

Learning from giants

Exploring, classifying and analysing existing knowledge on market research

Agnes Nairn

EM Lyon

Pierre Berthon

Bentley College

Arthur Money

Henley Management College

The paper presented here is an abridged and adapted version of an article by Pierre Berthon, Agnes Nairn and Arthur Money which appeared in *Marketing Education Review*, 13, 2 (Summer) 2003. The objective of the paper in the *IJMR* now is to encourage practitioners and academics alike to build their own research on the foundations which have already been build by previous thinkers. We hope to demonstrate that a good literature review goes well beyond a cursory acknowledgement of other authors who have worked in the area and we present the ‘paradigm funnel’ as a tool which can be used to this end. We demonstrate how it can be used to go beyond simply listing a series of past studies to move towards the production of a structured analysis of a total body of research which can generate enlightened research thinking.

In this paper the paradigm funnel is used to structure a historic body of research on Market Segmentation. Since the publication of the original paper the paradigm funnel has also been used to analyse Brand Management literature in an award winning thesis by Heding and Knudtzen (2006). These authors have added the notion of ‘paradigmatic turbulence’ to the original funnel and have applied it to a 20-year period of literature.

“If I have seen further it is by standing on the shoulders of giants.”

Isaac Newton, 1676

Centuries of wisdom agree that the human race is more likely to advance its thinking if it builds on what has gone before. Yet too many market

Received: 23 May 2006

research papers simply present empirical data with scant reference for how the findings advance our existing body of knowledge.

Practitioners may justifiably argue that clients don't want reams of academic justification but need sound, succinct analysis of current data to help them make better marketing decisions. But from time to time practitioners should ask themselves if the research questions posed by clients have been encountered before and if so what solutions were found. Retrospection can save time and energy; can identify major shifts in thinking; and can help construct analytical frameworks within which to investigate new research questions.

Academics working within market research do tend to preface their papers with a summary of thinking to date. This is partly a conditioned response to writing a Masters or PhD thesis which formally requires a literature review and is supported by a range of good guide books (Blaxter *et al* 1996; Hart, 1998; Fink, 1998). However, too often, this exercise is undertaken simply to demonstrate to the reader that the author is familiar with the field. It is not undertaken in the true spirit of clambering onto the shoulders of the giant to gain a new, enlightened perspective.

Introduction

To state is to assume; to speak is to leave silent. In the social sciences, as in other areas, it is often these assumptions or silences that are of most concern: 'The trouble is not with what the author does say, but with what he does not say' (Whitehead 1967, p. 23). In any piece of research, various knowledge statements are made. Indeed, the aim of good market research is to make a contribution to knowledge. This contribution should be built on the foundations of a review of the extant literature. The literature review, in turn, should be concerned with the deep assumptions of a particular research community. In the social sciences, the term paradigm has come to be equated with these deep assumptions. In this paper we develop the notion of a 'paradigm funnel', a tool that enables researchers to explore, classify and analyse the composition and the dynamics of change within a body of literature. We believe that this is the first attempt to use the notion of the paradigm to create a practical device that provides guidance where little currently exists. We hope it will particularly aid those unaccustomed to academic research to organise and systematise their thinking.

The literature review: description, conscription, circumscription?

The literature review is a central building block for any piece of research (Remenyi *et al.* 1998), yet it is often the weakest element. Many literature reviews take the form of either description or conscription. Description ranges from brief catalogues of previous research to in-depth study-by-study or article-by-article reports. Conscription comprises the (often selective) enlistment of opinion, proposition or finding from other research to make a point or bolster the position of the researcher. More insightful literature reviews introduce critical analysis – that is, they introduce an element of circumscription, critically delimiting what has gone before. All these approaches are of themselves wanting. Insightful literature reviews go beyond classification and criticism to provide a holistic overview of a body of literature and the assumptions that underpin it, from which hiatuses, paradoxes and trends can be discerned. Producing such a synthesis may present a major challenge to a new researcher, particularly if the literature comprises heterogeneous methods of enquiry, which is usually the case in market research. The researcher may be confronted with papers ranging from appraisals of mathematical models to qualitative studies of consumer behaviour to empirical experiments or surveys. Given the problem of conducting insightful literature reviews under these circumstances we offer the paradigm funnel as a useful tool.

This paper is set out as follows: first, Kuhn's notion of a paradigm is revisited; second, the paradigm funnel and the levels that constitute it are described; third, an example from an area of marketing literature is used to illustrate how the paradigm funnel can be used to structure an insightful literature review and to generate productive research thinking.

The paradigm: the structure of scientific revelations?

The term paradigm, derived from the Greek *paradeigma* – from *paradeiknumi*, 'show side by side' – originally meant, in English (from the 14th century), an example or pattern. The term was launched into wider usage in the second half of the 20th century with Kuhn's (1962) *The Structure of Scientific Revolutions*, which focused on understanding the historical evolution of the natural sciences. The term was partly popularised in the social sciences by Burrell and Morgan (1979), and in part due to Kuhn's and others labile use of the term it has become part of common parlance. Indeed its equivocality may have been its greatest strength. Definition delimits interpretation – and for a term to be widely

used it must be malleable enough to suit the purposes of a disparate variety of authors: equivocality engenders adaptability.

