reduction of inventories and defects in the plants of Toyota and its suppliers, and it underpins all operations across the World.

Toyota launched its first small car (SA Model) in 1947. Production of vehicles outside Japan began in 1959 at a small plant in Brazil, and continued with a growing network of overseas plants. Toyota believes in localizing its operations to provide customers with the products they need where they need them; this philosophy builds mutually beneficial long-term relationships with local suppliers and helps the company fulfil its commitments to local labour. Over and above manufacturing, Toyota also has a global network of design and 'Research and Development' facilities, embracing the three major car markets of Japan, North America and Europe.

In every community in which the company operates, Toyota strives to be a responsible corporate citizen; close relationships with people and organizations in the local community are essential contributors to mutual prosperity. Across the world, Toyota participates enthusiastically in community activities ranging from the sponsorship of educational and cultural programmes to international exchange and research. Today,

Toyota is the world's second largest manufacturer of automobiles in unit sales and in net sales. It is by far the largest Japanese automotive manufacturer, producing more than 5.5 million vehicles per year, equivalent to one every six seconds.

4.3.1. Design philosophy

Being the biggest Japanese carmaker so far, Toyota has been taken as paradigmatic of Japanese design. Recently, Toyotas has adopted a policy that links the Japanese 'factor' to the company's strategy, establishing a shorthand message to the global market that the cars be perceived as embodying truly Japanese design, or, as Toyota says: the J-Factor. In Toyota's words, J-Factor "refers to the local and global acceptance of Japanese-inspired design and cultural sensibilities", while Vibrant Clarity it the new design language that has been developed to express it through a combination of "perfect imbalance, freeform geometrics and integrated component architecture".

Add the three ingredients of Vibrant Clarity together and you get something called subtractive mass - "a minimalist style that is not only lightweight, but also looks lightweight". The Vibrant Clarity is Toyota's design DNA translated in two words. It refers to the four key aspects of car design: Proportions, which must be optimized, Architecture, which must be pure, Surface, which expresses emotion and Something Special, which must bring together the design elements that make a car stand out from the crowd.

Toyota realizes that in order to compete not only in emerging markets but also in Europe, it needs to rev up its design game. Six years ago, it opened ED2, its European Design & Development centre at Sofia Antipolis, near Nice in Southern France. The design team is aimed to produce cars that appeal emotionally to design-conscious European buyers and meet their specific needs. At ED², a team of 35 designers and strategists from nine countries works on making cars that strike a chord with drivers in countries where gasoline is more expensive than in the U.S., parking spaces are harder to find, and streets are narrower.

4.3.2. Lean System

Toyota Motor Corporation's vehicle production system is a way of "making things" that is sometimes referred to as a "lean manufacturing system" or a "Just-in-Time (JIT) system," and has come to be well known and studied worldwide.

This production control system has been established based on many years of continuous improvements, with the objective of making the vehicles ordered by customers in the quickest and most efficient way, in order to deliver the vehicles as quickly as possible. The Toyota Production System (TPS) was established based on two concepts: The first is called "jidoka" (which can be loosely translated as "automation with a human touch") which means that when a problem occurs, the equipment stops immediately, preventing defective products from being produced; The second is the concept of "Just-in-Time," in which each process produces only what is needed by the next process in a continuous flow.

Based on the basic philosophies of jidoka and Just-in-Time, the TPS can efficiently and quickly produce vehicles of sound quality, one at a time, that fully satisfy customer requirements.

4.3.3. A green Toyota

In R&D, Toyota focused its efforts on three key areas: the environment, safety and energy. It made a special effort in the area of the environment by expanding its line-up of hybrid vehicles, and has worked on R&D relating to a plug-in hybrid. In addition, as part of Toyota's efforts to respond to the diversification of energy, in 2007 Toyota plans to introduce a flex fuel vehicle in the Brazilian market that will run on 100% bio-ethanol fuel. From this point on, based on the philosophy of providing "the right car, in the right place, at the right time," and in accordance with the infrastructure and customer needs of each region, Toyota will continue to promote efforts to develop environmentally friendly technology and vehicles.

4.4. Ford

Ford Motor Company entered the business world on June 16, 1903, when Henry Ford and 11 business associates signed the company's articles of incorporation. With $28,000 in cash, the pioneering industrialists gave birth to what was to become one of the world's largest corporations. Few companies are as closely identified with the history and development of industry and society throughout the 20th century as Ford Motor Company. As with most great enterprises, Ford Motor Company's beginnings were modest. The company had anxious moments in its infancy. The earliest record of a shipment is July 20, 1903, approximately one month after incorporation, to a Detroit

physician. With the company's first sale came hope—a young Ford Motor Company had taken its first steps.

The first major step towards the emergence of the modern mass-produced automobile was taken at the end of the first decade of the 20th century. The decision by Henry Ford (1863-1947) to abandon workshop practice and adopt instead the moving assembly line was a simple conceptual breakthrough. It transformed the manufacturing process and bought into being what we have referred to ever since as 'mass production' on a so far unimagined scale.

Without a doubt the first significant styling achievement was the work undertaken for the Ford Thunderbird, launched in 1955. This was followed by Ford Edsel of two years later. These cars were, in sharp contrast with each other, a resounding success and a colossal failure respectively. The Thunderbird, a small, "fun" sports car conceived along European lines, was created to compete with GM's Corvette of 1953. Ford was less an aesthetic innovator then someone who understood that utility has its own inner beauty. The appeal of the 'Tin Lizzie', as it came to be called, lay in its reliability. Ford's famous statement that his customers could have his car in any colour "as long as it's black" carried with it promise that, although they would not get variety, the owners of his car would know that every Model T was as good as every other Model T. Ford came to the fore as a leading manufacturer in early 20th century. He paid his workers well and was able to lower the price of his cars, from $850 in 1908 to $260 by 1925. By that year two million Model T had rolled off his lines. By 1927 the production figures had risen to 15 million. However, by late 1920s, the unchanging nature of his business model had become a problem with the new GM's approach to styling favouring diversity. From the late 1920s Ford cars were restyled on a regular basis like their General Motors and Chrysler counterparts. The era of the standardised mass-produced cars was at an end (Sparke, 2002).

Nor do volume brands mean the same thing in different markets. Ford, for example, is mainly in the mind of American consumers through its light trucks – its F-series pick-up is the large volume vehicle in North America. There is an obvious association between the ruggedness of the vehicles and the American attachment to robust individualism. The whole story of Henry Ford and what he achieved is part of this image, even if the culture of the organisation at the time is now outdated. In Europe, in

sharp contrast, the Ford brand simply does not have the same meaning. There is nothing wrong with the products – the Mondeo is seen technically as a leader in this class. But the brand is perceived as a blue-collar one, for which no one will pay a premium. It is perhaps no coincidence that Ford's strongest individual product in Europe is the Transit light commercial van. In Japan, Ford carries the stigma of the unacceptability of American cars (Maxton and Wormald, 2004).

4.4.1. Design philosophy

J Mays, group vice-president Design, and chief creative officer at Ford Motor Company, is perhaps one of the most influential car designers in the industry. He is responsible for shaping the design direction of Ford Motor Company's eight global brands – Ford, Lincoln , Mercury, Mazda, Volvo, Land Rover, Jaguar and Aston Martin. In addition, through the expanded role he assumed early 2005, Mays invests even more time working with individual brands to create and support more long-range strategic design visions.

After his graduation at the Art Centre College, he worked in Europe for VW, Audi and BMW. Mays's disciplined approach in designing was an easy fit with the system of designing cars in Germany. Armi (2003) explains that the German approach puts more emphasis on design and effective execution than on innovation. Refinement of the design became then the main issue. Creating these kinds of car requires long and painstaking attention to details. Mays recalls that when he had just arrived at Ford, the former company's president, Mr Jacques Nasser asked him to analyse the process of product development and give them his vision of what could be done differently. After a while he explained the cultural difference from his previous experience in some European companies. He said: 'In the German product development processes we would select one or two models early on. And that would be a quarter of the way through the process. The other three quarters of the time was spent detailing, refining, and executing. At Ford, it is the opposite way around. We would spend three quarters of our time just plastering the walls with ideas. Then, when we are out of the time, we've got to execute this thing.' In this case, the execution would be substandard compared with what you saw coming out of Germany.

Mays has worked quickly to install the German product-development process to achieve more thoroughly designed and engineering cars. The German system of

choosing one model and refining it already has had an impact. The process Ford uses nowadays, they make a much early decision on the direction they are going to take with far few models supported by a good customer data up front. By the time of a quarter of the way through the process, they have decided where they are heading in 90percent of the cases. A proactive changing philosophy like this requires finding strong-willed designers who can effectively interact with people in other branches of the company. According to Mays, design-driven is a short hand to say the designers need to work more closely with engineers to make sure that proportions, platform, or architecture are such that the design role is not simply about putting a cake decoration on a ill-proportionate foundations.

To be able to give this kind of direction and control to top designers, however, means being able to convince Ford top management to change its traditional ways in doing and managing process in the development of the car. As an example, the Ford Taurus, which was designed before Mays arrived, was adventurous but awkward. It began to loose money, and upper management decided that that consensus thinking rather than a tasteful dictatorship was the answer to the design problem. At the time, Ford leaders began to say they needed more market research, more analysis, and needed to be more in tune with the customers. Mays' view, however, is that that design was, perhaps, a little reckless, so the ability to make decisions intelligently about what should be done to the car was pulled out from underneath them. As a result of what he describes as mistakes by the previous designers, 'the mentality within the company is still. We better get 150 people in here and ask their opinion about the design of the car. And that will never work: to get in sync is impossible. So if I can leave behind a legacy at Ford, it would be that design has a high degree of integrity, and designers are looked at as experts who can balance the equation somewhere between the functional parts of the car and the emotional requirements of the marketplace with lovely exterior and interior design' (ibid. 2003).

This overconfidence in the designer's role at Ford is fostered by the three golden rules of design dictated by J Mays and further explained by Edson Ami (2003):
Design priority one: Proportions
He explains that the correct proportions for an automobile have 'to do with collective memory of things that you have seen since childhood. It has to do with your personal preferences and with your aspirations in life. And all of those are set up probably by

time you are fifteen years old.' Being more familiar with Japanese design, today's young generation prefers vehicles that have a slightly funkier, boxier proportion. In contrast, Mays believes that a 'proper' car should have a passenger greenhouse that is closely coupled to the lower body of the car.

Design priority two: Line

Line, as seen in the silhouette and graphics of a vehicle, is the next priority. In Mays's mind, consideration of a line should precede consideration of form, in both the sequence of designing and the order of importance. Mays says: 'There are two ways to design something: you can let the form lead you, or you can let the line lead you. In car design, you have got the line lead you and then the form expands out from the line. That is the starting point for any kind of design in the automotive industry.

Design priority three: Forms and Shapes

The real trick comes in the next priority, which involves translating these linear outlines into three dimensions. It is at this point that Mays tries to resolve the geometric forms seen in profile. He talks about this process as one in which the sense of geometry is kept, giving life and tension to these pure forms. According to him, people want to look at something and believe that it is purely geometrical, which is in fact almost impossible on an automobile. What it is essential then, is trying to do a correct shape in order to make appear to be, or give the perception that it is, a pure geometrical shape.

The J Mays design philosophy, along with his golden rules, can be easily seen in the most recent Ford models. Introduced in 2006 at the Paris motorshow, the iosis X Concept is a radical five-door sports-crossover vehicle. This vehicle pushes the boundaries of Ford's 'energy in motion' philosophy to the limit, fusing 'kinetic design' with the sporty ruggedness of a 4x4. Like the original iosis coupe Concept that also made an impact at shows in 2005, this is not a production vehicle but it give us a glimpse of the future development for Ford in years ahead. Iosis X clearly demonstrates that 'kinetic design' is fast becoming a consistent and enduring reality in Ford's future.

With 'kinetic design', the Ford of Europe design team has embraced the marque's core values in an expressive, new design language. iosis expresses this language in its

ultimate form. Kinetic design visualises Ford's acclaimed driving quality – it expresses energy in motion. The foundation for this new design language is a modern vehicle architecture derived from Ford's 'shared technologies' strategy. Designers now have the freedom to develop very different models and designs from these shared component sets. 'iosis' demonstrates how the same component set used for the SAV Concept shown at Geneva can be applied to an entirely different type of vehicle.

In the case of iosis this language is applied in its most muscular form as expressed by the full surfaces spanning taut, dynamic feature lines. Strong shoulders supported by sharply defined undercut lines further support this muscular stance.

To emphasise the athletic proportions of the body, the principal surfaces are precisely sculptured, which is most evident from above when a clearly defined three-plane plan view can be identified. At the front this elimination of imprecise rounded forms has the effect of visually shortening the front overhang. Contributing further to these athletic, sculptural forms are the wheel arch lips that have become a familiar Ford design signature since they appeared originally on the Ford Focus. Overlaid on these well-defined sculptural forms are clearly recognisable graphic elements. Prominent among these is the distinctive daylight opening area with its characteristic upward tick at the rear. On iosis, and iosis X Concept the new face of Ford is represented by the familiar Ford graphic of an inverted trapezoid air intake, in this case placed below a bold, chromed grille.

The definition of the J Mays's design philosophy and the Kinetic Design master line is categorized into four clusters: 'tough', 'no boundaries' – which is the tag line for the 'outfitters'. A third category called 'friends and family' into which the Mondeo fits, and then there is a fourth one that is the soul of the brand Ford, which is called 'living legends'. On 'tough truck' category models such as Ranger, F150, F250, F350, and so on can be found. 'No boundaries' runs from Escape, the smallest SUV, to Excursions on the top. 'Friends and family' runs from Fiesta in Europe, to Focus, Fusion and Mondeo. And for 'Living legends': T-Bird, Mustang, Cobra, and Forty-Nine.

Of course, there has been a huge difference in the American and European portfolio due to an adaptability to the market characteristics and demand. It is well known, for

instance, that there is a preference for SUV's and trucks in North America. In Europe, by contrast, considerably smaller cars are preferred.

Recently, at the Frankfurt Motor show 2007, the new off-road Ford Kuga was revealed, based on the Iosis X concept. At the front, the designers have taken Ford's twin-grille theme to the extreme. The Kuga's purposeful face is dominated by a huge lower air intake, which is outlined in chrome. Above lies a smaller grille, with rakish headlights featuring bright circular central bulbs. The lens design is very sporty, with the plastic covering trailing along the wing.

Raised bonnet lines running to the A-pillars add to the aggressive stance continued by the extended wheel arches, which are filled by stylish alloys wearing enormous tyres. At the rear, the roofline slopes down to meet the distinctive C-pillar. With minimal overhangs all-round, plus an athletic-looking wide track, the Kuga has a similar sporty appearance to the original Iosis X concept car.

Also aligned with the Kinetic design philosophy, a new Ford Verve Concept suggests a new design direction for future compact cars. The press release explains that the Ford Verve Concept is as dramatic on the inside as its exterior. From its boldly shaped surfaces and courageous use of rich colours and irresistible materials, the car has a playful sense of sophistication and fashion. It also pioneers new technologies that someday could be a production reality. As Ford designers explored the possibilities for a future Ford small car, the wide latitude they were given helped them focus on applying the tenets of kinetic design to the interior of the new concept. As a result, the Ford Verve Concept repudiates tradition, especially in the architecture of the instrument panel, whose sensuous curves and full shapes make a typical, upright centre stack design seem distinctly old fashioned.

4.4.2. Ford Brazil

In 1919, Ford arrived in Brazil; the first vehicle manufacturer to start up operations in Brazil. Two years later, in 1921, a new series assembly line was inaugurated in Bom Retiro for the production of the Model T. In 1953, Ford inaugurated its plant at Ipiranga, also in Sao Paulo. This facility produced the first Brazilian-made truck, the F-600, and the F-1000 pickup truck. In 1967, Ford acquired Willys Overland do Brazil, significantly increasing its industrial plant and product lines.

The manufacturing complexes under Ford Brazil's umbrella are located in the state of Sao Paulo. The Taubate, plant supplies engines and transmissions to the Ford Fiesta and Ka, built in Sao Bernardo. The truck assembly plant at Ipiranga produces the Cargo and F-Series models, as well as bus chassis.

One of the most important products in the portfolio of Brazilian Ford is the EcoSport. The Ford EcoSport is a mini SUV designed and built in Brazil by Ford. It is essentially a no-frills version of the European Ford Fusion, consequently based on the Fiesta platform. The EcoSport is one of Ford's best-seller models in Mexico, Argentina and Brazil. EcoSport arrived on the Latin American market at a time when SUVs were highly desired but were only available as high-priced imports. The rugged but affordably priced compact SUV proved right for a region where roads are often rough. EcoSport is available in a 'flex-fuel' model (Flex 1.6L) that can run on gas or ethanol. In Brazil, ethanol is 40 percent less expensive than gas. EcoSport has won several awards, such as Quatro Rodas magazine's 'The Best Buy of 2004' in the SUV category, and Brazilian Association of the Automotive Press' 'Best Sport-Utility of 2004.' This model is an icon of Ford's turnaround in Brazil. It has considerably improved Ford's brand image throughout Latin America, especially in Brazil, and also has been generating a premium profit responsible for turning Brazil into one of the leader markets in terms of profitability for Ford.

4.5. Conclusion

Four companies (Fiat, Ford, Toyota and Volkswagen), were analysed to illustrate the current situation in the motor industry, in terms of design and branding practices. Recently, Fiat has been in the process of reorganising its entire range of products under a single design strategy called 'Rinascimento'. Unlike the old practice of reinforcing each model as a brand, the new strategy is driven by clear focus on national stereotypes, such as the Italian style-consciousness. As a result, the company's portfolio has changed dramatically towards more distinctive products aimed at modern mainstream drivers.

Volkswagen, the biggest European car manufacturer, has an extensive portfolio of products, from the Brazilian designed Fox to the premium Phaeton. Throughout the range, design and brand identity is very consistent, and for a long time, VW has

communicated a single message to its audience: quality engineering. However, in the process of achieving a brand consistency, it seems that VW overlooked another golden rule of business: focus on customers. People who are looking for premium products usually tend to resist products which seem similar to entry-level models. Why would customers pay a premium for a product with so many similarities in terms of design cues? They are looking instead for products which stand out from a design point of view.

The design philosophy adopted by Toyota has been linked to a specific Japanese design aesthetic: the J factor. Known as Vibrant Clarity, it refers to the global acceptance of Japanese-inspired culture. Although Toyota is keen on developing a design strategy, it still lacks a consistent image, and it is clear that since the late 90s Toyota has been paying more attention to the public demand for environmentally-friendly cars. Widely accepted in the US market, the Prius is perceived by the general public as the best solution when seeking a car with a low environmental impact. However, the entire life cycle of the product must be analysed in order underline this claim. That is, unfortunately, not the case when Toyota communicates its brand attributes to its audience, but nevertheless a much stronger brand is emerging from this 'green' strategy.

An iconic product does not sustain the company's image forever. As an example, Ford has been struggling to return to being perceived as one of the biggest players in the marketplace. In 2007, Interbrand released its ranking of the best brands in the world, and the result for Ford was disastrous. It shows that Ford's brand value has decreased by 19%. In an attempt to regain the momentum, its Kinetic Design philosophy may provide the answer, with a demanding and radical change in terms of image. Although more recently most automotive companies have been clearer about design strategies, it has been observed that none of the analysed brand leaders considers real people in the process of developing their products. If you are designing something for someone, your target audience must be at the centre of your strategy.

The next chapter, Users' Insight, explores what the author considers to be the core idea of this research: a user-centred approach when developing products: in this case, cars.

5. Users' Insights

In this chapter, I present the central idea of this research: the people's insight. It offers a fresh perspective on product development for the automotive industry. The possibility was presented to real people to express their opinions, feelings and desires about what they believe the future might be. In order to do so, an experimental project called Brand Stereotype was developed in November 2005 and the results were presented at the Vehicle Design Interim Show at the Royal College of Art. The project aimed to explore new ways of gathering insights through qualitative methods using images rather than simply words alone. This was the very beginning of what would become the master line of the methodology used later to gather primary information or, in other words, people's insights.

This is the research stage where the hypothesis was tested. In brief, the main hypothesis of this research is that the automotive industry has, for over one hundred years, been focused on product development rather than on a design method that takes account of people's desires and aspirations, as reviewed by the literature. In this sense, this research questions the unilateral model applied over the years where few decision makers have decided what would be the best option for millions of people. However, this model of product development is no longer sustainable. Through a co-creation, where people were invited to discuss their views about what might be the better and expose their inner desires and dream about the future, the research explores a collaborative way along with designers towards a better future.
The user-centred process is suggested as one of the possible ways for the automotive industry become fairly sustainable in long term.

5.1. Brand Stereotypes – an experimental project

Brands once were only used to distinguish goods from each other. In today's market the essence of the brands remains the same. However, at the same speed that our society has been changing, the brand has also been changing and adapting as part of our daily life. It is no longer just an element of identification. Rather, brands are influencing and sustaining different cultures but nevertheless with a very similar metrics. Branding these days is largely about involvement and association; the outward and visible demonstration of private and personal affiliation. Branding

enables us to define ourselves in terms of a shorthand that is immediately comprehensible to the world around us (Olins, 2003).

Although brands have a long had a role in commerce, it was not until the twentieth century that branding and brand association became so central to competitors. In fact, a distinguish characteristic of modern marketing has been its focus upon the creation of differentiated brands. Unique brand associations have been established using product attributes, names, packages and advertising. It has been to move beyond commodities to branded products in order to accentuate the bases of differentiation (Aaker, 1996). In our everyday lives, we are immersed in a world of brands.

In the motor industry, branding association has been essential to reinforce qualities and attributes through a distinctive design in order to create true value for customers. The model of the car company that Henry Ford created and Alfred Sloan perfected – integrated, scale-driven, "product-push"-oriented – prevailed for decades (Branstad, Williams et al., 1999). Today the traditional model of the auto company is under direct attack. Alternative visions and concepts have emerged for every piece of value that the traditional car company adds. Most carmakers have already realised the importance of being driven not only by product development, but also its brands in which the product must be the physical translation of the intangible attributes.

In this case, more than ever designers are playing an import role in the process of product development and of building the company's image. In this competitive situation, designers must understand the customer demand and the clients' aim to better translate the brand attributes into something desirable (Olins, 2003).

In attempt to communicate the values of their products, the automotive companies may be failing to differentiate themselves in a crowded market. Similarities are common between a company's mission statement and this approach might lead them in producing similar products and services. But how can a company translate the core of its strategy in order to bind its values to people's minds and hearts? Perhaps the shortcut is the use of stereotyping. The notion of stereotyping a brand as a shortcut judgement points to the manner in which it is a very simple, striking, easily-grasped form of representation but one nonetheless capable of condensing a great deal of complex information and a host of connotations. On the other hand, (Stewart, Powell

et al., 1979) suggest it is part of the human being behaviour to anticipate an opinion about products and services even before get to know it. In that case, it has been customary to treat stereotyping as an atavistic mode of perception. When Walter Lippmann coined the term, he did not intend it to have a wholly and necessarily pejorative connotation. Lippmann describes stereotyping not as a neutral pattern neither just as a shortcut for analysing something. It is all these things and something more. Stereotypes are, therefore, highly charged with feelings that are attached to them (Dyer, 2002).

Stereotyping is commonly applied when people tend to compare different cultures or countries, in which these are conveyed, most of the time, in either a simplistic or a mistaken way. For example, Brazil is generally referenced as a country of which favelas, samba and football are the most common imagery. The same could be said about the UK's image where tradition and formality are among the most common images (Figure 36).

Figure 36 Brazil and UK stereotypes - mood board

This is all arbitrary observation, after all. Thus, attitudes towards the nation and the brands, which derive from it, are unpredictable, emotional, variable and spring largely from legend, myth, rumour and anecdote. Despite some misinterpretation, nationality still is a seal of quality for some industries, and for carmakers, in particular. Cars have always been traditional national icons. They are symbols of speed, independence, status and style, and they are often objects of great beauty, craftsmanship and ingenuity. Above all, at one time they did seem to be the personification of the nation in metal (Olins, 2003). However, after an extensive period of merges and acquisitions national identity nowadays is a blur subject for most people in terms of brand distinction. It seems to be melting away as carmakers are much more focused now on building reputation towards global operations. The problem is a huge lack of distinctiveness between products as well as the way the automotive industry has attempted to communicate its values to all stakeholders.

Based on the discussed subject above, this experimental project aimed to examine the relationship between what messages automakers are attempting to communicate and how people perceive this message through stereotyped images. The method applied to gathering information was a one-on-one questionnaire. (Figure 37) Some questionnaires were also sent by e-mail. There were sixty-two respondents who participate to this project by answering the questionnaire. The survey was designed to capture opinions through peoples' reactions from the provided images. The use of images was determinant once it is believed that people are likely to recognise images easily than from a word-based questionnaire. The first question asked people what they considered to be the most memorable car brand. From this point, participants were requested to link the chosen brand with images that were divided into five categories: 3D Shapes, Animal, Person, Brand, and Lifestyle.

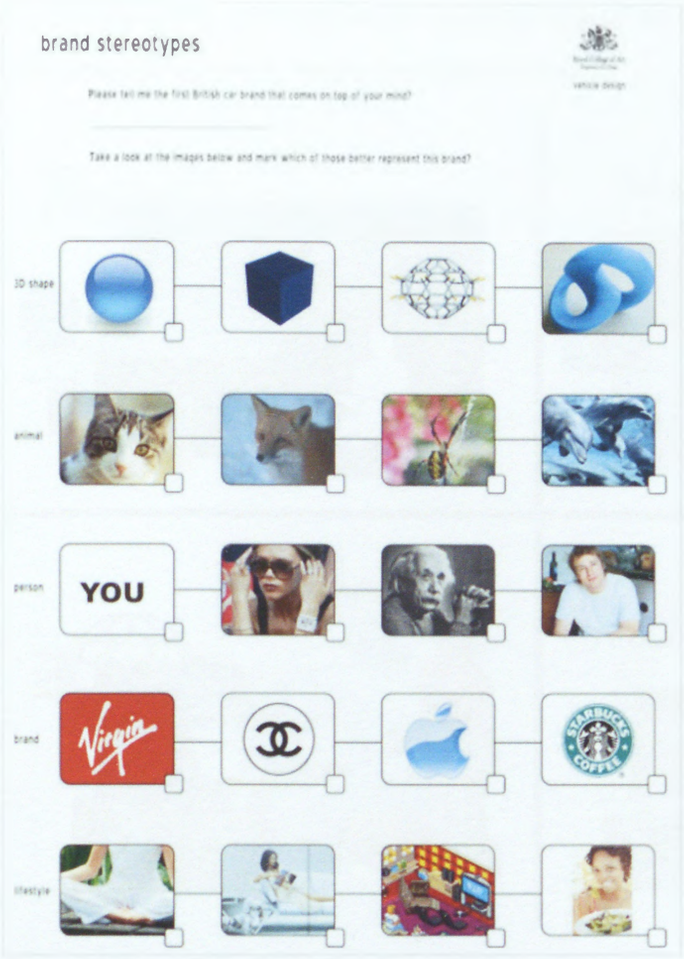


Figure 37 Brand Stereotype - Survey questionnaire

The author defined the wide prospectus of these categories in order to gather the people's perception through comparison between the chosen brand and the categorised images. A framework was made by using images associated with the four scenarios which were based on a map used by Fiat's OSA (one step ahead) process, which contains four poles: Being, Having, Techno, and Emotion (Figure 38). Moving clockwise around the map, the pole Being represents spirituality, values of the soul, transparency and simplicity. The pole of Emotion attaches values related to authenticity where the bold manifestation of feeling constitute an area full of warmth and passion. The pole of Having is related to the archetypes of passion and identity expressed through exhibitionism. Finally, the Techno pole represents the advent of technology as a guiding value in the process of change. This map was used as a framework to place the results from the questionnaire respondents, as well as a guide to choose images to build up the questionnaire. As a result the respondents identified

ten brands as the most memorable as follow: Jaguar, BMW, Porsche, VW, Audi, Mercedes, Mini, Lotus, Smart, and Rolls Royce.

Figure 38 Brand Stereotype - Four scenarios

Before placing the brands cited in the framework, a graphic display from each brand was created by showing some product examples as well as the company's statement or tagline. As an example, Smart uses the tagline 'Pure, Pulse, Passion – Join in'. In some way, that is the essence of Smart's brand translated into a single sentence. But these words are not simply taglines. They are in fact shorthand descriptions of each company's competitive strategy. These words describe what the companies are pledging to deliver as well as what is special about their products and services. As (Pincus and Bertels, 2006) argue, consumers and stockholders would agree that the success of brands is a function of both the relevance of their promises and how effectively and consistently the companies are able to keep them. In that case, the tagline was chosen for the reason that it is a powerful marketing tool, which is aimed at sealing the complexity of a communication pack provided by the carmaker along with the products image. It is basically a slogan or phrase that visually conveys the most important product attribute or benefit that the advertiser wishes to convey.

Perhaps one of the most recognisable is Nike's 'Just do it' tagline. In the automotive industry, however, BMW's 'The ultimate driving machine' appears as one of the most consistent messages in relation of their product range. In general this short message help consumers to cut through the clutter of claim and counter-claim. Few people have the time or inclination to examine and compare every technical detail of a car before they buy it; they instead rely on the shorthand of the car's reputation. The same is true of any number of products, from mobile phones to breakfast cereal, from laptop computers to chocolate bars. People rely on a product's reputation, its brand and the way that its attributes have been delivered to make an informed purchasing decision.

