



## **Viewers and brand placement in movies: new insights about viewers contribute to a better understanding of the effectiveness of the technique**

The La Londe Conference in Marketing Communications and Consumer Behavior  
International Research Seminar in Marketing  
5 to 8 June, 2007

*Jean-Marc Lehu and Etienne Bressoud*

### **Abstract**

Several studies have shown the potential of product placement use. Since traditional media have become saturated, this communication technique benefits from growing interest. Consequently, product and/or brand placements have mushroomed, especially in Hollywood movies, but not always with the same effectiveness. Rather than focusing on the placement itself, this research proposes to explore new insights concerning viewers' reaction during the second step exposure. A sample of 3,532 DVD French viewers has been used to link the way the movie has been viewed, chosen and appreciated (or not) with a spontaneous brand placement recall, the day after the film has been watched at home. Results contribute to strengthen the professionals' interest in the technique, and complete the academic knowledge on the topic. A profusion of brand placements does not mechanically increase the number of brands recalled, and a first viewing of the movie at the cinema, just as watching it at home on a large home cinema screen, improves the brand placement recall. Such an improvement also occurs when a DVD movie is chosen either because of the movie director or when the viewer likes the movie he watched.

**Key words:** Consumer, product placement, brand placement, movie, branded-entertainment, spontaneous day after recall.

## Introduction

The fact that in the movie *Code Name: The Cleaner* (2007), the main character is blatantly wearing a Lacoste polo, that Chevrolet is one of the favoured car in the movie *Déjà Vu* (2006), that *The Financial Times* is the unavoidable newspaper in the movie *A Good Year* (2006), and that Bollinger champagne shares the screen with Smirnoff vodka in *Casino Royale* (2006), is certainly not coincidental at all. Those products have been part of a so-called “product placement deal”. Product placement in movies has become a communication technique which is used more than ever by advertisers (Karrh, McKee and Pardun, 2003; PQ Media, 2005). A recent ANA (*Association of National Advertisers*) survey indicates that 63% of the American advertisers who responded, already integrated product placement actions in their communication plan, 52% specifying that financing was a transfer from TV advertising budget (Consoli, 2005). A lot of research has already been devoted to product placement in movies (Karrh, 1998). This paper strives to bring new insights about the viewer’s contact with the movie and the brand placement. The originality of this approach is that, it focuses on the potential second exposition stage by using an innovative study of DVD viewers instead of usual movie theatre viewers and by focusing on brand placement. Product placement and brand placement expressions are sometimes used indifferently. In this paper, new findings are presented to advertisers about the existing links between the viewers’ exposure conditions and the impact of brand placements.

## Brand placement in movies

If the first brand placements appeared in novels two centuries ago, they have developed with the movie industry (Turner, 2003; Newell and Salmon, 2004). “Placing a product” consists in putting a product and/or a brand into a movie scene where it can be seen and/or its name heard. The placement can either be paid for by the advertiser or is part of a barter deal concerning products and/or services such as logistics facilities (Karrh, 1998). Ford paid to bring back an Aston Martin car in the James Bond films since *Die Another Day* (2002) but BMW supplied 32 Minis with specific features for *The Italian Job* (2003). Mainly since the end of the 1980s, several papers have contributed to a better understanding of this communication technique, coined as “hybrid” by Balasubramanian (1994) since it combines several media techniques. Its positive effect on attitude (Fontaine, 2005), and especially its potential impact on brand recall (Brennan, Dubas and Babin, 1999; d’Astous and Chartier, 2000) represent the main core of the research knowledge.

Confronted with media fragmentation and audience scattering on the one hand (Deloitte, 2005) and to the soar of electronic video devices allowing to skip commercials (O’Neill and Barrett, 2004) on the other hand, advertisers are looking more and more to re-establishing the link between their products and their consumers. As brand placement in movies seems to be well accepted (O’Reilly *et al.*, 2005), and since it is less expensive than a 30-second TV spot and can also be more effective (Jaffe, 2005), it is more frequently used. Ways of placing the brand may differ, but the main purpose of obtaining brand recall and improving brand image remain. That’s why especially in 2006, Heineken beer is generously drunk in *Madea’s Family Reunion*, why Chief Inspector Clouseau drives a Smart car in *The Pink Panther* and why Dole bananas are eagerly eaten in *Curious George*.

