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CREATING CARS AND MANAGING CREATIVITY

by

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October 11th, 2005 Report by Thomas Paris Translation by Rachel Marlin

Overview

The work of designers and the aim of the Renault Design team is to bring life to manufactured products. The organisation which Patrick le Quément has created in order to accomplish this task, has proved to be a delicate combination of two very important factors; an unbridled talent for creativity, and the demands of a company with respect to production and performance. The designers recruited by the company have to be talented and able to work in teams. The way in which design is organised has to be scrupulously rigorous : this is an excuse for allowing the designers to behave like so-called 'bad boys', in other words, allowing them to question, oppose and create disorder in the name of stimulating creativity. The management of the designers has to be a balance between the convergence phases when vehicles are being designed, and divergence and divergence and 'recharging one's battery' phases, which are necessary to keep creativity going.

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TALK : Patrick le QUÉMENT

Industrial design

What is industrial design ? All the objects around us – table lamps, armchairs, pens and cars – were mass-produced by machines in factories. They are all industrial products. Nevertheless, not one of these objects is exclusively serving a function : their common purpose is to establish emotional ties with us, to affect us, to move us, to please us, to reassure us with their serious side or with their feminine gentleness, or even to act as a status symbol. All these objects have a soul. I often cite Walter Gropius, an architect, designer and founder of the Bauhaus, who said « *The role of the designer is to breathe soul into the lifeless product of the machine.* » This is the essence of our work : giving, if not soul, then at least spirit, intelligence, character, charm, and human warmth to manufactured products which make up our environment.

A multicultural team of designers

One way of defining design is to start with what the designers do. Design is what designers do, in the same way as information technology is what computer scientists do, or cinema is what film directors do. Such reasoning may appear to be a tautology, but it is not. One only has to look at my team of designers to appreciate this.

My team consists of one hundred and ten men and women of eighty different nationalities and of all colours, as the Benetton slogan goes. The average age is thirty-two. Most of them studied design or the applied arts. Four years after they left secondary school, they learned to draw and analyse all sorts of products, such as coffee machines, electrical drills, mobile telephones, and, sometimes, cars. Most of them had already started drawing cars when they were children.

Drawing, and especially drawing cars, is an early vocation, well before becoming a profession. This is why art school is not a necessary step before becoming a designer. Sometimes, we take on young people who have no training. Having a degree is not part of our recruitment criteria. As far as we are concerned, a good potential designer should possess four qualities : firstly, a passion for everything to do with cars. This is what we call 'having petrol in one's veins'. Secondly, the person masters a form of visual expression : most often this is drawing, but sometimes it is making models. Thirdly, he has a sense of teamwork. Our designers are naturally individualists which is normal for an artistic activity. However, everyone, once they have joined a company like Renault, integrates teams and is helped by model-makers, or works on projects with many colleagues from the technical design or marketing departments. Lastly, he must be talented : one can be passionate, an excellent designer, work well in teams, but still not have that certain mysterious quality called 'talent'.

Design management at Renault

As well as our one hundred and ten designers, our organisation has one hundred and thirty model-makers/typographic designers (who work manually, or on computers, or use both techniques); a contingent of engineers and technicians; as well as so-called 'support functions' such as the human resources department, which is one of the most important if not the most important function. With four hundred and twenty-nine staff in total, the Renault Design department is itself a SME (small and medium-sized enterprise).

Managing the design includes managing the designers, and integrating this complex entity into the company. How does one achieve this? As far as I am concerned, I use two methods : vision, and a creative form of organisation.

A vision : the Renault Frenchness

One may or may not have a vision, but at Renault Design, we have. Richard Whiteley explains in The Customer Driven Company that a vision has two purposes. Firstly, a vision is a source of motivation and forceful inspiration when it is shared. Secondly, it is a guide for taking decisions, and bringing together all the departments or all the services of a single department of a company. A vision, he continues, is not a strategy. The strategy of an organisation is firstly to outline a plan with a design, clearly indicating the means necessary for success. A vision is rather more comparable to the representation, by an artist, of a building which is being built. However, it is not an artist or a designer who speaks, but a specialist in quality management. A vision is capable of motivating employees more than a strategic plan, even one which is very well devised.