Once the information from the questionnaires was collated, the result was placed on the framework spread through according the respectively quadrant (Being, Having, Techno and Emotion) as shown in Figure 39. By following the quadrants clockwise we can see that brands such as Mini and Smart were placed on the far top right position on the Being and Emotion quadrant. The next quadrant, Emotion/Having, shows Audi, Jaguar and far end Porsche followed by BMW, Rolls Royce and Mercedes on the Having/Techno quadrant. Finally, we will find Lotus as the only brand placed on the Techno/Being quadrant.

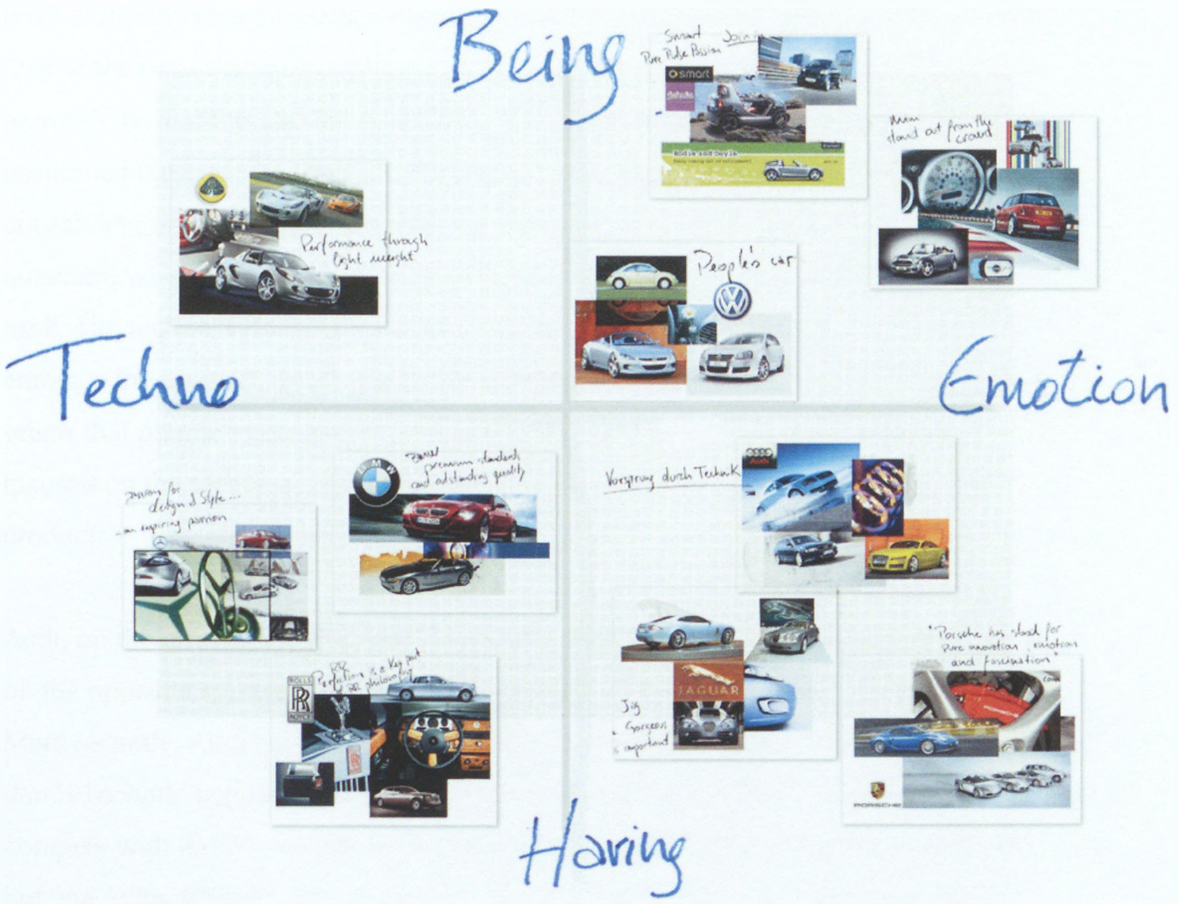


Figure 39 Brand Stereotype quadrant

By doing an empirical analysis, it is clear to see how some brands are shadowed by their heritage. Despite the fact that the respondents are not part of the Rolls Royce targeted market, the brand has been seen as part of the 'Having' cluster. Of course it would not make any sense to place Rolls Royce on any other quadrant, however it is a good example of a brand very well positioned and committed to communicating their values directly. On the opposite side of the spectrum, Volkswagen has surprisingly been placed on the same quadrant as Mini and Smart. It is unlikely to see VW sharing close position with Mini and Smart in terms of brand appealing. However, the long term achievement in high quality products as well as a immense range of products Volkswagen provides have made people think in a particular model, such as VW Beetle rather than the brand as a corporate expression.

The results from the survey were discussed with professionals from the automotive industry such as Peter Stevens (Vehicle design consultant), Ian Callum (Jaguar), Raul Pires (Bentley) and Luiz Veiga (Volkswagen Brazil). In most cases, there was a certain

level of discordance between people's opinion and the experts on the car design field. One of the most discussed positions was Lotus, which was placed by the respondents between the Techno and Being clusters. Some experts suggested that Lotus should be positioned close to 'Emotion' cluster since it is usually a car that represents an outstanding driving experience. Although the experts think of moving Lotus to another quadrant, we should not forget to take account of how Lotus has been presenting itself. The tagline 'Changing the rules', urges us to look at things differently, to embrace the unusual, according to the company's statement. However, in this case it seems that people's perceptions are mostly aligned with Lotus values once it is focused on the technical advantages rather than on the emotional appealing of the product.

Audi, on the other hand, the luxury car division of Germany's Volkswagen was placed on the opposite spectrum of the quadrant between Emotion and Having clusters. More recently, Audi has been heavily basing its communication on the 'Vorsprung durch Technik' tagline, German for 'Progress through technology'. If Audi was to compete with BMW and Mercedes it had to have a personality as attractive as theirs, but one quite different. This personality had to be based around Audi's capabilities. And that is how the idea of Audi's advanced technology emerged (Olins, 2003).

By reflecting the brand values of progressive, sophisticated and sporty qualities throughout all the customer's contact points, Audi has perhaps one of the most consistent images in the marketplace. However, the results showed that people interpreted the Audi brand through its an emotional characteristics once it was placed on Emotion/Having cluster. After all, it must be seen as a huge advantage to them since this is the image that Audi wants to project: a brand positioning to a more progressive market, where people are willing to pay a premium price for it.
Jaguar and Porsche share a relatively similar position in this study on the Emotion/Having quadrant despite the fact that both play in slightly different markets. As parent brand Ford Motor Company recently found out, Jaguar's brand positioning is so strong that attempting to move it down is a dangerous exercise. Analysts believe that Jaguar is the only luxury brand of Ford Motor Company that has not turned around yet in terms of profitability. However, the current Gorgeous campaign is a sort of return for Jaguar, going back to the can't-miss bull's-eye appeal of its blue-blooded legacy. (Anonymous, 2006) The associations made by the participants are based on

their feelings, beliefs and knowledge, which were derived as a result of their experiences. What the project result has shown is that most companies still use the same way to reach people's minds and hearts by communicating the attributes of their brands through similar tones of voice. VW for example, has an extensive product rage based on the same assumption of being the 'people's car'.

The study showed that for brands with a long history, such as VW, where the functional benefits are the main clusters for image building, some distortions were identified. On the other hand, brands such as Mini and Smart, both developed into a branding philosophy, appear more aligned with people's perceptions.
The great challenge for mature brands is to switch their images to different segments without confusing customers. The quality-focused is no longer a safe route for the automotive industry, neither a brand-led strategy. As the study showed, brands with an emotional connection with its customers have a more accurate and clear image.

Thus, this conceptual framework represents an original attempt to analyse how some carmakers have been positioning their brands in the marketplace through their core message. The framework is a useful tool to analyse the difference between what companies are communicating, and what people actually think they are. This experimental project was a starting point for a further development where abductive thinking played an important role in inventing new options to find better solutions through design.

5.2. Field research

Extensive field research was undertaken as a primary source of information in two countries, Brazil and the UK. A series of interviews, focus groups and technical visits took place in order to gather information not only in order to understand the subject but also to explore in depth areas correlated.

Very often focus groups are chosen based on demographics. However, this study is focused on people's aspirations, desires and their potential behaviours. The difference is critically important. It is easy to think that the demographics of the target audience are the driving force behind selecting study participants. However, for the purpose o this research it was considered the behaviour of the person as the main desired characteristic rather than demographics.

For this reason, one of the most challenge parts of this research phase has been recruiting people. Since this research is attempting to gather a broader overview from the developed and developing world, two cities were chosen to take part of the qualitative study: London, in the UK and Curitiba, in Brazil. London, one of the richest cities in the world has been facing problems in the transportation system for decades because a series of factors such as the size of the population, people's behaviours towards mobility and under investment.

Curitiba, on the other hand, has been considered one of the most innovative cities in the world in terms of public transport. Curitiba is the capital of the Brazilian state of Paraná and it is renowned as one of the world's most sustainable cities. Faced with the dilemma of rapid urban growth, the city designed a Master Plan in the 1960s that has evolved over the years to its present form. Although, Curitiba's population increased from 430,000 in 1960 to over 1.8 million today, its streets are 25% less congested than cities of similar size. Much of this difference can be attributed to Curitiba's highly efficient bus system, which transports 75% of all weekday commuters. As a result of Curitiba's innovative public transport system and other environmental measures, Curitiba's air quality is far superior to other comparable Brazilian cities.(US Enviromental Protection Agency, 2006) In contrast with this and here lies a paradox, Curitiba has more private cars than any other city in Brazil but most of the time uses public transport just because they have good alternatives (Mau, 2004).

In Brazil, Curitiba was chosen because of its privileged socio economical position in the current Brazilian socio/economic scenario. Curitiba is the largest city in the prosperous Southern region, and its population is largely descended from German, Ukrainian, Russian, Italian and Polish immigrants. The city is well known to urban planners worldwide for its innovative public transit system. Considered to have the best quality of life in Brazil, Curitiba is a city with approximately 2mil inhabitant. For many years Curitiba has been the 'testing' city for many companies, which are planning to launch a new product, or service in the internal market.

In the UK, London was chosen because is historically known as one of the great "world cities" and remains a global capital of politics, finance, culture, and design. The problems the city has been facing in terms of mobility are very often treated by public opinion in a paradoxical way. For many, it is still an example of a democratic and

well- connected system where buses, tube and trains reach almost every corner of the city.

5.2.1. Recruiting people (Diffusion of innovation)

The participants have been recruited to take part of the focus group based on the diffusion of innovations theory, which was formalised by the sociologist Everett Rogers in early 1960s.

Diffusion is the process by which an innovation is communicated through certain channels over time among the members of a social system. (Rogers, 2003) explains that diffusion is a special type of communication concerned with the spread of messages that are perceived as new ideas. The perceived newness of the idea for the individual determines his/her reaction to it. In addition, his theory explains communications as a process in which participants create and share information with one another in order to reach a mutual understanding. Thus, the four main elements of the theory are the innovation, communication channels, time, and the social system.

Rogers stated that adopters of any new innovation or idea could be categorized as shown in the Figure 40: innovators (2.5%), early adopters (13.5%), early majority (34%), late majority (34%) and laggards (16%), based on a bell curve. The method of adopter categorisation is the most widely used in diffusion research today. It is essentially the only method of adopter categorization. In fact, terms such 'innovators' and 'early adaptors' are widely used and understand by the public.

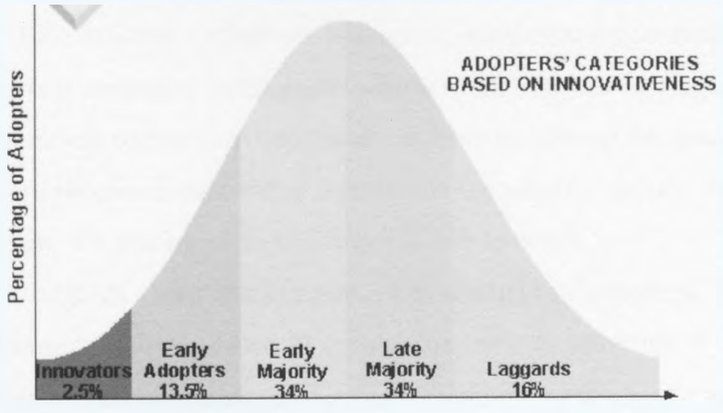


Figure 40 Rogers Everett's diffusion of innovation bell curve

Each adopter's willingness and ability to adopt an innovation would depend on their awareness, interest, evaluation, trial, and adoption. Roger explains some of the characteristics of each category of adopter as follows:

- Innovators – Venturesomeness is almost an obsession with innovators. Their interest in new ideas leads them out of local circle of peer networks and into more cosmopolitan social relationships. Communication patterns and friendships among a clique of innovators are common. Control of substantial financial resources is helpful in absolving the possible losses from an unprofitable innovation. The innovator must be able to cope with a high degree of uncertainty – in other words, he is a risk-taker.
- Early adopters – They are a more integrated part of the social system than innovators are. Whereas innovators are cosmopolites, early adopters are localites. This category has the highest degree of opinion leadership in most systems. Potential adopters look to early adopters for advice and information about an innovation. They are important piece in the process by triggering the critical mass when they adopt an innovation. In one sense, early adopters put their stamp of approval on a new idea by simply adopting it.
- Early majority – adopt new ideas just before the majority of people. They interact frequently with peers but seldom hold position leadership. The early majority are one of the most numerous adopter categories, marking up one third of the members of a system. The decision to take part in an innovation process is relative longer than that of innovators and early adopters. The thinking process "Be not the first by which the new is tried, nor the last to lay the old aside" fits this group.
- Late majority - sceptical, traditional, lower socio-economic status, the pressure of peers is necessary to motivate adoption. Intervention strategies that help them to overcome barriers are needed to get them to take up the innovation. Their relatively scare recourses means that most of the uncertainty about a new idea must be removed before the late majority feel that it is safe to adopt.
- Laggards - neighbours and friends are main info sources, fear of debt, pays little attention to the opinions of others. The point of reference of the laggards is the past. Laggards tent to be suspicious of innovation and of change agents. This resistance to innovation may be entire rational as they must be certain that a new idea will not fail before they can adopt it.

The better choice for recruiting participants to take part of this qualitative study then was made based on those people who have characteristics and behaviour similar to those at the top of Rogers' model, the innovators and early adapters. The research is keen to identify not only their perception about the current situation, but also their beliefs and dreams. Therefore, the innovator and early adaptor are certainly the most assertive group of people to fit in the profile needed to gather information required by the qualitative nature of the study.

Innovators may also process a type of mental ability that better enables them to cope with uncertainty and to deal with abstraction (Rogers, 2003). These abstraction skills were determinant to the successful results of the field activities once the participants were asked to link past experiences with possible future scenarios. When defined the use of Everett Rogers's theory, a decision of what kind of innovators and /or early adaptors professionals were demanded. The ideal group would have evenly divided by gender, and also by the state of the mind. In order words, logical and creative thinkers. I started looking for people with the following profile: Creative thinkers; Artists, Designers, Entrepreneurs, Writers, etc. Logical thinkers: Engineers, Solicitors, Medical doctors, etc.

Of more than 45 people contacted, 23 finally agreed to take part in an experimental project. Participants' ages ranged from 22 to 30 years old. Although demographics are the most common way to set up a sample age range, the preference here was for mental age approach, rather than actual age. Given that the enquiry focuses on the situation 20 years hence, people in their twenties reflect the most relevant group of people.

5.2.2. In depth interview

When the target audience was defined, including the people who would take part in this study, the recruiting process started, based on Rogers Everett theory as explained just above. A wide range of people was shorted listed before the final list. In total, more than forty people were initially considered and contacted.

The first stage of this process of gathering primary information from the participants was through contact by phone during the recruiting process. After introducing myself and explaining the reasons why I was calling, and with the agreement of the

participant to carry on the conversation, I explained the basis of my research and the importance in having the person take part in the activity. The most common reaction from them was the curiosity about the subject and the method. As it was expected, some of potential participants were a little suspicious, but after the whole process was explained to them, they accepted the invitation to take part in the study. There was only one case of disagreement from the start. So, that is why a spear list was prepared.

A one-to-one interview was set up and followed a scripted guide interview at the start, and as happened in most cases, a loose conversation on the subject followed. The interviews aimed to learn from the participants how they felt and thought generally about their own behaviour towards design and branding, without the concern of being judged by others. It was also an opportunity to break the ice and to get to know the participants personally in order to confirm whether they fitted in with the 'Innovator' or 'early adopter' attitude.

It was suggested to the participants that the interview should be held in the environment where they spend most of their daytime. In this case, the idea was not only to gather information through the interview, but also to observe the way of life of the participant through ethnographic research. It is believed that the ethnographic research approach produces a more detailed understanding of people's behaviour, beliefs and preferences by observing and interacting with them in a natural, or even their own, environment. It was also requested that the interview should be recorded by the further transcriptions only. Most of the participants agreed to being filmed. However, some of them were more reserved and therefore did not allow us to be film them.

5.3. Insights from Brazil

The field research in Brazil was held at Pontificia Universidade Catolica do Paraná in Curitiba. As explained in the Chapter on Methodology, there were two sessions: the first one took place on 24th Nov 2006 and the second on 15th Dec 2006. Six participants kindly agreed to take part in each session and the profiles of the participants as well as the results are shown in the following section of this thesis. Both sessions were organised to be very relaxed and informal experience for the participants. When recruiting the participants, it was important to bear in mind the amount of information given to them about the whole activity in order to prevent them

from forming prior assumptions about the subject or coming to the meeting with pre-formulated answers. The idea was to make people feel confident enough to accept the invitation and then, once the content of the activity was explained to everyone at the same time, it was hoped that they would feel more comfortable about expressing their ideas to the group.

In the first session, the group of participants was formed evenly in creative and logical thinkers as well as in terms of gender, as it was explained in Chapter 3 Methodology. There were three males and three female from different area of activities.

Group 1 – Brazil

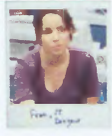
	Name	Age	Gender	Activity	Logical	Creative
	Darwin	23	Male	Director of Communication		X
	Erico	29	Male	Web Developer	X	
	Fabiola	24	Female	Designer at Univeler		X
	Fabio	28	Male	Computer Engineer	X	
	Melissa	28	Female	Journalist	X	
	Pavao	28	Female	Artist		X

The session started with the explanation of the evening agenda. Another important thing was to explain the means of recording the session once all the information would be used only for the purpose of the research. After that, it was asked all participants to introduce themselves in few sentences. This was an attempt to break the ice and make the participants feel less isolated once they did not know each other

before. At the beginning the participants felt reserved when were asked about feeling towards the subject. However, this type of attitude was expected then, a very informal conversation was conducted in order to make them comfortable enough to discuss the subject deeply. Some literature alerts the fact that it is common some of the participants usually take a position of 'the voice of the group' and try to impose he or she opinions over others. It was quite surprise that in both sessions in Brazil, the participants have discussed their opinions but others have not influenced their personal views.

In the second session, the group was formed with the same parameters from the first one with creative and logical thinkers in the same proportions. However, one 'logical thinker' participant was not possible to participate that date due to urgent familiar matters. That is the reason why in Group 2 we can observe more creative thinkers than the logical ones. Despite this significant change it did not compromised the quality of the discussion.

Group 2 - Brazil

	Name	Age	Gender	Activity	Logical	Creative
	Bernardo	22	Male	Illustrator / Artist		X
	Carol	28	Female	Social Scientist	X	
	Fernanda	32	Female	Solicitor	X	
	Fran	22	Female	Graphic designer		X
	Marcio	28	Male	Designer		X
	Peewee	28	Male	Graphic designer		X

5.3.1. Discussions

The Discussion was the first activity of the entire group discussion session. The questions were prepared to make the participants fell involved progressively into the subject. As it was previously explained, all the participants were asked to introduce themselves in order to make them comfortable and part of the group. The discussion aimed to understand the participants relationship with the object car by evoking their past experiences. Based on this, the first questions was:

What is your earliest memory about car and how do you feel about that?
In both group discussion the participants took very seriously the purpose of the exercise and collaborated intensively throughout the activity. Indeed the first question was aimed to unlock the emotional feelings and in most cases it is related to a family situation.

" ... my father had a Ford (she couldn't remember what model it was) for about eighteen years. It was a member of the family. I remember my dad would wake up early on Saturday morning to wash the car and get it ready to the weekend. It was an extension to our living room. Me and my sisters usually fought for a particular spot in the back and sit by the window... that was a great fun." Melissa

"Once I bought a VW beetle. I always found great that everyone was able to fix most of the engine problems. With a piece of wire and a hose you would be able to fix it. There was a kind of love and have relationship with that car." Marcio

"I remember that when I was 4/5 years old I knew all cars brands. I could tell you what car was on the streets at that time. Today is simply impossible to get a grasp of all brands and models out there." Bernardo

The comments above show how the participants have involved with what they have brought to the discussion. The participants then were invited to remind past experiences not only about car, as the question originally suggests, but also on a journey, whether god or bad. All of the participants demonstrate a sentimental side when remembering the earliest memories of a car. Generally it was related with a

childhood moment, in most case a pleasant moment. Nevertheless, the majority of them remind the object car as an element that was part of the family.

When asked about what the object car represents in their lives, participants were pragmatic in most of cases saying that it is a tool, as an extension of their legs, or even an extension of their living room.

"To me it is my kind of working device. It's extremely necessary for my job, visiting clients. I can get to places quite fast. There is no other way to do my job than with a car. And of course, at the weekends it's nice to hit the road and travel around the country." Fernanda

"If you have a look at the working desk of someone you can briefly describe that person. I guess the car is the same. You can easily find traces by which you define the personality of that person. The car is an extension of their bedroom. People spend so much time in their cars." Darwin

"It's a facilitator. In my case it doesn't make sense having a car. I love living without one. When I need a car, I usually rent one. It's because I think there are many cars on the streets, and we need to be conscious of the damage that this may cause. I would rather prefer to invest in other things." Carol

"Sure it is a facilitator to take you from and to places without being worried about the timetable of public transport." Peewee

"I've got a love/hate relationship with my car. It is very useful and brings me all the comfort of commuting. However, it is also a nightmare in the rush hours. I just came from work and spent 40 minutes stuck in a traffic jam. It was horrible. Another thing is that I feel a little bit unsafe when driving. There are so many things that you have to pay attention to: yourself, the pedestrian who usually crosses the road without checking if a car is coming or when the traffic light is red for them, many other cars around, motorbikes crossing your way... I feel like a hostage to the system. You have to rely on others' ability of driving too." Fran

"I haven't got a car by my own option. A car is like having a family. It's so expensive." Marcio

"To me, a car means my independency! I can go wherever I want." Bernardo

"People expend so much time alone in that cubicle. It's time for thinking, singing. In a way, it's your own real time, a relaxing time." Melissa

Although many participants state their views in terms of a car being practical in daily life, opinions like those of Melissa and Bernardo clearly show the car as a 'means of independency' or a place to spend their 'own time'. It seems that people are transferring the feelings of being on their own in an isolated place but at the same time being part of in the city environment. The car seems to be, in this case, the object that 'lives' in this paradox where feelings such as love and hate, expensive to run but useful most of time, is shared by the same person.

They were also asked how the relationship between product and brand affects their perception of the object car. In this case, the idea was to get their attention on the brand attributes, which usually are communicated by the carmakers to the potential consumers in an attempt to conquer mind and hearts.

"My dad always say that Ford is not a good car. I do like Ford Ka, but I would not buy one because there's something in the back of my mind saying that's rubbish. On the other hand, when I think about Mercedes-Bens it's all about status and glamour. Even though I would not buy one." Fabiola

"It is pretty strong to me as well. My dad has never liked a Fiat car. In his opinion, Fiat is crap. He once declared 'here it's a Ford's house'. It was almost like supporting a football team." Darwin

"My brother once bought a Fiat 147, which ran on ethanol. That was a horrible experience 15 years ago. Even today he is not up to buy a Fiat." Erico

"I don't actually have a specific concern about brands in general. I prefer to analyse the technical specifications and how the car was built. However, there are some

brands that I've got some admiration for because of the history behind that brand." *Fabio*

"I don't have any wish for a specific car brand. [When choosing a car] I prefer to look at the design rather than at what the brand is." Melissa

"I recently bought a Fiat Palio because of a series of attributes: design, quality, bi-fuelled engine, and economic. I guess being an efficient car comes at the top of my priority list." Darwin

Although some of the opinions are strongly influenced by a member of the family the patterns of analysing the brand attributes still focused on logical attributes. In other words, their opinions were based on the features of the car, whether good or bad. None of them made an emotional connection to the cited brands. One of the participants stressed this in the following way:

"Nowadays there are loads of different models, although we have few brands. It's almost impossible to get an emotional connection with your car because most of them are boring and very often we will see another model coming out." Bernardo

As was explained previously, the focus group was set up to be an informal conversation guided by some questions. In the course of the discussion and interesting discussion about the retro-design styles came up to the arena. This has been largely used by the motor industry in an attempt to provide 'emotional' connection with customers through the re-birth of models that were a success in the past such as the Mini, Pt Cruiser and more recently the Fiat 500.

"I think it's nice at a certain level. The Mini is cool, the PT Cruiser is nice but it's just a fashion wave. It's a target to those people who change cars as much as they change clothes. It's completely different from having an original Mini, which is true thing." Marcio

"I think it should have a limit. They should be only inspired by past models, not just reediting the classics." Bernardo

"That's it. It should be used only as a reference to a cool thing from the past. The PT Cruiser is quite strange. It's a distorted view of what a car was in the 1950s. Another bad example is the New Beetle. It's nice, but it's not a Beetle. It's just the name." Peewee

"It's all about marketing. If you tell people that it [the car] is like something from the past, something that brings you good memories, then it is much easy to hook people up. It's easy to make it right. Just follow the recipe of the past success." Fran

"I don't like these copies. I prefer the original ones. If I want a Beetle, or a Mini, I would get an original one." Fernanda

"I like innovative ideas; therefore I don't like this restyling thing." Carol

It was common sense that retro styling in vehicle design has followed the wrong path. According to the discussion above, it is clear to see that people do like references from the past to help them to identify models and brands, which were part of our visual portfolio. However, it should be used only as a reference for new developments and not as an attempt to bring back the entire product from the past .

5.3.2. Mind map

The mind mapping session was one of the activities developed for the focus group. As was explained in the Methodology chapter, the Mind Map session aimed to explore new ideas to be used as a source of inspiration that would come straight from the users. By using the five senses as a requirement in developing ideas towards the future of cars, the participants found themselves in a brainstorm session which not all of them were used to. However, as most of brainstorms, participants were timid in these sessions, but then opened up and became intensively involved. By questioning 'what amuses or repulses your senses' the participants led their ideas according to the results that are described below.

The mind Map activity was a rich experience for both sides - for them and for myself as facilitator of the process - due to a plethora of ideas from the four sessions, both in Brazil and in the UK. The participants initially felt a little timid and the ideas were at the same level. After a while, as is normal for all creative processes of idea generation,

the participants started to explore deep feelings in relation to the object car and also random ideas, which in some way could be used as sources of inspiration for further developments.

	Positive	Negative
Sight	- Rounded shapes - Bubble - Cockroach (or insect like) - Smile	- Similar - Form (The car architecture is boring. The formula engine, passenger and luggage should be explored in different disposition)
Hearing	- Gear changing (According to the participants it is important to stay in tune with the car engine, and changing gear is perhaps the part where you are mostly in contact with it. You can feel the car through it) - Absence of sound (in contrast with the previous observation, it was also pointed out the creations of a cocoon like where people would be encapsulated from the noisy exterior world) - Relationship. 'I would talk to my car, and maybe develop a more intense relationship...' said one of the participants.	- Noisy - Malfunction peaces provide an annoying noise.
Touch	- Soft dashboard - Neoprene - Smooth - Duvet - Chenille	- Rubber - Plastic (participants demonstrated concerns about the perceived quality. They preferred honest materials. Plastic should look like plastic, Aluminium should look like aluminium) - Wood

Touch	- Soft dashboard - Neoprene - Smooth - Duvet - Chenille	- Rubber - Plastic (participants demonstrated concerns about the perceived quality. They preferred honest materials. Plastic should look like plastic, Aluminium should look like aluminium) - Wood - Leather
Taste	Sweet, chewing gum, Coffee, chocolate, Ice-cream, Strawberry, Biscuit, Caipirinha, Ice.	
Smell	New life (Described by one participant as a good feeling when you are heading towards a new 'chapter' in your life. It's smells good. It is perhaps the sense of openness and adventure usually from the local culture) - Nature (Usually related with forest smell and after rain smells) - Bread - Baby	- Odour neutralizers - Highlighted by one participant and agreed by most of then: 'A brand new car smells disgusting'. However it was quite controversial statement once some participants said that it is the best smells ever. The positive response might have a strong relation with the whole sensation in buying a new car and that different, sometimes perhaps weird smell is related to the entire experience of a brand new car.

5.3.3. Workshop

The workshop was intended as an inclusive experience by joining both designers and participants. The participants chosen five words that could be described as drivers for the future. These words should reflect their aspirations and dreams on what issues may affect us in the way we interact with the object car around the year 2030.

