ADVERTISING, SPONSORSHIP AND PROMOTIONS:

Understanding and Measuring the Effectiveness of Commercial Communication

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Seminar on

ADVERTISING: THE RELIABLE ROAD?

HOW CAR ADVERTISING WORKS?

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SUMMARY

Car advertising provides a privileged field to analyze how advertising works, given the weight of the investments, and the level of consumers' involvment.

For 10 years, B.V.A. has collected data on several European countries on the impact of the car makers advertising campaigns, through its MULTIPACT service.

The analysis must separate two kinds of qualities, which can explain why advertising campaigns succeed or fail :

- perceptive qualities
- persuasive qualities

On each dimension, there are wide variations in campaign performances.

The level of media investments is only one of the variable which can explain these different performances.

Two individual characteristics are of paramount importance : the age of the consumer, and the make he presently owns. The leverage effect of advertising campaigns on the purchase intentions of non-owners of the make is much more obvious than the same effect on owners.

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INTRODUCTION

Among all consumer markets, the car industry provides a favourable environment for observing how advertising works. First, the amount of money invested by car makers is considerable; therefore, there is an important pressure exerted upon the consumer; then, the car market is highly competitive and competing campaigns always offer an exciting opportunity to try to understand why some of them succeed better than others; the launching of new models occurs several times a year in every European countries and requires important media expenditures (cf. chart $n^{\circ}l$).

CHART 1

THE WEIGHT OF CAR ADVERTISING

Number of car makers among :	FRANCE	GERMANY	ITALY	U.K.	SPAIN
Top 10 advertisers	6	3	2	2	58
Top 20 advertisers	7	5	5	6	

Source : The European Advertising & Media Yearbook.

Finally, there is a high level of consumer involvment in the car buying process. For both financial and psychological reasons, purchasing a new car is an event which will often mobilize a large amount of informative activity. And advertising will strive to be one of these information sources taken in account by the buyer. To throw some light on the car advertising process, we need some data analyzing its effects.

THE MULTIPACT METHOD

For 10 years now, B.V.A. has been monitoring car advertising and its impact on the consumer, first in France, then in 7 other European countries. Chart n°2 summarizes the activity of our European MULTIPACT service in the field of car advertising.

CHART 2

BVA'S MULTIPACT EUROPEAN CAR ADVERTISING MONITORING									
	FR.	GERM.	ITALY	SPAIN	U.K.	NETH.	BELG.	AUST.	ALL EUR.
Number of waves/year	11	4	11	11	6	2	2	2	
Number of ranges	4	4	3	3	4	4	4	3	
Number of interviews/year	6600	4800	3850	4950	4800	1600	1600	900	29500
Media coverage TV Radio	X X	X X	X X	X X	x	x	x	x	
Magazine Billboards	X X	X X X	X X	X X	X X	X X	X X	X X	
Newspapers		X	X	X	X	X	X	x	

The MULTIPACT databank contains results related to more than 15 000 messages and increases every year by almost 1 000 new campaigns.

The MULTIPACT method proceeds as follows :

- it estimates the reach of any car advertising message during the monitored period (suscribers and non suscribers messages)
- it consolidates the reach of the campaigns, taking into account all the messages belonging to the same campaign, whatever the media used
- it then considers differences between psychological indicators concerning the model or the make according to whether people were reached by the campaign or not.

Among, these psychological indicators, we devote special attention to the car owner's shopping list, constituted by the models he mentions as a possible choice to replace his present car. This shopping list, we consider as being the most synthetic way to compare the results of campaigns following very different roads to try to persuade; whatever the road you choosed to follow —for example, to arouse the desire of the consumer, or to offer him an "unique selling proposition"— if you are to succeed, you will have to push your model higher in the consumer's shopping list. If the purpose of advertising is to enhance the presence of the make (Joyce - 1991; Moran - 1990) its appearance on the shopping list should be a good indicator of success.

Being a psychological weapon, as it is advertising results should be appreciated by psychological measurements, and not only by the sales data.

Several factors affect sales and among them, some are completely extraneous to advertising, such as the scope of the dealers network, the quality of servicing or the relative price of the model.