Generally social scientists argue that (a) a paradigm is a set of basic beliefs or assumptions, (b) that these beliefs are essentially metaphysical (and thus comprise fundamental ontological, epistemological, methodological and axiological assumptions), and (c) being metaphysical in nature they are essentially articles of faith, for their ultimate veracity cannot unequivocally be established (e.g. Guba & Lincoln 1994). This perspective on paradigms has come to dominate the social sciences, and has resulted in the ongoing frenzy of paradigm classification (the identification of discrete incommensurable paradigms) (e.g. Burrell & Morgan 1979) and the ineluctable corollary – the paradigm wars (e.g. Willmott *et al.* 1993) and reconciliations (e.g. Lewis & Grimes 1999).

While this process has done much to foster a more critical and reflexive use of theory, what is often missing in these endeavours is attention to the procedures by which empirical observations are reconciled with existing theory. Authors either attempt to differentiate paradigms, or argue for the superiority of one paradigm over another, or reconcile estranged paradigms. However, Kuhn's (1962, 1970) original conceptualisation was about how one paradigm is, over time, replaced by another – often through what is akin to a gestalt flip. Critically, change (revolution) is brought about by the disjunction between core assumptions and observed facts of nature. Simply, anomalies build to an extent that accepted theories cannot cope, and researchers are forced to reconsider core assumptions and reject them for others. 'The decision to reject one paradigm is always simultaneously the decision to accept another, and the judgment leading to that decision involves the comparison of both paradigms with *nature* and with each other' (Kuhn 1970, p. 79).

The paradigm funnel

It is this notion of reconciliation between the observed and the assumed that we seek to highlight through the notion of a 'paradigm funnel'. What is the dynamic within a paradigm that leads to its rejection and replacement? Kuhn defines a paradigm as 'the entire constellation of beliefs, values and techniques, and so on shared by the members of a community' (1970, p. 175), and science involves matching these with observations of nature. Thus a paradigm ranges from deep, implicit assumptions to explicit tools, practices and the selection of problems and facts. Moreover, science works 'within' a paradigm, taking its fundamental

features for granted and extending and applying it. Science comprises puzzle solving, whereby data and theory are matched. This process is ‘a strenuous and devoted attempt to force nature into ... conceptual boxes’ (Kuhn 1970, p. 5). Kuhn (1970, p. 25) identifies three foci for factual scientific investigation:

1. the determination of significant fact
2. matches of fact with theory
3. the articulation of theory.

The determination of significant fact comprises empirical observation of key variables and constants; the matching of fact and theory comprises refinement of analytical convention; and the articulation of theory, the modification and development of underlying assumptions.

Building on these distinctions our paradigm funnel differentiates four levels, which range from the ‘explicit, observable’ to the ‘implicit, unobservable’. The reconciliation between each of the levels equates to Kuhn’s three foci (see Table 1).

The dynamics of a paradigm are a result of the ongoing interplay between deep assumptions and surface facts. Generally anomalies are not discovered within a matrix of deep assumptions but rather between levels (i.e. between facts, analytical methods, theories and deep assumptions).

The logic is as follows. If facts do not accord with a specific theory, recourse is made to questioning how the data are structured or analysed.

Table 1 Levels in the paradigm funnel

Level	Research focus	Question posed by researcher	Research process
1	Empirical observations	What is observed ‘in nature’?	Generation of data
2	Analytical methods	Are the mechanisms by which data are mapped to theory correct?	Ordering, structuring and manipulation of data
3	Specific theory	Are our theories correct?	Articulation of theoretical generative mechanisms and associated empirical propositions
4	Deep assumptions	Are our core metaphysical assumptions correct or appropriate?	Questioning of deep ontological, epistemological, methodological and axiological assumptions