Movies are not the only medium used for brand or product placement. Some can be found in television series or shows, theatre plays, songs, videogames, novels... (Kretchmer, 2004; Moser, Bryant, and Sylvester, 2004). The main purpose remains the same: generating complementary income for the author, the medium or the production on the one hand while offering an opportunity of branded entertainment to the advertiser (Russell and Belch, 2005). Car makers were amongst the first to use the technique because of the potentially very large audience for a low cost (Parrish, 1976). Moreover the same movie can be seen in theatres, on

DVD, cable/satellite TV, syndication and reruns. Besides, building a “fake” car would have been too costly for the production and somehow could appear too obvious to the audience (Moser, Bryant and Sylvester, 2004).

Research on product placement usually focuses on spectators’ acceptability, or on its effectiveness. Nevertheless, most research in this field, explains effectiveness by the way the placement is made. It means that most of the results show how the characteristics of the brand placement affect its efficiency. Three placement modalities are usually differentiated: prominence, audiovisual and plot insertion. Prominent placements when “the product is made highly visible by the virtue of the size and/or position on the screen or its centrality to the action in the scene” (Gupta and Lord, 1998). Audiovisual characteristic refers to “the appearance of the brand on the screen” and/or to “the brand being mentioned in a dialogue” (Russell, 2002). Finally, plot insertion refers to the degree to which the brand is integrated into the story plot (Russell, 1998). This research contributes to a better understanding of product placement effectiveness, and more specifically brand communication effectiveness.

Several researchers worked on placement effectiveness, either in theatres (Ong and Meri, 1994) or in TV programmes, included series (Stern and Russell, 2004). If they noticed that a movie placement has a first life in theatres and a second one at home (Vollmers and Mizerski 1994), little research has focused on this last topic (Brée, 1996). These works converge to placement conditions, which can be partly controlled by the advertiser. Because it cannot be controlled, less contribution is about the link between spectator’s conditions of exposure and the brand placement effectiveness. But spectator’s attitude influences the effectiveness (Johnstone and Dodd, 2000; Fontaine, 2002), and the advertiser could have chosen the movie on the basis of the attitude it was supposed to generate.

This primary analysis leads us to investigate one goal: exploring the influence of the spectator’s attitude on the fickleness of the second life brand placement effectiveness via the DVD. This goal is reached by explaining effectiveness with the spectator’s attitude while watching the movie during its second life, which is analyzed using an experiment with DVD viewers.

## **Hypotheses**

The number of Spontaneous Day After Recall (SDAR) of brand placements seen on screen is used in this research as the measure of brand placement effectiveness. Acting like that, we assume the consumers’ side of our work, explaining how many brands a consumer should remember, given his exposure conditions to the movie. The advertiser’s objective is obviously to make sure that the consumer recalls his own brand, explaining that a consumer remember a brand, regardless the modalities of the brand placement.

Four hypotheses have been formulated to link brand placement and the consumer who has been exposed to it. The main novelty of this research is that it focuses on the second wave of potential exposition - DVD versus cinema. The first two hypotheses focus on this aspect, before and during the exposure to the movie. The last two hypotheses concentrate on the spectator’s attitude toward the film before and after viewing it.

Amongst the respondents some might have seen the movie beforehand when shown in cinema. Johnstone and Dodd (2000) first test the hypothesis that SDAR might be higher if viewers are watching the movie for the second time. Unfortunately, they concluded that prior exposure has too little impact upon brand salience level to valid this hypothesis. Their hypothesis was tested on a sample of 53 viewers. This research takes advantage of a sample of 3,532 viewers. Like Brée (1996), we assume that a brand placement has several lives which interact through the many diffusions of the movie. Consequently:

***Hypothesis 1a:** The number of brand placements SDAR on DVD viewing is favourably influenced by a first viewing of the movie at the cinema.*