Once the participant had decided what word best described his or her vision for the future, a student designer helped them to find out the images. It is important to stress that the design students did not interfere in the participant's creation. They acted only

as facilitators in helping the participant in finding the desired image and organising it according to the directions given by the participant. This part of the activity is described also as a participatory design, which in essence is aimed to ensure that the concept of the visual map met their initial ideas.
Although some of the participants had no link with any creative activity, in general the visual maps were presented in a high quality not only in terms of consistence, but also with a good aesthetic quality. In order to better understand the participants' visual creation, a short description was given by them to explain their views about the future. It could be said that the visual maps are the hidden picture of the participants' desires and dreams about the future.

The visual maps presented below are followed by some quotations from the participants. Some images may not show the pictures properly because of the size of the file. It's used only as a reference in the body of this thesis. A better and consequently bigger print can be found in the Appendix from page 3 to 8.

Bernardo's Visual Map (Figure 41) and Drivers for the future: Customization, Environment responsible, Compact, Durable, Low cost maintenance.

Figure 41 Visual representation from Bernardo's drivers for the future.

'Durable: I think products in general should last longer and that most things are created to be disposable. I know it's a utopian thinking, but in my view it should be the other way around. Products should last longer.'

'Environmentally responsible, after all it's our planet'

' .. the car should have be inexpensive to maintain. I think that the car shouldn't be considered as part of the family. We look after a car as if we are looking after a son or daughter. It shouldn't be anthropomorphised...'

'I've used the word compact because the world is shrinking with the growing population. The car of the future must reflect that.'

'In the plastic future, I want a car which reflects my personality. Things are getting too synthetic.'

'I've used a white and clean background because that is what I'm expecting from the future... simplicity in everything.'

Carol's Visual Map (Figure 42) and Drivers for the future: Sustainability, Compactness, Economy and Recyclable Materials

Figure 42 Visual representation from Carol's drivers for the future.

'The entire idea of my visual map is connected through my words, which are Sustainability, Compactness, Economy and Recyclable Materials. I believe that this is quite self-explanatory about what I'm expecting from the future: democratic car that should follow all of these drivers as a prerequisite in the future'

'At the end of the life cycle, the plastic pieces could be re-used for other sorts of products. They should be re-usable as much as possible.'

Darwin's Visual Map (Figure 43) and Drivers for the future: Headlights, Chewing gum, Comfort, Isolated and Personality.

Figure 43 Visual representation from Darwin's drivers for the future.

'The first thing that grabs my attention in a car is the headlights. That's why I put the fibre optics as the background to my visual map. It brings clarity to my choices.'

'It might be a little strange, but chewing gum is extremely linked with comfort. It's not necessarily related with taste but with texture and touch.'

'The charming guy [in the picture] represents the personality. He has charming specs, stylish hair and everything. You can see personality through these small things. In the future I expect people with more individual personality, but with a democratic attitude. It is a paradox, but that's the way.'

'The layout of the [visual] map represents a central aspect of my perception about what the car might be in the future. If you carefully look at it, you will see a human face. This means it doesn't matter how advanced technology and materials will be in the future, if it is not be centred in the human personality, it will fail.'

'The moon and the charming guy are at the corners to represent how isolated we are from the technological aspects of the car and the products as a whole.'

Erico's Visual Map (Figure 44) and Drivers for the future: Adventure, Family, Safety, Comfort and Customisation

Figure 44 Visual representation from Erico's drivers for the future.

'My collage is a little bit chaotic. But it was deliberate because that's my vision about the future. It's not a pessimistic view at all, that's why I've used some colours.'

'The back mirror represents the adventure in the past, as a background. The way we've been living is quite an adventure.'

'I add the family right in the middle of my visual map. For me the family is the centre of personal relationships. Then, I added this halo to the family image. Perhaps that's my dream, my aspiration. Unfortunately, in the future I think that this might be different when people care less about it.'

'On top of the image we will find the customisation, which is represented by the Lego. I think cars should be based on Lego's format. It should be something fun that would allow you to play with it in terms of form and shapes.'

Fabio's Visual Map (Figure 45) and Drivers for the future: Speed, Comfort, Family, Adventure and Technology

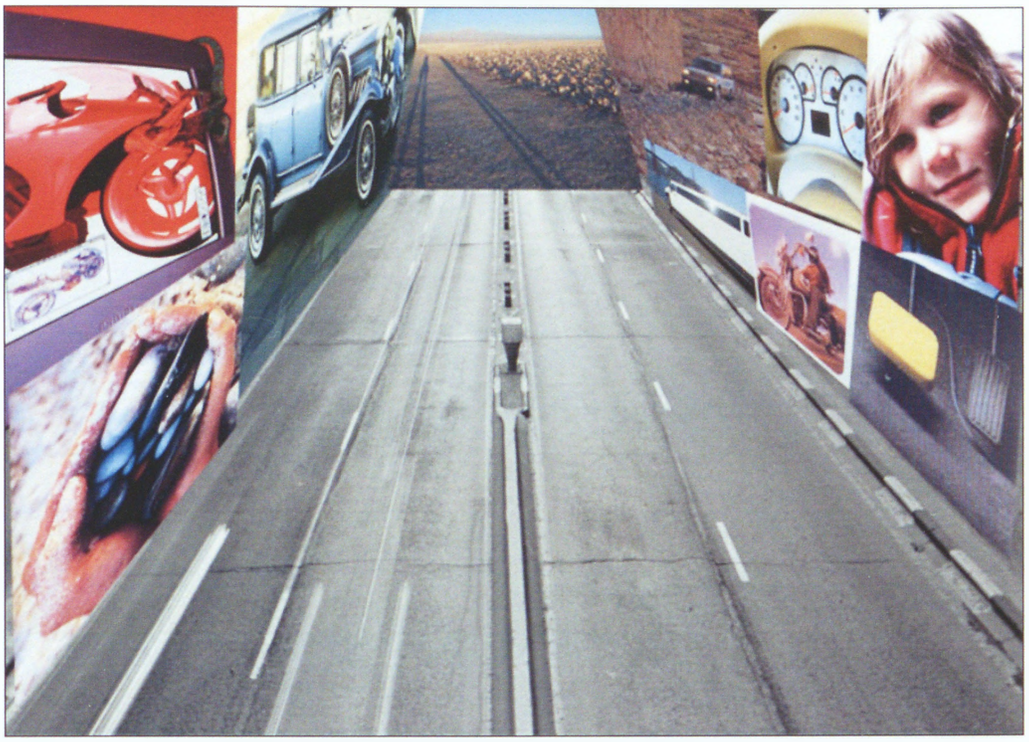


Figure 45 Visual representation from Fabio's drivers for the future.

'The image represents a bit of everything that I expect to see in the future. The time line here is the road in which you are free for unlimited speed and the images around the road are the things that support it.'

'The image of the desert is the Adventure to nowhere specifically. Just go for a dream world!'

'...it seems that old cars, specially from the1950s/1960s had so much space inside them. It was much more comfortable than the current models, despite all the technology and safety used today.'

'I think retro design is great. But not just the redesign of old classics. Designers should understand the essence from that time and use it in today's design.'

Fabiola's Visual Map (Figure 46) and Drivers fro the future: Freedom, Independency, (personal) Identity, Status and Beauty

Figure 46 Visual representation from Fabiola's drivers for the future.

'The tunnel, or slide, in my [visual] map represents freedom. For me it is the pure representation of enjoyment, freedom!'

'When we started to talk about the five words, Comfort came first to mind. The car in general has to be comfortable. It must be something like your slippers in the sense that it must suit you, otherwise, fulfils your needs but comfortably.

'Personal identity and style... I think these are totally important. The cubes shown here [in the composition] have very straightforward message in them. The tube is an unanimous symbol of style.'

'In the future, as it is today and more than ever, the car will be a symbol of status. It was represented here through the image of the wine. However, I could see it otherwise.'

'Last, but not least, the sphere is the representation of beauty. It is obvious, transparent, clean, unanimous, without any convention.'

Fernanda's Visual Map (Figure 47) and Drivers fro the future: Save natural resources, Smoothness, Compactness, Colour diversity and Joystick

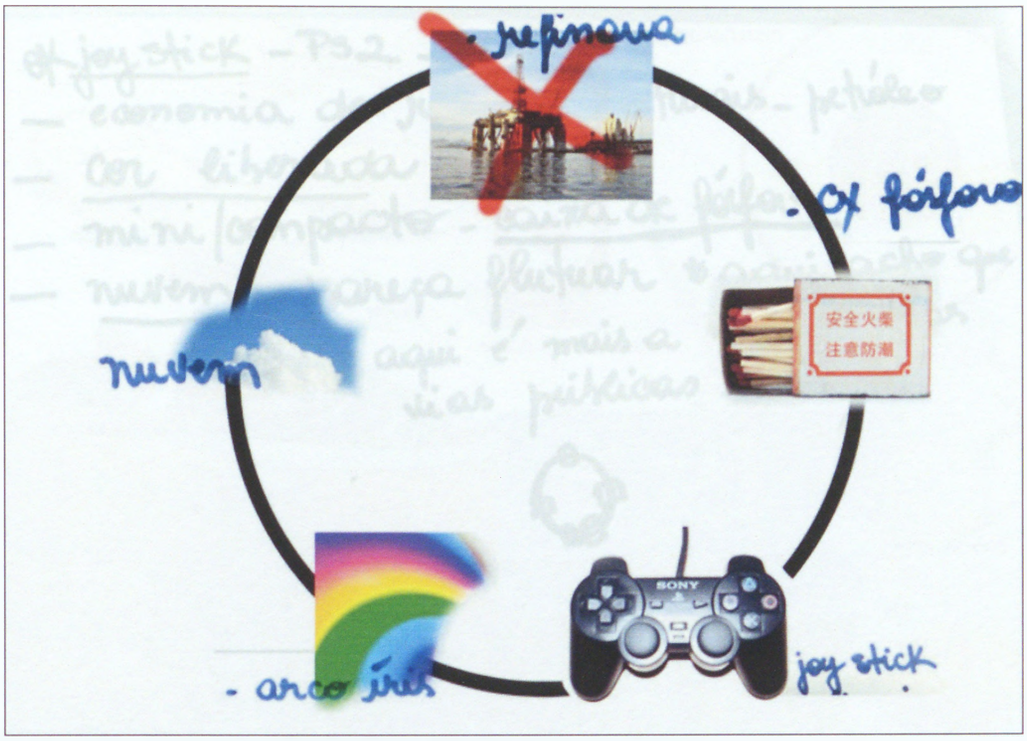


Figure 47 Visual representation from Fernanda's drivers for the future.

'This crossed image of the platform is self-explanatory. It's un-imaginable and unacceptable in 2030 for this sort of energy to be used.'

'Smoothness is all about the feeling of being in the car; it's about the pleasure of the journey. I would not feel the road... floating would be great!'

'Something like a matchbox is all we need. Cars should be compact enough for a person and luggage. Perhaps something organic that could grow according our needs.'

'I had a dark car once, and I was never able to find it when I parked it in a shopping centre. All the cars look the same and most of them are silver or black!! Let's add some colours.'

'I'm amazed how children of 10 to12 years old are fluent with joysticks. They will probably be driving with joysticks in the future, that's their language.'

Marcio's Visual Map (Figure 48) and Drivers fro the future: Safety, Trendy, Intuitive commands, Eco-friendly, and Democratic.

Figure 48 Visual representation from Marcio's drivers for the future.

'I'm not sure about the idea of an individual car, I think in the future there will be too many people in the world, and the individual transport should be more democratic.'

'... in the future, cars will not just run with clean energy, but will also be produced through zero CO2 emission processes.'

'Why do we have so few brands in the marketplace? Companies from other areas, which are more social and environmentally responsible, will become more interested in this segment.'

'Driving is so complicated; it's too mechanical, too many buttons. It should have intuitive commands.'

'I think that [the car in the future] will become more trendy. People are more aware about styling, design, and art. It will have a strong personality, nothing comparable with today's cars, which are almost all the same.'

'It should be something that encapsulates you, protects you, but in a simplistic shape.'

'I have a feeling that the car is dirty. You open the bonnet, and you've got a dirty engine. It's dirty because it pollutes. Even when I get into the car, I still have the taste and smell...'

'Externally it could even have different graphics which the owner could change whenever he or she likes. The interior, for example, should look like your workstation. A place that you can customise in the way you like...'

Melissa's Visual Map (Figure 49) and Drivers for the future: Nanotechnology, Nature, Relationship, Comfort, and Joy,

Figure 49 Visual representation from Melissa's drivers for the future.

'I believe that interpersonal relationships will become more intense. I've represented this in my visual map through this urban couple talking and also through the dogs in this picture'

'Nature will play an important role in our future. That is the way out for many of our current problems.'

'Joy is translated here through my own picture of when I was a child. That's pure joy.'

'In terms of the image proportions, as you can see, the nanotechnology here takes up a big part of my map. It becomes macro. In fact it is the background of it. The other images are lining up as chronological events taking place in my life.'

Pavao's Visual Map (Figure 50) and Drivers for the future: Durable, Personality, Irreverence, Comfort, and Speed.

Figure 50 Visual representation from Pavao's drivers for the future.

'The watch is an old one. It conveys a durable thing to me. It's mechanical. It's forever. It doesn't run with batteries.'

'Comfort for me is a couch moment. You just let the time go by. Just relax...'

' .. speed, I don't know actually, I remember the witch and her broom. It goes very fast indeed and it doesn't take much space when parking...'

'The witch is also the irreverence and the style, in contrast with the black and white background.'

'The diamond doesn't represent a commercial value, but it is a classic, it is forever. It is also related with the durable concept in my map.'

'This sentence "wash you hands before you handle this paper" is something linked with personal care, hygienic care. In the future people might be a little bit paranoid about it. I'm just wondering, how will cars take it?'

Peewee's Visual Map (Figure 51) and Drivers for the future: Connectivity, Recycled, Creativity, Comfort, and Customisation

Figure 51 Visual representation from Peewee's drivers for the future.

'First of all: Recycled, not recyclable. Everybody talks about recyclable, but I'm interested in something already recycled. I would like to see where those scrapped cars are going. I would see them turning back into something useful.'

' Connectivity is all about being connected with the whole transportation system. Even connected with the cars around my car.'

'Creativity is the basis of all this changing [in the motor industry. The difference between models are minimum, they just add some accessories and change same panels, but in fact it's all the same.'

'Total-customization. It is not only choosing the colour of the seats and wheels. It would be great to be able to choose the position of the dashboard equipment. Total freedom of choice. If the car has a powerful computer as they [the motor industry] say, why not a dashboard like my computer desktop?'

Fran's Visual Map (Figure 52) and Drivers for the future: Space and safety, Mobility, Flexibility, Functionality, Comfort and Money

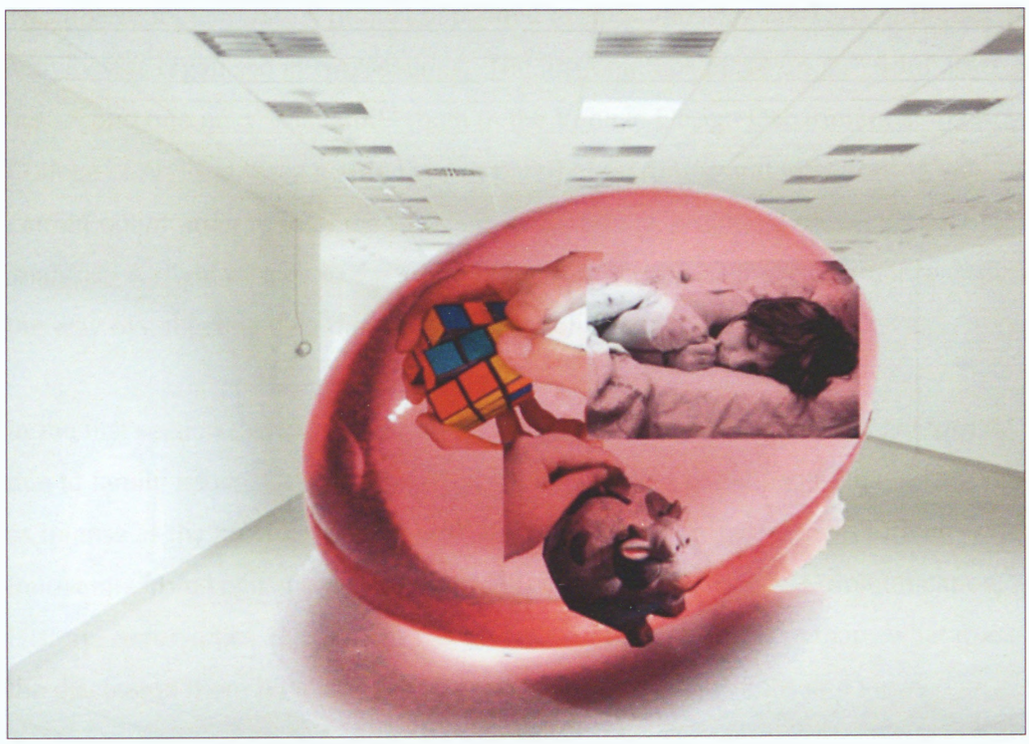


Figure 52 Visual representation from Fran's drivers for the future.

'I've organised the layout with all the images encapsulated into an empty white painted room. When I think about the car, it's not the object itself, but the space in which this object is inserted. Then, we have to look at how can we organise the whole system, not only the object.'

'The cube is the representation of mobility and flexibility. You can move in several directions until you find the right one.'

'I wish I could change the position of something in my car. For example, change the position of the radio, the speedometer, pull and push things in the dashboard.'

'I'm very concerned about the real value of the car. It costs about R$ 20,000 (£ 4,000) an entry level car. Is it the right price? Let's take the mobile, for example; they were expensive in the past, but as soon as the technology became a commodity the prices went down. You can even get a free mobile today depending on what type of deal you can get. Why doesn't this kind of thing happen with the motor industry?'

5.4. Insights from the UK

This phase of the research project happened in April and May 2007. As in Brazil, the activity was organised in two sessions. The first one took place on 26th April 2007 and the second one on 3rd May 2007, both in the Vehicle Design Department at the Royal College of Art. The same metric used in Brazil of recruiting and interviewing was carried out in order to fulfil the study pre-requirement of doing a cross-cultural analysis. A slight change in the group discussion script was made in order to improve the way of collecting data during the discussion flow.

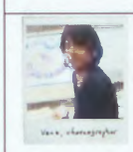
In the first session there were five attendees. One of the participants did not turn up due to family issues. Despite the fact of having one less participant, the discussion was as intense as the previous session with six participants. This group was formed with innovators from Logical and Creative thinking from areas such as Communication, Art History, Aeronautics and Dance. The diversity of the group was perhaps what made the discussion more interesting in terms of the variety of opinions and views.

The basic difference from the previous focus group in Brazil was that a moderator was invited to lead the discussion: Rama Gheerawo, a designer by training and Project Leader at the Helen Hamlyn Centre. He has been involved with research projects related to the automotive industry for more than ten years. The idea of involving another person to moderate the discussion session came after some conversations about this research topic. He shares similar views on the subject and also has a broad

historical knowledge of the local industry. Thus, it was certainly necessary to this type of discussion when the participants where invited to remember their early memories about journeys, cars and brands.

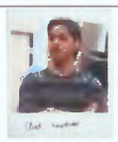
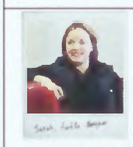
Group 1 had a particular characteristic that permits a remarkable cultural viewpoint. Most of the participants are British citizens, which in essence brings bring a very local flavour to the research outcome. As is well known, London is a multicultural city, however, as this study also intended to in some extent discuss the cross-cultural contrast, a group of this type was needed to better represent the local culture.

Group 1 - UK

	Name	Age	Gender	Activity	Logical	Creative
	Damian	31	Male	Director of Communication		X
	Lucie	24	Female	Art historian		X
	Nadir	28	Male	PhD in aeronautics	X	
	Nelson	30	Male	Salesman	X	
	Vena	28	Female	Choreographer		X

In contrast with the previous group in the UK, people from different parts of the world formed group two. Although they are culturally from different parts of the world, all of them have been living in the UK for more than five years. Consequently, the discussions in this case had more contrasts from the previous group discussions.

Group 2 – UK

	Name	Age	Gender	Activity	Logical	Creative
	Adelaide	24	Female	PhD students (Engineer)	X	
	Clint	23	Male	Hairstylist		X
	Daniel	25	Male	Fashion designer		X
	Paul	30	Male	Wine specialist	X	
	Sarah	24	Female	Textile designer		X
	Slava	26	Male	MBA student	X	

5.4.1. Discussions

In both groups in the UK the discussion process was very intense and motivating. After a brief introduction on ground rules, the participants introduced themselves and were asked to describe briefly the earliest memories of a journey. In most cases, the journeys described were not related with a car at all. In group 1, there was a tendency of presenting relatively emotional experiences. Such a high emotional involvement in the activity was not expected from the participants. However, as in Brazil, the participants felt comfortable in talking very deeply about their private life. This was a good surprise and certifies the professionalism given in order to achieve the objectives of this exercise. Indeed once the participants were keen to truly collaborate in the activity, made it easy to conduct the whole activity from the interviews to the final stage.

"I have a sad memory. I remember being stuck in a traffic jam and my parents just said the words of splitting up. And we just had a really nice weekend in the country and going to the field and whatever... and when we came back in to London and we hit Shepherds Bush, and there was red lights everywhere we could see because there were so much traffic. It was raining really hard and all I could see was rain drops falling down the window and my memories is not much about the journey, but the fact was when we stopped the rain drops were moving very quickly like they're racing." Lucie

"I don't know if it's either an actual memory or an imagined thing. I would be free and I was living Gaiana to come back to London and I have an image in my head of looking at the aeroplane window and just down to the tarmac... My emotional memory, which is real, it is being quite sad and not knowing what's happening. It's not the movement, but the pre movement moment that was captured in my mind. I don't know why I'm not sure whether it's real or not because I know I made that journey, and I know that was real." Vena

The emotional connection during the entire exercise was further explored when the participants were asked to tell the group a particular thing in their memories that in some way influenced their attitude towards cars.

"I remember when my dad's car broke down and we were crossing the border from... I don't know actually. Then we asked some people to push the car. I'm still remembering the tension in the air. I really don't like the idea of a car breaking down. It's frightening." Nadir

"I remember when I was a kid sitting in a PVC seat with a shorts... it was sticky. Nowadays I do notice the materials of the cars and specifically the seats and how they feel against the skin." Damian

"My initial reaction is that I really don't like it [cars]. It's claustrophobic the way new cars smell." Sarah

It was also discussed with the group the relationship between what brand attributes could be identified by the design of the car.

"I think certain brands have some values attached on them whether or not it is the case. I think there is some perception on that. However, sometimes the perception doesn't necessarily match with the real product or design. Sometimes there is some products that are just particularly well marketed." Vena

"I agree. I'm a guitarist and I think that a copy of a (Gibson) Les Paul guitar is not as beautiful as the original one, although it looks absolutely the same. When I look at the logo on it makes me feel better because I know that is the right one." Nadir

"I would go further than that. I think it's not just a question of perception, it is the integrity of the brand and the values that people, who built the brand, put into it." Damian

And than a the financial value of a some premium brands came to the discussion with two divergent opinions:

"I do think that the more expensive cars are nice looking. So, if I could find something in the market that I liked as much then I don't think that I would spend a lot of money for the sake of it. But, I think there is definitely some credit in that too" Sarah

"I don't think that is true. The most expensive cars must be good looking. i think that they appear to you us the most good looking because you know they are expensive, so this adds value to the car. For example, I would have a cheap good-looking car as well. I think the New Fiat Punto has a nice shape... it's a good looking and it's cheap." Adelaide

Adelaide's comment was very assertive regarding what people perceive as quality and over priced products. Both arguments rose naturally as most in the conversation about branding, consumerism and design. When perceptions were discussed, there were no right or wrong answers at any level, it is all about how people perceive that brand, or design. In this sense, that is the exactly the distinction of what is real, and what is just perceived as real. Perception is actually more important than reality in many cases. Especially in the world of business, particularly design, marketing and advertising, perception is reality. Companies spend great sums of money to alter our perception of their product. Their goal is for you to believe their advertising to be real and ultimately

to attract you to think that their product has some attributes that in some way could be linked to your being. In other words, you perceive that it is right for you.

5.4.2. Mind map

In the activities carried out in the UK, there was a slightly difference from the mind map session that was explored in Brazil. In Brazil, the amount of ideas generated was relatively less than the session in the UK. However, this exercise is not aimed to quantify the number of ideas but the quality of them.

In Brazil, the session was organised to be like a brainstorm where everybody could say something without any criticism. In some cases, there was some discordance of ideas between participants, which took some time to be clarified. In the UK, in contrast, it was thought that by introducing what the brainstorm was all about, the participants could work initially individually and then share their result with the others. That is why there were more words (ideas) coming from the UK session in contrast to the session carried out in Brazil.

The basis of the mind map was the five senses. As was explained previously in the Methodology Chapter, the five senses are important as a translator of the peoples' emotions and feeling. The results sound confusing and paradoxical at the same time. However, as in most of the brainstorming sessions, it is unpredictable what kind of answers could come up from the experience. Nevertheless, the mind map produced the most insights for the concept project to be viewed in the next chapter. Some of the projects had their breakthrough ideas coming from a use of the following table of insights not only in terms of materials and colours, but also shapes and demanding sensations.

	Positive	Negative
Sight	- Delicate contrast - Vertical shapes - Water flowing - Movement and blurring - Spires - Bahamas sea - Sunlight – bright in trees /grass - Modernism 'not too cool, though	- Chaos - Kitsch - Pea green - Orange - Silver (the discussion here was about the colour palette of the current cars and their meaning. There was a

Sight	subtlety' - Simple, linear, green - Fun, Characters. 'Shiny is good, I love light!' - Sharpness shape	conformity of opinions: Black = executive Silver = unimaginative Red = Show off Blue = boy car
Hearing	- Loud silence - Mix old and new melodies - Tension between harmony and dissonance - Countryside sounds (birds, insects) An interesting and thoughtful comment from one participant. 'If we take out the urban noise, you'll have an absence of sounds. In contrast, the meaning of silence in the countryside is different. You will always have a background noise by an amazing composition of birds and insects sounds' - Wind - Violin - Deep low moaning but not loud - Nature and constant sounds - Absence of sound - Breeze in trees + birds - Wood in fireplace	- Urban sound - No metallic sounds - Mechanical - Annoying loud - 'Hate the modern fire alarms' - 'Don't like bad / cheesy ring tones - Tube announcements has to feel human' - 'Too many beeps on the cars... the door is open, fast your sit belt, lights on, mobile, sat nav.. it drives me crazy!!'
Touch	- Skin - Velvet - Warm shower - Head on pillow - Smooth cotton - 'I like the feel of fish and chinchillas' - Kashmir	- Rough surfaces - Skin like textures on the dashboards - Cheap and nasty fabric - 'I hate scratching ice' - 'No sharp objects' - Cold objects
Taste	Pancakes, Spices, Cinnamon, Sweets, Fresh air, Adrenaline, Beer, Fois gras, Acid	- Old food -'Don't like spicy' - Savoury

Smell	- Grass - Ginger ('it's wild and mysterious' as described by one participant) - Coffee - Suggested by one participant 'smell could be used as a prove or disprove tool' - Fresh spring / summer morning - New car - Snuggling in bed - Well integrated oak in a fruity wine	- Old country house - 'New cars smells yuck' - Claustrophobic and acid - No smell at all

5.4.3. Workshop

Similarly to the workshop carried out in Brazil, this workshop was the highlight of the entire activity. The opportunity to make the participants interact with the design students in order to create their visual maps stood out clearly for all of them. In this co-creation process they were able to explore their desires and dreams and translate it in an image-based language. At first the participants chose five words, which we called drivers for the future, and then with the help of the design students they looked for images that better represented those drivers. The visual map could also be described as the hidden picture of their vision about the future.

The visual maps presented below are followed by some quotations from the participants. Some images may not show the pictures properly because the size of the file. It's used only as a reference in the body of the thesis. A better and consequently bigger printing can be found in the Appendix.

Vena's Visual Map (Figure 53) and Drivers for the future: Luxury, Cocoon, Fly, Floating, and Key.

Figure 53 Visual representation from Vena's drivers for the future.

'When I was finding some images there were some worries about it because there was an overlap between the ideas and images that were coming up. For example, the spiral is a representation of a Luxury, but I've also used it as a background to support the other ideas.'

'In many ways the bubbles is an image of blown glass; there are lot of bubbles on it. To me they also look like little planets flying in the space.

'We tried to arrange all the images in a spiral because, spirals for me are about constant movement towards transformations.'

'Thinking about a car, it's about having a space that is very beautiful and special, luxurious and comfortable. It's about pleasure.

'... ideally it would be an extension of your living room.

'I was quite conscious about choosing things and images that was a combination of natural material, but also the key which is very hard in a sense. But I quite like it because it's came up on the 'Floating' idea because it's like floating...'

'The cocoon was chosen because I think that there is something about being wrapped and safe, something similar of being suspended.'

'Yes, in a sense [the car] it's a continuation of a home but it's also a space suspension and I suppose maybe for me it's related to my first memory of being suspended in the airplane looking down on the tarmac. It's a different space.'

Slava's Visual Map (Figure 54) and Drivers for the future: Speed, Comfortable, Flexible, Green and Space.