Of course, when you choose to use as synthetic indicator of advertising effectiveness, the changes which appear in the shopping list after the campaigns, you have to check that your measure offers a consistent relation with purchasing behavior. What would be the use of modifying the shopping list, if the shopping list only offered a very loose relation with actual purchase? The links between survey data and sales are sometimes very tenuous (S. Broadbent - 1991)

CHART 3

MULTIPACT PURCHASE INTENTIONS VS REGISTRATIONS (1993)

BRANDS	FRA	NCE	GERN	1ANY	U.	K .	SPA	AIN	ITA	LY
RANKING	Reg.	MP	Reg.	MP	Reg.	MP	Reg.	MP	Reg.	MP
N° I	30,6	30,1	20,1	16,6	21,5	20,8	16,3	14,9	32,2	14,5
N° 2	18,3	17,4	16,4	13,8	17,1	15,5	14,1	11,5	10,3	6,7
N° 3	11,1	11,7	9,2	7,2	12,3	10,5	13,6	13,2	8,3	14,6
Nº 4	8,0	5,4	7,0	11,0	8,0	5,3	10,7	4,9	7,3	8,8
N° 5	5,9	3,4	5,3	8,0	5,2	4,3	10,4	7,8	7,3	9,6

Chart n°3 compares, for the main 5 European markets, the actual registrations, with the purchase intentions, as collected by Multipact. On the whole, it shows a good relation between the two sets of data. And when some differences appear, they make sense : for instance, the luxury makes tend to have somewhat higher purchase intentions than their actual sales level, even when we clearly invite our interviewees to take prices into account when giving their choice.

Inversely, some makes with a very aggressive pricing policy have less purchase intentions than registrations. Among the mix of factors, which push their sales, the consumer's desires, refleted by their shopping list, play a smaller role than for others makes.

THE COMMUNICATION STEPS

Appearing on the consumer's shopping list —and if possible in first position— is a good indicator of advertising effectiveness and we know before a new model can reach this final stage, there are several intermediary steps to go through. First people have to be aware of the existence of a new model and even to get familiarized with it, before they consider its purchase ; they will also have to identify some of the qualities which give its specific attractiveness.

These are some of the steps that we summarize though what we call "the choice funnel" (see chart n° 4).

When looking at the funnel, we must keep in mind that competition is the rule of the game. At all levels, the number of models named by the car owner is limited, and the list he mentions is shorter than the overall number of existing models in the range. Of course it is rather easy to take place among the models named at the first level — the awareness where, on average, respondents name over nine models. But if you want your model to be named among those who are considered as being familiar, then you have to strive harder, since there are only 3.6 "nominees".

And of course, if you want to be mentionned at the top of the shopping list, then there is only one place per respondent.

THE "CHOICE FUNNEL"



CHART 4

So we can say that the function of car advertising is firstly to insert the name of our new model at the top of the funnel, among those that are already known (and let us remember that new models are frequently launched on the car market). Afterwards, this new model has to be pushed through the funnel, where indicators become more and more selective so that it can take its place in the choice spectrum.

However, for our campaign to effectively push our model through the funnel, it must fulfill some conditions.

First, it must get perceived by the consumer, which means two different things.

• <u>it must catch the attention of the car owner</u>, amid a very cluttered environment. Multipact will estimates these attention catching ability with it's Recognition Score ⁽¹⁾

•then <u>it has to establish a strong link with the model advertised</u> or at least with the make which launched this model. That's what we appreciate with our Identification Scores (make identification and model identification).

In some of our previous analysis, we have shown that, as long as there is no correct identification, at least at the level of the make message, there is no benefit to be expected from the campaign (Barluet & Brulé - 1994).

⁽¹⁾ MULTIPACT also measures spontaneous recall of advertising campaigns. For metric reasons, we consider that recognition scores give a more accurate estimate of the reach of a campaign (cf. Singh. Rotschild & Churchill - 1988).