Consistent with this first hypothesis, and the wish to focus on the second exposure step, we notice that the size of a TV screen is smaller than a cinema screen. In a cinema all the spectators see the movie on a large screen. This similar viewing condition does not exist at home. But pre-tests informed us about a certain number of viewers using video widescreen projection instead of a traditional TV set. This is not a problem if the size of the placement has no impact on its recall. Nevertheless, various previous works have insisted on the role of the placement prominence (Gupta and Lord, 1998; Brennan, Dubas and Babin, 1999; d’Astous and Chartier, 2000). They demonstrated that the more prominent the placement, the greater the impact. Then the size of the placement - which is part of the prominence placement definition - considering the size of the screen, influences the placement recall. That’s why we wondered if the absolute size of the placement could play the same role. Due to a matter of perception, the larger the screen on which the respondents have been watching the movie, the bigger the brand placements’ appearance, and *via* this prominence the better the recognition and the recall. Consequently:

**Hypothesis 1b:** *Watching the movie at home, on a large home cinema screen improves the brand placement number of SDAR.*

The two following hypotheses concern the choice of the movie and its appreciation. Some movie viewers do choose their movie (in theatres or on DVD) because of the movie director (Ainslie, Drèze and Zufryden, 2003). If we assume that those movie fans might be more interested in the direction, the set and/or the acting, their supposedly higher attention could lead to a better number of SDAR for brand placements. Based on a direct effect due to vigilance, we presume that:

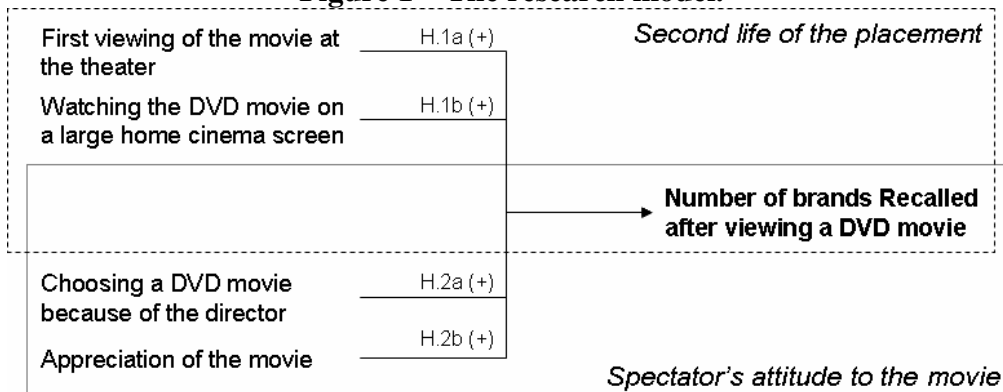
**Hypothesis 2a:** *Choosing a DVD movie because of the director improves the brand placement number of SDAR.*

Fontaine (2002) showed that movie’s appreciation has a positive impact on attitude change. We think that this result is still accurate on recall and then we presume that for a viewer who has enjoyed the movie, details might be better perceived and then be better recalled. This hypothesis is also inspired by Johnstone and Dodd’s works (2000) stressing the fact that placements could increase brand salience, and even more specifically if the audience liked the movie. Consequently:

**Hypothesis 2b:** *The more the video viewers appreciate the movie, the more they spontaneously recall placed brands.*

This all set of hypothesis is resumed in Figure 1.

**Figure 1 – The research model.**



## Data collection

The purpose of this research was to innovate by using a large convenient sample of video viewers questioned the day after watching a movie on DVD, when leaving one of the three French video rental shops chosen for the study. The final sample includes 3,532 video viewers questioned about one of the following 11 American movies (*Men in Black II*, *Minority Report*, *Analyze that*, *Banger Sisters*, *Fashion Victim*, *Austin Powers in Goldmember*, *Johnny English*, *Intolerable Cruelty*, *Mr. Deed*, *Hardball* and *Paycheck*) used for this research. Those movies have been selected because they were new DVD releases (meaning heavy rentals) during the data collection process, because the movie was successful (meaning many available copies then facilitating the data collection) and essentially because the placements were easily and clearly recognizable (All the brand placements identified and used in the research were strictly isolated, meaning that it was undoubtedly possible to link an SDAR with a specific placement, because each brand placement occurs just once in every considered movie). Furthermore, American movies represent 55% of 2003 the French DVD market in volume, and 69% in value (C.N.C., 2005).