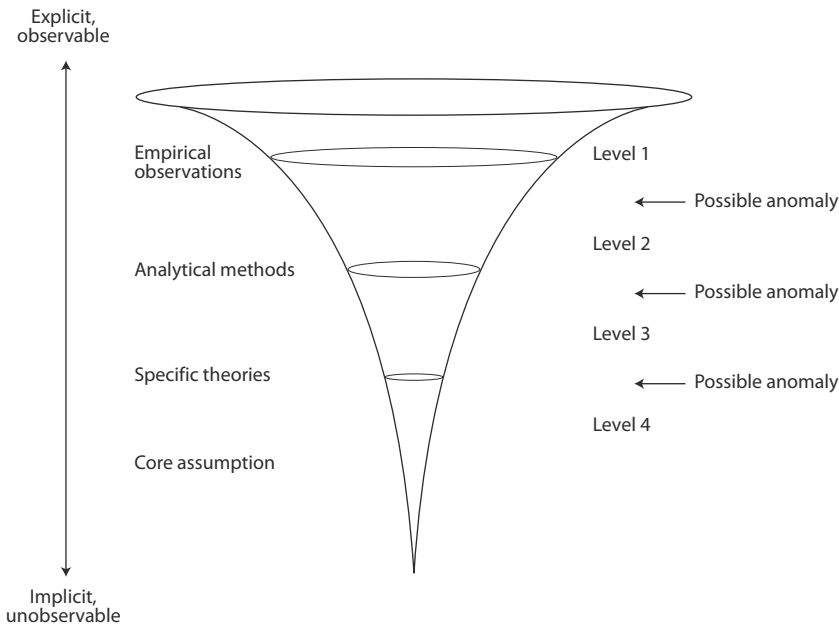


Figure 1 The paradigm funnel

If solutions are not found at this level, the specific theory that generated the empirical hypotheses may be questioned. Finally, communities of specific theories may be questioned, which may lead to the questioning of deep assumptions and the eventual gestalt flip to a new paradigm. In summary, anomalies on one level of the funnel can potentially be resolved by recourse to a deeper level. Thus, data anomalies may be solved by different data-manipulation techniques. If this fails, one has to resort to rethinking theory and, ultimately, the deep assumptions underpinning a theory.

The paradigm funnel is depicted graphically in Figure 1.

An application of the paradigm funnel: the market segmentation literature in the 1990s

For the purposes of illustration, we use the paradigm funnel to demonstrate how a researcher might analyse a body of literature central to marketing: segmentation. We should stress that the purpose here is not to focus on the ‘descriptive content’ of the segmentation literature per se, but rather on how the literature maps onto the levels in the paradigm funnel.

Those interested in a fuller review of this literature should see Nairn and Berthon (2001).

As segmentation has been widely researched and debated over such a long period of time (Smith 1956; Haley 1968; Wind 1978; Krieger & Green 1996; Kamakura & Wedel 1999), it was clearly impossible to include an entire review of the segmentation literature. Indeed, by the beginning of this century there had been over 1600 articles on segmentation published (Wedel & Kamakura 2000). It was therefore decided to restrict this illustrative review to articles published in the American and European marketing journals, which (in 2002, when this paper was first published) were rated A to C in the Judge Institute of Management Studies (JIMS), Cambridge University, UK list of 'Quality Rankings of Journals in Management and Social Science'. It was thus hoped that the highest-quality literature on the subject was included in the review. In the interests of manageability it was also decided to limit the time frame of the review to one decade: the 1990s. Using these two filtering criteria, the review comprised 37 articles taken from the 1990–1999 editions of the following journals: *Journal of Marketing Research*, *Journal of Marketing*, *Journal of the Academy of Marketing Science*, *Journal of Consumer Research*, *Omega* and *European Journal of Marketing*. The authors acknowledge that restricting the review to these (albeit top) journals may bias the findings. However, this review is presented as illustrative rather than definitive. Each of the 37 articles was assigned to a level in the funnel. The articles and their levels are summarised in Table 2.

Methodology for assigning articles to each level

The departure point for assigning articles to each level was the four 'Questions Posed by Researcher' listed in Table 1. We had to decide what constituted the primary objective of each paper. Was it to show what was observed 'in nature', to test analytical methods, to verify or explore a theory, or to question the core metaphysical assumptions of an existing theory? To help us make this decision, we considered the explicitly stated objective(s) of the articles, their content and the research methodology employed. This procedure is illustrated by the use of selected examples from each level.

Level 1 – empirical observation

Five articles were identified as belonging to this category. Three of these articles are used to illustrate the procedure by which allocation took place.

Table 2 Paradigm funnel level and research articles

Funnel level	No. of articles	% of articles	Author(s) and date of articles
Level 1	5	14	Dalgic & Leeuw 1994; Dibb & Stern 1995; Danneels 1996; Hammond <i>et al.</i> 1996; Sarabia 1996;
Level 2	21	57	Lastovicka <i>et al.</i> 1990; Kamakura & Mazzon 1991; Novak & de Leeuw 1992; Hagerty 1993; Allenby & Ginter 1995; Bayus & Mehta 1995; Bucklin <i>et al.</i> 1995; Desarbo <i>et al.</i> 1995; Kamakura & Wedel 1995; Jedidi <i>et al.</i> 1996; Krieger & Green 1996; Ramaswamy <i>et al.</i> 1996; Vriens <i>et al.</i> 1996; Chaturvedi <i>et al.</i> 1997; Allenby <i>et al.</i> 1998; Bucklin & Gupta 1998; Cohen & Ramaswamy 1998; Ramaswamy <i>et al.</i> 1999; ter Hofstede <i>et al.</i> 1999; Trivedi 1999; Walker & Damien 1999
Level 3	9	24	Novak & MacEvoy 1990; Kamakura & Novak 1992; van Raaij & Verhallen 1994; Tepper 1994; Cooper & Inoue 1996; Kara & Kaynak 1997; Schlegelmilch <i>et al.</i> 1996; Kucukemiroglu 1999; Botschen <i>et al.</i> 1999
Level 4	2 37	5 100	Knights <i>et al.</i> 1994; Firat & Schulz 1997