Still, when your message has been perceived, it does not necessarily mean that it had an impact on the shopping list of the consumer. <u>Some of the perceived messages move forcefully the shopping list, and others do not</u>. We measure their ability to alter the shopping list with our Persuasion Score.

If we have a look at these scores in 1994, for the 5 main European countries (see chart 5 and 6) we observe that there is a <u>very broad dispersion of results</u>. In other words, the campaigns vary widely in their ability either to catch the attention of car owners, or to convey the car identity, or to move buyers choice.

DISPERSION OF PERCEPTION SCORES

CHART 5

	FRANCE	GERMAN Y	ITALY	SPAIN	U.K.
1) Recognition :				1	T
Min.	27	11	19	13	21
Max.	78	76	95	92	82
Average	38	34	46	50	25
Standard deviation	19,5	17,2	18,1	21,8	22,5
2) Brand identification :					
Min,	3	4	3	3	5
Max.	75	72	92	88	65
Avarage	24	28	37	36	20
Standard deviation	18,6	17	20	21,4	15,9

CHART 6

DISPERSION	OF PERSUASION SCORES

	GERM BUY INTE		U.K. BUY INTENTIONS		
	All position	lst rank	All position	1st rank	
Min.	0	0	0	0	
Max.	38	25	14	11	
Average	12,2	7	6,8	4,3	
Standard deviation	7,3	4,9	3,6	3	
Number of campaigns	83		53		

Moreover, when we analyze the correlations between these different qualities of the campaigns, they happen to be low. Which means that the campaigns which demonstrate a good visibility are not necessarly those which will perform well on the persuasion criteria.

That is something we should keep in mind, since it means that, when monitoring the impact of advertising campaigns, we should not stop once the visibility of messages has been appreciated.

If we did stop at this type of measurements perverse effects could be produced, since it could induce agencies to create campaigns with a high level of visibility sometimes at the expense of their ability to convince.

MEDIA INVESTMENTS AND CREATIVITY

If the scores that we use to assess impact of car makers' campaigns are as broadly scattered, the explanation should perhaps be found first in the wide differences in media pressure. The amount of money invested in media for a given campaign is extremely unequal.

In Spain, for instance, during the year 1993, for the medium car range, the monthly media investments for a given model stretches from less than 50 million pesetas to more than 800 million. Such a broad variation should produces very different results both in terms of visibility of campaigns as well as in terms of persuasion.

To assess the relation between investments and performance, we analyzed 191 campaigns conducted in France in 1993 for high range models, campaigns for which we had the full information on the level of media expenditure. We divided the media expenditures into four categories : under 4 millions francs, 4 to 9 millions, 9 to 16, and 16 millions and over.

As for the performances, we selected the visibility of the campaigns, which should be one of the criteria most correlated with media pressure. The visibility is measured against three indicators : Recognition of at least one of the messages of the campaign, make Identification and model Identification with at least one of these messages.

Chart n° 7 shows the relation between media expenses and the campaign visibility. We can see that there is a relation : the more you invest, the bigger your chances to reach more people, as measured through our indicators. Still, the relation is rather loose, and the rise of the visibility indicators as media expenses increase is not very pronounced.



MEDIA INVESTMENTS AND VISIBILITY OF CAMPAIGNS

We have already found in a previous study (cf. Brulé - 1992) the same kind of loose correlation between media pressure and campaign performances for different markets, and will now limit ourselves to car advertising and look more closely into the phenomenon. Let us concentrate on a narrow band of investment, close to the average for the product category : investment between 10 and 14 million francs. Here, we can say that we are considering advertising campaigns backed by very similar amount of media pressure.

Chart n° 8 shows the make identification scores for the 24 campaigns in this narrow band. We choose to use only one indicator of visibility to avoid overloading our graph; we preferred brand Identification to model Identification because it introduces less differences between national makes, whose models are more familiar, and imported makes.

Still, for a French car owner, it's easier to identify a campaign by Renault or Citroën, than a campaign by Honda or Rover. That's the reason why on this chart, we indicated separatly the data corresponding to national makes and to imported makes.



What you observe on this graph, is a large dispersion of figures. For French makes, campaigns with almost the same advertising pressure, get Identification scores between 15 and 65 %, that is variation factor of 1 to 4.