The spontaneous day after recall (SDAR) of the brands seen in the movie by the spectator was made, in association with the independent variable of the ANCOVA. The SDAR of each placement was added to calculate the number of SDAR per movie for one respondent, *i.e.* the dependant variable. The previous watching of the movie in a theatre was measured by a dichotomous question. Respondents were asked if they watched the movie on a TV or on a large home cinema screen. They were also questioned about the reasons for their DVD choice, which has been recoded in "director; yes or no". At least, the appreciation of the movie is evaluated on a 0 to 20 scale (0 meaning a total dislike and 20 an absolute liking). The data collection process took place from January 2003 to February 2005 focusing on the selected "just released" DVDs. The questionnaire was systematically submitted to every renter of one of the DVDs subject to the research. Every respondent freely chose the movie he wanted to watch. Due to the small size of video clubs, due to their proximity and due to the appeal of the research subject, only 6 persons refused to answer the questionnaire.

## Methodology

Since the four hypotheses are not independent, we decided to test all of them in the same model rather than testing them individually. Hypotheses are validated using an ANCOVA, which allows us to study the simultaneous impact of each independent variable on the dependent variable. Independent variables are each mentioned in the four hypotheses here above. The dependant variable is the number of brands recalled by the respondent (SDAR) in one movie. A hypothesis is validated when the link between the studied variable and the dependant variable is significative, *i.e.* p-value is inferior to 5%, and produce the expected meaning of the value. Because the number of placements varies from one movie to another (indeed from 4 to 22 in the considered movies), the total number of brand placements in the movie has been included in the model as a control variable.

## Results and discussion

The day after, 34% of the used sample noticed and recalled at least one brand placement in the movie they watched. According to the academic works collected for this research, the size of the used sample, 3,532 video viewers, appears sufficiently important compared to the number of respondents usually used for researches in this field, from 62 (Sabherwal, Pokrywczynski and Griffin, 1994) to 378 (Fontaine, 2002), to allow us to diversify spectators, movies and placement modalities. It seemed necessary partly to compensate for the limit generated by the fact that when using real movies, compared to *ad hoc* created films for the research or simply excerpts, researchers do not have full control of the placement modalities.

First of all, we should notice that, according to the ANCOVA results (Cf. Table 1), the control variable - *i.e.* the total number of brand placements in the movie - does not explain the number of SDAR (probability associated is 0.880), which means, that a profusion of brand placements does not mechanically increase the number of brands recalled.

**Table 1 – Model parameters of the ANCOVA**

Source	Value	Standard error	t	Pr >  t	Lower bound (95%)	Upper bound (95%)
Intercept	0,134	0,067	2,001	0,045	0,003	0,266
Total_Brands	0,000	0,003	0,151	0,880	-0,006	0,007
Evaluation_Rank	0,018	0,005	3,771	0,000	0,008	0,027
Projection-TV	0,000	0,000				
Projection-HomeCine	0,859	0,049	17,387	< 0,0001	0,762	0,955
Choice_Director-No	0,000	0,000				
Choice_Director-Yes	0,827	0,060	13,858	< 0,0001	0,710	0,944
Shown_Cinema-No	0,000	0,000				
Shown_Cinema-Yes	0,850	0,054	15,641	< 0,0001	0,743	0,956

Dependent variable: Number of SDAR.

Because of the DVD viewers' specificity, this research took place during the second potential step of exposure. Validating hypothesis 1a ("Shown\_Cinema - Yes" parameter >0; p<0,0001) means that the respondents who have previously seen the movie in a cinema show more SDAR than respondents who have seen it for the first time on DVD. On the one hand, this analysis shows that the recall is stronger among viewers watching the movie on DVD a few months after viewing it in a theatre. On the other hand, because some 15% respondents (representing 522 viewers) rent a DVD even after having seen the movie in theatres the previous year, this result supports the product placement professionals' view as well as the academic research which argues that the potential total audience could be tremendously bigger than the one calculated from cinema tickets alone (Brée, 1996).

17 % of our sample show the movie on a large screen (home cinema). Since the number of SDAR was significantly greater among these 587 respondents, hypothesis 1b is validated ("Projection-HomeCine" parameter >0; p<0,0001). Indeed, the large dimensions of the screen allow the brand placement to appear significantly bigger in size, hence more prominent, hence be more effective (Brennan, *et al.*, 1999; d'Astous and Chartier, 2000). This leads us to presume that placements seen for the first time at the movie theatre might be more effective than placements seen for the first time on a regular TV screen; considering only the size of the placement, independently from its duration.