Danneels (1996) explicitly stated the objective of his paper as ‘to provide an empirical study of the application of market segmentation, specifically by apparel retailers operating in Belgium’ (p. 37). He further made it clear that he sought to provide specific examples of marketing management practice. His objective was quite clearly to ‘show what is observed’. In the same way, the purpose of Dalgic and Leeuw’s (1994) paper was to present an analysis of a series of case studies to demonstrate how niche marketing was understood and practised in Europe in the mid-1990s. Sarabia (1996) again explicitly stated the objectives of his paper to be ‘to discover the frequency with which firms assess and select segments and the methods used in this’ (p. 62). In addition it was noted that he used an empirical methodology of a postal and telephone quantitative questionnaire survey of 89 firms. The focus of each of the five articles in this level was the generation of data.

Level 2 – analytical methods

Twenty-one articles were assigned to this category. Again, three articles are used to illustrate the allocation procedure. The purpose of Trivedi's (1999) paper was to attempt to model variety-seeking buyer behaviour based on response to a firm's promotions, using stochastic elements to allow for the fact that the same level of variety may not be sought by customers on each purchase occasion. His primary interest was not in describing behaviour (empirical) but in testing the comparative value of a number of analytical methods. His stated major objective was 'to determine whether the new segmentation scheme allows a richer understanding of promotional response as compared to a simpler, uni-dimensional one, and, more important, whether it leads to different conclusions' (p. 38). The focus here is clearly on ascertaining whether 'the mechanisms used to map data to theory are correct'. In the same way Chaturvedi *et al.* (1997) concentrated on the comparative evaluation of analysis techniques in their proposal for the use of an overlapping K-Centroids Clustering method in segmentation. The departure point for their study was that 'although most market segmentation applications seek homogeneous partitions, researchers have pointed out that persons can belong to overlapping clusters or multiple segments' (p. 371). The paper investigated a number of analytical methods to overcome this problem. In the same vein, Lastovicka *et al.*'s (1990) study of lifestyle segmentation examined the relative value of quantitative and qualitative analyses of lifestyle categorisations: 'Specifically, classifications for two lifestyle typologies were derived from two methods: quantitative analysis of self-reported answers to AIO questions and qualitative judgements based on less structured depth interviews. Moreover, the data were modeled with both the conventional additive factor model and the multiplicative factor model' (p.13). The focus of all 21 articles was the ordering, structuring and manipulation of data.

Level 3 – specific theories

Nine articles were assigned to this level on the grounds that the authors explicitly set out to investigate specific theories. Again, three examples are used to illustrate the allocation procedure. Botschen *et al.* (1999) considered a market segmentation theory that has been in place for 30 years: benefit segmentation (Haley 1968). 'The belief underlying benefit segmentation is that the benefits which people are seeking in consuming a given product are the basic reasons for the existence of "true" market segments' (Haley 1968, in Botschen *et al.* 1999, p. 39). The focus of their

study was ‘to clarify the distinction between attributes and benefits sought’ (p. 39). They were thus trying to elucidate an existing theory. Their methodology was the application of another theory – means–end theory – to benefit segmentation. Kara and Kaynak (1997) explore a new segmentation theory: finer segmentation (FS). In their piece, ‘FS is conceptualised as a better and a more precise way of segmenting markets’ (p. 884). Having established the groundwork, they claim that ‘additional ... empirical research is needed’ (p. 892). Clearly this was a theory-based rather than an observation-based study. Tepper’s (1994) investigation into the role social labelling plays in how elderly consumers respond to segmentation cues was also categorised as a Level 3 paper. What she examined was the response of elderly consumers to promotional material that makes reference to older people. She drew on labelling theory from social psychology to formulate her hypothesis that the phenomena of ‘self-devaluation’ (private labelling) and ‘perceived stigma’ (social labelling) would mediate the relationship between age segmentation cues and intentions to use senior citizen discount offers. The focus of all nine articles was the articulation of theoretical generative mechanisms and associated empirical propositions.

Level 4 – core assumptions

Two articles were assigned to Level 4 of the paradigm funnel. These were both considered to be focused on (and presenting a challenge to) the deep assumptions made by the community of segmentation researchers. Knights *et al.* (1994) – whose study explores financial services marketing – challenged the root assumption that segments are objective entities. In the view of the authors the whole underlying notion that consumers of financial services products have identifiable needs prior to consumption is problematic. It is their belief that, ‘consumer “need” is a category for ordering and making sense of behaviors which are the outcome of producer/consumer relationships (e.g. the sale) rather than the property of individuals, as is conventionally assumed’ (Knights *et al.* 1994, p. 48). Likewise the objective of Firat and Schulz’s (1997) paper, ‘From segmentation to fragmentation’, was to confront the suppositions that have been made about market segmentation for half a decade. They proposed that, in the light of postmodernism, basic assumptions are being challenged: ‘The purpose of this paper has been to provide an objective overview of the emergence of a social phenomenon, postmodernism, and to discuss the impacts this phenomenon may have on the marketing discipline’ (p. 204) for ‘emerging trends would suggest traditional conceptions ... may not be as meaningful or satisfactory as once thought’

(p. 184). Thus the focus of these two papers was the questioning of deep ontological, epistemological, methodological and axiological assumptions.