At Renault, our vision is shared by all the members of our team, from the designers to the planners. It is embodied in the Twingo, the Scénic 1, the Scénic 2, the Mégane 2, the Espace 4, and the Modus. It is the vision of a creative company in its quest for cultural originality which we refer to as 'Renault Frenchness'. For us, Frenchness is not a question of old-fashioned cultural nationalism because we recognise that today, any form of cultural, regional, national or purely individual originality is inevitably a mixture. Edgar Morin wrote in this vein a few months ago in Le Monde : « When it is a question of art, music, literature or thinking, cultural globalisation is not homogenous. It is made up of large cross-cultural waves that encourage the expression of national identities. Crossbreeding has always created diversity while at the same time encouraging intercommunication. »

Creative organisation

The second method I use is creative organisation. A great deal has been written about this over a long period of time. It is much easier to describe on paper than to put into practice.

Renault Design is organised around professions and projects with a clear priority given to professions, which is not the case in all the other idea centres at Renault. I put into place a level rather than a pyramidal organisation so that I can be in the field as well as in the studios and workshops with my designers as often as possible. There are only two hierarchical levels between the designers and myself, and three between the designers and our president, Carlos Ghosn. The design project managers, who were all trained at Renault, are the interface for projects with other departments in the company.

Reporting to the chairman and managing director

Design is an important department which reports directly to the chairman and managing director. In my career spanning thirty years, including Ford where I worked for seventeen years, then at Volkswagen-Audi, and finally at Renault, I have come across all sorts of organisation. On the basis of this experience, I am convinced that this direct link between the managing director of the company and the design director is fundamental in a company whose aim is to be creative. In order to be creative, an organisation needs creativity not only from its designers but also from those who make the decisions : it also needs freedom of thought and originality from its leader, as well as his force of his character and his appetite for taking calculated risks. Louis Schweitzer is responsible for the Scénic's success as he alone took the decision to make a composite car and to produce three hundred and fifty such cars a day. He took a huge risk.

The rigour of an efficient organisation

A creative organisation should be, above all, a very good organisation. It has to satisfy the same criteria as any other efficient organisation whether it be a factory, a technical design office, a travel agency, an administration, and so on. A design department should impress by the order and cleanliness of its premises, the professionalism of its staff, the care with which it monitors stocks in its supply stores, a respect for keeping to time at meetings, as

well as keeping to the timing of its project planning, the meticulousness of its presentations, its capacity to anticipate events which arise, its reactivity as a group, its integration into the general organisation of the company, and so on. A very good organisation is a body of people capable of acting as one, whose members carry out rigorously co-ordinated functions with each other with a view to the common objective.

It should also be capable of change by avoiding bureaucratic paralysis, of adapting to a changing environment, to the progress of science and organisational techniques. It is no accident that design was the first department at Renault to adopt the restructuring of professions and projects in January 1988. Design should aim for the highest degree of organisation, at least as much as any of the other departments within the company.

The right to be a 'bad boy'

Therefore, we try our best to dispel the notion that we are a bunch of artists who are congenitally disorganised, with no intellectual weight. It is even more important to do so because, by rather dubious motivation, we like to allow ourselves the possibility of behaving badly when this seems indicated to us. Or, in the words of the designer Tibor Kalman, to behave like 'bad boys', but in such a way that everyone understands that it is a decision based on reason and is carefully considered each time. *«We have to be brave and we have to be bad. »*

Being creative in design is sometimes – too often perhaps – like opposing the consensus view, questioning the status quo, refusing to execute orders and therefore creating disorder, disassociating oneself from the rest of the organisation, overstepping the mark, and taking the risk of general incomprehension and isolation. We are free to say 'no', and we have the right and sometimes the duty to show our opposition. Tibor Kalman justifies this anti-social attitude by saying "We (designers) are here to inject art into commerce." Our role is to make sure that we should never forget that no-one knows what the client really wants in terms of industrial products and especially in terms of style. Management gurus such as Peter Drucker and W. Edwards Deming share our outlook :"It is possible that the potential client does not miss what he has not got : no-one felt the need for a photocopying machine or a computer until they became available" (Drucker) ; "the manufacturer is in a much better position than the client to invent innovations. If you asked a motorist in 1905 what he needed, would he have expressed the need for tyres on his vehicle ? Personally, when I had my own excellent pocket watch on a chain, would I have been capable of suggesting that we study a little quartz watch ?" (W. Edwards Deming)

