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Projective Techniques: Are they a Victim of Clashing Paradigms?

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Abstract

This paper reviews the concept and historical development of projective techniques. It considers why, given the importance of their psychoanalytical foundations to the underlying paradigms of management theory, they have been generally marginalised as a mainstream business and management research tool. Projective techniques are defined and their historical origins delineated. This is followed by an overview of projective 'types'. Some of the general advantages and current issues associated with employing projective techniques are also presented. Thereafter a discussion of the reasons projective techniques have not been widely adopted by positivist academic management researchers is made. We put forward the central argument that since many of the challenges facing management research are due to the restrictions introduced by bounded rationality, projective techniques offer a possible alternative to traditional mixed methods.

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1 Introduction

In Lee and Cassell (2010) the implications for management research of its domination by the Anglo-American positive traditional is explored. One question raised is whether a dramatic paradigm shift is needed in management research to address the current global situation? (Thorpe and Ellwood 2010, Wensley 2010). This paper considers whether such a paradigm shift is needed if more recognition is given to the important role that psychoanalysis has, and can play in the development of management theory and practice. In modern management theory, which is still largely seen to be based on a positivist paradigm, the role of the Freudian concept of projection, which is one of its cornerstones, is largely ignored. This means that the associated methodology of projective techniques does not have such a central position in the management research toolbox as they should. The aim of this paper is to review the history, current status and possible developments of the use of projective techniques in academic management research. It is argued that projective techniques can address some of the shortcomings the current global situation has revealed in standard mixed methods based on bounded rationality.

In an influential article, in the New York Times, Krugman (2009) states that:

> "... the economics profession went astray because economists, as a group, mistook beauty, clad in impressive-looking mathematics, for truth. .... as memories of the Depression faded, economists fell back in love with the old, idealized vision of an economy in which rational individuals interact in perfect markets, this time gussied up with fancy equations."

Similarly, it can be argued that traditional business and management research methods have mainly concentrated on conscious, quantifiable processes and fail to address the unconscious. Just as Krugman argues for economists to reconsider the work of Keynes and the Cambridge Circus, and accept that economic actors are not always rational, this paper argues that management research should more fully utilise the concepts of projection and 'bounded rationality' (Edwards 1954, March and Simon 1958). Taking this perspective it has to be accepted that much decision making is not entirely rational. Therefore, traditional research techniques aimed at measuring rational behaviour are of limited use in management research. What are needed are measurement methods, such as projective techniques, that work outside of 'bounded-rationality'.

This paper reviews the concept and historical development of projective techniques. It considers why, given the importance of their psychoanalytical foundations to the development of management theory, they have been generally marginalised as a research tool. In particular, the paper discusses whether such techniques offer an alternative and innovative general management research method. The paper also argues that their neglect is disappointing given the challenges the current financial and economic crises offered management research. By going beyond the fence of bounded rationality, projective techniques may enable researchers to better understand many of the factors that have been suggested as causes of the crises such as fraud, deception, greed, avarice and commercial ruthlessness. The paper concludes by discussing whether the apparent neglect of projective techniques suggests that the main challenge to academic management research, in the current volatile times, is 'herding' and that unfounded dramatic paradigm shifts are likely to be sub-optimal.

2 The Origins and History of Projective Techniques

Underlying projective techniques is the concept of 'projection' - a concept that is attributed to the work of Sigmund Freud (Breuer and Freud 1895); (also see Abt and Bellak 1959, for discussion). Projection basically relates to how unconscious and often suppressed beliefs can be transferred (projected) on to external objects. Projection can be seen as a cornerstone of much current management theory. It played an important role in Murray's identification of psychological needs (Murray 1938). In turn Murray's work provided the theoretical basis for much early management research such as achievement motivation (McClelland 1953), competency based models of management effectiveness (Boyatzis 1982) and Maslow's Hierarchy of Needs (Maslow 1943). It is still implicitly used in many areas of management, but is seldom acknowledged. For example, in operational management, office layout theory assumes that managers project their subconscious in designing their office space (bunker, open etc.).

The idea of projective techniques is usually accredited to Frank (1939) with techniques initially developed in clinical psychology, where they were used for personality assessment and psychoanalytic treatment (Bellak 1992, Graham and Lilly 1984, Kassarjian 1974). The hypothesis that "research participants project aspects of their personalities in the process of disambiguating unstructured test stimuli" was the basis for this development. A number

of different techniques were developed such as the well-known Rorschach technique or "ink-blot test" where subjects are assumed to project aspects of their own personality onto the ambiguous features of a series of pictures of inkblots.