Benefits of the paradigm funnel in a literature review

Basic taxonomy

At a very basic level the paradigm funnel provides a starting-point for sorting out what has been written before. The first collection of literature will, of course, normally consist of many more papers than the 37 used here for illustrative purposes. Having classified articles, researchers may move forward on a level-by-level basis.

- **Level 1:** specifically cataloguing what empirical work has already been carried out allows the researcher to identify gaps where he or she can contribute to knowledge. This is the level where many literature reviews stop.
- **Level 2:** identifying the current views on methodology in the field of study allows a more informed and focused approach to the choice of techniques and procedures for the researcher's own study. This is a level that is particularly important for the market research community.
- **Level 3:** isolating those authors who have participated in theory building may direct the researcher in terms of their fundamental research question.
- **Level 4:** identifying the existence of any major challenges to core assumptions will force the researcher to think about their chosen area of study on an ontological, epistemological or axiological level.

Levels 3 and 4 are probably seldom visited by the market research community, but could fruitfully be analysed.

Focus of research effort

The paradigm funnel also allows researchers to examine how research effort in their area is spread during a specific time period. In this example of the segmentation literature in the 1990s, the paradigm funnel allows the researcher to observe that over half the research articles were concerned with analytical conventions, that a further quarter discuss specific theories, while fewer than one in seven of the articles are empirical in nature and only one in twenty tackle the deep assumptions made by the research community (see Figure 2).

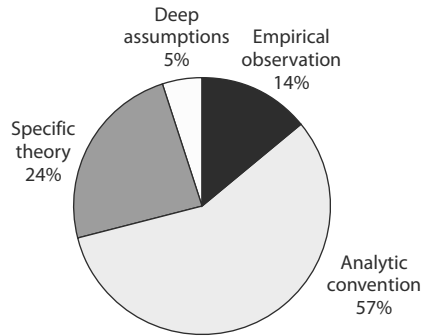


Figure 2 Percentage of articles in each part of the funnel

This analysis may lead the researcher on to generate hypotheses as to why this may be the case. In our view, an unequal distribution of research between levels in a paradigm funnel is in part to be expected. In the course of normal science, once a paradigm has become established, one would expect the collective research endeavour to take place at the shallowest levels of the funnel – namely empirical observation, or what Kuhn called the determination of significant fact. By corollary, one would expect a small proportion of work to be concerned with matching fact to theory, and even smaller amounts of research devoted to theory building or deep assumptions. However, the paradigm funnel has revealed that this was clearly not the case in the previous decade of segmentation research. There was a surprisingly small amount of empirical work and, instead, intense concentration on the refinement of mathematical tools and techniques. A researcher faced with this particular paradigm funnel classification might be led to consider whether this distribution of research effort signals a paradigm shift. As empirical work fails to match with established theory, a commensurate increase in interest in both data manipulation and new theory building may have occurred such that, ultimately, we would expect to see a questioning of the deep assumptions underpinning the whole body of segmentation research.

The researcher might be led on from here to examine the previous three decades of segmentation literature to observe whether a concentration of effort in Level 2 of the paradigm funnel is a recent development; or they may be prompted to keep an eye on new literature to see if more Level 4 papers are forthcoming.

Journals and paradigm level specialisation

The paradigm funnel can also be used to analyse the contribution made by specific journals to specific facets of a paradigm. This allows the researcher to assess the bias introduced into a body of literature by the contribution from specific journals or even specific authors. Figure 3 shows the percentage contribution (in terms of number of papers) made by each of the journals to each level of the paradigm funnel.

It can be seen in this example that the *Journal of Marketing Research* and the *European Journal of Marketing* dominate publications on segmentation. However, the levels of the paradigm funnel represented by each are quite different. The *EJM* has published 100% of attempts to explore the ontological assumptions underpinning segmentation research (Level 4) and 80% of the empirical segmentation literature (Level 1). During the 1990s it published nothing on segmentation techniques (Level 2). The *JMR*, in contrast, published over 80% of the analytical literature (which accounted for 57% of all segmentation literature in the 1990s), but published nothing on empirical work or ontological research. There was only one paper from *Omega* in the review so it is not possible to draw conclusions about this journal, but *JCR* and *JAMS*, like *JMR* have only published on methodology and theory. The researcher may wish to take into consideration the specialisations of different journals and use this to temper conclusions about the overall picture of a research area.