Detecting tendencies and stimulating creativity

Admittedly, we listen to the client and his representatives in the company, but not too much, because listening too much may interfere with creating vehicles such as the Espace, the Twingo or the Scénic. It is perfectly possible to lend an ear, but one should always keep a certain distance.

In such conditions, how can one see into the future ? How should one anticipate the expectations of the client when he is not even aware of future possibilities and is not capable of putting his expectations into words ? Reaching the client in a way which he considers appropriate, at the exact moment when he feels the need, is a challenge to find the moment when need and desire coincide.

We have developed an in-house system with two aims : firstly, to detect the future tendencies in terms of expectations and demands of the clientele ; and secondly, to stimulate and renew the creativity of our teams.

The first step in this system, chronologically speaking, goes back to my arrival at Renault. There was a programme of concept cars, Z, which was started in 1987. We presented the Z18, the latest model in our collection, at the Frankfurt Motor Show under the name of Egeus. A concept car may be the fore-runner of a mass produced model. This was the case with the Scénic in 1991, which became the Scénic of the Mégane range, or the Vel Satis concept car, which generated the second generation Mégane. However, these prototypes never lead directly to models which are manufactured.

Concept cars : reservoirs of ideas

A concept car, is an idea for a car, or even several ideas or innovations. It is also an attempt to find an aesthetic ideal.

An innovation is a change which occurs in the world of science and technology. It can also occur in mathematics, thermodynamics or metallurgy as well as in so-called human sciences such as psychology and sociology. The direct transmission, perfected by Louis Renault in 1898, when our company started, is an example of an innovation. The 'user' concept of the car is another example : this was put forward by Renault in 1961 with the Renault 4, five years later made popular with the Renault 16, and then with all our single-unit people-movers today. It was epitomised from the 1980s by our slogan '*Renault, cars for living*'.

The term 'creation' refers to art, the fine arts and applied arts, and is a world fundamentally different from the one mentioned above merely because of the absence of the idea of progress with time. One only has to look at prehistoric frescos or works from Egyptian or Greek antiquity to become convinced of this.

Concept cars are not only mobile laboratories. They have other functions. They give our young designers the opportunity to take part in projects before they are completed. Over a year, a concept car involves three designers and a few technicians, whereas a mass-produced model represents four years of work for hundreds or thousands of specialists from all over the company.

Concept cars are a source of stimulation for our designers who can tale part in an in-house competition launched with each new project. They have the opportunity to express themselves, to put forward their personal vision of the project, then to present it and to defend their approach in front of a jury. This is one way of finding fulfilment as much as it gives a free rein to one's creativity.

Stimulating creativity

Knowledge and passion for cars are not enough to visualise and to design the car of tomorrow. Opening one's eyes to other environments and areas of interest is necessary. In a modern, industrial company like Renault, designers need to work closely on a continuous basis with the other branches of the company which are also involved in the creation and design, particularly the engineering and product departments in particular. The Guyancourt 'technocentre' fulfils the requirements for a common professional site. However, if the designers (and the model makers) work together in the same place on a continuous basis there is a risk of a unique line of thought within the company. Furthermore, they need the cultural environment which a city provides. This is why we opened a satellite creation centre in 1999 in the heart of Barcelona, followed in 2001 by an extension of Guyancourt situated near the Place de la Bastille in central Paris, called Renault Design Paris.

Satellites centres to renew inspiration

Barcelona and Paris were chosen because they are among the most important sources of creativity in Europe. They are places where things happen. They undoubtedly influence and strongly enrich brand product design. As well as the study of vehicles included in the

company's product programme, the mission of these centres' is to contemplate potential developments. Each centre has a budget for design initiatives which allows them to speculate on the directions that new car will take, and which is likely to influence our range of cars in the future. Finally, these centres carry out the role of *battery-recharging* for our designers who are able to evolve there during their careers. This is another reason why it is important that designers stay in their profession throughout their career.