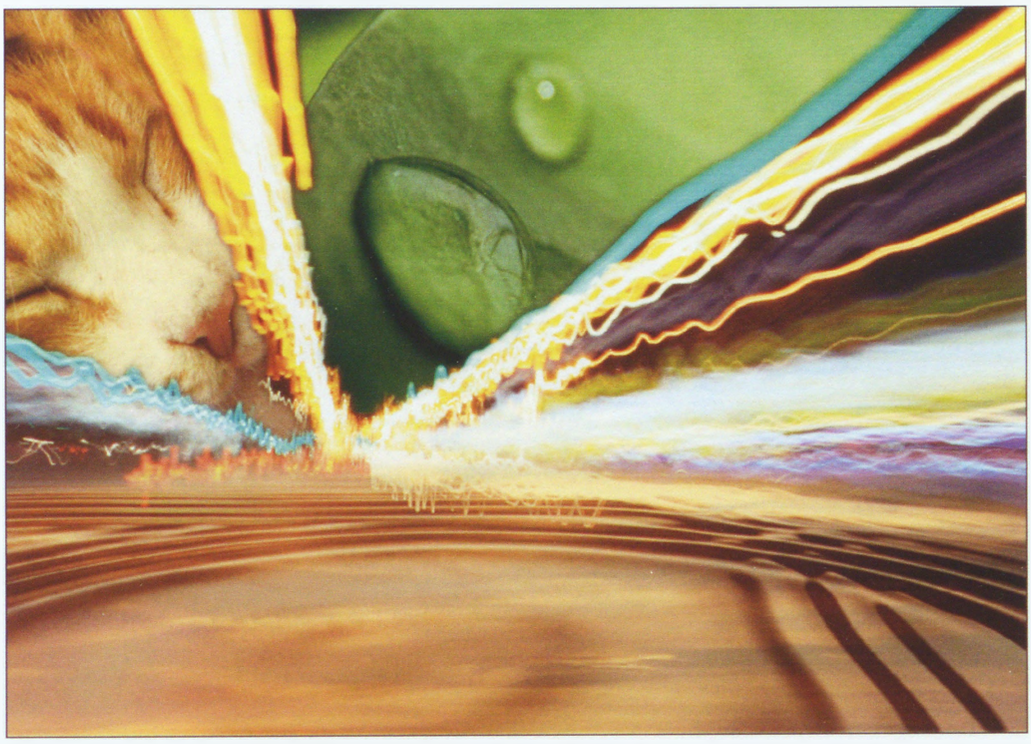


Figure 54 Visual representation from Slava's drivers for the future.

'My first word is speed, which is basically those lines going towards the middle of the visual map. They are not the major things, but they are in compass with other things in my mind.'

'Green, our future car should be Green, low carbon if not non-carbon foot print at all.'

'It [the car] should be comfortable'

'The image of the Sky represents two things: one is a smooth movement, and at the same time it represents the infinitum space.'
'Driving just for the enjoyment.'

Sarah's Visual Map (Figure 55) and Drivers for the future: Fresh, Statement, Uninhibited, Grip and Neat.

Figure 55 Visual representation from Sarah's drivers for the future.

'The word Fresh is represented by the image of the child and the horse and this beautiful tree. To me that was kind of how the whole car environment should be as well as I suppose when we should driving it.

'I do feel a little bit claustrophobic with the smell of a new car. It's yuck'

'The sunglasses means the Statement. It is particularly strong, but the idea is that anyone wants to be sleek, anyone wants to show what they are about.'

'Uninhibited. It brings me a similar meaning of the Statement through the image of this curved metal bench.'

'Grip and Neat is represented here through the bench again and the buildings, which reflect the strength about the whole idea.'

Paul's Visual Map (Figure 56) and Drivers for the future: Classical, Environmentally friend, Small.

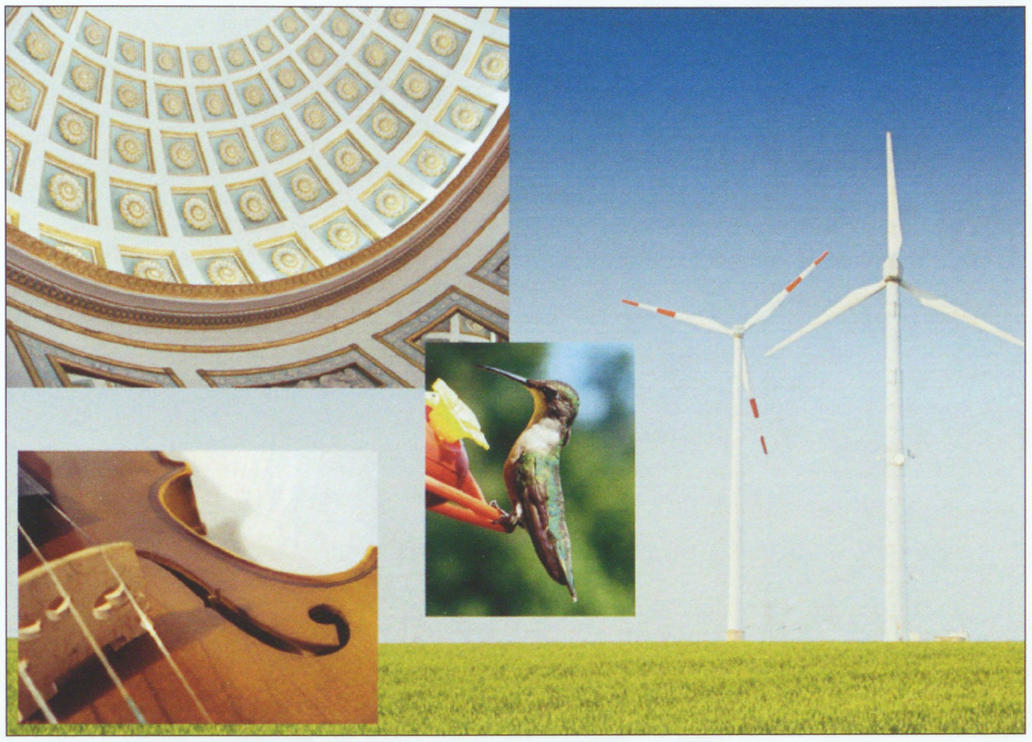


Figure 56 Visual representation from Paul's drivers for the future.

'The first thing I felt on top of my mind is that it should be a classic. It shouldn't loose the sight of beautiful curves and things that have worked for more than a hundred years. A lot of the time, some of the concept cars that we saw before, it's trying to look futuristic for the sake of it, but it's being actually pretty ugly.'

'I thing that the peak of this bird is a beautiful curved and a beautiful natural design as well.'

'In the future, [cars] should be environmentally friendly. I've also liked the wind turbine because I do thing that they're a good piece of design beside the functional thing that it represents.'

'...I also decided to put what shouldn't be, in a spare visual map, and shouldn't be that [a Hummer limousine]. I think that is too grotesque.'

Nelson's Visual Map (Figure 57) and Drivers for the future: Safety, Individuality, Functional, Aesthetic and Freedom.

Figure 57 Visual representation from Nelson's drivers for the future.

'The individuality and the aesthetic is linked. I want the car to be an aesthetic, but individual at the same time.'

'A Functional word is represented through the image of a Swiss army knife and the computer picture is quite self-explanatory about what I expect from a car in the future.'

'I came up with this dome picture to represent the Aesthetic. Sometimes you don't know what it is, but it looks nice. The TVR Tuscan, for example, why couldn't all cars be beautiful like that?'

'Freedom, that's what the car represents to me. When I came up with the image of the bird and this car running in a open road, a beach... it's the feeling of driving around that symbolizes freedom.'

Nadir's Visual Map (Figure 58) and Drivers for the future: Curves, Movement, Smooth, Mysterious and Emotion.

Figure 58 Visual representation from Nadir's drivers for the future.

'I liked the fact that the lights of the solar eclipse are getting through...'

'What I mean by mysterious was that usually the environment of the cars is totally isolated from the outside world and the other way around. Sometimes I ask to myself what's happening inside that car? I'm curious about what's happening in there.'

'To me, cars have some mysterious dimensions, that's why I was trying to understand and explain that through the images that I've choose.'

'When we were looking for a mysterious representation, the sheep popped-up mysteriously. Maybe one sheep is telling the other sheep a secret or something. That's that kind of mysterious thing too.'

'Another word was Smooth. We've got those images and the ballerina to represent the smoothness, but in a sense of a more dynamic movement, a smooth movement.'

'Curves are represented by those curving formations [lighting movements]...'

'Emotion... Solar eclipse represents the emotion in the nature of its movement. As you can see everything here is in movement.'

Daniel's Visual Map (Figure 59) and Drivers for the future: Freedom, Speed, Comfort, Uniqueness, and Wind / Nature.

Figure 59 Visual representation from Daniel's drivers for the future.

'To me, the bird is the ultimate representation of freedom. It's absolutely free to go wherever they want.'

'Speed, of course!!! I love bikes and the wind sensation. It's also related with freedom.'

'There is nothing like a stylish sofa. I like the comfort of a beautiful stylish sofa...'

'Wind / Nature... it's represented here by the sailing boat and the power of the sea.'

'Uniqueness... is just sticking out from anything else.'

Lucie's Visual Map (Figure 60) and Drivers for the future: Enveloped, Silence, Closeness, Warmth, and Milk bottle.

Figure 60 Visual representation from Lucie's drivers for the future.

'Enveloped, because it has this cocoon, this idea of being surrounded, protected...'

' The mountains represent the Silence. It's so irritating noise when you try to concentrate... It's just so irritating. And the most silent place that I've been to is the mountains.'

'Closeness, it's all about touch and ... quite self explanatory in relation to the future of cars.'

'Warmth, I found this image, like a glowing light to be used as a background.'

'The Milk bottle was chosen because out of all of the storage things I can think of, the milk bottle is the nicest shape. It's just perfect. A milk bottle is just perfect in every way, it's completely function and beauty.'

'I think in terms of what I'm expecting from the future of the cars, this visual map is quite self-explanatory.'

Adelaide's Visual Map (Figure 61) and Drivers for the future: Alternative, Challenging, Elegant, Unique, and Original.

Figure 61 Visual representation from Adelaide's drivers for the future.

'The first words that I thought was Alternative, so that's why I came up with the idea of the windmill.'

'The idea of speed, challenging and luxury is represented by the sailing boat.'

'I was looking for something original and elegant and then I found the giraffe. It's a strange elegance and truly original.'

'The last thing was Unique. I liked the colours and the shapes of the balls and the fact that they are all grey, except that light blue one.'

Damian's Visual Map (Figure 62) and Drivers for the future: Completely in touch, Perfect temperature, Enlighteness, Socialise, and Breathing space.

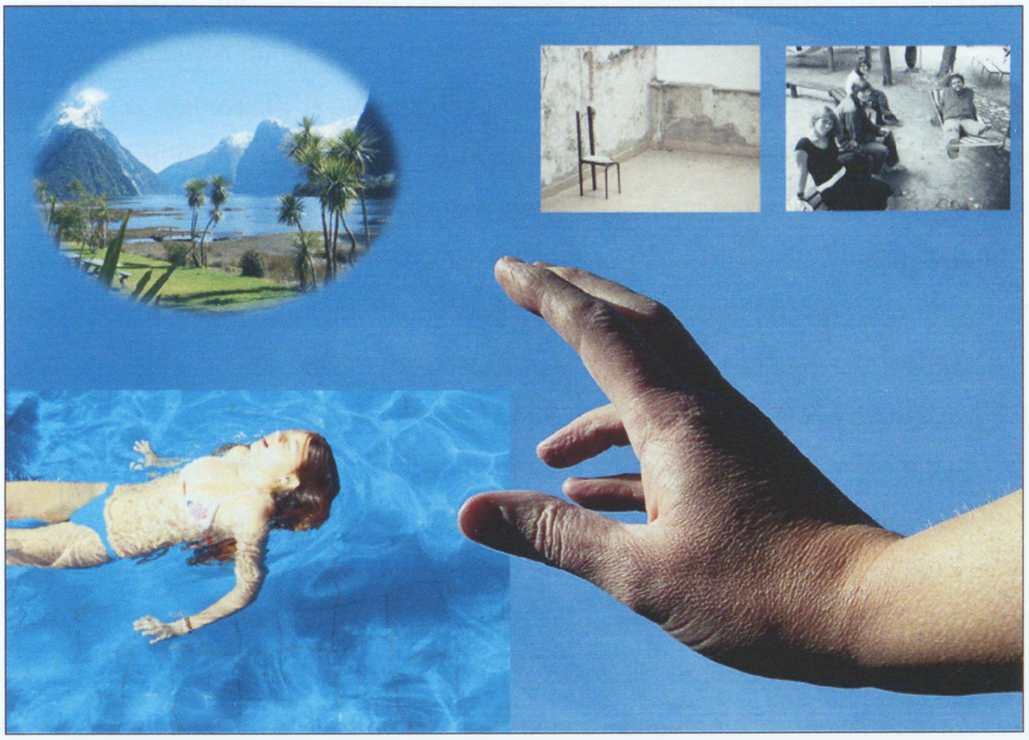


Figure 62 Visual representation from Damien's drivers for the future.

'I suppose it's the things that I would like the car in the future would be about. In the ideal world it would hold all of these things.

'I hate being too hot. And I also hate being out of touch. Not being able to feel the air in my face... So, the cocoon sort of car, I don't actually really like it. I prefer the wind in my face. I used to ride a motorbike.'

'The car has two symbolisms to me. It has to be completely alone and free, and on the other hand the car as a social space, and I value really both of those.'

'I just hate being crowded up, somehow the car has to transmit the feeling of a spacious space.'

5.5. Perceptions on concept cars

It is well known that popular perception varies immensely, especially in areas where personal taste dominates over common sense. What is beauty to me might be horrible to someone else, and vice versa. As it was presented initially as one of the hypotheses of this research, was to investigate the different perceptions that people might have from the images that have been communicated by the motor industry over the years. The most common thing to test peoples' opinions about the future development is the concept car that usually is presented in the motor shows as a signpost in terms of branding and design strategy. However, as was already discussed in the course of this thesis, the author believes that there is a discrepancy between what the motor industry has been showing as the future of personal transport and what people really would like to see on the roads in the future. Another problem identified was that rather than innovate, some brands refer to the past as an easy option for to maintain public recognition through some design cues. For instance, brands such as Volkswagen, Audi and Porsche to name a few, although playing in different segments, make the use of this as a signature of their brands. On the other hand, some brands are distinguished by attributes other than design and we can look at Volvo as an example. For several years Volvo has been largely recognised by how safe may your journey will be. Other car brands have a different strategy based more on the product itself rather than the company's image. That is the case of Fiat, where each product is developed in disregard to the rest of the portfolio. Only in recent developments, Fiat has changed dramatically their design strategy and has tried to combine visual elements in several models.

However, how far should a carmaker stretch their design cues in an attempt to be perceived as an acceptable product in the future? It is a trick to find the balance of satisfying the existent consumer who might want to keep the actual car part of the image of the brand, the potential customers who want the state-of-the-art in terms of technology and design but at the same time want to be assured that it is in fact as reliable as the current models.

Based on this discussion, a quick survey was made as part of the focus group discussions in an attempt to verify whether or not the some concept cars presented by four major carmakers in 2006 motor shows around the world could have their brand recognised by their design cues.

Four concepts cars from Fiat FCC, Ford iosis-X, Toyota Hybrid X and Volkswagen Tiguan (Figure 63) respectively, had their badges blurred by an image editor and then presented to the participants. After a quick analysis of those pictures, they were asked to try and identify what brand they thought the concept car was, what it was designed for and what the design cues were that made them believe that it was the particular brand they thought it was. Finally, it was also asked what cultural background - such as American, European or Japanese - it was aimed at.

Figure 63 Badge-less concept cars presented to the participants during the focus groups.

This is not an attempt to quantify information through this survey. Again, this is a qualitative research and it was done purely to instigate the discussion in the course of the activity. However, the findings from this mini survey support the following hypothesis:

H2: 'It is suggested that peoples' perceptions of some brands differ from what carmakers attempt to communicate through their brand attributes and design styles.'

In total all twenty-three participants took part in the survey and the result was simply astonishing. Very few participants could identify or even link the new design with previous models. In some models, such as the VW concept car, the leap from the current models to the presented concept is not so far from what we are used to see on

the streets. Out of twenty-three participants, only two participants from Brazil got all the four brands right. A massive number of fifteen people did not get at least one brand right. However, the most valuable information coming out from this fairly simple survey was that the vast majority guessed similarly the brands, cultures and design cues in a mistaken way.

The table below presents a compilation of the results of the survey. The first column shows how many right answers each models have got and what the participants have guessed as the right design cues. The last column presents some of the comments made by the participants when the answer was obviously wrong, but nevertheless it represents their pure perceptions towards the concept cars.

	Right answers 11 out of 23	Design cues pointed to when the answer was right	Common comments
VW	5	Rear lights, VW bum	American, Chelsea tractor
Ford	3	Front grill	Nissan, Mazda, Japanese, cool and aggressive looking
Fiat	1	Fiat Adventure	Country-ish, Japanese, Nissan, off-road
Toyota	2	Front windscreen, 'it looks environmentally friendly', techno	French, Renault, weird-futuristic, Citroen

As an example, the VW concept car was the most recognisable car with five right answers when the rear was the most recognised part, the rear lights in particular. The Volkswagen Tiguan concept car was presented at Los Angeles motor show 2006 and marked the debut of a new Volkswagen range vehicle, the MPV. Being the further development of the Concept A, this went to production in early 2007. Far more conventional than the rakish Concept A that introduced some of the car's exterior (the front end) and interior design language, the Tiguan still looks to be a the "baby Touareg". All the current VW corporate elements, or design cues are in place, for example the grille and the new-style headlamps.

Although this concept has all the Volkswagen attributes and corporate elements, Tiguan concept car was generally taken to be an American car due to the side of the

car. One participant described the concept as "macho-looks, pugnacious and aggressive". It is definitely a robust design, as are most VW cars, but perhaps the company has been stretching the brand and design too far away from the message that is still in peoples' minds: VW is the peoples' car.

Although Ford has its origins in America, it has been Ford of Europe that is responsible for the new design philosophy: the kinetic design. Presented originally at the Paris motor show in 2006, Martin Smith, Ford of Europe's Executive Design Director, says that Ford Iosis X is not intended to be representative of this future production model. Instead, it "sets out to explore the ways in which Ford's kinetic design form language and detailing can be applied to a niche vehicle in a rugged and exciting way." The original Iosis concept foreshadowed the new Ford Mondeo.

However, for the purpose of this exercise similarly to the Fiat FCC, Ford iosis-X was also mistaken as a car with a Japanese character. Indeed, the lines and the trapezoidal front grill, and angular shapes make this car very futuristic looking. However, not surprisingly, the participants both in Brazil and the UK felt that the new Ford design lines are too far from what the look of current cars is.

Although Fiat FCC was designed and intended for the Brazilian market, few Brazilians participants guessed it correctly. Generally, the Fiat FCC concept was mistaken as a Japanese design style due to the edgy lines. Fiat FCC was perhaps the most difficult to guess out of the other three models. The only design studio outside Italy, which is based in Brazil, developed this concept car. There is a clear distinction between this concept and the forthcoming models especially in Europe. However, throughout its history, Fiat has been focusing on strengthening the brand through particular models rather than giving to the company's portfolio a unique design philosophy. The FCC concept is an example of this. Designed in Brazil, it has all the elements that are particularly linked with not only the local road conditions, but also with the courage in presenting something extraordinarily new in terms of design and packaging. We can never forget the audacious six-seated Fiat Multipla.

Toyota Hybrid X concept also scored very low, with only two people suggesting its concept as a Toyota. This concept was presented at the Geneva Motor Show in 2007. The car proposes a new design language for hybrid models, according to the Japanese

automaker. It seems the Hybrid X also closely points to the design direction for the next-generation Prius. Hybrid X is designed as a four door, four-seat open-space concept. It has the dimensions of a conventional family car.

The majority of the participants, for instance, also failed to identify the Toyota concept X. In most cases, it was described as a 'European style' for some, and others even suggested that it looked like a "weird-futuristic French car". Toyota is perhaps largely recognised by its technology-driven aspect and its reliability more than by the design language. It is almost impossible to look at the past models and finding similarities in their vast range of products. Toyota has also been attempting to respond regionally to cultural differences and tastes. Largely accepted in the American market, the next attempt is to conquer the European market. The cultural confusion created by the concept Hybrid X being noticed as European is perhaps because it was coincidently designed at Toyota's European design studio based in southern France.

However, the design process at Toyota has been dramatically changing in the past five years, as shown in the Toyota case study. It takes time for the new design philosophy to be perceived across the world as a corporate strategy. More important then the result was perhaps the comment made by one participant in the UK group: 'it looks environmentally friendly to me'. That is perhaps a good indication that all the efforts made by Toyota to differentiate the Prius as a "green" car have been paying off.

In conclusion, this survey showed clearly that the peoples' perceptions about the nature of the carmakers' design are dramatically confused. It might be the case that the motor industry has been attempting to not only reach other markets by borrowing cultural and design cues for their own designs, but also immersing their design teams in particular markets in order to better understand local taste and manners. That is clearly the case of Toyota more recently with its design studio established in France and with Fiat, which has a flexibility to design specific products to the Brazilian market. In the light of this exercise, Ford was the company which has been providing the biggest gap between what we can see on the streets and what their visions about the future are through the iosis X concept. Although the media and the specialists celebrate this attitude, the participants in general thought that it is too far from a near reality.

In this sense, Ford's extremism contrasts with Volkswagen conservationism in always presenting concept cars that are not far from what the public is already used to seeing. Based on this survey and the discussions, the hypothesis presented above is supported.

5.6. Evaluation and Analysis

Once all the planned activities of gathering information from the field were done, an evaluation and a depth analysis was required. As was explained in the previous sections, from all the interviews, group discussions, and workshops done with the collaboration of the participants in the UK and Brazil, the massive amount of information was collated in order to look at potential convergences and divergences. The information was then narrowed down in an uncomplicated manner through the project brief. Therefore, the information was collated into four future scenarios called: Individualism & Uniqueness, Unbranded, Virtual vs. Real, and Me car/We car.

When creating these future scenarios, the discussion had been addressed to the convergences and divergences emerging not only from a cross-cultural analysis of the participants' drivers for the future, but also from the visual maps and participants' quotations. For this reason, some of the participants' visual maps could be fitted into more than one future scenario, for example: Marcio presents through his ideas a strong desire for a more democratic solution, which in this case fits in the Me car/We car scenario. Furthermore, he also discusses the importance of Trendy drivers, and Intuitive Commands, which is linked with the idea of the Individualism & Uniqueness and Virtual x Real future scenarios respectively.

A complete list of the participants' drivers as well as what future scenario it better fit is presented bellow:

Brazil

Participant	Drivers for the future	Scenario
Marcio	Safety, Trendy, Intuitive commands, Eco-friendly, Democratic	Individualism & Uniqueness Virtual x Real Me car/We car
Fran	Space and safety, Mobility, Flexibility, Functionality, Comfort and Money	Me car/We car
Erico	Adventure, Family, Safety, Comfort and Customisation	Unbranded

		Me car/We car
Pavao	Durable, Personality, Irreverence, Comfort and Speed	Virtual x Real
Fernanda	Save natural resources, Smoothness, Compactness, Colour diversity and Joystick	Individualism & Uniqueness
Fabio	Speed, Comfort, Family, Adventure and Technology	Virtual x Real
Bernardo	Compact, Durable, Customisation, Environmentally responsible and Low cost maintenance	Me car/We car
Darwin	Headlights, Chewing gum, Comfort, Isolated and Personality	Individualism & Uniqueness
Carol	Sustainability, Compactness, Economy and Recyclable Materials	Me car/We car
Fabiola	Freedom, Independency, (personal) Identity, Status and Beauty	Unbranded
Melissa	Nanotechnology, Nature, Relationship, Comfort and Joy	Unbranded
Peewee	Connectivity, Recycled, Creativity, Comfort, and Customisation	Individualism & Uniqueness Unbranded Virtual x Real

UK

Participant	Drivers for the future	Scenario
Damian	Completely in touch, Perfect temperature, Enlightenment, Socialise, and Breathing space	Individualism & Uniqueness
Lucie	Enveloped, Silence, Closeness, Warmth, and Milk bottle	Individualism & Uniqueness
Nadir	Curves, Movement, Smooth, Mysterious and Emotion	Individualism & Uniqueness Virtual x Real
Nelson	Safety, Individuality, Functional, Aesthetic and Freedom	Virtual x Real
Vena	Luxury, Cocoon, Fly, Floating, and Key	Me car/We car
Adelaide	Alternative, Challenging, Elegant, Unique, and Original	Individualism & Uniqueness
Clint	Safety, Spacious, Speed, Comfort and Good looking	Individualism & Uniqueness

Daniel	Freedom, Speed, Comfort Uniqueness, and Wind / Nature	Individualism & Uniqueness
Paul	Classical, Environmentally friend, Small	Me car/We car
Sarah	Fresh, Statement, Uninhibited, Grip and Neat	Unbranded
Slava	Speed, Comfortable, Flexible, Green and Space	Virtual x Real

Several convergences between the group discussions in Brazil and UK were expected. It is one of the main characteristics from the group of people, innovator and early adopters, who took part of this study that they are strongly connected with global issues. Certainly the most common word used as the drivers of the future was 'Environmentally Friendly' or in some cases, other words were used but with a similar meaning. It truly represents how people have been in a process of changing their views towards what they are expecting from the motor industry. The second most common word was 'Comfort'. It seems a bit a of a paradox that people in big cities have a strong sense of what is good for our environment and have been giving up cars for other less polluting possibilities such as bicycles. However, for the purpose of this exercise, the participants were describing on several occasions a car as an object that gives you 'comfort'. It seems that the meaning in this case is not of comfort as a way of well-being or of feeling something good, but of comfort as a way of using a car as a tool that helps you to get from A to B faster than public transport, or even than a bicycle for instance.

In Brazil, the convergence and divergences from the visual maps were analysed initially by collating similarities between ideas and images, as shown in the (Figure 64)

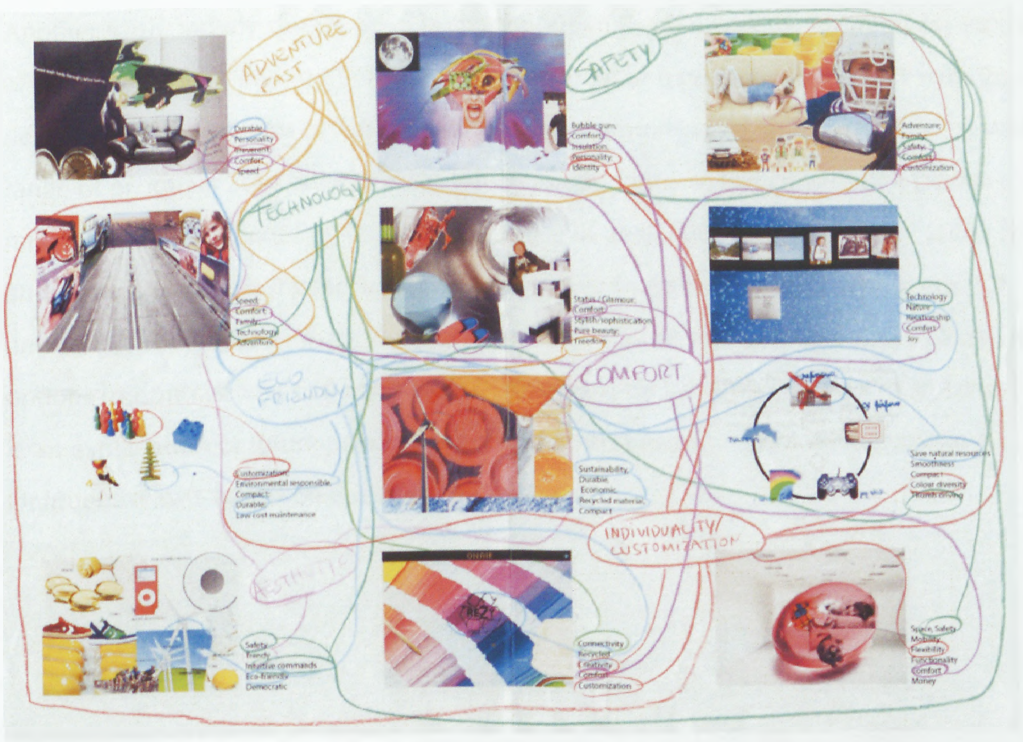


Figure 64 Analysis of the visual maps from Brazil. Convergences and Divergences

Through the visual map analysis, it was identified seven main drivers among more than third different ideas: Eco-friendly, Aesthetics, Comfort, Technology, Safety, Adventure, and Customization. The main characteristic found in the Brazilian group was that the discussions went towards the democratization of the car. A strong feeling of sharing or even the wide possibilities of people being more collaborative by the simple attitude of giving someone a lift was identified and suggested throughout the exercise. This lead to the decision of setting up the Me car/We car scenario, in which the design team was expected to look at future possibilities not only in terms of a new shape or a design driven by technological gadgets, but also in terms of an in depth analysis towards perhaps even a new possible business model.

In contrast, the main issue coming out of the discussion of the focus group in the UK was the consequence of individuality. In other words, people are more interested in going on a journey by themselves, isolated from the outside world. Several participants referred to the image of a cocoon that represents this feeling. The criticism of the increasing size of cars in recent years, for example the boom market of 4x4 cars known as 'Chelsea tractors', was also at the centre of the discussion. The group completely agreed that cars should be smaller but at the same time comfortable.