Results about choosing a DVD because of the movie director validate hypothesis 2a ("Choice\_Director-Yes" parameter >0; p<0,0001). According to our point of view it sounds logical that a movie fan who prefers a specific director may be more alert to certain details, and thus to various brand placements. Nevertheless, among the 10.4% of respondents who chose their DVD for this reason, we can hardly believe that they were all movie directing specialists. Several if not most of them have probably been attracted by the fame of the director's name, leading to a direct effect. For advertisers, these results therefore invite them to privilege well-known and accomplished directors for their branded entertainment deal. This could explain why the \$25 million global product placement deal for Steven Spielberg's *Minority Report* appears quite suitable and logical (Lehu, 2005).

Hypothesis 2b is validated ("Evaluation\_Rank" parameter >0; p<0,001). It concerns the evaluation of the movie by the respondent. Here also, such a validation means that the more the viewer liked the movie he has watched, the better he recalled the brand placements. The

validation of this hypothesis leads us to conclude that a positive environment influences the number of SDAR for brand placements. Thus, not only advertisers are invited to select the type of movie to place their products and brands in, in consideration with their wished target, but they are also called upon to evaluate the chances of getting a good movie at the end. Some might hesitate when validating the hypothesis 2b about the liking of the movies, as the success or failure of a movie can hardly ever be predicted. Even if its components (theme, story, director, editor, actors...) appear to produce a high quality combination during pre-production, numerous movies end as what professionals call a “bomb”, becoming a real box-office failure.

### **Main managerial implications**

Those results could contribute to reinforce advertisers' favourable attitude toward brand placement as a rather profitable technique (Lubbers and Adams, 2004), considering its global impact as well as the fact that the placement increases with the second exposition step, watching the movie on DVD for this research.

Moreover in France, home cinema equipment seems to be a consumer favourite, especially since the number in French homes grew by 28.3% between 2002 and 2003, 26% between 2003 and 2004 (Médiamétrie, 2005). It also seems to be a more global trend in developed countries (Schimmetits, 2005), giving more comfort to the video viewers. As viewers are watching their movies on bigger screens at home, the possibility of better noticing and recalling the placements during the second exposition step also increases. This result could also be a source of stimulation for advertisers to consider a placement in a movie, even after it has been released in theatres. If domestic conditions are improving and if viewers are more and more “addicted” to home cinema, the growing possibilities of digitally inserting placement for DVD releases and TV showing could lure their attention (Brown, 2003; Moser, Bryant, and Sylvester, 2004).

We already know that a director's reputation can influence the consumers' evaluation, especially if the movie critics are positive (d'Astous and Touil, 1999). Here, as viewers attracted by a famous director's name while choosing their movie had more SDAR, the present research invites advertisers to privilege famous directors who usually team up with a famous cast. This could explain why, for instance, 28 different brand names appeared in Steven Spielberg's *War of the Worlds* (2005) with Tom Cruise and Dakota Fanning, and no less than 41 advertisers had their brands shown in Sydney Pollack's *The Interpreter* (2005) with Nicole Kidman and Sean Penn, and even 50 of them appearing on screen in Martin Scorsese's *The Departed* (2006) with Leonardo diCaprio, Matt Damon and Jack Nicholson among other stars. This could mean bad news for any unknown director or for low budget movies in general. Nevertheless, if a director's appeal is already known by advertisers while choosing the movie in which they could make placements, the success of the movie will remain uncertain. But if large multinational advertisers are no longer interested or prone to take risks, this could be however a real chance for smaller brands. Barn analyzed that even countless Bollywood movies generate opportunities for product placement (Barn, 2005).

### **Limits and further possible research**

The external validity of this research remains naturally limited. Moreover, it has been conducted in France, and previous research about product placement in movies taught us that disparity can occur when comparing results coming from different countries, (Gould, Gupta and Grabner-Kräuter, 2000; McKechnie and Zhou, 2003; Devathan *et al.*, 2003). Furthermore, if choosing real movies as the material for the research offers a much greater realism of the study, because respondents can supply us with more natural answers, it also implies a natural structural limit. We have no control at all on the used material, which means that not every

movie can be used in such an experiment. As there is no possibility to modify the appearance of the product and/or the brand (because the shooting is already done of course), movies used for the here above research have been very carefully chosen to present clear and not arguable brand placements. Nevertheless, the sample is large compared to those usually used. That is why we still believe that the strength of the results, given by the use of real movies, partly compensates the limit of a reduced control. Moreover, working on full length real movies and natural exposure conditions, opens a new perspective of research in this field.