In 2002, we extended our network of centres in Asia. We took over the Renault Samsung Motors (RSM) design centre in Keihung, near Seoul, which is destined to be both a satellite centre and a sort of technocentre for the Renault Samsung Motors brand. We develop vehicles for the RSM range there as well as studying projects for the Renault brand from time to time.

Before the end of the 2005, we will establish a second bridgehead to monitor trends in Asia by opening a very small unit in Bombay (Mumbai). It is a joint venture with Mahindra and its aim is to develop the sales of the Logan car (which should be marketed in India in 2007), to make use of the traditional riches of the country in terms of material and colours, and to look into the possibility of a commercial operation in vehicle upholstery.

In the future, after the Indian venture, it is very likely that we will open other satellite centres because we want to monitor closely the expansion of our group on an international scale, and we are looking for new sources of creativity.

Partnerships as sources of creativity

There are various sources of creativity, for example studies made with partners. We currently have a partnership in Brazil with the *Universidad Pontificia Catholica* to expand our ideas in colours and materials. We want to increase our knowledge of natural Latin American materials (such as plants, trees, seeds, bark, leaves etc.) to identify their possible use in industry and to assess their potential.

Similarly, we have recently established relations with Tag Heuer. Attention to detail and the precision necessary in watch-making represented an excellent opportunity for us to share experiences and know-how. We had a fruitful collaboration which has given rise to two products : a dashboard clock, integrated into the passenger compartment of our Talisman concept car ; and a watch designed by Renault and marketed in the Tag Heuer range since 2003. Incidentally, this watch won the first prize at the Geneva watch-makers' competition.

On a different level, we designed a catamaran which is partly a racing boat and partly a cruising boat, for the Van Peteghem-Lauriot Prévost naval architect's company. The project was a breath of fresh air for the teams involved. Above all, it gave us an opportunity to reconsider the limited living space available on board as a result of inevitable navigational constraints.

Opening our eyes

Apart from the occasional and formal relationships outside the company, we encourage our designers to look at the world and see how it is changing. We encourage an 'all-round vision' approach by making studies, magazines, iconographic documents and videos available to our employees on subjects as varied as architecture, fashion, furniture, art and so on.

We are expanding our sources of influence and cultivating the creative synergies outside our own field. We also take opportunities to share knowledge and best practices, and exchange staff within our group and with our Nissan partners. Stimulating the creativity of our designers is a constant preoccupation for Renault Design. The entire system which we have set up contributes to this. It is also part of the individual development of our creative staff, which is fundamental in our field and a major priority for us. Discovering new trends is the best way of doing this. We send small groups of our creative staff, supervised by a design specialist, to some of the most important exhibitions, for example the Milan Furniture Show, and arrange for them to meet leading industrial artists such as Ron Arad in Great Britain. They come back with a video and an in-house publication to show the rest of the company what they have seen and their reactions to it. The aim of this continuous training programme is also to cultivate a spirit of analysis and curiosity, to whet one's appetite in terms of information and exchange of ideas, and to maintain creativity at the highest level, both with our designers and with management.

DISCUSSION

Design and economic constraints

Question : You mentioned the Logan. When one wants to do things economically, is it necessary to do so in an old fashioned – if not ugly – way? How do designers accept this?

Patrick le Quément : The Logan sells very well in a number of countries primarily because it gives an impression of honesty and authenticity. In car design, in order to make a beautiful car, there is a magic word : proportions. A beautiful car is a low car which tends to be both wide and large, with a great aesthetic fluidity in shape from the front to the back... I can assure you that the person who designed the Logan knew how to draw and had a sense of proportions. Incidentally, it was the same person who designed the Renault Speeder.