Another topic largely discussed in both sessions in the UK was the Uniqueness factor of a car, as seen in Figure 65. More than ever, people have been in contact with good design not only in terms of functionality but also a more appealing aesthetics. A wide range of products from diverse areas which already give to the consumer a power to mix and match it according to their own sense of aesthetic has been largely seen. This attitude has been forcing those more conservative industries towards a new era. Of course it is much easier to produce an electronic device and give to the people more options in contrast to a car, for instance. However, this argument works in so far as it is an exploration of future possibilities. The future scenario called Individualism & Uniqueness was based on this discussion.

Figure 65 Analysis of the Visual Maps - Convergences and Divergences - UK

From both focus groups, in Brazil and the UK, there was a consistent view that technology will indefinitely influence the way we interact with the car as it always did. This topic does not appear in the visual maps. Instead, it was an issue discussed mainly during the mind mapping session where the influence of new technologies will in the future be more humanised and prepared to deal with our inner senses. This technology driven development suggested by the participants would allow us to interact holistically with the car even at an intuitive level. Similarly, the participants also suggested looking at the virtual world of games and social networking as a social

interaction that could be linked with the way people commute. Those ideas serve as a basis of the creation of the Virtual x Real scenario.

The idea of the Unbranded scenario came up not only out of the insights from the focus group. It came to certify and a previous observation made by the author during the process of the researching the subject of trends in branding. The automotive industry has a huge influence on peoples' lives around the world. However, few mega corporations have largely handled it properly and as a consequence it has been struggling more recently to match peoples' desires. As was observed in the literature review, a new business model is necessary for the sustainability of this complex business. Many other industries have already realised the change in consumer behaviour in the last decade and have responded accordingly. The Unbranded scenario was created based on both ideas coming from the literature review and lately confirmed by the participants through the discussions.

5.7. Conclusion

As a conclusion, the entire process of gathering information from users has demonstrated how important it is to understand convergent and divergent opinions towards the car as an object that provide more than mobility. It is in many cases, people's lifestyle statement. Through the quantitative method, the users' insights confirmed the importance of producing visual references rather than a text-based report. A visual version ensures a better understanding of the design team's activity which is usually based on a visual approach. It is obvious that designers are extremely visually driven. Large portions of our brains are devoted to making sense of visual information, understanding changes in light and shadow, and movement, and finding meaning in the things we look at. Thus, by engaging with participants in both countries, Brazil and the UK, a richer research experience was provided, confirming the importance of exploring further future scenarios in order to contextualise the project briefing.

In the next Chapter I present the project designs based purely on the users' insights. A design team has worked on this project, entitled 'Feel the Future', not only to translate the participants' visual representations, but also to test whether or not this method of being inspired by individuals works better in the process of a vehicle design project.

6. Project – Feel the Future

In this Chapter I present the process of the entire Project phase (stage 6 of the research framework) by using the information from the field research, which was collated into the four future scenarios. The main objective of this chapter is to present the brief, which in this case represents the bridge between the User insights' and the designers' development.

The author, who acted as a facilitator in the process of collating the massive amount of information from the field research and compiling it into four future scenarios - as was previously explained - also created the brief.

6.1. Briefing

The briefing represents the compilation of the initial analysis from the User Insights' analysis. Originally, it was thought that the design team would work straightway with the drivers and the visual maps. However, after careful observation it was decided that the amount of information could cause confusion for the development process. Then, it was decided that the design team would create clusters to fit similar ideas from the participants into scenarios created by the author but nevertheless, truly based on the entire process of gathering information, and of course, on the information itself.

The objective was to design a thoughtful concept of a vehicle based on peoples' aspirations and feelings. The scenario suggested was set in the year 2030. The year 2030 was not chosen randomly, but rather from the initial observation that the participants are on average in their early twenties, and in twenty years time approximately, they will be part of the target group which will be more likely to spend more on their vehicle. Apart from that, the participants are reasonably special people in their areas. As set out above, the Diffusion of Innovation theory developed by Everett Rogers focuses on those people who in some way envisage the future.

Apart for the briefing, some imagery boards were developed as 'mood panels' to be displayed in the studio in order to set the scene and also to make the design teams more familiar with the users, their drivers for the future and, of course, with their visual maps. The main objective in using photos and video compilations of the participants is an attempt to make the users' experience as vivid as possible for

members of the design team who have not been involved in the research process. The idea was to display those images and user-stories as well as the research participants' quotations in order to maintain the users' 'presence'.

As I discussed before in Chapter 2, Literature Review, designers are more likely to think in, and also generally to have a preference for working in, a visual language. That was the main reason that this briefing was presented through a very objective manner through the four scenarios.

The four scenarios were:
Individualism & Uniqueness
'...my car is like a cocoon where I can do whatever I want..'
'when I'm driving, it's a mix of freedom and of being in a cage'
These are some of the comments made by the participants during the group discussion.
The feeling of being insulated was identified more clearly by participants in the UK in contrast with a more democratic solution suggested by the Brazilian group. Attached to this feeling, a strong sense of desiring something that is unique was also identified.

Unbranded
According to the peoples' insights, in the future we may see a complete change in the business model of the motor industry. Although we have a vast range of models, why have we got a few brands in the marketplace? This was constantly questioned throughout the group discussions. Why should OEM build, brand, market, distribute, and sell cars? What if the industry were to become focused on assembly only and let other companies use the attributes and values from different segments to brand it? What would a vehicle look like if it were branded as Virgin, Tesco, Google, and Apple? Or if the company were to link their brand attributes to other designs?

Virtual x Real
It seems that one life is now no longer enough. A second identity is becoming common in the virtual world as an escape from real life. Today, it is a common practice of teens around the world to play in the virtual world and use avatars as new identities. As participants from both countries discussed, people are looking for new ways of interactions. Another point suggested was that in the near future regulations

might get stricter for those who love guzzling cars such as 4x4s or sports cars. In this case, the virtual world is a refuge for those who want to have the pleasure of driving an 'illegal' or even an 'immoral' car.

Me car/We car

This is an open-source car from development to usage and it is even disposable. This was identified through the group discussion in Brazil as an intense desire to experience mobility in a more democratic way. In the UK, we can find some enterprises with the concept of 'pay-as-you-drive' such as City Car Club and Streetcar. The Me car x We car concept is also aligned with an open-source process. The most successful examples of open source are Linux, Firefox, and Wikipedia.

6.2. Project development

An interim presentation took place in 15th Oct 2007 with the aim of following up on the initial ideas and concepts from the design students. It was set up to make sure that the briefing was understood by the designers and whether or not the perceptions from them fit into the idea of making a vehicle by using the information straight from the customers' minds rather than researching from other sources.

As presented in the briefing, the design students had total freedom of choice in terms of what scenario they could opt for as well as the participant they decided to design it for. Some discussions that followed the presentations aimed to enrich the presented concepts or adjust some misunderstandings that may have happened. In general, most of the design concepts were presented in a satisfactory way. Despite the fact that the design team was working at the same time on another project, the effort that the students put into this project was incredible. The high level of cooperation from the design team may be related to the fact that they had an opportunity to work with a pure source of information coming from the users with little or virtual interference.

6.3. Results

In this section it is presented the visualisation of the conceptual ideas from the design team on the peoples' insights, dreams and aspirations. The first year design students from the Vehicle Design department at the Royal College of Art developed all the following concepts under the author's supervision as well as that of the senior tutor Richard Winsor. Despite the short time given to the designers, only two weeks to

come up with the concepts, the projects were distinguished by the thoughtfulness and quality of the results.

The entire project was developed exclusively through the four future scenarios, once all the research has already been done by the author through the interviews, group discussions, mind mapping and workshops. The design team then, had a chance to look focus on the given information in order to better develop their concepts.

In this section the results are presented through the future scenarios division: Individualism & Uniqueness, Unbranded, Virtual x Real, and Me car/We car. The original format of the images was 0.60cm x 1.60cm, therefore some text may be illegible due to the reduced size. However, an A3 page of each project can be found in the appendix of this document.

6.3.1. Individualism & Uniqueness

Designer	Participant
Ralph	Peewee / Adelaide
Tabitah	Nadir / Clint
Hong	Marcio/ Vena
Thomas	Lucie / Darwin

Based on Nadir's visual map, Tabitah has come up with a concept (Figure 66) with is an amphibious vehicle aimed to discussed a rather pessimist scenario of a flooded cities. She explains: 'With the increase in global warming and the ice caps melting at a phenomenally rate, the future scenario of transportation on roadways is questioned. Most people would use vehicles merely for the pleasure of driving. Vehicles would evolve into amphibious modes of transport, considering that most roads would be converted into waterways. For inter-city travel, one would have to resort to navigating through fast track tunnels artificially guided by GPS. Carrying a narcissistic outlook with individualism and uniqueness, this vehicle is a single seater and the outside skin projects the mood of the driver, while giving him privacy, much like the pupa environment for most larvae.'

Figure 66. Tabitha's concept for Individualism & Uniqueness scenario

The second concept from the Individualism & Uniqueness scenario is the Hong's design, which was inspired by Marcio's drivers for the future.
It seems ironic that the future, a place created by endless imagination and creativity is being stereotyped as a monotone, communistic society where everyone is dressed like an Olympic speed skater. In fact, by Hollywood's standards, North Korea is the most futuristic society today.

Although there is some logic to the stereotype, it undermines a very important aspect of the future. While certain inalienable restrictions such as efficiency, morality, pollution, overcrowding will dictate the general direction of future vehicles, the demand for a different, creative, powerful design will be stronger than ever.

Since the creation of the automobile, it has been more than just a mode of transportation. It has and always will be a symbol for status, personality, security and freedom- no other product in history has had more emotion attached to it than the automobile. In fact, almost every research interview in the "Feel the Future" study associated the automobile with freedom, and despite environmental and industrial restrictions in the future, the participants wanted a vehicle that was more than a basic mode of transportation; they wanted more ways in which the vehicle could be customized to reflect their personality.

This project looked at the future vehicle from a manufacture-to-customer-to-city point of view instead of the biased view that city planners and engineers keep feeding us whenever the subject of future vehicles is brought up. Upon reviewing and analyzing the data gathered by the 'Feel the Future' research was then reworked according to the environment and the restrictions that will exist in the year 2030.

One of the biggest issues concerning the future will be overcrowding. Overcrowding is the root of most traffic problems, and it will require strict regulation. Wheelbases will be regulated, and luxury will have a new look. Height will replace length as a new symbol of luxury.

Echelon

The Louis Vuitton Echelon (Figure 67) is the ultimate expression of personality and imagination for the future. It takes a step back and looks at the future from (literally) a different point of view. It branches out from the traditional height the passengers are used to. It doesn't require an increase in size, like the SUV's and trucks to achieve its height, and it gives out a presence like no other. The interior is separated by its function. The passenger sits on the roof, enjoying the journey while the driver is on the lower platform to drive. The 'skateboard' power plant concept will also give new life to the idea of 'coach building', where a non-automotive company will be able to create a vehicle.

Figure 67. Hong's concept for the Individualism & Uniqueness scenario

Louis Vuitton has been a symbol for Luxury over the years, and since it began by making travel luggage, it was a perfect icon to bring in 2030. Its attention to detail, its use of genuine, honest materials, and fashion has been translated into this vehicle. It also sends out a strong image of security and safety through its sharp shapes and shield-like aesthetics.

The Echelon concept is for the people who want to stand out from the inevitable regulation cookie cutter cars. It is for people, who want freedom, security and luxury.

Shinning

Ralph developed the third project (Figure 68) for the Brazilian graphic designer Peewee. The vehicle is a single sit urban car with a strong sense of environmentally

friendly materials. The vehicle senses and then instigates communication with other vehicles, which share the same technology. Both vehicles pulse with coloured light, the closeness of the colour match signifies the compatibility of their music collection, interests or other customisable profiles. Using recycled fabric throughout, combined with recycled cork from wine bottles for interior details, this vehicle gives the driver a close sense of having made a small difference. In windy conditions, when stationary, a lightweight turbine is elevated from the roof of the vehicle to harness energy where possible. Turbines in the front of the car open up when braking for the same reason. This technique will recycle some of the energy lost in braking and the stored electricity could be used to light the vehicle. When waiting in traffic, the utilisation of the pop-up turbines by several vehicles would provide a cheerful sense of community between owners.

Figure 68. Ralph's concept vehicle for Individualism & Uniqueness

A joystick-style controller leaving free space for a wrap around touch-screen display replaces the steering wheel. This displays customisable options in an infinite range of downloadable styles and configurations. All elements can be dragged to a preferable location. According to Ralph, the vehicles styling and emphasis on social connectivity is inspired by the extravagance and brightness of the Rio de Janeiro Carnivals. The structural light strip sweeps around the form like the streamers whirled by the performers and glow with intentional vibrancy.

Enveloped

The fourth concept develops the idea of a future where Individualism & Uniqueness might be a determinant driver of change in our society in about 20 years time; Thomas has developed the Enveloped concept, as shown in Figure 69. Although images were provided, the designer decided to expand his visual references in order to connect the participants' visual map and his personal view about what better represents the Individualism & Uniqueness scenario. By integrating references such as sharpness, skin, bubbles and an insect-like shape, his design has captured the essence of Lucie's desire for a unique vehicle which provides a private and quiet place, isolated from the outside world.

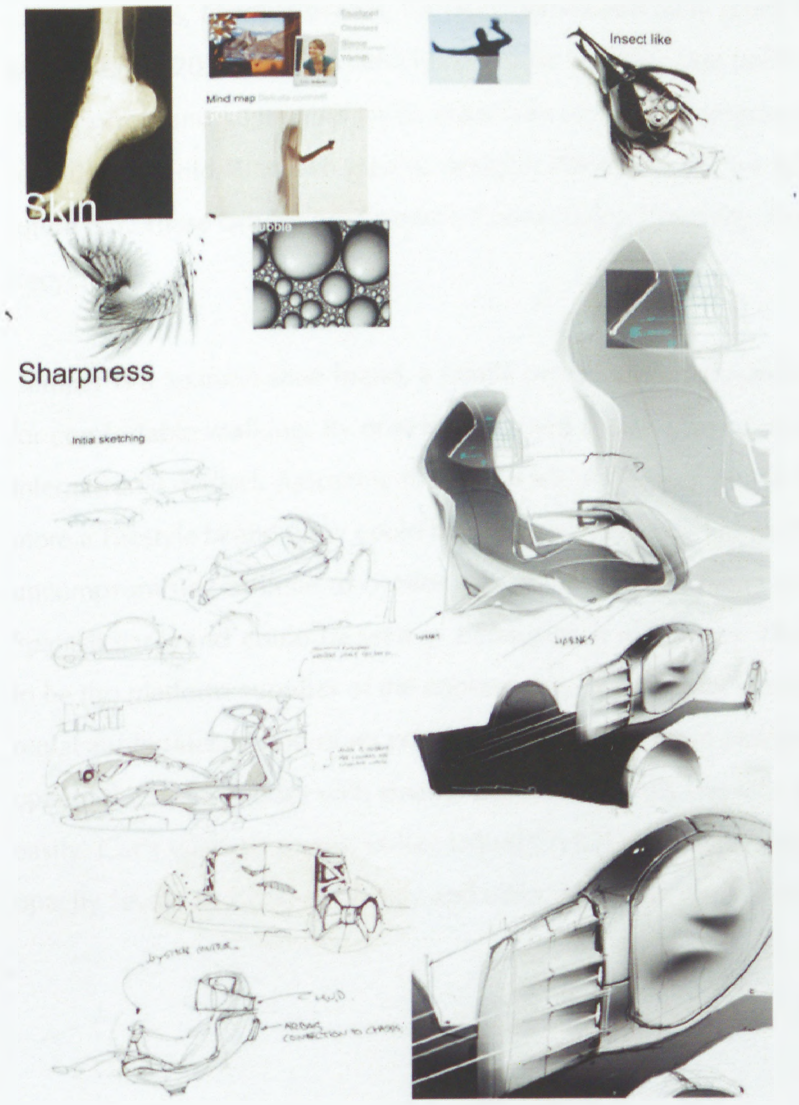


Figure 69. Thomas's concept for Individualism & Uniqueness scenario

6.3.2. Unbranded

Designer	Participant
Jukka	Pewee / Fabiola
Jin	Melissa
Magdalena	Erico / Magdalena

Camper – Powered by Seat

The car is based on the concept that in 2030 cars consist of technical platform, manufactured by traditional car companies and body kits, manufactured and sold by

car companies, lifestyle brands, furniture brands and daily goods brands. (Figure 70) Moreover, in 2030 all road vehicles could be linked to one traffic flow control system that controls and supervises traffic especially on heavily congested roads. The targeted user, 26-year-old Brazilian graphic designer Peewee listed five key drivers for his future car. These drivers are Comfort, Connectivity, Creativity, Customisation and Recycled.

Camper is a Spanish shoe brand, a family owned company, dedicated to make shoes for comfortable walking. By now it has gained a strong brand image on the international market. Assuming that in the future Camper would develop to be even more a lifestyle brand, they could be supplying car body kits in 2030, with an uncompromising attitude to comfortable driving. Seat, a rather young and dynamic Spanish car brand could be seen as a companion to Camper. Therefore it was selected to be the platform supplier of the concept car. The body kit would be covered with replaceable skins, made of recycled plastics. This solution makes it easy not only to update the overall looks with smaller expenses, but also replace damaged parts more easily. Car's window panels utilize Liquid Crystal technology that allows changing opacity levels, to achieve privacy and different kind of atmospheres inside the car.

Figure 70. Jukka's concept for the Unbranded scenario.

Due to its flat skateboard-type platform, the car's interior architecture is flexible. All components are easy to add, move or remove, thanks to several fixing points in the floor. As the fixing points would be standardized, customisation with different manufacturer's parts will be possible. A traditional dashboard is replaced with a large touch screen display, where the user can customize visibility and location of all controls. The steering wheel would pop up from the dashboard for driving and remain hidden when in automated mode.

Pop up car

Inspired by Melissa's drivers for the future as well as Tesco's brand attributes, Jin Sungs suggests that we have a disconnection between the products and people as shown

through his designs (Figure 71). Our everyday life became dry, and perhaps big supermarkets look like a symbol of this circumstance. Therefore, this project proposes to re-establish this lost connection, and helps to find out the story about people and products.

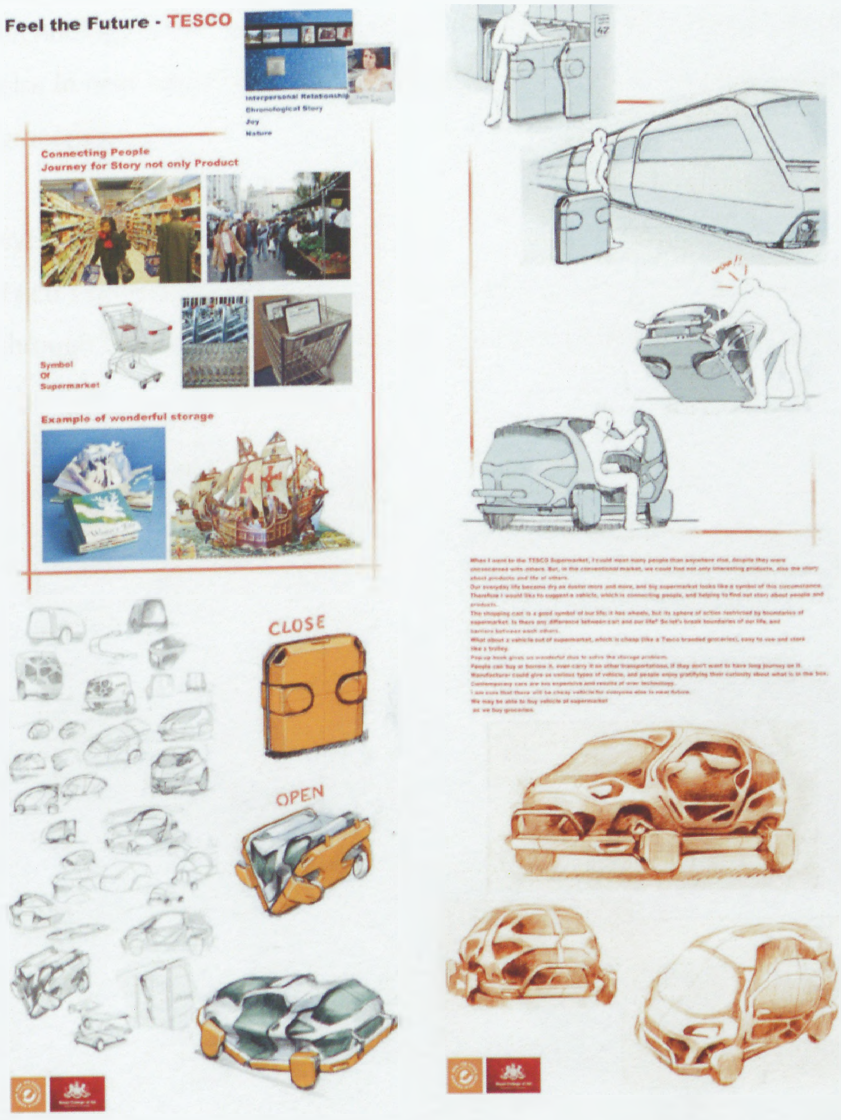


Figure 71. Jin's concept for the Unbranded scenario

The shopping trolley is a suggestive symbol of our life. It has wheels, but its action is restricted by the boundaries of supermarket. "Is there any difference between a trolley and out life?" questions Jim. He suggests that we have to break the boundaries of our life, and the barriers between each other. What about a vehicle on the shelves of a supermarket that would be cheap (like Tesco branded groceries), easy to use and could be stored like a trolley? The pop-up books also give us great clue to solve the

storage problem. People can buy or borrow it, even carry it on other transportation systems, if they do not want to have long journey on it.

Contemporary cars are too expensive and are the results of over-developed technology. Therefore, it is suggested that there will be a cheap vehicle for everyone else in near future. We may be able to buy vehicles in the supermarkets as we buy groceries.

WHOAHHWHATSTHAT

Erico's drivers for the future have inspired Magdalena's concept design (Figure 72) through his Visual Map, and also his comments during the focus group session.

Figure 72. Magdalena's concept for Unbranded scenario.

Magdalena explains that the car will be a blank canvas where the user might be able to customise his/her car according to their own taste. She proposes a different business model based on the following stages:

. Production - The use of textile offers a high range of hands-on customization and personalization.

. Branding - The "canvas" is now labelled by different brands with graphics/ seams/ treatment etc.

. Customization - the hands-on attitude allows the customer and final user to create their own statement within a given frame.

. Exterior - The given frame assures certain stability in design/ no pieces have to be added.

. Interior - Dashboard-pillows can be used for advertisements e.g. giving a "new car" feeling whenever pillowcases are exchanged. Fresh smell!

. Design - Remarkably basic (traditional outline). Inspired by the playfulness of a pillow-fight and its communicative aspects.

6.3.3. Virtual x Real

Designer	Participant
Bob	Marcio / Peewee
Andrea	Damian / Slava / Nelson
Kyuham	Nadir / Fabio
Carl	Daniel / Fernanda

Intuitive

Bob's project (Figure 73) based on Marcio's and Peewee's drivers for the future.

A touch screen surrounding the driver has replaced the dashboard. All the controls panels, such as climate control, the radio, navigation etc are shown on the screen. The panels can be dragged by the driver to the location on the screen / dashboard that he or she prefers. If the driver prefers not to show sustain panels and prefers to have a clean dash, than that's also possible. The desktop image can also be changed to the driver's favourite picture, for example, or it can show a dynamic screensaver.

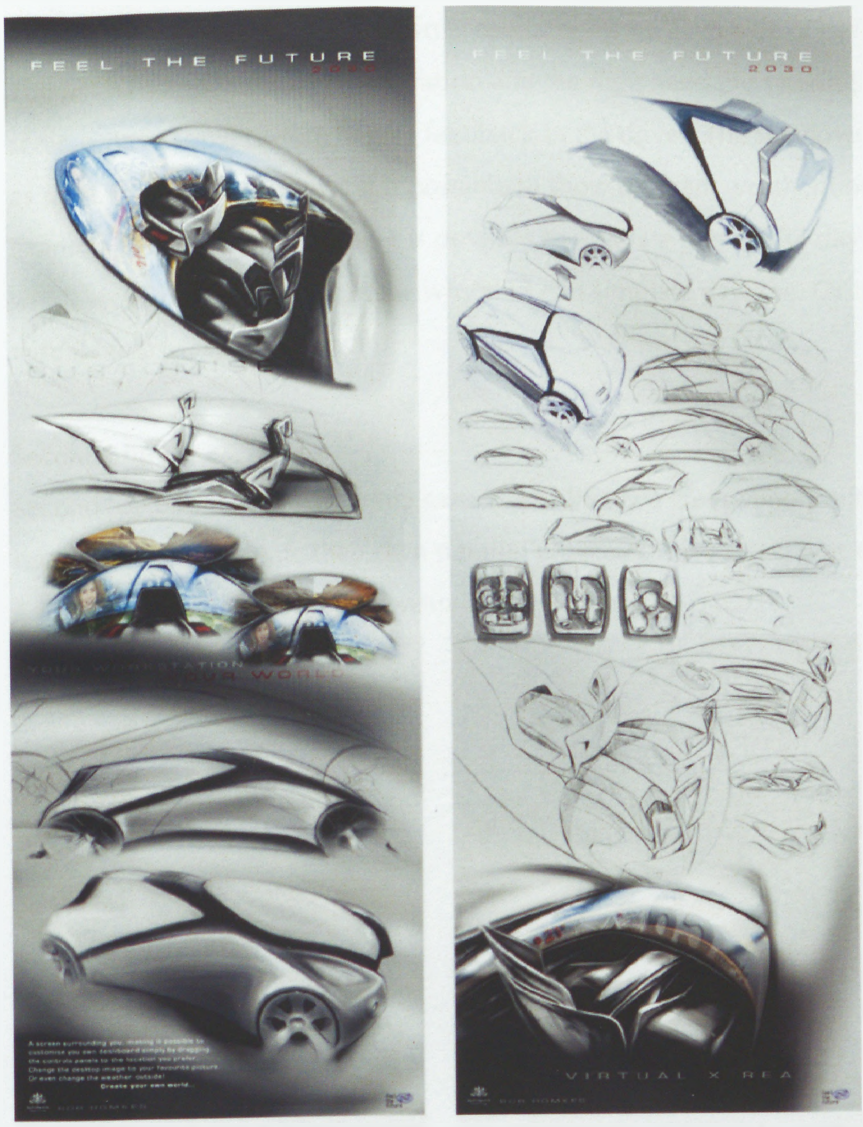


Figure 73. Bob's concept for Virtual x Real scenario.

Multiple settings can be saved for more drivers. Each setting appears after the driver has identified themselves by a fingerprint on the touch screen. This will also make the engine and electronics of the vehicle operate, instead of using a key.

The position of the driver is in the middle. This position is chosen because the inside of the car is the driver's world. The driver is the centre of his or her own world. There is space for two passengers. They can also enjoy the touch screen while sitting in a relaxed position, slightly lower than the driver. They still have a nice outside view because the window is lower at the rear as well.

Controlling the vehicle goes by two sensor screens on each side of the driver's seat. The left hand operates the acceleration and the right hand the steering. The sensor screens have some texture to give feedback to the driver. The windows also function as screens. On the windows it is possible to show different weather conditions. For example if the weather is bad, it is possible to simulate a beautiful day through the windows. Or during the night the windows can simulate daytime. Or it can show a virtual fantasy sky for example.

Second Life

Second life and the virtual reality games are already a great opportunity to people experiencing and create their own parallel universe. This project was developed by Andrea based on the Damian's visual map. (Figure 74)

Figure 74. Andrea's concept for Virtual x Real scenario.

The Keyboard concept will allow you to create your own virtual car. It generates new shapes from a standard platform thanks to the simple use of the keyboard. Multiple movements coordinate the letters position in order to modify the surface of the car. Second life will give us the opportunity to generate a sort of parallel life in a different context: the virtual reality may gives to the shy and emotive people a chance to show the real personality with a different face and body. Many are the reasons for the very fast development of the virtual world. In that reality everything should change and generate an innovative and high technology world. People in some extent need the nature and a refined world. However, in the virtual reality people would care less about all these aspects.

Andrea imaged a vehicle that will become an interface between people's communication. People will be able to communicate with other people along the road and then the object car will create a sense of community. The car's architecture will be the element of identification, a kind of mood identification: a sports car for a single person means 'I would be alone and enjoying the driving' or a spacious car to hang out with friends and be part of a community. The idea of being in touch with the car allows you to interact with the object in a different way. It will be no longer be a cold meaningless object, but in contrast it will truly represents your mood and taste.

Relaxing space

By reading through the briefing, Kyu Han explained that Nadir's and Fabio's visual maps have grabbed his attention due to the strong contrasts of opinion and also the strong imagery. (Figure 75)

Nadir has mentioned curves, smooth, mysterious, emotion and the Ballerina's movement. Based on it this drivers the concept motto was "Relaxing space through VR (Virtual reality) & navigation systems." When developing the idea, it was thought that this vehicle should be like a time machine. Using the material techno-gel, the driver can spread the green house like a soft petal. The vehicle can be driven automatically to the destination by itself using a navigation system. Then, during the journey the driver can experience the virtual world and feel relaxed in a parallel world.

Figure 75. Kyu's concept for Virtual x Real concept.

The exterior was inspired by racing cars from 1950s and 1960s with low lines that is the representation of speed, as suggested by Fabio's visual map. This vehicle does not have transparent glassing. External cameras capture the internal images, so then you will be able to choose the background scenario of your journey. For example, in a raining day, you can set up a sunny day by touch the screen and interacting with the car. Other profiles are also available such as space, forest, and other urban scenario.