In the case of foreign makes, identification scores vary between 3 and just over 40 %, that is a variation factor of 1 to 10.

We see that if, at statistical level, there is a relation between the amount of media pressure and the visibility of the campaigns, at the level of one individual campaign, <u>trying to</u> <u>forecast its performance knowing the money spent</u>, would be taking considerable risk.

Whatever the growing sophistication of media planning methods and of audience data available, these results remind us that a campaign's impact depends above all on the talent of advertising people and on their ability to retain the consumers attention and to convey the model's personality.

If we limit our observations to one media, TV for instance, we see that the impact of commercials varies voidely, for the same budget, the same make and even within the same advertising break.

This raises our suspicion toward mechanistic models of how advertising works, where the impact of the campaign is assessed through an estimate of the reach and the repetition supplied by sophisticated media planning computations. Counting opportunities to see a message is not counting actual contacts.

SOME METHODOLOGICAL PRECAUTIONS

When trying to estimate the impact of advertising campaigns, the kind of difficulties that we have to overcome are not the same if we are speaking of the impact in terms of visibility or in terms of persuasion.

In terms of visibility, we can use individual measures : this particular interviewee could recognize a given message, or he could not; he could identify the make and the model, or he could not.

In terms of persuasion, to be able to carry out individual measure, we should have observations coming from the same interviewee at different moments. Then we could conclude : this particular interviewee did not include the model X in his personnal shopping list at time 0; at time 1, we observed that he had been reached by the X campaign, and now he includes the model X among the cars he would consider if he was to replace his present car.

For different reasons, familiar to the advertising researches, we do not collect these kind of diachronic data, through panels of people being re-interviewed several times. The main reason is that we need to show a lot of advertising material throughout our interview, so that the respondants of our sample would be overexposed if they had to be re-interviewed, and no longer representative of the overall car owners.

Being unable to measure the persuasive effects of advertising campaigns at the individual level, we have to estimate them by comparing groups of individuals. Most of the time, we will compare the people reached by a campaign —whatever the way we define them— and the people not reached. And we shall observe the differences between these 2 groups, especially among the variables that we consider as good indicators of advertising efficiency.

As MULTIPACT uses the "shopping list" as the most synthetic indicator, we shall compare the shopping list of the individual reached and the individual not reached.

Of course, this way of proceeding can be risky if we assume that any difference between the two shopping lists will be assignable to the contacts with the advertising campaign. Obviously the two groups —people reached by the campaign and people not reached— can differ also for other reasons, and these reasons can also be correlated with their shopping list.

This is why we have to check carefully the variables which could create fallacious correlation between the exposure to the campaigns and the shopping list of the interviewee, or any other criterion of advertising efficiency.

From our analysis, two of these intervening variables call for special care : the age of the interviewce, and the make of his present car.

As for the age, some of our previous works have established its paramont importance in the field of permeability to advertising (cf. Agostini & Brulé - 1989).

It is as true for car advertising as it is for many other markets. And it could induce wrong interpretations : several times for instance, we observed negative correlations between the exposure to a given campaign and the purchase intentions of the advertised make.

After deeper examination, it appeared that people reached by the campaign were mainly young people, as usual, while this particular make was specially appealing for people over 40 years.

Matching the age structure of the two groups —people reached by the campaigns and people not reached— erased the deceitful conclusion that the campaign had reduced the chances to purchase a car of the make, a conclusion hard to endorse when presenting the results to your client...

To assess more sharply the effect of car owner's age on advertising perception, we made separate analysis on owners of the advertised make and on owners of other makes.

On owners of the advertised makes, the effect of age on campaign visibility is obvious (cf. chart n° 9). This graph show, according to age, the percentage of owners of the make reached by at least one of the makes' campaign during the year 1993.

Here, we can see both from the maximum, the minimum, the average and the median scores that the reach of the campaigns decreases rather steeply when the age of the car owners grows. This graph shows the results for France only but the trend is the same for the other countries.