Projective techniques provide the researcher with the tools to elicit projection and thus go beyond the fence of bounded rationality. This is because they have the ability to tap into the unconscious mental processing of individuals and can be used to get through the defensive barriers that respondents erect (Ramsey and Bond 2007, Ramsey, Ibbotson, and McCole 2006, Rogers and Beal 1958), the barriers of incorrect attribution or the barriers due to research question sensitivity (Anderson 1978, Fram and Cibotti 1991, Soley 2009).

The first use of projective techniques in management research is generally accepted to be Haire (1950). He conducted a marketing study in the United States using projective techniques and found that female consumers formed impressions about the personalities of other women based on their product purchases, which they could not, or would not, state during direct questioning. The study gave unique and valuable insights into the barriers to product acceptance among housewives and these were deemed to be so useful that the study was basically the launch pad for the use of projective techniques in marketing research. Professional marketing researchers adopted the use of projective techniques and concluded that projective techniques were far superior to other research methods because they assessed the deep-rooted motivations of consumers (Dichter 1960, Dichter 1964). Follow up studies have consistently confirmed and supported the validity of Haire's approach and this cemented their use in marketing research (Anderson 1978, Fram and Cibotti 1991). This common usage of projective techniques in marketing and advertising communications research continues to this day.

3 Overview of Projective Techniques

The Association of Qualitative Practitioners defines (AQR 2004) projective techniques as follows:

> "A wide range of tasks and games in which respondents can be asked to participate during an interview or group, designed to facilitate, extend or enhance the nature of the discussion. Some are known as 'projective' techniques, being loosely based on approaches originally taken in a psychotherapeutic setting. These rely on the idea that someone will 'project' their own (perhaps

unacceptable or shameful) feelings or beliefs onto an imaginary other person or situation."

Projective Techniques can be classified in a number of ways. Linzey's (1959) classification based on mode of response provides for five types. These are:

Association Techniques

Association techniques ask participants to respond to a stimulus with whatever association first comes to their mind. For example they may be asked "What type of car would an accountant usually drive?" This is an example of word association, which is the most common test in this category. It is a simple enabling device where respondents or research participants suggest words that they can associate, in some way, with something relevant to what is being researched.

The weakness of word association tests is that they do not provide respondents with the ability to project their subjective thoughts and perceptions on to a third person, and this may restrict their usefulness as a data elicitation technique. In addition, words can have explicit as well as ambiguous meanings, and interpretation of their meaning will be dependent on how individuals in, for example, different cultural settings interpret them. However, word associations can be extremely useful as they demand little from the subjects.

Choice Ordering Exercises

Choice ordering exercises ask respondents or research participants to arrange items in order of choice or best fit along criteria which the respondents themselves specify or which the researcher specifies as being relevant. For example in automobile research a researcher may say to respondents "Please sort these types of cars into groups of similar image". In brand image research a researcher could ask: Please place these packs of tissues (packs actually presented) in order of the masculinity of each pack from least masculine to most masculine, or, please sort these packs into groups of similar brands. This technique can allow respondents' own categorisations and understandings of a product or an issue to be described rather than the researcher asking them to discuss something along pre-determined lines. Gaining such an understanding from the respondents' point of view helps ensure that key elements of the issue being researched are not overlooked by the researcher.

Expressive Procedures

Here research participants are asked to describe something, typically visually or verbally and the process in which they do this is explored. For example if conducting employee evaluation research one may ask the respondents to "Please describe what sort of animal your regional manager would be if he were an animal" or "please describe what sort of person this company would be if it were a person". This is called personification and is a simple projective technique in which respondents are asked to imagine something inanimate, like a brand or product or concept as if it were a person. Respondents are asked to describe this person's personality, lifestyle, and demographic characteristics and may be asked to imagine where they might live what they do for a living and who their friends are.

Completion Exercises

These ask the participants in the research to complete a physical exercise like a sentence or story where the first few words have already been written. For example in organisational merger and takeover compatibility research you may want to explore the corporate culture of the takeover target by asking people in the target company to: "Please finish off this sentence 'Managers in this company are mainly'." or "Please complete the speech and thought bubbles of this person in response to the other person saying: 'So it's your annual review next week' ". Such sentence completion exercises are simple to use projective techniques. They can be seen as extensions to word association tasks but are much more structured as they require the completion of a sentence of which part is already given by the researcher.