Even if hypothesis 2b about the liking of the movies, has no predictive value because the success of a movie can never be foreseen. Nevertheless, it sounds very interesting to us, because of the rise of digitally inserted product and brand placements. Some placements can now be elaborated, replaced or even erased, after the movie has been shot (Brown, 2003; Sivic and Zisserman, 2004). In the near future, this could lead to a more systematic use of previews to analyze the relevance of integrating a brand or not; not right from the outset but after watching the final edited motion picture. It could then allow some sort of a pre-testing step with elaborate concrete material, the kind traditional advertising already offers.

Now, it would be interesting to extend this research to a greater number of movies, to different countries and to the next viewing steps (television programming for instance) in order to validate the correlation between better placement recall and the number of viewings. Another contribution could be made by explaining brand placement recall according to individual characteristics validated in this research and to brand placement characteristics already found to be relevant.

### **Conclusion**

Recommending that advertisers consider as much as possible the viewer's characteristics in order to conceive their product and/or brand placement operations may sound technically difficult at the first sight. But more and more the consumer's identity and specificities are known, recorded and used. It doesn't seem that much fanciful to think that in a near future it could be possible to adapt the placements to the target, especially when the movie is watched on DVD. An interaction already occurs. The DVD main menu already offers the viewer to choose, version (short, long, director's cut...), kind of screen (pan and scan or widescreen), language, subtitles... Even about the areas where the movie is running in theatres, advertisers sometimes request adaptations; like Pepsico switching Dr. Pepper placement in *Spider-Man 2* (2004), for Mirinda (another soda), in areas where it was much more well-known than Dr. Pepper.

Considering their real communication potential, product placement and brand placement in movies have become some undisputedly attractive techniques of branded entertainment. The more the research about its impact and its modalities of usage deepens, the more product and brand placement turns out to become a sophisticated communication technique. It has been increasingly and legitimately appreciated by movie producers, communication consultants and of course advertisers looking to solve media fragmentation and audience dispersion by new efficient ways to contact and seduce their potential consumers. The new original insights brought by this research led to confirm the interest of the technique for the advertiser, as he can obviously count on recurrent communication, strengthening as multiple opportunities to see the movie are offered to the consumer.

### **References:**

- Ainslie, Andrew, Drèze Xavier and Zufryden Fred (2003), "Modeling movie choice", *working paper*, University of California, Los Angeles, June.
- Balasubramanian, Siva K. (1994), "Beyond advertising and publicity: hybrid messages and public policy issues", *Journal of Advertising*, 23 (4), 29-46.