THE EFFECT OF AGE ON ADVERTISING PERCEPTION AMONG MAKE NON-OWNERS

As for the owners of makes other than the advertised make, figures are illustrated by chart n° 10. They are somewhat different, with the median % of people reached much closer, across the age groups. However, the top performers —which are as usual, the national makes— get scores higher among young people, confirming that they are more receptive to advertising, although to a lesser extend than for their own make.

On the following chart (chart n° 11), we see that, whatever the age of the respondent, <u>he is</u> more receptive to messages emanating from the make he owns.

Each make is located by two figures : on the horizontal axis, the proportion of non-owners reached by at least one of the messages of the make, on the vertical axis, the proportion of the make owners reached by at least one of its messages. If the make owned had no effect all the points should stand close to the yellow line, the diagonal. We see that all the makes are above the diagonal, sometimes far above, which means that there is in fact, some sort of "make one owns. The selective perception barrier which protect us against the flow of messages which assails our mind (W. Fletcher - 1994) is more easily broken by messages for our own make.



This selective perception of the messages, according to the make owned clearly represents a danger when comparing shopping lists between people reached by the advertising campaign and people not reached. Since there is a strong tendency toward make loyalty among car owners — on average, one out of two puts a model of his present make at the top of his shopping list— and since the make owners perceive the make's messages much more frequently, it could be that the differences between our two analyzed groups reflect only these correlations : my messages reach more of my customers, who anyway intend to purchase my make more frequently, while I am ascribing these higher purchase intentions to the advertising campaigns.

To check if we are in a situation of spurious correlation, due to a third variable — here the make one owns— we have to analyze the data separately for the two sub-populations : the owners of a given make, and the non-owners.

Happily, with our sample of almost 30 000 interviews, 15 makes are represented by more than 400 owners. Chart n° 12 shows what happens (in France) when we analyze the difference between people reached and not-reached among only owners of the make : we see that, for the national makes and for the main importers, the difference is very small, if any.





Most of the dots are quite close to the diagonal.

Only for the smaller importers, do we see a real difference. They happen to be also the makes for which make loyalty is likely to be weakest.

Now if we consider what happens among non-owners of each make, we look at chart $n^{\circ}13$ Here we see that the overall level of purchase intentions is much lower, since these purchases have to be conquered on the competitors. But the gap between people reached and people not reached is much broader : almost all the dots stand above of the diagonal and it is for the makes with a large market share that the gap is the broadest.



The same conclusions could be drawn if we look at the German market : chart n° 14 presents the situation among owners of the advertised make, and chart n° 15 among non-owners.

Here again, we see that among owners of the advertised make, most of the dots stand close to the diagonal, especially the dots corresponding to the national makes, which means that the level of purchase intentions is not much higher among those who were reached by advertising campaigns for there own make than among those who were not. While the additionel purchase intentions noted among the non-owners reached by the advertising campaigns is sizeable, and involves both the national makes as well as the imported ones.





On every European market, the situation is the same and summarized by chart n° 16. What we see here is the <u>double effect of the make one owns on the impact of advertising campaigns</u>.

On one hand, advertising <u>visibility is, on an average, twice as high</u> when the campaigns emanate from the make you own : it is what we called earlier the make patriotism.

The level of purchase intentions in favor of a given make is on an average almost 5 times higher among the make owners, although make loyalty presents wide variations from make to make.

CHART 16

THE	IMPAC	f of ad	VERTISI	NG ON	OWNERS A	ND
	NON-O	WNERS	OF THE	ADVERT	ISED MAKE	

	OWNERS	NON-OWNERS
VISIBILITY Average level (correct make identification)	54	27
PERSUASION Average level of make purchase intentions	55	12
Average interval between people reached and not reached by advertising	5	11
Relative value of the interval	10 %	92 %

However, the excess of purchase intentions among people reached by the campaigns is twice as high among the non-owners of the make than among the owners. If you relate this difference to the absolute level of purchase intentions, the difference appears to add about one tenth to the purchase intentions of the make owners, while among non-owners, it amounts to a doubling of level of purchase intentions.