The design of the Logan, as an industrial challenge, was constrained in many ways. If I partly share Charles Eames' view that constraints are a designer's best friend, I think that after a certain point, they may become a real handicap. In the car industry, design takes place within the boundaries which one refers to as the 'hard points' : a line is drawn around the bonnet, the engine, and the passenger area and then the boot. The Logan is a relatively short car but it carries five people comfortably and is equipped with a gigantic boot, the same size as the BMW 5 Series. The resulting shape is notable for its very straight banks and a design which more closely resembles commercial vehicles than traditional GT car models.

Furthermore, all the components of the car were designed to reduce the cost, particularly the production costs. Like every other vehicle, we have worked closely with the production engineers. Subsequently, the doors and the wings were made to reduce the number of impressions necessary in the stamping process. The result is an extremely compact car, much less pronounced markings, the rear lights do not extend across the boot ... Finally, the shape of the Logan is also the result of a wish to develop other variants on the bodywork. An estate car version will be coming out soon.

Creative divergence and essential convergence

Q.: The divergence phase of the creation process thrives on a certain number of methods which you have presented : optimising resources, the development of the satellite units, the search for new trends, having an all-round vision. How do you bring it all together ? In what framework do designers work ?

P. le Q. : Bringing all these strands together is essential in order to launch our products. We are only successful if a vehicle sells well. We work from specifications, and broad marketing principles. We do not consider them as constraints since these elements help us to understand the client. What is alarming is not knowing the client. The role in managing the product – or in marketing it in some companies – is to identify the client, to understand his emotional and psychological expectations (some of which are sometimes unexpected or not yet voiced) better. We carry out briefing sessions with the project managers and the design managers, and we test and try out rival cars. After this group work has been carried

out, individual work can begin : we suggest variations on a photofit created by the product managers to try to charm this type of client. We try hard to have a certain number of suggestions, sometimes eight or nine. My aim is to try to make sure that there is a great deal of variety on offer. One can say about some designers who have been there for ten years that 'they have done nothing'. This does not mean that they have been twiddling their thumbs, but that none of their projects has been chosen in the final line-up. Nevertheless, their existence allows us to widen the range of projects that we can present to clients' representatives or even potential clients, and finally to general management. Afterwards, the process becomes increasingly group-oriented since the team works on the projects which have been chosen.

Individuals and groups

Q.: You have one hundred and ten designers but just one of them is the creator of the Logan. What are the links between the group and the individual in the creation process ?

P. le Q. : At Renault, design traditionally remains individual, and this was already the case when I arrived. The projects are named after their designer. However, today, teamwork is an essential component of the profession. At the beginning of my career, when I had just graduated from the Simca design school, I began drawing door handles and moved on to hubcaps and wing mirrors, eventually designing cars.

Today, some of the scale models of our designers who have just graduated and joined Renault Design, have been chosen to become a car. Perhaps the new generation are more talented than we were. This is entirely dependent on the talent of the managerial staff and our culture which allows young people to express themselves. The role of the director of the range is to transmit his knowledge to young designers who are enthusiastic. Sharing experiences like this certainly allowed us to make a certain number of cars which perhaps we could not have made otherwise.

As for our culture, even if it is orientated towards global performance, it allows for individual expression. The number of people who come back to Renault (having left it once) is symptomatic of this. Mobility is normal in design : a team of forty designers may lose six or seven of its members in a short space of time. When Renault Design really became international (today, 50 % of our designers are not French), there were a number of people who left the company. However, in the past three or four years, seven of those who left have returned.

Artistic temperament

Q.: The need to express oneself individually is a reminder that designers have artistic temperaments. Does design management resemble the work of an impresario with a large ego ?

P. le Q. : The emotional side is very important in our profession. We let our designers develop within groups which are of a manageable size : they work with the directors of a range of designs who have administrative, budgetary and technical power. This facilitates the creation of an environment in which people are at ease, and which gives the impression of being open, where they know that they have the capacity to express themselves and where they are encouraged to do so. This environment is essential in expressing the creativity of designers.