- Barn, Sukhbinder (2005), "Product placement and Bollywood movies: an exploration of the industry structure", film themes and placement opportunities with indigenous an Indian diaspora audiences, paper presented at the 5<sup>th</sup> Conjoint Conference American Marketing Association/Academy of Marketing, Dublin Institute of Technology, Dublin, Ireland, 5-7 July.
- Brée, Joël (1996), "Le placement de produits dans les films : une communication originale", *Décisions Marketing*, 8 (May-August), 65-74.
- Brennan, Ian, Khalid M. Dubas, and Laurie A. Babin (1999), "The effects of placement type and exposure time on product placement recognition", *International Journal of Advertising*, 18, 323-338.
- Brown, Rebecca J. (2003), "Genetically enhanced arachnids and digitally altered advertisements: The making of *Spider-Man*", Working paper *Virginia Journal of Law and Technology*, 8 (1), Spring. University of Virginia School of Law, Charlottesville, VA.
- Consoli, John (2005), ANA Survey : 63 pct. use branded entertainment, *Brandweek*, March 23<sup>rd</sup>.
- C.N.C. (2005), "Le marché du cinéma en vidéo", *CNC Info, le dossier du CNC, Spécial Vidéo*, issue 293, March.
- d'Astous, Alain and Francis Chartier (2000), "A study of factors affecting consumer evaluations and memory of product placements in movies", *Journal of Current Issues and Research in Advertising*, 22 (2), 31-40.
- d'Astous, Alain and Nadia Touil (1999) "Consumer evaluations of movies on the basis of critics' judgements", *Psychology & Marketing*, 16, 8, 677-694.
- Deloitte (2005), *TMT Trends: Predictions, 2005: A focus on the media sector*. Paul Lee (ed), Deloitte Touche Tohmatsu Consulting, United-States, The Netherlands, Hong-Kong.
- Devathan, Narayan, Michelle R. Nelson, John McCarty, Sameer Deshpande, Hye-Jin Paek, Ratanasuda Punnahitanond, Susan E. Stein, Alexandra M. Vilela, and Ronald Yaros (2003), "Product placement go global: An examination of contacts across five countries", in P.A. Keller and D.W. Rook (eds), *Advances in Consumer Research*, 30 (170-171), Atlanta, GA.
- Fontaine, Isabelle (2002), "Impact persuasif du rôle accordé aux marques au sein de supports non publicitaires : le cas du placement de marques dans les films", *Proceedings of the 18<sup>th</sup> Congrès de l'Association Française du Marketing*, Lille, France May 23-24, 177-200.
- Fontaine, Isabelle (2005), "Brand placement in movies: A matter of exposure", paper presented at the 34<sup>th</sup> European Marketing Academy Conference (EMAC), Milan, Italy.
- Gould, Stephen J., Pola B. Gupta and Sonja Grabner-Kräuter (2000), "Product placements in movies: A cross-cultural analysis of Austrian, French and American consumer' attitudes toward this emerging, international promotional medium", *Journal of Advertising*, XXIX (4), Winter, 41-58.
- Gupta, Pola B. and Kenneth R. Lord (1998), "Product placement in movies: the effect of prominence and mode on audience recall", *Journal of Current Issues and Research in Advertising*, 20 (1), Spring, 48-59.
- Jaffe, Joseph (2005), *Life after the 30-second spot*, Hoboken, NJ: Adweek-John Wiley.
- Johnstone, Emme and Christopher A. Dodd (2000), "Placements as mediators of brand salience within a UK cinema audience", *Journal of Marketing Communications*, 6 (3) 141-158.
- Karrh, James A. (1998), "Brand placement: a review", *Journal of Current Issues and Research in Advertising*, 20 (2), Fall, 31-49.

- Karrh, James A., Kathy Brittain McKee, and Carol J. Pardun (2003), "Practitioners' evolving views on product placement effectiveness", *Journal of Advertising Research*, 43 (2), 138-149.
- Kretchmer, Susan B. (2004), "Advertainment: The evolution of product placement as a mass media marketing strategy", *Journal of Promotion Management*, 10 (1/2), 37-54.
- Lehu Jean-Marc (2005), "Le placement de marques au cinéma : proposition de la localisation du placement à l'écran comme nouveau facteur d'efficacité potentielle", *Décisions Marketing*, 37 (January-March), 17-31.
- Lubbers, Charles A. and William J. Adams (2004), "Merchandising in the major motion picture industry: Creating brand synergy and revenue streams", *Journal of Promotion Management*, 10 (1/2), 55-63.
- McKechnie, Sally A. and Jia Zhou (2003), "Product placement in movies: a comparison of Chinese and American consumers' attitudes", *International Journal of Advertising*, 22, 349-374.
- Médiamétrie (2005), *L'Observatoire des Equipements Multimedia*, Publication Médiamétrie, Paris, France.
- Moser, H. Ronald, Layne Bryant and Katie Sylvester (2004), "Product placement as a marketing tool in film and television", *National Social Science Journal*, 22 (1), 76-86.
- Newell, Jay and Charles Salmon (2003), "Product placement from Lumière to E.T.: The development of advertising in motion pictures", paper presented at the *Association for Education in Journalism and Mass Communication Conference*, Ad Division: Special Topics, Kansas City, MO.
- O'Neill, Eileen and Marianne Barrett (2004), "TiVo – The next big thing – DVRs and television advertising models", paper presented at the *6<sup>th</sup> World Media Economics Conference*, HEC Montréal, Montréal, Canada.
- Ong, Beng Soo and David Meri (1994), "Should product placement in movies be banned?", *The Journal of Promotion Management*, 2 (2/4), 159-175.
- O'Reilly, Daragh, Rachel Cripps, Efstathia Kazani, Reshma Patel and Angeliki Zarra (2005), "Interpretation of product placement by UK movie-goers: A qualitative study", paper presented at the *34<sup>th</sup> European Marketing Academy Conference (EMAC)*, Milan, Italy.
- Parrish, Robert, (1976), *Growing up in Hollywood*, Harcourt Brace Jovanovich, New York, NY
- PQ Media (2005), *Product Placement Spending in Media 2005 – History, analysis & Forecast, 1974 to 2009*. Stamford, CT: PQ Media LLC.
- Russell, Cristel.A. (1998), "Toward a framework of product placement: theoretical propositions," *Advances in Consumer Research*, 25, 357-362.
- Russell, Cristel.A. (2002), "Investigating the effectiveness of product placements in television shows: the role of modality and plot connection congruence on brand memory and attitude", *Journal of Consumer Research*, 29, December, 306-318.
- Russell, Cristel A. and Michael Belch (2005), "A managerial investigation into the product placement industry", *Journal of Advertising Research*, 45, 1, 73-92
- Sabherwal Shonall., Jim Pokrywczynski and Robert Griffin (1994), "Brand recall for product placements in motion pictures: a memory-based perspective", Paper presented to the 1994 Conference of the Association for Education in Journalism and Mass Communication, Ad Division Research, Atlanta, GA.
- Schimetits, Martin (2005), "European Home Cinema Market – A Screenshot with an Outlook of Future Trends", *Integrated Systems Europe Conference*, Amsterdam Rai, The Netherlands.