These figures strongly suggest that the <u>persuasive power of car advertising consists mainly</u> in suggesting to non-owners of a given make to include this make into their shopping list next time they will replace their car.

How can we explain this difference in the impact of advertising campaigns on owners and on non-owners of a make ? First, we have to observe that given the tendency to make loyalty, the re-purchase intentions are already fairly high among owners so that any increment is hard to achieve. And perhaps owners of the make already have such a large body of information on their make that any advertising has only a marginal effect on their shopping list, except maybe when the campaign announces the launching of a new model.

CONCLUSIONS

For 10 years now, B.V.A. has been collecting European data on the effect of car advertising campaigns through its MULTIPACT service. Several global lessons can be drawn from our experience :

• <u>Advertising is a highly competitive process</u>. Whatever the aim assigned to your campaign, to gain in awareness, familiarity, image, or purchase intentions. Room is limited in the consumer's mind, even for a product favored by a high level of consumer's involvment such as a car.

This means that any make should of course monitor the results it gets from its advertising investment and compare them with its competitors results; if your campaign obtains scores above the data bank average, you can feel satisfied, but if at the same time, the campaign of your main competitor gets scores higher than yours, then you may still be loosing ground. Assessing the competitive performances of your campaign against your competitors' is a useful check (Brulé - 1992).

• Actually, there appears to be <u>huge differences in consumers reactions to car advertising</u> <u>campaigns, even when media expenditures are taken into account</u>.

Any model attempting to explain the outcome of campaigns on the basis of the size of the investment and the way it was allocated to the different media would not have our data's support. The success of a campaign relies primarily on the skill of the advertising people to capture the drivers attention, to convey the models personality and to encourage receivers to include it in their shopping list, whatever the reasons suggested.

• When assessing the effects of car advertising, we should take <u>care not to confuse the</u> <u>means and the end.</u> We must keep in mind that if the visibility of a campaign is a requisite for its efficiency, it's not the final purpose. The final purpose is to move the representations, and among these representations, the shopping list, which summarizes the way the consumer grades the models on the market.

• When assessing the power of advertising on the consumer's choice, we should neither overestimate nor underestimate it. When we look at how advertising works, according to the make owned, we see that it is hard for a campaign to move deeply the purchase intentions of the makes owner, given the amount of information he already holds. Advertising is not source of information powerful enough to overcome the experience of the consumer.

At the same time, vhen we look at what happens among the non-owners of the make, we see that, once our campaign has overcome their indifference, it can have a considerable leverage effect, almost doubling the probability that the advertised model will get included in their shopping list.

These lessons, drawn from the car advertising market, do not necessarly fit to any market and especially to the packaged goods markets where the effectiveness of advertising is often more obvious on the brand buyers than on the non-buyers (Mac Donald - 1992). Readers should keep in mind that we are dealing with a market where the purchases happen only every 3 or 4 years, where the price of the product is high, and where consumer's involvement is strong.

REFERENCES

1 - J.M. Agostini & M. Brulé : "Relation entre le comportement déclaré des télespectateurs pendant les écrans publicitaires & la mémorisation de la publicité TV" - Séminaire ESOMAR 1989

2 - C. Barluet & M. Brulé : "Eléments pour un modèle de fonctionnement de la publicité automobile" - IREP 1994

3 - S. Broadbent : "Introduction to the ESOMAR seminar" - Amsterdam 1991

4 - M. Brulé : "Audience measurement and communication effectiveness" - ARF-ESOMAR seminar 1992

5 - M. Brulé : "Une mesure de l'efficacité concurrentielle des films publicitaires à la télévision" - IREP 1992

6 - W. Fletcher : "The advertising high ground" - ADMAP november 1994

7 - T. Joyce : "Models of the advertising process" - ESOMAR seminar 1991

8 - C. Mc Donald : "How advertising works" - The Advertising Association - NTC Publications 1992

9 - W. Moran : "Brand presence and the perceptual frame" - JAR Oct-Nov. 1990

10 - S. N. Singh, M. Rotschild & G. Churchill : "Recognition vs recall as measures of television commercials forgetting" - Journal of marketing research Feb. 1988

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