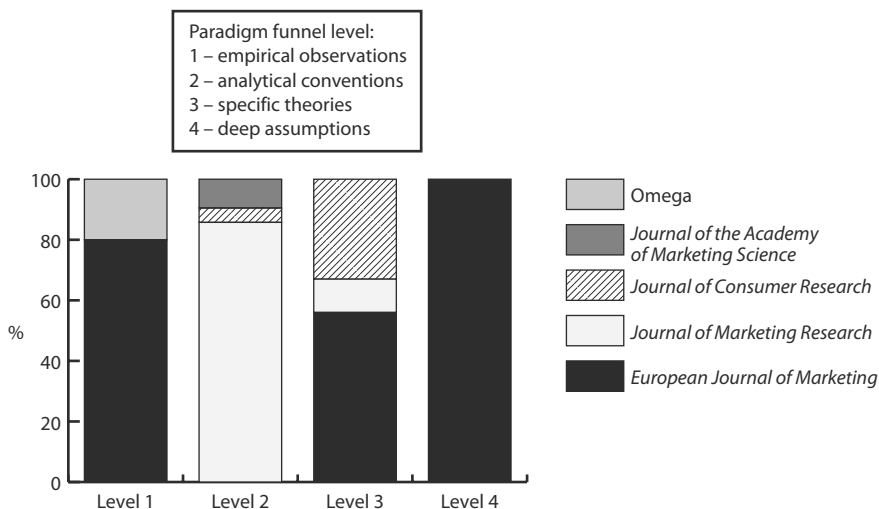


Figure 3 Contribution of journals to each level in the paradigm funnel

They may also wish to widen or restrict the scope of journals included in their review.

One proposition that arises from this illustrative analysis is that the US journals (*JCR*, *JAMS*, *JMR*) concentrate on method and theory, while the European journals (*EJM*) are more concerned with the deep assumptions underpinning the area, and the empirical studies that depend upon these underpinnings. This is an area that might be fruitful for a researcher to pursue across a range of marketing literatures.

The researcher might also wish to ascertain whether the findings would change if an author (lead or otherwise) was counted only once per discontinuous level of the paradigm funnel. If this consideration was used, the number of articles would be 5, 12, 8 and 2 for the empirical, analysis, theory and assumption levels respectively. The respective percentages would then be 19%, 44%, 30% and 7%. This allows the researcher to assess the relative contribution made by individuals to the dynamics of a paradigm.

Conclusion

This paper has presented a tool for conducting literature reviews. It has revisited Kuhn's (1962) notion of the paradigm and has introduced the four-level paradigm funnel. A detailed illustration has been provided of how the paradigm funnel can be used to produce more insightful literature reviews and to generate productive enquiry. It is suggested that using the paradigm funnel has major benefits for researchers – particularly those unfamiliar with writing reviews or those analysing a heterogeneous literature. First of all – and perhaps most importantly – using the funnel forces the researcher to consider the metaphysical assumptions upon which a stream of research is based, and compels a consideration of disjunction between core assumption and observed fact. Second, the paradigm funnel encourages the separation of empirical, methodological, theoretical and ontological approaches to a subject. This facilitates the identification of the hiatuses, paradoxes and trends that fuel new research. Third, the paradigm funnel can highlight the way in which research effort is distributed at a point in time. This allows an understanding of how a community as a whole is tackling an issue. Fourth, using the funnel can highlight the nature of the research contribution made by specific journals and specific authors, which allows the researcher to detect bias in a literature.

Suggestions for further research

Our first paper (Berthon *et al.* 2003) was aimed at marketing educators. Since then the tool has successfully been applied to the brand management literature (Heding & Knudtzen 2005) and extended in its functionality. In this second paper we have introduced this new tool into the community of market researchers. We hope it will stimulate applications of the paradigm funnel to more literatures. Once a number of these studies have been carried out it may be possible to make generalisations about the ratio of articles one might expect to see at each level of the funnel at specific periods in the development of a stream of research. The funnel could be used as a method of identifying crisis points in theory development and as a stimulus for conference debate.

We suggest that the paradigm funnel could be used by academics and practitioners alike. It can serve both as a tool for structuring an insightful literature review for submission to journals and also as a stimulus for deep discussion of the current state of knowledge in market research at workshops or seminars.