Like artists, we have to manage the highs and the lows. The world of design is well known for its capacity of producing false hopes in designers. A designer is often only worth as much as his latest work. In choosing a car, we may have seven projects to choose from of which two are retained and the rest do not make the grade. The people whose projects are accepted are congratulated within the company and it is recognised that the projects are their projects. We do not reveal who is the designer of the cars outside the company ; if we did, the designer would immediately be approached by a headhunter. As far as the remainder of the projects is concerned, how should one manage what may be considered as a personal failure ? Firstly, we never use the word 'failure'. I personally take the responsibility for each of the projects presented. Patrick le Quément decides which projects are chosen. I encourage designers who do not present a solution but who present a variety of solutions. In this way I can be certain that management will not be faced with three clones, or three products which are virtually the same. This is also the reason that we have opened our satellite centres so that autonomous projects can be developed in Paris, Barcelona or Korea without information circulating between these places. Projects which have not been chosen nevertheless contribute towards creating the idea which is retained from the group.

After the choice has been made, we shuffle the cards again so that the designers, some of whom are more sensitive than others, do not 'stew' in what some may perceive as failure. We send them off to recharge their batteries and we place them in projects where success is guaranteed. The quality of the design is also dependent on the way that this is managed. There are so many football teams made up of stars whose performance is not up to scratch...

Design is a profession which gives a great deal of pleasure and recognition, but when things do not work out well, we are held responsible. This can be a source of anxiety, but it is part of our profession. We should not fight it. "*Never complain, never explain*", as Henry Ford said.

Failure and pressure

Q.: *Is 'listening to clients but don't overdo it' a risk with respect to the market ? Are the failures of the Vel Satis and the Avantime models the result of this attitude ?*

P. le Q. : If you spend too much time listening to what the client wants, he will tell you that it is a car which exists today, but which is really 'yesterday's' car since it was designed a few years ago. We are very well supplied with analyses made by the product management or by marketing information which reveals what works and what does not work. However, in the search for new products, one approach is by natural evolution and another is by change and innovation. In one case, one improves the product marginally ; in the other, one develops something completely different. And yet, as Carlos Ghosn said, it is not by studying carrier pigeons that the telegraph was invented. There are changes. At every change, there is the potential for success but also a riskof failure.

In the last few years, we have had several successes and the two failures that you mentioned. I find it hard to regard the Avantime as a failure because it is a project which was developed with a partner, ran over time, and which had huge problems in terms of quality. It was an *avant-garde* car. It is interesting to see the number of cars launched by our rivals which have been inspired by it.

Vel Satis is a failure which is difficult to analyse. It is hard for me to face up to this failure. It is the most bitter failure I have experienced in the thirty-four years of my career.

Q.: Do you shoulder the responsibility for these failures within the group ? Do these failures result in additional pressure ?

P. le Q. : Vel Satis was in competition with another project which was perhaps less revolutionary. Company management made a choice which I supported. Nevertheless, I remain the sole person responsible for the choice of the Vel Satis. As far as pressure is concerned, I have spent my whole career under pressure. Today, we have to produce more test products so that failure is not so hard to bear.

Q.: Without the Avantime and Vel Satis, there would certainly not have been the Mégane. So we cannot talk about a failure simply by considering a single car. Furthermore, the product cannot be blamed on its own. At the top end of the range, the environment counts for an awful lot especially the merchandising surrounding the product and the service. A potential Vel Satis client will not necessarily want to buy it from a salesman who also sells the Logan. Changes involved in aiming at the top end of the range can only concern design and should be part of the change of company culture.

In addition, at the top end of the range, if one examines companies which sell luxury goods, one notices, generally speaking, that time has to pass before brands can make their mark. Hermès was managed in a traditional way for years. During this time, the foundations for the future of the company were being built.

Presentation of the speaker :

Patrick le Quément : graduated with a BA in engineering design products from the Birmingham Institute of Art & Design in 1966. He began his career at Simca and then joined Ford for whom he worked in the United Kingdom, Germany, the United States, Australia and Japan. In 1985, he founded the VW-Audi Centre for advanced design. He became manager of industrial design at Renault in 1987 and created a concept car department which enabled the emergence of models such as the Twingo, the Scénic and the Mégane II. In 2002, he won the European Car designer of the year for his daring and innovative design.

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