Arcade

Carl has also developed a concept vehicle attending the demanded issue of Virtual x Real future scenario. (Figure 76)

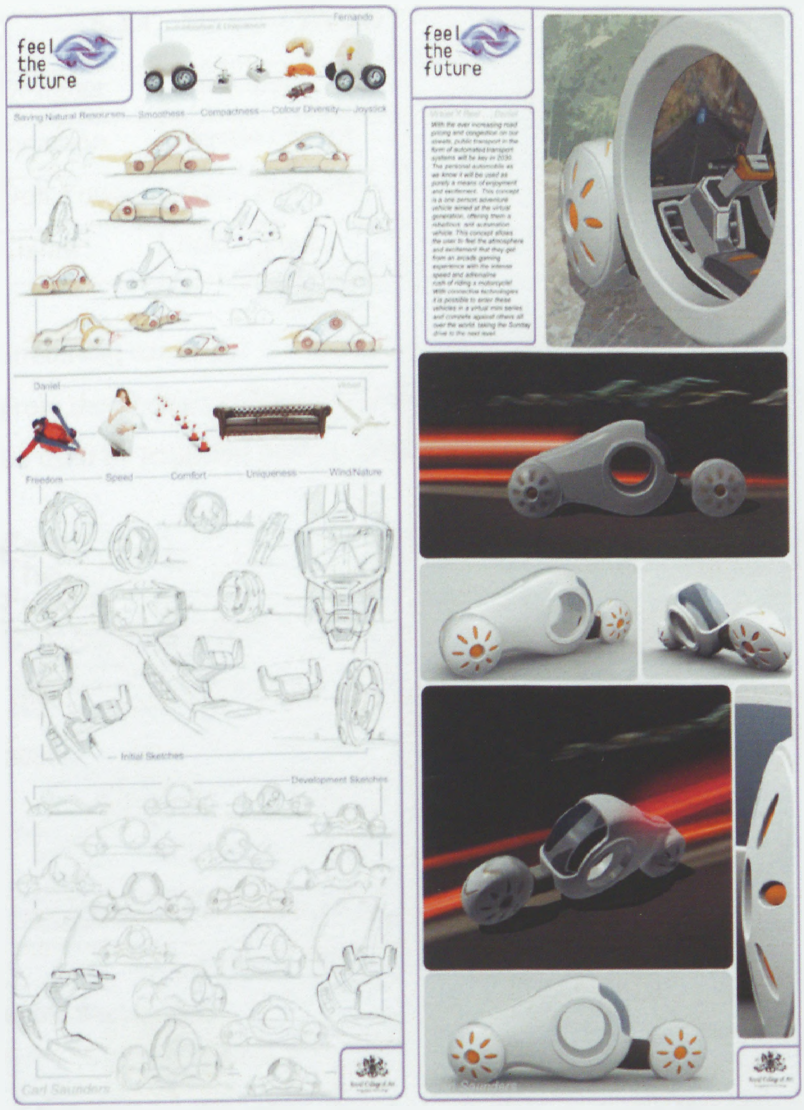


Figure 76. Carl's concept for Virtual x Real scenario

With the ever-increasing road pricing and congestion on our streets, public transport in the form of automated transport systems will be key in 2030. The personal car as we know will be used purely a means of enjoyment and excitement. This concept is a one-person adventure vehicle aimed at the virtual generation, offering them a rebellious anti automation vehicle. This concept allows the user to feel the atmosphere that they get from an arcade gamming experience with intense speed and adrenaline rush of riding a motorbike. With a connective technology it is possible to enter these vehicles in a miniseries of events and compete against others all over the world. It is suggested that it might take the Sunday driving to the next level.

6.3.4. Me car / We car

Designer	Participant
Jonathon	Marcio / Carol
Doh Young	Fran / Bernardo
Ciaran	Erico / Paul

Stretching car

From the choices of Me Car / We car scenario, Marcio and Carol were selected user to be used by Jonathon designs (Figure 77).

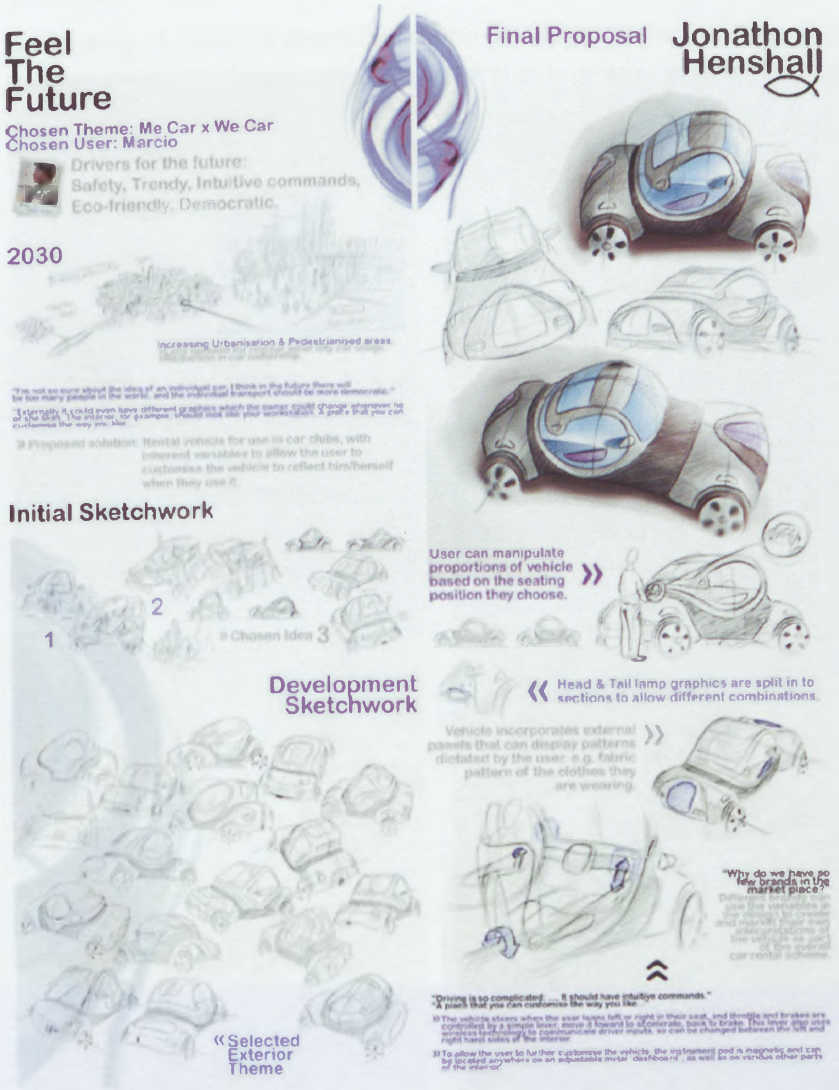


Figure 77. Jonathon's concept vehicle for Me car / We car scenario

Two apparently conflicting themes served as the main influences for the vehicle concept; democratic transport and customisation. Meeting the stipulations of these

themes has resulted in a single occupant vehicle being designed specifically for use in a car club, but one that allows the user to significantly change the proportions and shape of the vehicle to reflect him/herself when they use it. Additionally, the inherent variables within the design can also be used by any brand to create their own interpretation of the vehicle aesthetic. Marcio's and Carol's drivers inspired this concept for the future, the Visual Map, and as well as the previous comments during the focus group session.

Convergence: F.Surfing

This is a concept car that was developed not only based on people's insights, but also by looking at different possibility of the feasibility of the concept. (Figure 78)

Figure 78. Do's concept vehicle for Me car/We car scenario

The design aesthetic and the usability were taken in consideration by observing two very different sports: motorbike and wind surfing. F.Surfing is the convergence of these two. In 2030, there will a range of cars that will be free of charge when buying - think of mobile phones. You will pay for the service, rather than for the product itself. Global companies will also be keen to give it to you in response of using your car as advertising media, once the competitions might be very intense.

F.Surfing can be used in two different ways: First, the wheel allows the user to be agile in traffic jams in the city. The second way to use it is by attaching the wheel to a module, which in combination with the power wheel will transform it in a three wheeled car. The driving position will be more comfortable and also safe. Let's imagine a scenario in which you can go out with your three-wheeled car and find yourself stuck in congestion. You will be able to park your car, detach the power wheel and keep going. At the end of the day, special services will deliver the 'car module' in front of your house. When using the power wheel, it will be necessary to wear special clothes, which are not only intended for safety, but also to be used as a way to communicate with other cars. Of course it is a quite dramatic leap in terms of a proposal for a transportation system. However, the idea is to aim F.Surfing at a young generation and to introduce the idea through an extreme sport format. And, once the concept gains recognition, it will be rolled out to a mass audience.

Taut

From choosing Erico's profile, and the Me car/We car theme, it was clear that the Family image was a main area to address in Ciaran's project. (Figure 79) He was concerned that in the future people may care less about family or community. As a result, from brainstorming what the family means now, and what it might mean in the future, the discussion led to websites like Bebo or Facebook where people connect more to friends or even to strangers than they do to their own immediate family.

Figure 79. Ciaran's concept for Me car/We Car scenario

The qualities of the website Bebo were then imitated in the design of the vehicle, offering a social area with the opportunity of sharing information or advertising. Adventure was another word that was important to Erico, and looking to the past, this led to look at memories, which led to camping and the use of tents. The form of the vehicle is strongly influenced by tents, their taut surfaces, and the framework that supports it.

6.4. Conclusion

The primary objective, of translating the participants' visual maps into a design concept was accomplished. From launching the brief to presenting the final proposals, it took only two weeks for the design team to produce not only the vehicle concept,

but most importantly, with a series of thoughtful designs that consider the intrinsic relationship between the user, the mobility provider (rather than car), the environment, and in some cases, even the business model.

Although some designers have used other references to combine their ideas with users' insights, most of the team members have confirmed the assumption that the method developed and utilised can be based purely on what is relevant and desired by users or potential customers. Critical to the success of this project was the engagement of the design team with the core idea of contextualising people's aspirations for a better future. It was clear that even the user can see that individual desires must be part of a bigger context, and that designing a car as a external element of the entire system is a simply naive mistake. Thus, the project represent a broad visual expression of what the motor industry could offer in terms of providing more relevant products to the marketplace.

In order to frame the research process completely, a Validation was set up, to ensure the relevance of the projects and the participant opinions to design and branding in the motor industry. In the next chapter, the results of this validation are represented by several statements from some of the participants, both form Brazil and the UK.

7. Validations

This Chapter presents the participants' validation of the conceptual vehicles, created by the Vehicle Design first year students at the Royal College of Art based on the participants' aspirations and insights about what we might be driving in the future. The projects were sent to the participants in order to verify whether or not the developed concepts matched with their aspirations and desires.

7.1. Participants' validation

Just after the compilation of the projects, the results were sent to the participants in order to validate not only whether or not the projects themselves matched with the participants' aspirations, but also whether these matched with the entire methodology. As was described before, the methodology was uniquely developed by combining different qualitative methods. Therefore, it was one of the most significant phases of the entire research process. Although all projects went to all participants, unfortunately not all of them replied to the call. So far, the majority of the twenty-three participants have kindly stated their opinions on the projects. The vast majority gave a positive response to the projects.

Bernardo's and Fran's comments on the Do Hyoung's F. Surfing project (Figure 80):

"I understand that my aspirations about what the car might be in the future - compact, durable, customised, environmentally responsible and with low cost - were perfectly fulfilled. They were mainly fulfilled in relation to the compact, customisation and low cost issues. No doubt that those are the strongest point of the project. It seems that it is a kind of car that has several possibilities of usage to match with the taste of the modern consumer, who doesn't accept any more products with which they can't interact properly. Another thing that grabs my attention is the leap of a business model concept, in which, in this case, the car is a service, rather than a product. The comparison with the mobile service sector is just perfect. The strategy of advertising is also pertinent to make the business model feasible. All in all, I found the concept excellent." Bernardo

Figure 80 Do's concept vehicle for Me car/We car scenario

"This project was something that surprised me. I think there is an emerging trend towards personal autonomy that people are looking for, but on the other hand they are still locked in urban spaces, as we know it. This vehicle has an incredible mobility that might solve the trouble of being in a traffic jam and also limited spaces. It is something that I was trying to communicate through my Visual Map: we have to rethink not only the vehicles of the future, but also where this vehicle will be running. I believe this concept would be part of a time of transition. It would take two decades to change the logic of the traffic conditions in big cities. The innovation in vehicles, however, will not be necessary all this time. Then, F.Surfing fits perfectly in this situation. In terms of safety, I would be scared thinking that only a special suit would protect me in case I fell down. Even if the vehicle could offer me a very stable and

balanced system when riding/driving. This vehicle seems to be safer than a motorbike, but I am particularly scared about riding a motorbike. I would be a little resistant to test it. Even though I'm young, I don't have an adventurous spirit for this kind of thing. However, it may delight the extreme sports practitioners." Fran

Another projects developed for the Me car/We car scenario was designed by Jonathon as shown in Figure 81. Due to its characteristics, two participants, Carol and Marcio, both from Brazil, validated the project.

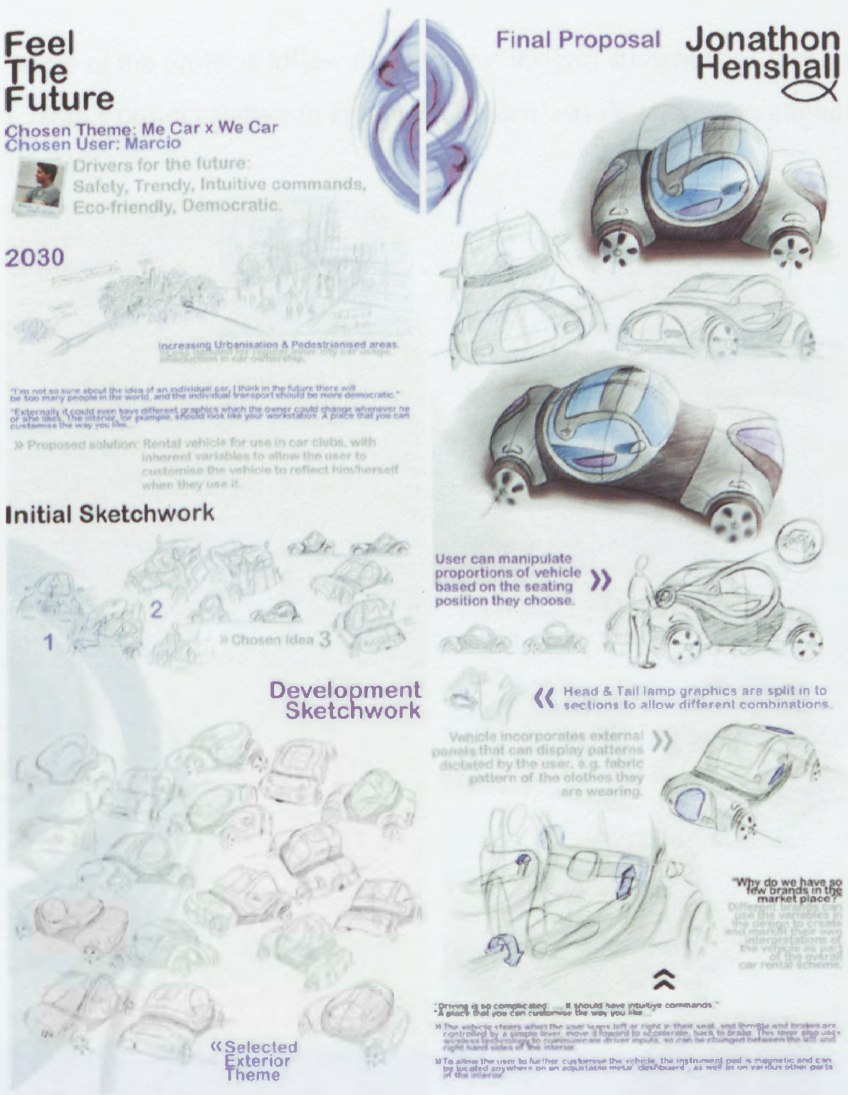


Figure 81 Jonathon's concept vehicle for Me car/We car scenario

"I liked it so much. In fact I haven't idealised anything. I found the 'face' of the car very cute and also the idea of stretching proportions very beneficial to the user and the environment. However, I think the democratic car should accommodate more than

one person. I don't like the idea of everybody having their own car, in other words, it is not economically feasible since we can carry more people in the same car. On the other hand, I liked the customisation possibilities and also the driving position." Carol "The idea matched entirely with the concept of proportion manipulation of the car. In the future, this concept might fill the gap of every missing situation such as traffic jams, travel, the number of passengers, fuel and similarities in the urban vehicle. My only doubt is about materials. Maybe in the future new flexible materials will be invented for this kind of use." Marcio

Some of the projects follow the peoples' insights straightway. That was the case of Ciaran's project shown in Figure 82, which was developed to attend to Erico's insights.

Figure 82 Ciaran's concept for Me car / We Car scenario

"This concept car match perfectly with what I had in mind: a 'sociable' car. It must integrate people, be comfortable, addressed to the family needs, easy going in attitude and ideas. I also liked the idea of having a large panel of glass, larger internal room and simple shape. The fact that the original idea came from a tent is simply great!" Erico

Erico's visual map was also used by other designers in a different scenario: the Unbranded theme. Magdalena's project (Figure 83) was also inspired by Sarah's visual map as well as being strongly influenced by the mind maps.

Figure 83. Magdalena's concept for Unbranded scenario.

"I think the designer didn't go too far from what we can visualise for a near future. I'm talking about the shape of the car. It is still quite traditional in terms of architecture.

Overall, the idea of customising by using fabrics is good, but I think that a project for 2030 should go even further." Erico

Sarah's comments on the project: "I think these concept developments look really chic, fresh and exciting. I like the idea of being able to customise my car to a great extent and the attention to textiles playing a key role in communicating with the passengers clearly addresses some of the key points I made in my visual map. The development sheets above look really fun; for me good design is essential but I don't want my car to take itself too seriously, so this definitely looks like its heading in the right direction."

The second Unbranded project was designed by Jin Kim especially based on Melissa's drivers for the future which are linked to a strong sense of relationship, between people and companies, and to respect for our nature and joy. (Figure 84) Melissa says: "I believe the project is aligned with my aspirations for a future in relation to nature, comfort, joy and high technology. Sincerely, I found the concept car pretty and futuristic. If it is the idea that this car is affordable and less polluting, then certainly I would buy it. I also thought interesting the fact that it is optimised and small in contrast with the big cars we have on the roads currently. It's a great example that it is possible to have comfort in reduced spaces."

Figure 84 Jin's concept for Unbranded scenario

Perhaps one the Unbranded projects that is closer of the essence of this scenario is Jukka's concept (Figure 85). It is a great response to the brief by creating not only a new concept car, but also a new possible business model. It was reviewed by Peewee in the following terms: "It is nice, the design and business concept of a trainers company joining an automotive industry. I guess it will be very helpful for customers who are keen to customise their cars. However, this is a project for 2030 and I think it's not too far away from what we have currently. Mercedes-Bens and Swatch have already tried it in the past."

Figure 85 Jukka's concept for the Unbranded scenario.

As part of the Individualism & Uniqueness scenario there were four projects coming from the design team. Hong's initial ideas were presented through three concepts to be narrowed down to the final one (Figure 86). Although the 'witch's broomstick' concept was not the chosen one to be developed to the final stage, it was considered as a potential project due to a strong link with Fernanda's visual map. In this case, it was sent to Fernanda's appreciation and comments this concept, who was amazed by the originality of the idea. She says: "I love it all! Great! It is adorable to see things that are unique, but durable and comfortable on the other hand. I remember we talked about the witch broomstick and all those symbolisms! That's great that Hong's got this idea and pushed it even further. Crazy isn't it? I like the idea of a car being something like a domestic appliance. The organic shape is also what I think that a car might be in

the future. It reminds me also of a dragonfly. I prefer the collective than individual in the context of a car carrying more people. But I also prefer the individual than the collective in the context of the object car as an object. What a paradox! Summarising, give 10 out of 10! Viva o futuro!"

Figure 86. Hong's concept for the Individualism & Uniqueness scenario

Marcio also validated the Echelon concept designed by Hong. This is perhaps one of the most interesting concepts because the concept is aimed at the luxury segment although the participant had stated clearly his desire for a democratic transportation system.

"The concept car Louis Vouitton Echelon has synthesized my idea of an individual vehicle for the future, considering the idea of a single cockpit, the compact and slim shape bounded together in a very urban utility composition. However, I have observed some points, which to some extent do not match my idea of a future vehicle design. In my opinion, the design aesthetic applied makes the car look like an interstellar army vehicle (such as a Sci-Fi aircraft) and the lines are too much sporty. I think in the future, forms and shapes will be more fun and colourful, therefore the design of the vehicles may look more like a toy than a spacecraft. The "blade" lines around the cockpit and the silver metallic surface look much more aggressive than my conception.
Comparing this to the idea on my board it is possible to notice a more friendly and fun composition. As an example, the soft lines of the converse trainers or the bright and clean transparency of capsules and simple shape of an i-pod could be incorporated into the design of this concept. The idea of luxury goes against the conception of simplicity and a democratic and eco-friendly vehicle." Marcio

By putting together some of those visual references from the visual maps and also from the mind maps, Ralph's designs (Figure 87) present a more sustainable concept in attempt to match several ideas discussed previously. Peewee's visual map was the starting point for Ralph's development.

"I liked how the designer cared about the environmental issues and also the internal space. It seems to be very spacious and comfy. The customisation is also well resolved along with the interactivity with other cars on the road. I liked the design in general. However, I didn't like the fact the car is a single seater, when you take into consideration that it is a car for the year 2030 and probably we will have even more problem with space on our planet." Peewee

I think it looks great... its more insect-like than I had envisaged but that is no bad thing... it is much like a second skin – a bit of body armour. I think the only thing that I feel doesn't quite fit is the joystick... but the sense of silence and being enveloped is captured perfectly." Lucie

Figure 87. Ralph's concept vehicle for Individualism & Uniqueness

Kyu Han Choi has used two visual maps, one from Brazil and other from the UK, Fabio and Nadir respectively. The similarities between ideas were a determining factor on the process of the concept development. Choi's project (Figure 88) attended both aspirations and the project has received a positive validation.

Figure 88. Kyu's concept for Virtual x Real concept.

"The concept car shows smooth and aerodynamic lines, which are related with speed and comfort from my visual map. It is a transparency freedom that in a sense allows the user to skip from the real world through the screen and cameras in the cockpit. The suspension and wheels design as well as the body shape remind me of the classic racing cars, which I particularly liked a lot. I believe the only missing point that I cannot see in this project is the 'family' factor on my Visual Map, but it is clearly because of the lack of space. In conclusion, I found the project excellent and it fits perfectly my taste of cars." Fabio

"I like very much how Kyu Han developed the concept of motion vs. emotion. The dynamics of the ballerina are nicely represented and translated into a car design

characterised by geometrically dynamic shapes of curves. Summarizing I would describe the ballerina as well as the exterior of the car as dynamic, feminine and sportive and I am very happy about the coherent representation in that respect. I am very impressed how Kyu Han incorporated the mysterious dimension of the visual map into the idea of designing a car as an enclosed space. Although I did not (as far as I remember) explicitly mentioned the idea of alternative realities. However, the different levels in the visual map do indeed suggest different levels of realities, a very interesting thought worth elaborating." Nadir

One of the shortest validations but never the less a positive one, came from Fernanda on Carl's project (Figure 89):

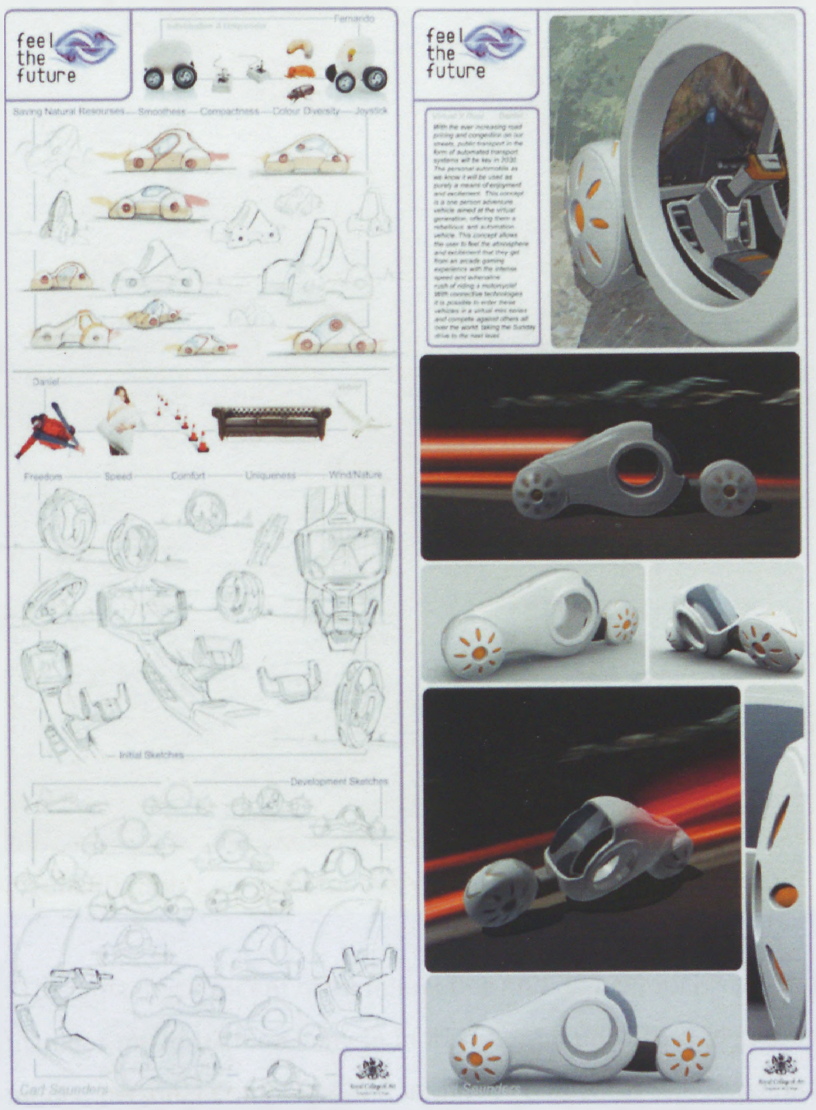


Figure 89. Carl's concept for Virtual x Real scenario

Fernanda replied the validation email simply saying: "I loved it!!! It would be nice in red or yellow, but generally it's great!" Fernanda

Bob has designed (Figure 90) the intuitive driving concept based on Marcio's and Peewee's visual maps and quotations.

Figure 90. Bob's concept for the Virtual x Real scenario.

"This amazing concept of an interactive and digital touch screen dashboard really matches my ideas for a vehicle in the future. I think the integration between digital media, personal computers and intuitive commands will become a reality. This design concept translated for completely this idea of a virtual x real interactivity. I believe that in the future, virtual reality and the possibility to choose and customise interfaces will

be an expected default in many devices. The position of the user in the middle of the vehicle and a complete digital driver control is a breakthrough for our current standards of driving. However, in the future our current mechanical drive commands and steering wheel could (and I believe it will) look like primitive." Marcio

"This was the car design that I liked most, out of the three other concepts for the future. It is the most advanced concept in terms of technology, but it is nothing absurd. It looks very feasible, not only the interior but also the exterior configuration. I thought that the amount of information on the dashboard is a little bit exaggerated. In terms of the proposal of changing the exterior scenario while driving, I am not sure if it wouldn't confuse the driver." Peewee

Also part of the Virtual x Real scenario, Andrea's concept (Figure 91) called 'Second Life' was validated by Fernanda.

Figure 91. Andrea's concept for Virtual x Real scenario.

"I think what Andrea proposes, a new way of interaction between the user and the virtual car through the keyboard, sounds interesting. The possibility of communicating with friends though the shape of the car sounds strange initially, but after a while it makes sense. You are free to express your mood status. Great stuff!" Fernanda

7.2. Conclusion

Though the validation process, the satisfaction of the majority of the participants with to the vehicle design concepts was confirmed. It was rewarding to see the participants' reactions to the projects, mainly because of their sophisticated aesthetic and technological awareness. We must not forget that this group of people are innovators and early adopters in their field, and they have a specific ability to influence people around them.

From the author's perspective, the design concepts have exceeded the expectations. As discussed previously, the design team have worked enthusiastically throughout by proposing ideas beyond what was requested. I believe this is the essence of collaborative projects where every stage can be focused on sharing ideas and building truly innovative ideas from all the participants.

8. Conclusions and recommendations

This research has investigated several issues that are inherent in the relationships between the motor industry and potential users. A comprehensive literature review has discussed three areas that have served as the focus for this research - design, branding, and innovation - in order to give a broad overview on the subject. Furthermore, a series of case studies has shown the current situations of four carmakers: Fiat, Volkswagen, Ford, and Toyota.

The analysis of the information gathered, both from the literature as well as from the case studies, has clearly helped me to reshape the research objectives and has led me to a further investigation with a group of users in Brazil and the UK. The results were then collated into four future scenarios, and organised into a brief format. Subsequently, in collaboration with RCA MA Vehicle Design students, a series of concept vehicles was developed based exclusively on the participants' insights. A validation of these concepts by the participants was carried out and the response was massively positive.