References

- Allenby, G. & Ginter, J.L. (1995) Using extremes to design products and segment markets. *Journal of Marketing Research*, 32, November, pp. 392–404.
- Allenby, G.M., Arora, N. & Ginter, J.L. (1998) On the heterogeneity of demand. *Journal of Marketing Research*, 35, 3, p. 384.
- Bayus, B.L. & Mehta, R. (1995) A segmentation model for the targeted marketing of consumer durables. *Journal of Marketing Research*, 32, 4, pp. 463–470.
- Berthon, P., Nairn, A. & Money, A. (2003) Through the paradigm funnel: a conceptual tool for literature analysis. *Marketing Education Review*, 13, 2 (Summer).
- Blaxter, L., Hughes, C. & Tight, M. (1996) *How to Research*. Maidenhead: Open University Press.
- Botschen, G., Thelen, E.M. & Pieters, R. (1999) Using means–end structures for benefit segmentation: an application to services. *European Journal of Marketing*, 33, 1/2, pp. 38–58.
- Bucklin, R.E., Gupta, S. & Han, S. (1995) A brand's eye view of response segmentation in consumer brand choice behaviour. *Journal of Marketing Research*, 32, 1, pp. 66–75.
- Bucklin, R.E. & Gupta, S. (1998) Determining segmentation in sales response across consumer purchase behaviors. *Journal of Marketing Research*, 35, 2, pp. 189–198.
- Burrell, G. & Morgan, G. (1979) *Sociological Paradigms and Organizational Analysis*. London: Heinemann.

- Chaturvedi, A., Douglas Carroll, J., Green, P.E. & Rotondo, J.A. (1997) A feature-based approach to market segmentation via overlapping K-Centroids Clustering. *Journal of Marketing Research*, 34, August, pp. 370–377.
- Cohen, S.H. & Ramaswamy, V. (1998) Latent segmentation models. *Journal of Marketing Research*, 10, 2, p. 14.
- Coleridge, S.T. (1818) *The Friend*, Vol. 2.
- Cooper, L.G. & Inoue, A. (1996) Building market structures from consumer preferences. *Journal of Marketing Research*, 33, 3, p. 293.
- Dalgic, T. & Leeuw, M. (1994) Niche marketing revisited: concept, applications and some European cases. *European Journal of Marketing*, 28, 4, pp. 39–55.
- Danneels, E. (1996) Market segmentation: normative model versus business reality. An exploratory study of apparel. *European Journal of Marketing*, 30, 6, pp. 36–51.
- Desarbo, W.S., Ramaswamy, V. & Chatterjee, R. (1995) Analysing constant-sum multiple criterion data: a segment -level approach. *Journal of Marketing Research*, 32, 2, pp. 222–233.
- Dibb, S. & Stern, P. (1995) Questioning the reliability of market segmentation techniques. *Omega*, 23, 6, pp. 625–636.
- Fink, A. (1998) *Conducting Research Literature Reviews*. London: Sage.
- Firat, A.F. & Schulz, J. II (1997) From segmentation to fragmentation: markets and marketing strategy in the postmodern era. *European Journal of Marketing*, 31, 3/4, pp. 183–207.
- Guba, E.G. & Lincoln, Y.S. (1994) Competing paradigms in qualitative research. In: N.K. Denzin & Y.S. Lincoln (eds) *The Handbook of Qualitative Research*. Thousand Oaks: Sage.
- Hagerty, M.R. (1993) Can segmentation improve predictive accuracy in conjoint analysis. *Journal of the Academy of Marketing Science*, 21, 4, pp. 353–356.
- Haley, R.L. (1968) Benefit segmentation: a decision oriented tool. *Journal of Marketing*, 14, April, pp. 649–656.
- Hammond, K., Ehrenberg, A.S.C. & Goodhardt, G.J. (1996) Marketing segmentation for competitive brands. *European Journal of Marketing*, 30, 12, pp. 39–49.
- Hart, C. (1998) *Doing a Literature Review: Releasing the Social Science Imagination*. Sage.
- Heding, T. & Knudtzen, C. (2006) Masters thesis. Copenhagen Business School.
- Jedidi, K., Kohli, R. & Desarbo, W.S. (1996) Consideration sets in conjoint analysis. *Journal of Marketing Research*, 33, 3, pp. 364–373.
- Kamakura, W.A. & Novak, T.P. (1992) Value-system segmentation: exploring the meaning of LOV. *Journal of Consumer Research*, 19, 1, pp. 119–133.
- Kamakura, W.A. & Wedel, M. (1999) Call for papers for special issue on segmentation: 2001. *International Journal of Research in Marketing*. p. 93.
- Kara, A. & Kaynak, E. (1997) Markets of a single customer: exploiting conceptual developments in market segmentation. *European Journal of Marketing*, 31, 11/12, pp. 873–895.
- Knights, D., Sturdy, A. & Morgan, G. (1994) The consumer rules? An examination of the rhetoric and ‘reality’ of marketing in financial services. *European Journal of Marketing*, 28, 3, pp. 42–54.