- Sivic, Josef and Andrew Zisserman (2004), "Efficient visual content retrieval and mining videos", *Proceedings of the 5<sup>th</sup> Pacific-Rim Conference on Multimedia*, Tokyo, Japan, 471-478.
- Stern, Barbara B. and Cristel. A Russell. (2004), "Consumer Responses to Product Placement in Television Sitcoms: Genre, Sex, and Consumption", *Consumption, Markets and Culture*, 7 (4), December, 371-394.
- Turner, Kathleen J. (2004), "Insinuating the product into the message: An historical context for product placement", *Journal of Promotion Management*, 10 (1/2), 9-14.
- Vollmers, Stacey. M. and Richard W. Mizerski (1994), "A review and investigation into the effectiveness of product placements in films", *Proceedings of the American Academy of Advertising Conference*, Karen W. King (ed) Athens, GA, 97-102.

### Annexe 1 - Table of statistical results

#### Summary statistics:

Variable	Obs.	Minimum	Maximum	Mean	Std. deviation
Number_SDAR	3532	0,000	8,000	0,708	1,222
Brands_in_movie	3532	4,000	22,000	12,418	5,814
Evaluation_Rank	3532	0,000	20,000	12,132	4,043

Variable	Categories	Frequencies	%
Projection	TV	2945	83,381
	HomeCine	587	16,619
Choice_Director	No	3166	89,638
	Yes	366	10,362
Shown_Cinema	No	3010	85,221
	Yes	522	14,779

#### Goodness of fit statistics:

Observations	3532,000
Sum of weights	3532,000
DF	3526,000
R <sup>2</sup>	0,239
Adjusted R <sup>2</sup>	0,238
MSE	1,137
RMSE	1,066
MAPE	58,149
DW	1,835
Cp	6,000
AIC	459,468
SBC	496,486
PC	0,763

#### Analysis of variance:

Source	DF	Sum of squares	Mean squares	F	Pr > F
Model	5	1261,831	252,366	221,959	< 0,0001
Error	3526	4009,048	1,137		
Corrected Total	3531	5270,880			

Computed against model  $Y = \text{Mean}(Y)$

**Standardized coefficients:**

Source	Value	Standard error	t	Pr >  t	Lower bound (95%)	Upper bound (95%)
Brands_in_movie	0,002	0,015	0,151	0,880	-0,027	0,032
Evaluation_Rank	0,058	0,015	3,771	0,000	0,028	0,088
Projection-TV	0,000	0,000				
Projection-HomeCine	0,262	0,015	17,387	< 0,0001	0,232	0,291
Choice_Director-No	0,000	0,000				
Choice_Director-Yes	0,206	0,015	13,858	< 0,0001	0,177	0,236
Shown_Cinema-No	0,000	0,000				
Shown_Cinema-Yes	0,247	0,016	15,641	< 0,0001	0,216	0,278

*Analyzed with XLSTAT 2006*