In this Chapter, the hypotheses are answered in order to conclude on the objectives of the research proposal.

H1: 'It is believed that there is a discrepancy between what the motor industry has been providing and what the potential customers/users want from the carmakers.'

The hypothesis above is largely supported not only by the extensive Literature Review but also, and mainly, by the interviews and group discussion with an innovators and early adopters both in Brazil and the UK. The literature review has revealed that the ways in which the automotive industry is modelled privileges market opportunities over the interests and wishes of the end-users. The product-driven motto upon which the automotive industry has been based for more than one hundred years has brought them to such a level of difficulties not only due to the proliferation of products, but also a grown problem too. The architecture of the car has changed little in terms of proportions and shapes. Although it seems obvious to say that a car consists of an engine, a passenger capsule, and a boot, as one of the participants in the focus group

remarked: 'it [the car] is still the same as ever: a box with four wheels. There is nothing genuinely new.'

Throughout the research process of gathering information, the discussions with innovators and their insights, the design concepts, and finally the validation process, it has become clear that people are demanding new designs, with more innovative shapes and architectures. The missing point is the emotional connection between the manufacturer and its product. Most cars on the streets are produced through a mass production process desperate for cost effective solutions, which in most cases end up in a poor quality product in every sense of the word.

During the focus group sessions it was clear that the users expect truly innovative solutions. The concept of the car, as a desirable object transcends its perceptions as merely a piece of metal that provides comfort while commuting. The Drivers for the Future exercise has shown how consciously we need to focus on this group of key areas for a better future. The concept of environmentally-friendly mobility was among the drivers which represents not only a desirable future, but also something that should already have been done and that now requires urgent decisions to be made in an attempt to restore, or better, stop the damage. It was stated by many participants that this issue is something that we cannot wait twenty years for before we decide to take real action. It was also clear that brands that have not been presenting real behavioural change on this issue have a potential to truly damage their image.

However, I believe that it is a matter of building in image on a 'green' platform, instead of defending a non-existent position. Toyota is undoubtedly leading the way with its Prius model's strong image. However, in 2007 a report published by CNW Marketing Research (Spinella, 2007), claimed that a Hummer is more efficient than a Prius if the life-cycle, from initial concept to projected scrapping, is taken into consideration. Efficiency rating is based on the Prius lasting only 109,000 miles, whilst the Hummer runs for more than 300,000. Neither of these figures are properly documented and this study has been roundly debunked (Gleick, 2007). Nevertheless, whether or not these claims are supported, reliability, durability and most importantly, disposability, should be also part of marketing campaigns. In this sense, unfortunately people have been misled by the idea of what a real 'green' car should be.

So, this twisted perception, not only in terms of what a sustainable car should be, has been created by the motor industry in an attempt to produce products based on what they think would be better for the user. In fact, it should be the other way around. It should not be about the brand and its attributes. It should not be just about the product and its characteristics. It must be about whom you are designing for: the user. Therefore, this research confirms that there is a discrepancy between what is delivered and what is desired.

H2: 'It is suggested that peoples' perceptions of some brands differ from what carmakers attempt to communicate through their brand attributes and design styles.'

This Hypothesis is answered in section 5.5, 'Perceptions on concept cars' by the results of a survey made during the focus group sessions both in Brazil and UK. In short, this survey showed clearly that the peoples' perceptions about the nature of the carmakers' design and branding are dramatically confused. It might be the case that the motor industry has been attempting to not only reach other markets by borrowing cultural and design cues for their own designs, but also immersing their design teams in particular markets in order to better understand local taste and manners. Based on the survey results and the discussions, the hypothesis presented above is supported.

H3: 'By changing the approach to designing concepts, the automotive industry would provide a more thoughtful product and also align with the peoples' aspirations and desires.'

The variety of design philosophies presented through the case studies show explicitly that global companies such as Ford, Fiat, Volkswagen and Toyota have been looking at design and brand strategy fundamentally based on previous developments. This research proved how thoughtful the results were of involving users and designers in a co-creation process. By integrating peoples' insights and the designers' abilities to translating them, a series of insightful concepts was presented, not only in order to provoke a new aesthetic exploration, but also to propose applications of new materials and even of potential business models. It is believed that this is the true way to achieve innovation.

The new terms of design thinking and of processes of co-creation have been subjects of much discussion in several design conferences. Some say that designers should not give away the 'power of man-made creations'. Others also defend that we, as designers, should not ask the people what they want if we do not know what to do, why should they know? I tend to believe that designers also have a high profile ego, which helps them sometimes to come up with breakthrough ideas. In most of the successful cases, the breakthrough is strongly linked with artistic outcomes that serve to amuse the observer.

However, some industries, in particularly the automotive, have been joggling with its ego for such a long time that surely forgot what they stand for. In marketing terms, it calls myopia. Throughout the case studies the 'myopic ego' is demonstrated by the single fact that all carmakers are focused on developing CARS, rather than means of transport.

Carmakers have in the past been considered as one of most advanced industry that was always strongly linked with advanced technology. In the 1960s for example, the age of space exploration, many concept cars had their shape influenced by the highly optimistic view that in the near future a car would be able to fly. In other words, a concept car had always been developed based on something else other than the user. The evolution of the aesthetics in the automotive industry could be briefly described as: in the 1960s the space, in 1970s and 1980s a boxing shapes and the functionalism exacerbate, in 1990' the lack of creativity by bringing back the lost emotional connection from the past through the retro styling. Nowadays, it is hard to identify a single trend that affects the conceptualisation process in vehicle design. The last editions of the motor shows seem to be much more a preview of that we will find in the dealerships next year, rather than a truly and inspiring view of the future in the long term. The courage to be able to speak the future has gone.

H4: 'The motor industry might be more beneficial in a long term strategy and sustainable future if their practices change from product-driven to a user-centred approach.'

Certainly the automotive industry needs to rethink its attitude concerning its long-term strategy. The motor industry is living in a transitory period, where technology is not

advanced enough yet to support dramatic changes in terms of designs and car architecture. However, it is believed that in order to change peoples' perceptions a more visionary view should be given. For example, the result of the Validation process clearly supported this hypothesis where the acceptance of innovators and early adopters through radical changes for the future of transportation was largely accepted.

Chris Bangle (2006), Chief of Design for BMW Group, responsible for design strategy and conception across all BMW's brands including Mini and Rolls Royce, has metaphorically compared the motor industry with the film making industry through the following quotation from Francis Ford Coppola. He said: 'in film making there are three ways; good, cheap, quick... pick two'. You can have a cheap and quick film, but not a good film. A good and quick film, but certainly it will not be cheap. You can have time to market very rapidly. You can have an expected and inexpensive, but do not expect it to be that good. If you really want high quality and put it very quickly in the marketplace, do not expect it to be very cheap.

That is the logic the carmakers have taken for granted for as long as this industry has existed. This might not be the same way of thinking for the future if we consider a more integrated and sustainable choice.
Either a product driven or a brand driven strategy might work for other companies, but not for the motor anymore. We live in a holistic world were people want more than an inexpensive vehicle, with a good quality and quick delivery. People want more than just an extension of their living room. They surely want a product that speaks their mind and attitude.

Following this sense, it is fair to say the four future scenarios are intrinsically linked with what the participants had in mind when they produced the visual maps. Not just because the validation process was positive, but also because the holistic view from the design team compose the entire idea and delivery thoughtful concepts.

Looking at the whole research process in retrospect, it can be said that the objectives proposed were fulfilled through an exhaustive work and but delight results. So far, among others small achievements, this research has brought a new way of thinking to the field of design practice, in particular to the area of vehicle design.

8.1. Recommendations

In the course of this research, it was identified several aspects that are considered the problems which the motor industry has been facing. A change of paradigm is needed. This research after all represents a positive view in promoting the discussion of change through the designing process.

The following research recommendations are addressed to Industry and Academic separately even though those suggestions might have a cross interest between them.

Industry:

. The long-term strategy and the sustainability of the industry depends on changing ways of thinking. The author recommends that the industry gradually swap over from a product driven to a user-centred approach when developing a car.

. Review the design / research and branding process embracing existing and also potential customers into the discussion.

. Learn from other industries experiences the application of user-centre design process, whether good or bad.

. The automotive industry should rethink its position from 'carmaker' to transport provider. This idea is clearly supported by projects such as those as part of the Unbranded theme where the design team proposed it and very welcomed by the users' validation that people do not necessarily want to have the ownership of the object car. What they want after all is, in most cases, to be transported from A to B safely, comfortably and preferably in style.

. It is easy to find the industry even presenting the word innovation as a brand attribute, and as one of the major driving forces of their business. No doubt that the motor industry is placed in the forefront of technological developments responsible to increase safety, performance, and reliability. However, it is beyond question to say that the motor industry should look at the basis of the innovation definition to understand that it is not an innovative process as it has been said to be. All the new technological developments usually come from suppliers through a process of evolution, rather than through a process of innovation.

Academia:

. Design schools should include a user-centred approach in its courses structure.

. Creative solutions, and processes are largely used in developing products and services as we could see throughout this research. However, further developments not only in business but also in social and cultural areas should be connected with creative solutions in a close relationship. But unfortunately creativity is not being encouraged generally in education, especially in business education. I am not discussing design education specifically, but rather all education. Creativity is a powerful motivator. If one does anything the same way for long enough it becomes boring, it does not matter what it is or how lucrative it may be. People are usually very motivated when asked and challenged to use creativity to solve problems or invent new methods or discover new opportunities. Design is more than just a tool that most organizations can embrace to infuse creative thinking into the equation. It should be embraced as an 'excuse' for giving a better future for a sustainable future. There are many reasons that design thinking is so important to business today: it serves as the meaning for creativity to be used as a real tool. But the desire for change is deeper than the role of the designer as an ambassador of creativity. It must goes onto all the organization levels, and even further, as supported by this research, it should goes onto the end users. Everyone is creative if given the opportunity. Giving them an opportunity to be part of the process of creation must be an imperative.

. Business Schools should dedicate a module to learn the basis of design and also how to combine logical with creative thinking.

8.2. Further development and research

This research is not conclusive and had not an attempt to become an end of the line in the discussed subject. It is rather the starting point of a discussion that might lead to a change in the industry, in education, government bodies and to change for all the stakeholders affected in some way by the object car. We as designers, have a huge responsibility in our hands in translating all the intangible attributes from a brand as well as the people's desires and aspirations in a product aesthetically acceptable, environmental responsible, and also that is able to help the company be profitable.

As a suggestion for further research, I would point out some areas that might be essential to look at by using this research as basis of the future thinking;

. In Branding: should branding be the short cut to remind people about a product or service?

. Open source design as strategy.

. A convergence between psychology, aesthetics, and business theories should be used to cross reference in further research.

. The same qualitative method developed of gathering information from potential customers, as was developed in the course of this research, could be applied in other countries in other to find out convergences and divergences from other cultures.

. The methodology of gathering information from the users is something that must be in constant development because of the nature of the activity. Once users are in constant change, methods and techniques must follow the changes.

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feel the future

Perceptions of branding and design towards product development in the motor industry

Kleber R. Puchaski

Research Appendix

Royal College of Art
Postgraduate Art & Design

Supported by:

CNPq
Conselho Nacional de Desenvolvimento Científico e Tecnológico

April 2008

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Figure 1 Visual representation from Bernardo's drivers for the future.

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Figure 4 Visual representation from Erico's drivers for the future.

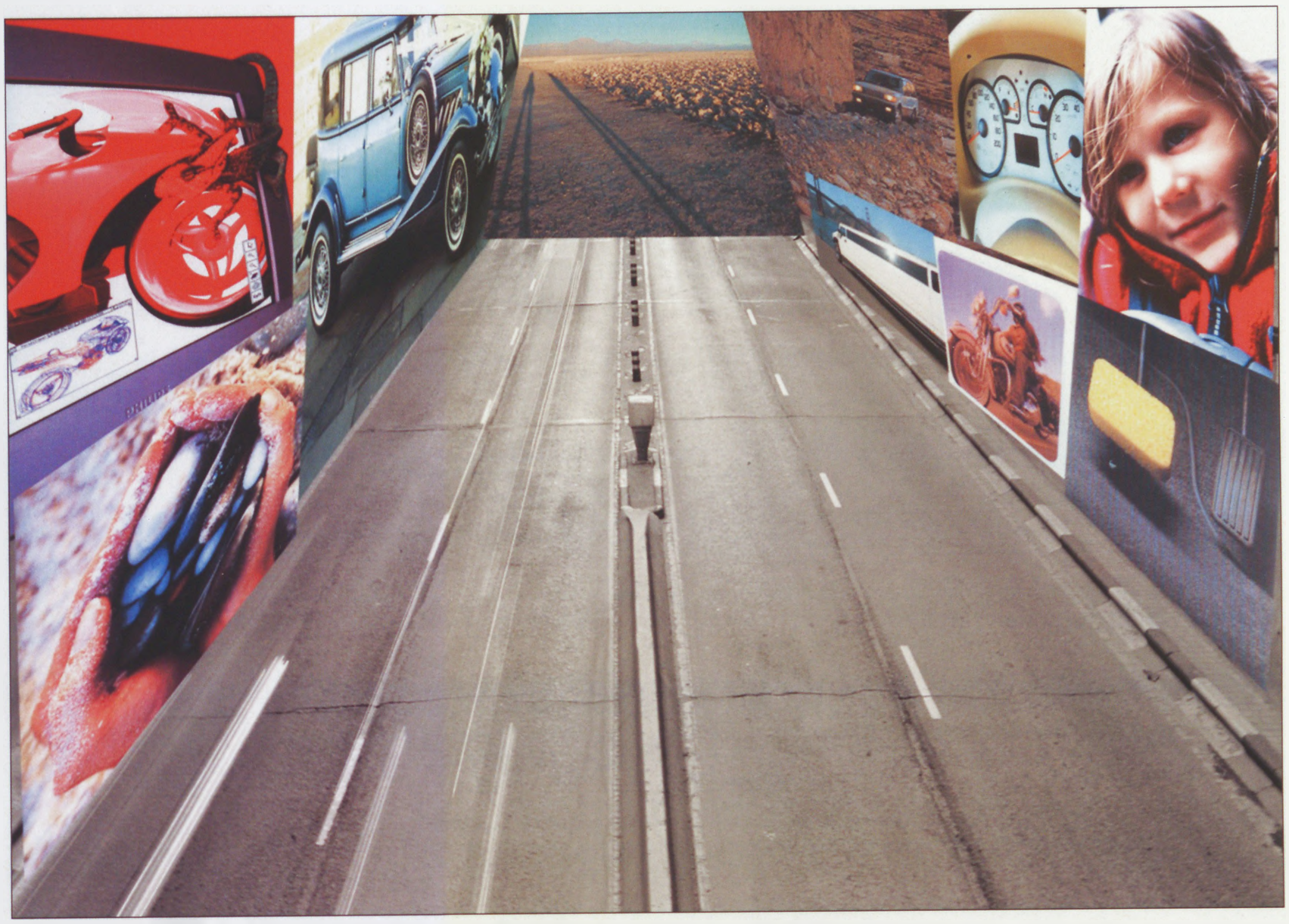


Figure 5 Visual representation from Fabio's drivers for the future.

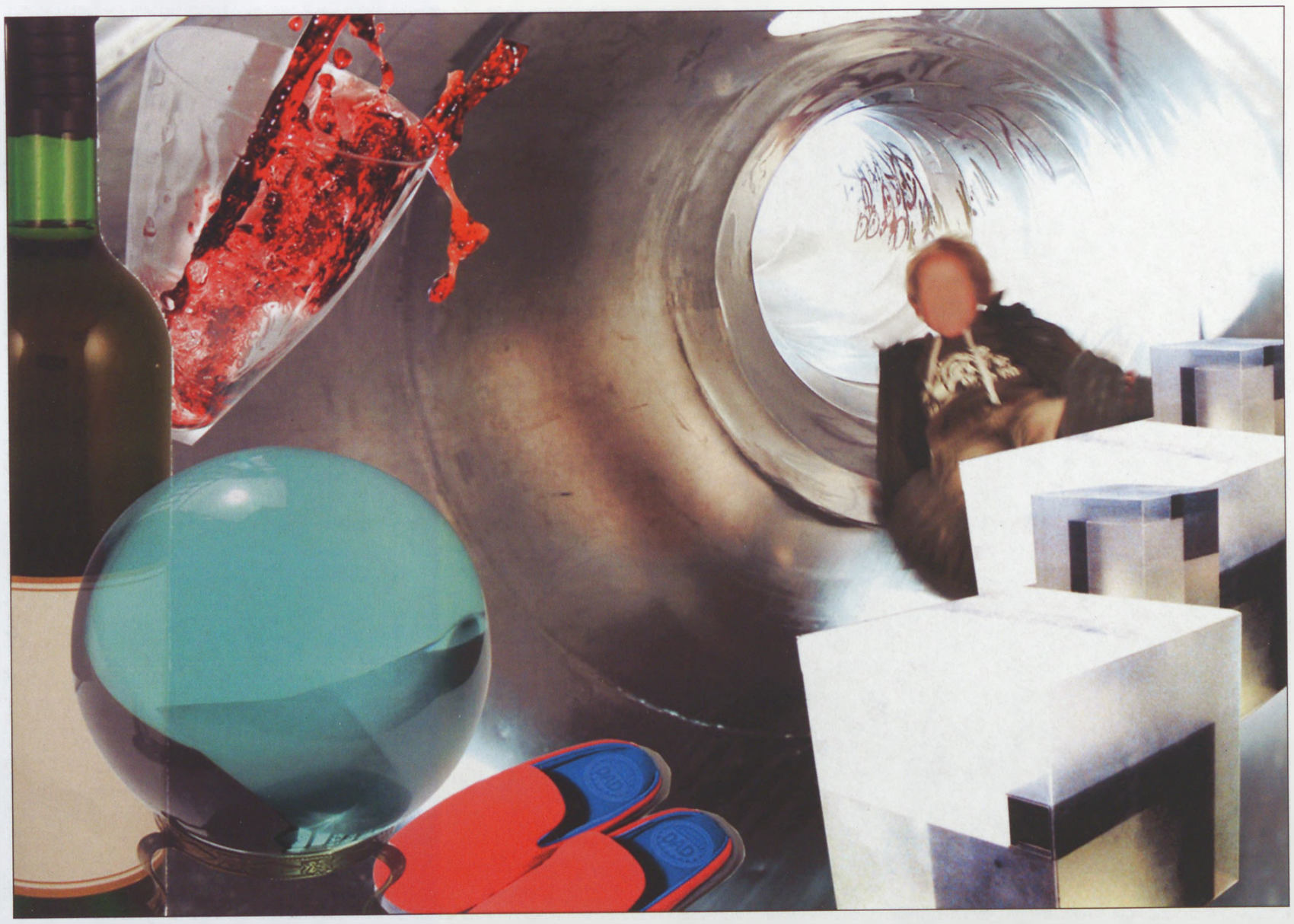


Figure 6 Visual representation from Fabiola's drivers for the future.

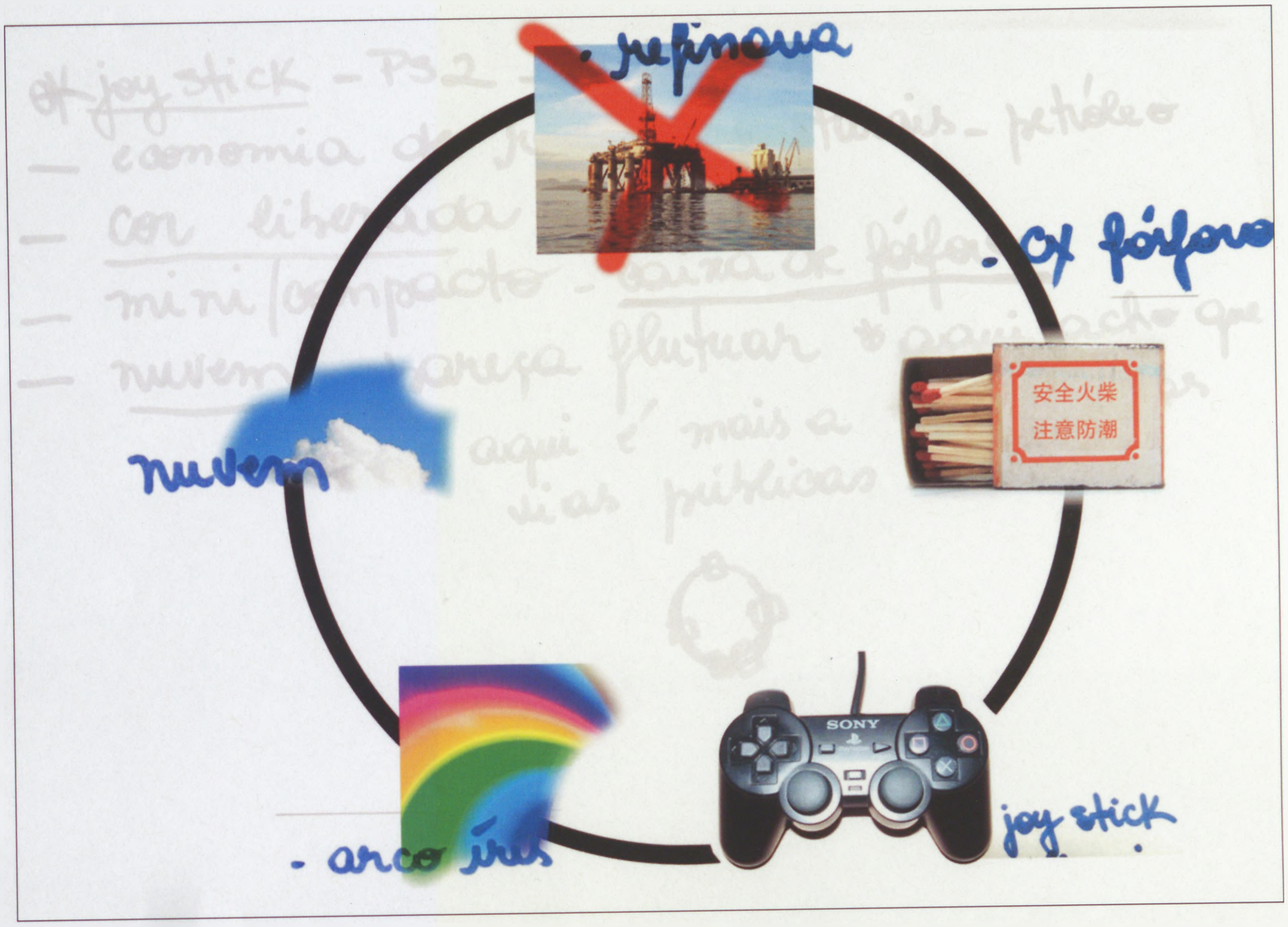


Figure 7 Visual representation from Fernanda's drivers for the future.

Figure 8 Visual representation from Fran's drivers for the future.

Figure 9 Visual representation from Marcio's drivers for the future.

Figure 10 Visual representation from Melissa's drivers for the future.

Figure 11 Visual representation from Pavao's drivers for the future.

Figure 12 Visual representation from Peewee's drivers for the future.

Figure 13 Tabitha's concept for Individualism & Uniqueness scenario

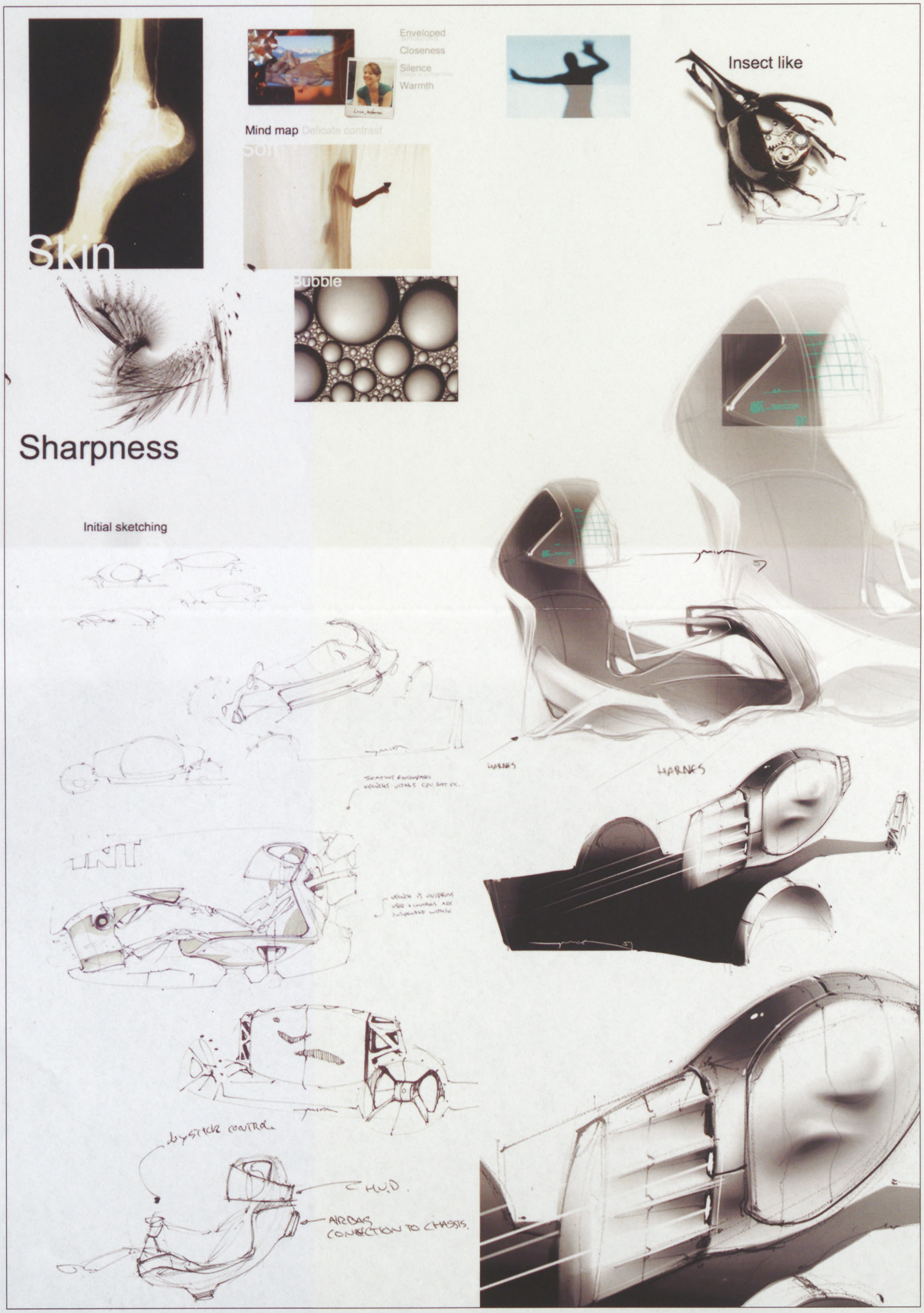


Figure 14 Thomas's concept for Individualism & Uniqueness scenario

feel the future

Ralph Tayler-Webb

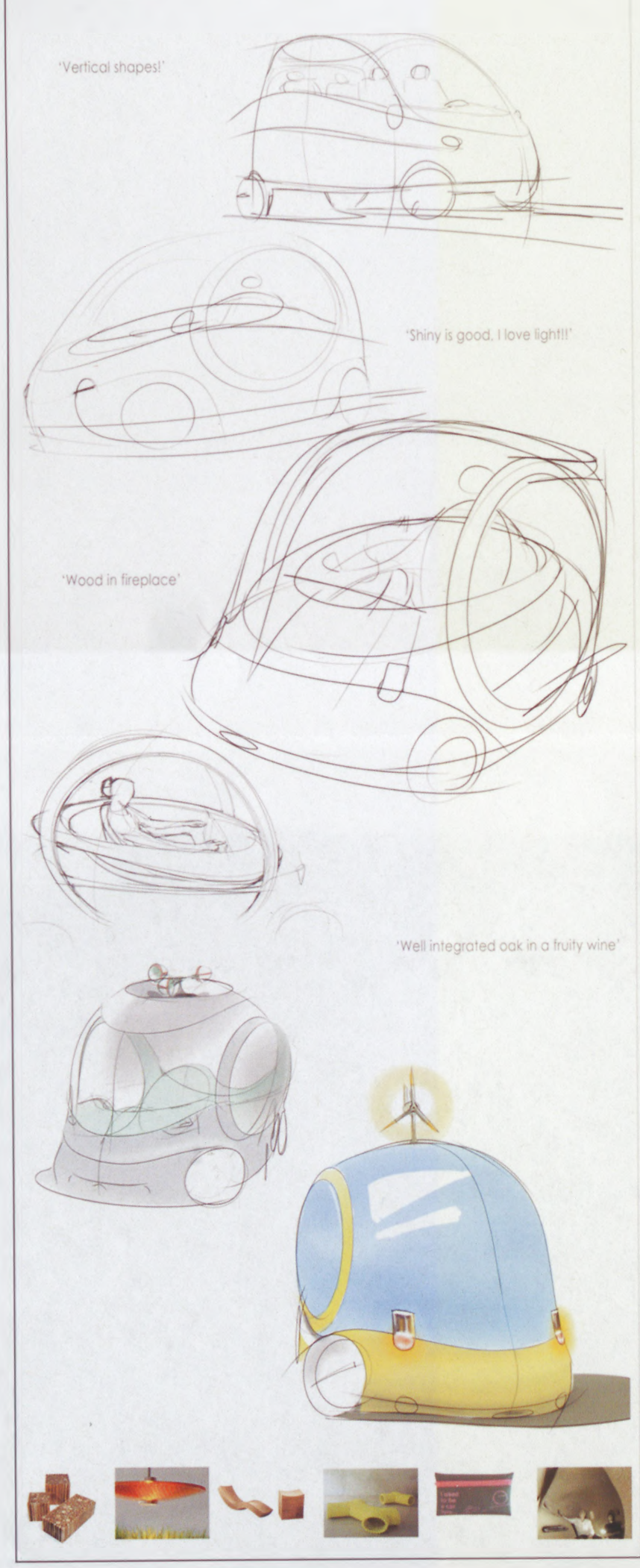
Royal College of Art

'Vertical shapes!'