- Krieger, A.M. & Green, P.E. (1996) Modifying cluster-based segments to enhance agreement with an exogenous variable. *Journal of Marketing Research*, 33, 3, pp. 351–364.
- Kucukemiroglu, O. (1999) Market segmentation by using consumer lifestyle dimensions and ethnocentrism: an empirical study. *European Journal of Marketing*, 33, 1, p. 470.
- Kuhn, T.S. (1962) *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press.
- Kuhn, T.S. (1970) *The Structure of Scientific Revolutions* (2nd edn). Chicago: University of Chicago Press.
- Lastovicka, L., Murary, J.P. Jr & Joachimsthaler, E.A. (1990) Evaluating the measurement validity of lifestyle typologies with qualitative measures and multiplicative factoring. *Journal of Marketing Research*, 27, 1, pp. 11–24.
- Lewis, M. & Grimes, A. (1999) Metatriangulation: building theory from multiple paradigms. *Academy of Management Review*, 24, 4, pp. 672–690.
- Nairn, A. & Berthon, P. (2001) Market Segments: Revealed or Constructed? A Review of the Literature, in *Developments in Marketing Science*, Vol. XXVI: The Academy of Marketing Science Conference Proceedings, p. 412.
- Novak, T.P. & MacEvoy, B. (1990) On comparing alternative segmentation schemes: the list of values (LOV) and values and life styles (VALS). *Journal of Consumer Research* 17, 1, pp. 105–110.
- Novak, T.P. & de Leeuw, J. (1992) Richness curves for evaluating market segmentation. *Journal of Marketing Research*, 29, 2, pp. 254–268.
- Ramaswamy, V., Chatterjee, R. & Cohen, S.H. (1996) Joint segmentation on distinct interdependent bases with categorical data. *Journal of Marketing Research*, 33, 3, pp. 337–351.
- Ramaswamy, V., Chatterjee, R. & Cohen, S.H. (1999) Reply to ‘A note on Ramaswamy, Chatterjee and Cohen’s latent joint segmentation models’. *Journal of Marketing Research*, 36, 1, pp. 115–120.
- Remenyi, D., Williams, B., Money, A. & Swartz, E. (1998) *Doing Research in Business and Management: An Introduction to Process and Method*. London: Sage.
- Sarabia, F. (1996) Model for market segments evaluation and selection. *European Journal of Marketing*, 30, 4, pp. 58–74.
- Schlegelmilch, B.B., Bohlen, G.M. & Diamantopoulos, A. (1996) The link between green purchasing decisions and measures of environmental consciousness. *European Journal of Marketing*, 30, 5, pp. 35–55.
- Smith, W.R. (1956) Product differentiation and market segmentation as alternative strategies. *Journal of Marketing*, 21, July, pp. 3–8.
- Tepper, K. (1994) The role of labeling processes in elderly consumers’ responses to age segmentation cues. *Journal of Consumer Research*, 20, 4, pp. 503–530.
- ter Hofstede, F., Jan-Benedict, Steenkamp, E.M. & Wedel, M. (1999) International market segmentation based on consumer-product relations. *Journal of Marketing Research*, 36, 1, p. 1.
- Trivedi, M. (1999) Using variety-seeking-based segmentation to study promotional response. *Journal of the Academy of Marketing Science*, 27, 1, pp. 37–50.

- van Raaij, W.F. & Verhallen, T.M.M. (1994) Domain-specific market segmentation. *European Journal of Marketing*, 28, 10, pp. 49–66.
- Vriens, M., Wedel, M. & Wilms, T. (1996) Metric conjoint segmentation methods: a Monte Carlo comparison. *Journal of Marketing Research*, 33, 1, pp. 73–86.
- Walker, S. & Damien, P. (1999) A note on Ramaswamy, Chatterjee and Cohen's latent joint segmentation models. *Journal of Marketing Research*, 36, 1, pp. 113–115.
- Wedel, M. & Kamakura, W. (2000) *Market Segmentation: Conceptual and Methodological Foundations*. Boston: Kluwer Academic Publishers.
- Whitehead, A.N. (1967) *Science and the Modern World*. New York: Free Press.
- Willmott, H., Jackson, N. & Carter, P. (1993) Breaking the paradigm mentality. *Organization Studies*, 14, 5, pp. 681–730.
- Wind, Y. (1978) Issues and advances in segmentation. *Journal of Marketing Research*, 15, August, pp. 317–337.

About the authors

Dr Agnes Nairn is an academic researcher and writer. She is based mainly in Bath, UK and is Affiliate Marketing Professor at EM-Lyon Business School in France and visiting Marketing Professor at RSM Business School in Holland. Her major research interest is the effects of marketing and advertising on children. She has published in a wide range of international journals.

Professor Pierre Berthon is Clifford F Youse Chair of Marketing at Bentley College, Boston, MA. He has taught at a number of Business Schools around the world and has published over 70 academic papers including several prize-winners. His research focuses on electronic commerce, marketing information processing, organization and strategy, and management decision-making.

Professor Arthur Money has recently retired from his position as Professor of Management at Henley Management College where he was also Faculty Chairman and Director of Research Development. He is author of over 100 journal articles, working papers, book chapters, co-author of six books and co-editor of two books. His research focus is statistics, management science and applications in the areas of information systems, finance and marketing.

Address for correspondence: Dr Agnes Nairn, UPR Marches et Innovation, EM-Lyon Business School, 23 Avenue Guy de Collongue, 96132 Ecully, Lyon, France

Email: NAIRN@em-lyon.com

Copyright of International Journal of Market Research is the property of WARC World Advertising Research Center and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.