'Shiny is good. I love light!!'

'Wood in fireplace'

'Well integrated oak in a fruity wine'



feel the future

Ralph Tayler-Webb

Royal College of Art

A car for 26 year old Peewee, a Graphic Designer.

The vehicle senses and then instigates communication with other vehicles which share the same technology. Both vehicles pulse with coloured light the closeness of the colour match signifies the compatibility of their music collection, interests or other customisable profiles.

Using recycled fabric throughout, combined with recycled cork from wine bottles for interior details, this vehicle gives the driver a close sense of having made a small difference.

In windy conditions, when stationary, a lightweight turbine is elevated from the roof of the vehicle to harness energy where possible. Turbines in the front of the car open up when braking for the same reason. This technique will recycle some of the energy lost in braking and the stored electricity could be used to light the vehicle. When waiting in traffic, the utilisation of the pop up turbines by several vehicles would provide a cheerful sense of community between owners.

The steering wheel is replaced by a joystick style controller leaving free space for a wrap around touch-screen display. This displays customisable options in an infinite range of downloadable styles and configurations. All elements can be dragged to a preferable location.
The vehicles styling and emphasis on social connectivity is inspired by the extravagance and brightness of the Rio de Janeiro Carnivals. The structural light strip sweeps around the form like the streamers whirled by the performers and glow with intentional vibrancy.

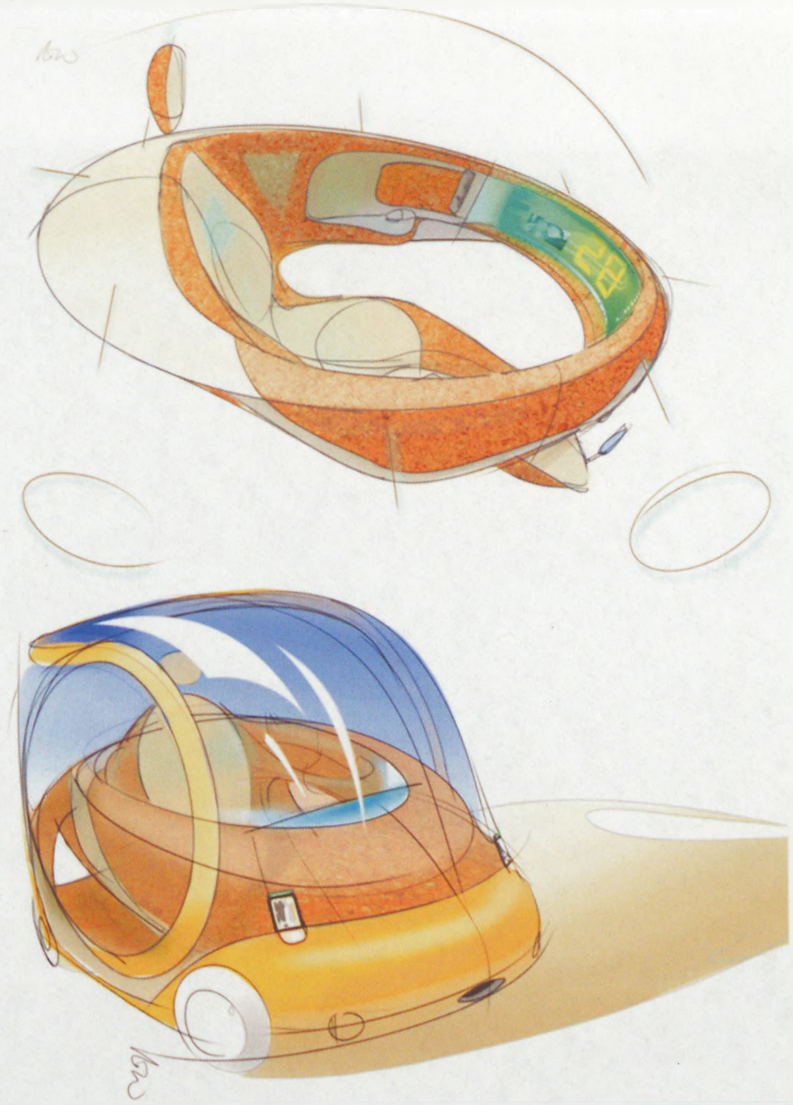


Figure 15 Ralph's concept vehicle for Individualism & Uniqueness

feel the future

Individualism & Uniqueness

Figure 16 Hong's concept for Individualism & Uniqueness scenario

Feel The Future

Chosen Theme: Me Car x We Car
Chosen User: Marcio

Drivers for the future:
Safety, Trendy, Intuitive commands,
Eco-friendly, Democratic.

2030

Increasing Urbanisation & Pedestrianised areas.
»Less demand for regular inner city car usage.
»Reduction in car ownership.

"I'm not so sure about the idea of an individual car, I think in the future there will be too many people in the world, and the individual transport should be more democratic."

"Externally it could even have different graphics which the owner could change whenever he or she likes. The interior, for example, should look like your workstation. A place that you can customise the way you like..."

» Proposed solution: Rental vehicle for use in car clubs, with inherent variables to allow the user to customise the vehicle to reflect him/herself when they use it.

Initial Sketchwork

Development Sketchwork

« Selected Exterior Theme

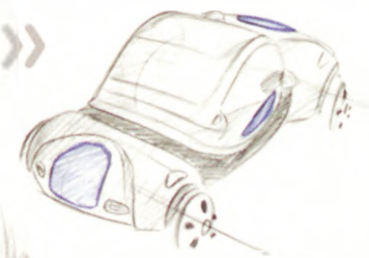
Final Proposal

Jonathon Henshall

User can manipulate proportions of vehicle based on the seating position they choose. »

« Head & Tail lamp graphics are split in to sections to allow different combinations.

Vehicle incorporates external panels that can display patterns dictated by the user. e.g. fabric pattern of the clothes they are wearing. »



"Why do we have so few brands in the market place?"
Different brands can use the variables in the design to create and market their own interpretations of the vehicle as part of the overall car rental scheme.

"Driving is so complicated: .... It should have intuitive commands."
"A place that you can customise the way you like..."

» The vehicle steers when the user leans left or right in their seat, and throttle and brakes are controlled by a simple lever, move it foward to accelerate, back to brake. This lever also uses wireless technology to communicate driver inputs, so can be changed between the left and right hand sides of the interior.

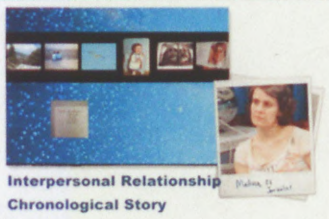
» To allow the user to further customise the vehicle, the instrument pod is magnetic and can be located anywhere on an adjustable metal "dashboard", as well as on various other parts of the interior.

Figure 17 Jonathon's concept vehicle for Me car / We car scenario

Figure 18 Do's concept vehicle for Me car / We car scenario

Figure 19 Ciaran's concept for Me car / We Car scenario

Feel the Future - TESCO

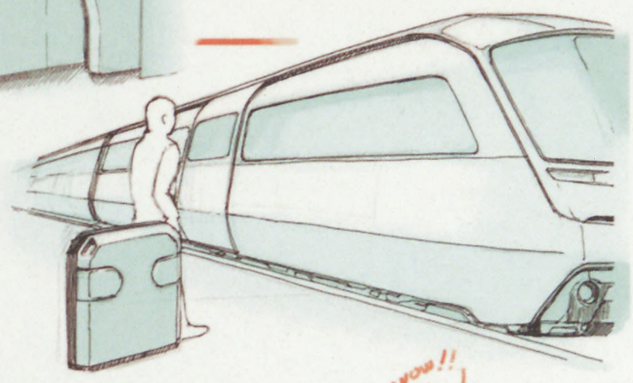


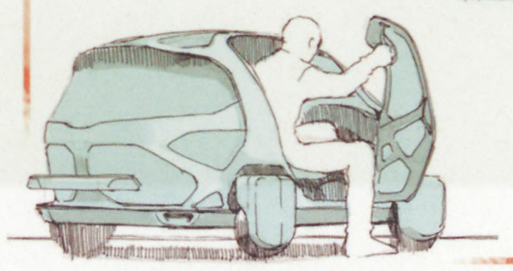
Interpersonal Relationship
Chronological Story
Joy
Nature

Connecting People
Journey for Story not only Product

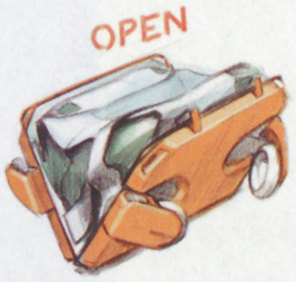
Symbol
Of
Supermarket

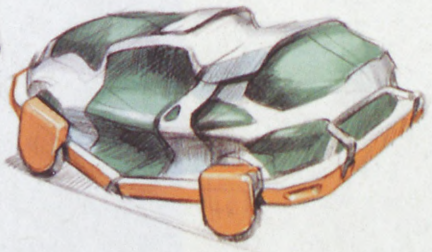
Example of wonderful storage

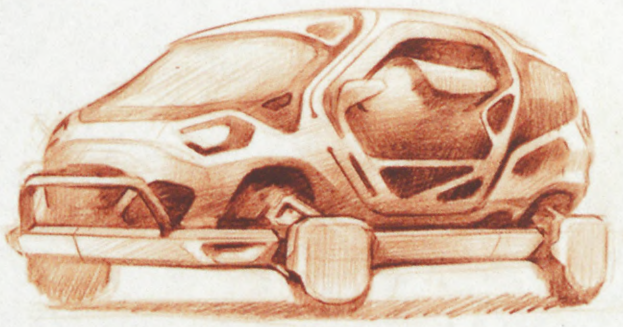




When I went to the TESCO Supermarket, I could meet many people than anywhere else, despite they were unconcerned with others. But, in the conventional market, we could find not only interesting products, also the story about products and life of others.
Our everyday life became dry as duster more and more, and big supermarket looks like a symbol of this circumstance.
Therefore I would like to suggest a vehicle, which is connecting people, and helping to find out story about people and products.
The shopping cart is a good symbol of our life; it has wheels, but its sphere of action restricted by boundaries of supermarket. Is there any difference between cart and our life? So let's break boundaries of our life, and barriers between each others.
What about a vehicle out of supermarket, which is cheap (like a Tesco branded groceries), easy to use and store like a trolley.
Pop-up book gives us wonderful clue to solve the storage problem.
People can buy or borrow it, even carry it on other transportatiosn, if they don't want to have long journey on it.
Manufacturer could give us various types of vehicle, and people enjoy gratifying their curiosity about what is in the box.
Contemporary cars are too expensive and results of over technology.
I am sure that there will be cheap vehicle for everyone else in near future.
We may be able to buy vehicle at supermarket
as we buy groceries.







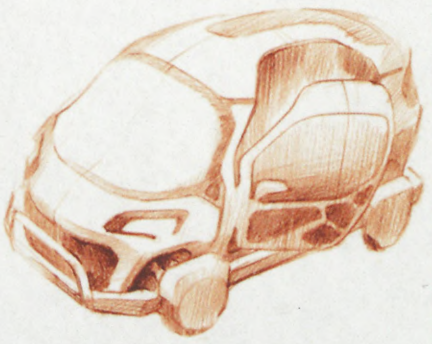


Figure 20 Jin's concept for Unbranded scenario

Figure 21 Jukka's concept for Unbranded scenario.

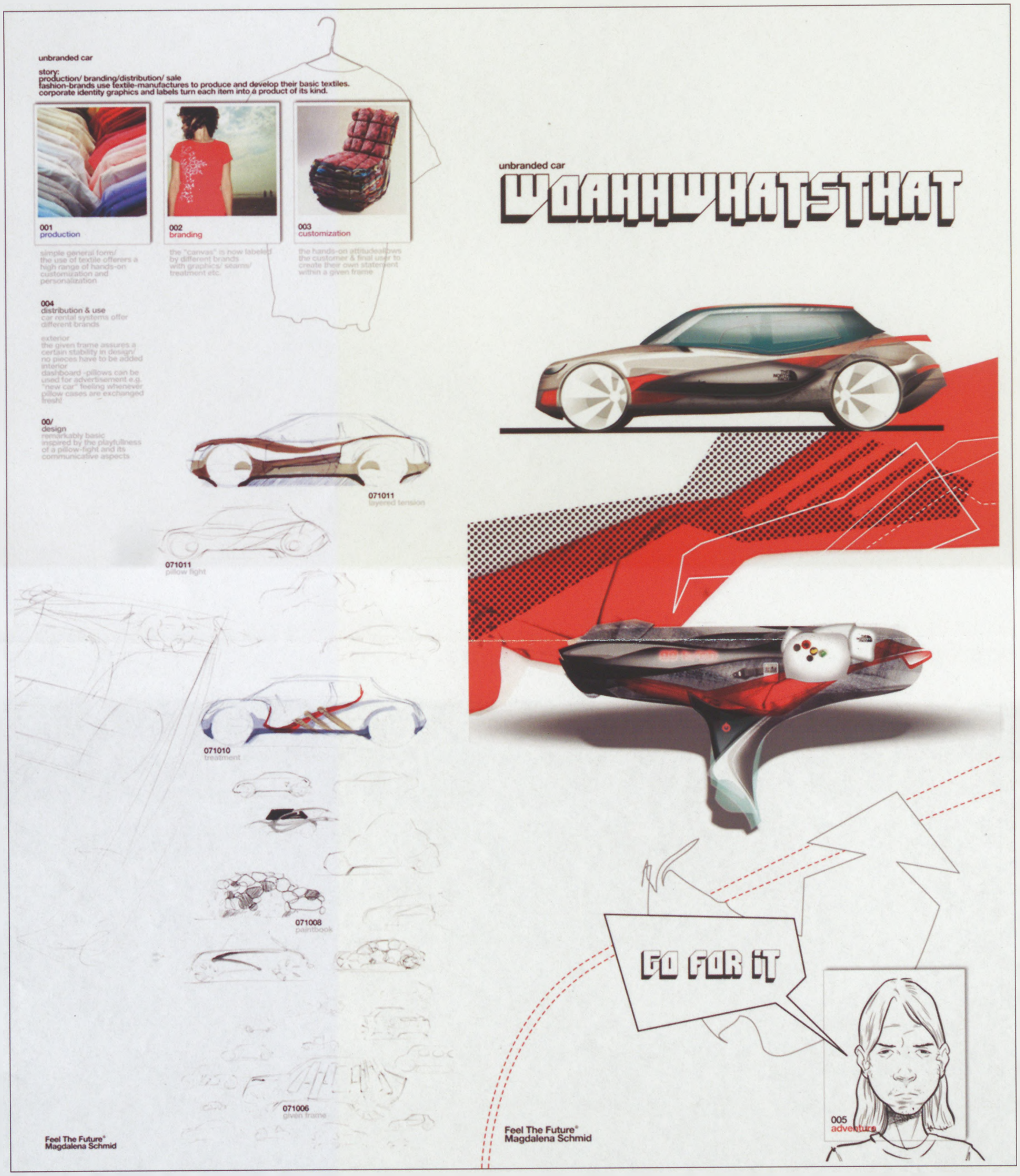


Figure 22 Magdalena's concept for Unbranded scenario.

Figure 23 Kyu's concept for Virtual x Real concept.

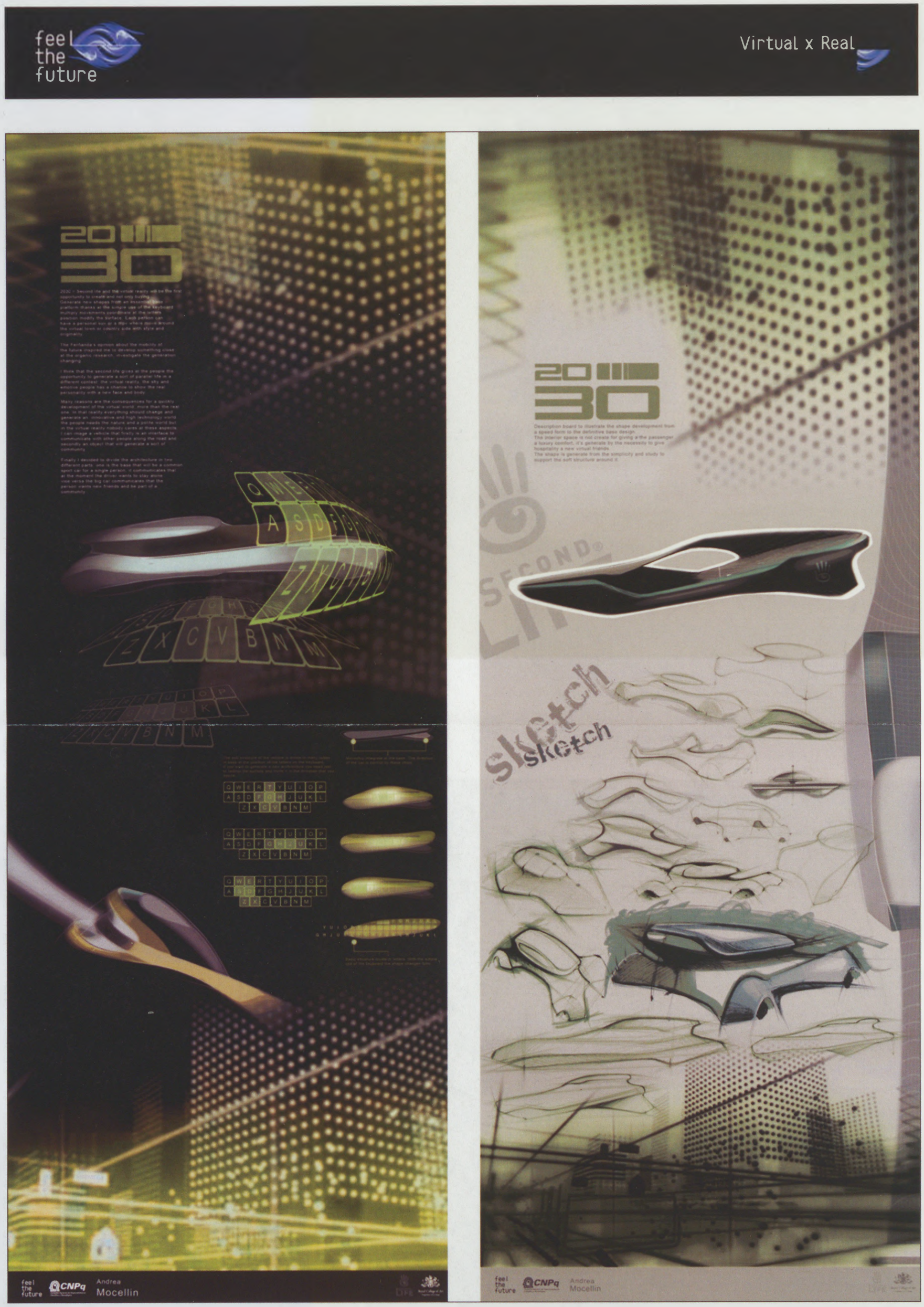
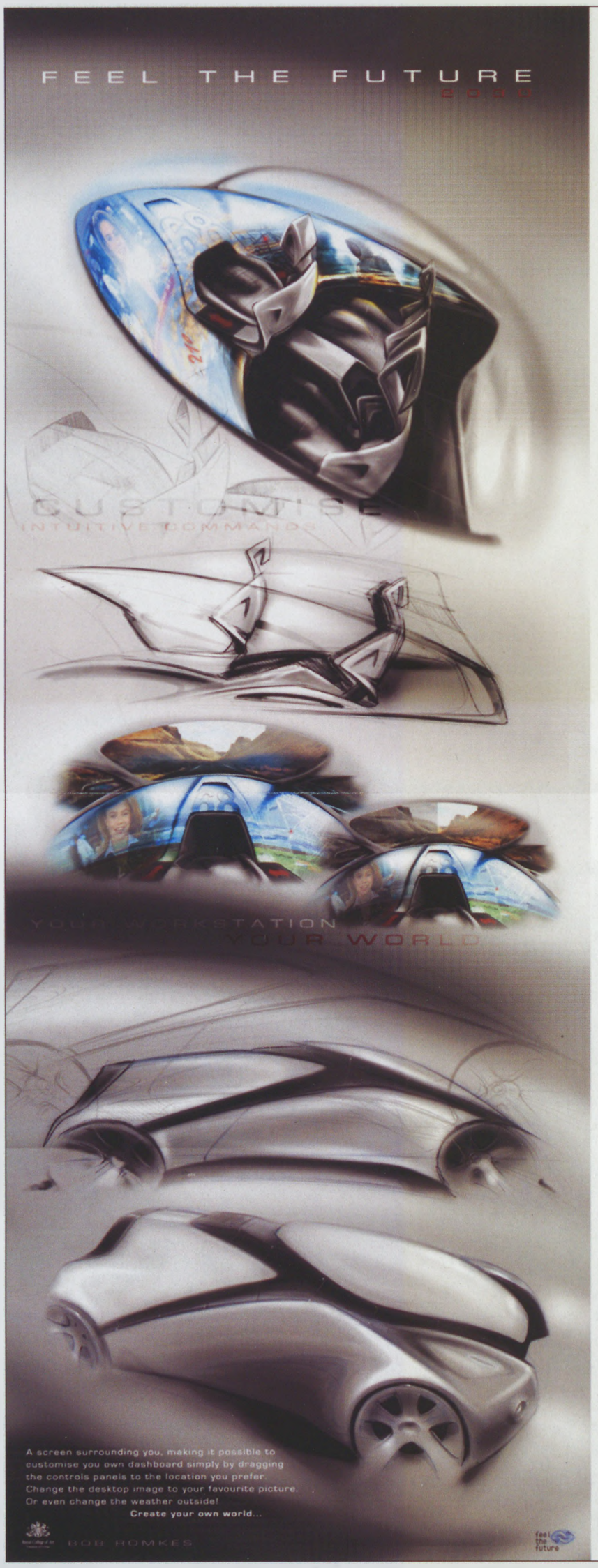


Figure 24 Andrea's concept for Virtual x Real scenario.



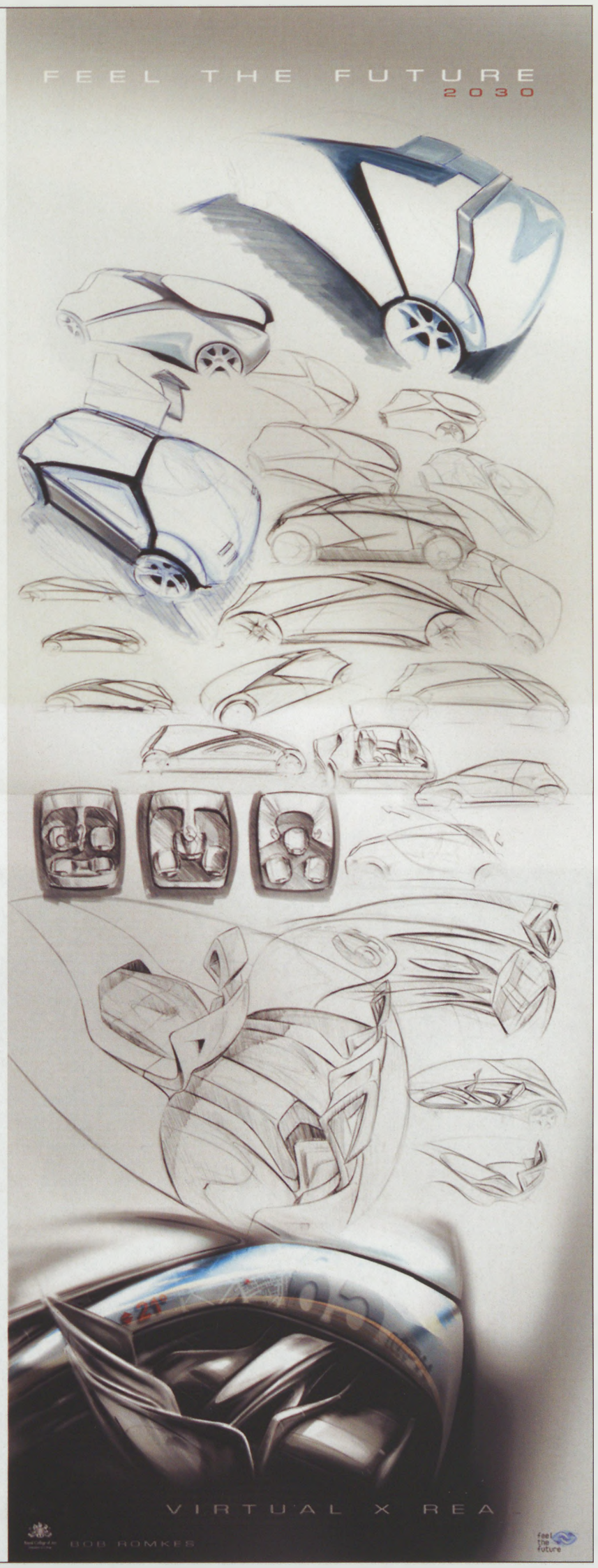


Figure 25 Bob's concept for Virtual x Real scenario.

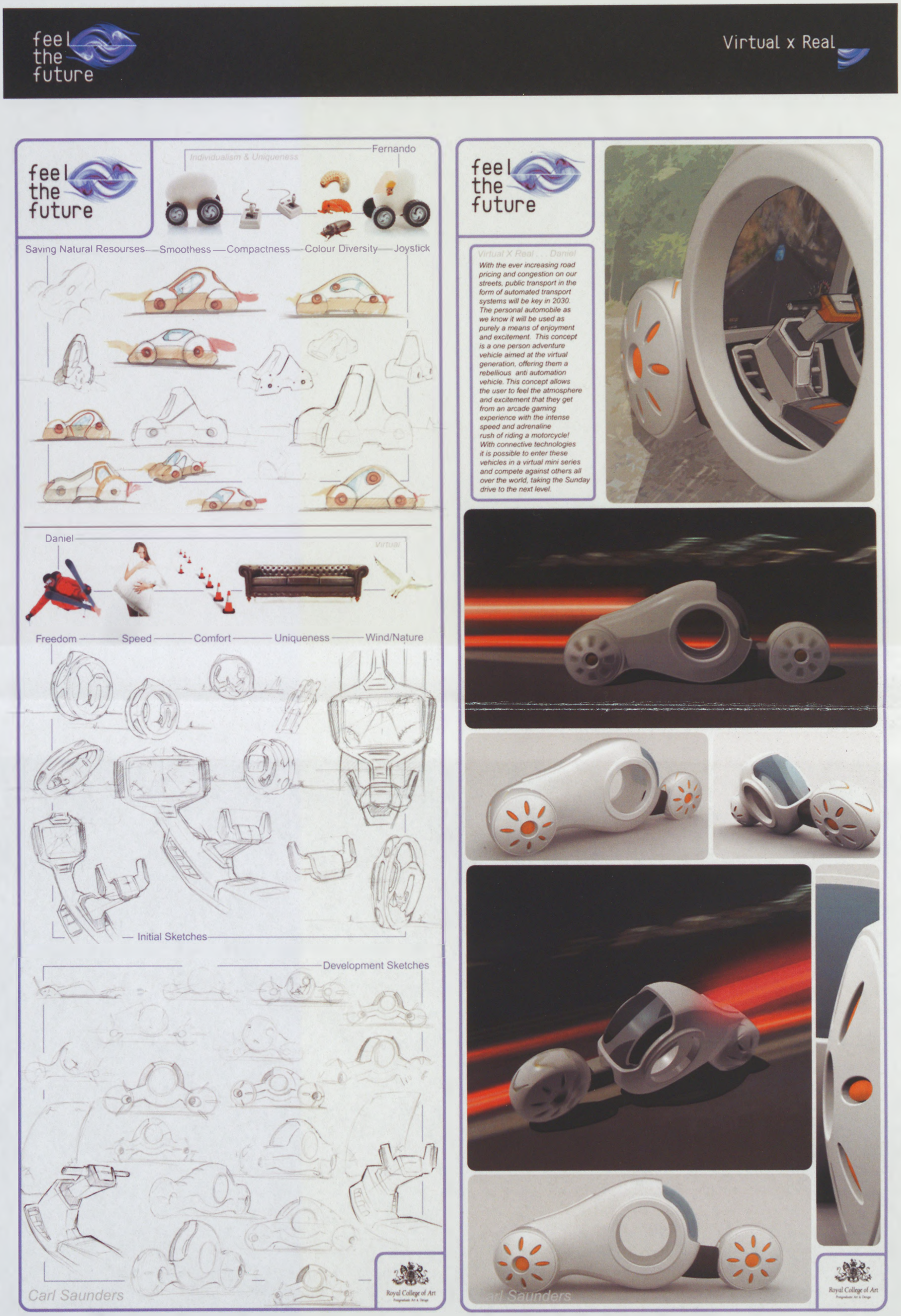


Figure 26 Carl's concept for Virtual x Real scenario