Construction Exercises

Construction exercises ask research participants to construct an answer to an unresolved problem or question. For example in psycho-drawing participants are asked to draw something relevant to the research project. So they might for example draw a product or brand, or an experience such as a hangover. These drawings are then usually described and interpreted by the respondents themselves as the research continues. Another construction technique involves asking research participants to make a collage. Here research participants create rough collages from a selection of available magazines or other visual materials to represent something relevant to the research. This move away from the verbal is said to help access intuitive knowledge and may allow access to aspects of the topic that would otherwise remain unarticulated.

4 Administration and Analysis of Projective Techniques

Traditionally individual face-to-face or focus groups are the tried and tested methods for administering projective techniques. There is a belief that one can gain most from the techniques in a face to face situation and if the researcher presents with a warm and friendly rapport they will be best equipped to elicit the best quality information from their participants (see, for example, Will, Eadie, and Macaskill 1996). However, such an approach is resource intensive for the researcher. There is also a large requirement on the part of participants in terms of time required to be involved and this may lead to low participation rates. In a study by Ramsey, Ibbotson, and McCole (2006) they explain their use of a postal distribution method for completion of projective techniques. This was viewed as a way to be less intrusive and provide participants with the alternative to complete at a time 'convenient' to them and without the added 'peering pressure' from the researcher, anxious to record every word and body movement. They reported that from a process perspective, the distribution strategy did not present the research team, or the participants with any major problems. Participants were able to follow instructions associated with completing the projective 'tests' and no complications were apparent, with a very satisfactory response rate being achieved. More recently, Bond and Ramsey (2010)have put forward the suggestion that using ICT for the delivery of the instruments offers many opportunities for resource savings, though there are obvious risks. Delivery could range from interviewers providing respondents with instruments on a notebook computer in their presence, to completely remote delivery with no interviewer interaction using the internet. The growth of VoIP (Voice over the Internet Protocol) and video over internet together with the growth of smart-phones, that can handle video and internet connections, offers many opportunities that need to be investigated.

One of the challenges of projective techniques is the complexity of the data and the corresponding skills required of the researcher to analyse them (Burns and Lennon 1993, Seitz 2001). Responses are not easily codified and need careful evaluation by researchers who are both trained and skilled interpreters of information. Attempts at a rigorous analysis are highly resource intensive in nature. It has also been argued by some (Colwell 1990) that to enable the competent analysis of projective techniques, one should perhaps have a degree in psychology or the behavioural sciences. In terms of analysis and interpretation of projective tests, Ramsey, Ibbotson, and McCole (2006) and Bond and Ramsey (2010) explain their endeavours to establish rigour in

the interpretation and analysis of projective techniques used in their studies. They employed a systemic quasi-quantitative analytical approach using context and matrix analysis to maintain rigour and also to enable cause and effect relationships among variables to be established.

5 The Advantages of Using Projective Techniques

Projective techniques have a number of advantages over direct questioning and some of these stem from the unusualness of the techniques as presented to respondents. They can be classified as a structured-indirect research approach that is capable of uncovering the feelings, beliefs, attitudes and motivations that many people may find difficult to articulate (Webb 1992). Since questions are not presented within the usual context of a conversation, it may not be obvious to respondents what answers may be appropriate or desirable (Endres 2004). This helps reduce issues of social desirability bias and also helps the researcher to uncover inner perspectives from their subjects in a way they will feel comfortable with (Gordon and Langmaid 1988, Loudon and Della Bitta 1993).

In line with the above arguments, Fisher (1993) found that the indirect techniques associated with projective techniques can reduce social desirability bias on variables subject to social influence. Social desirability bias is the systematic error in self-reported measures that result from respondents wanting to present a socially-desirable image to others and to avoid personal embarrassment (Fisher 1993). The techniques allow respondents to feel freer about the answers they give by de-personalising those answers or allowing them to express their answers in non-threatening ways such as via pictures or stories about people other than themselves (Wood 1969, Boddy 2008). Viewed as a 'face-saving' method, projective techniques provide the defence mechanisms that enable individuals to unconsciously attribute their personality traits and impulses to others (Bond and Ramsey 2010). This frees respondents from self-censorship by removing their self-consciousness about their answers and this helps research gain more self-revealing answers from respondents.

The stimuli can range from structured (clear and definite) at one extreme, to very ambiguous (unstructured) at the other extreme. The structure of a stimulus determines the degree of choice available to the subject. A highly structured stimulus, for example a questionnaire that requires the subjects to read a list of statements and answer "true" or "false" to each, leaves

very little choice. The subject has an unambiguous choice among clear alternatives and the stimuli will probably be interpreted similarly by almost everyone who reads them. Ambiguous stimuli (with little structure), for example Rorschach inkblots, present a wide range of alternative choices and the subjects may choose their own interpretations. Semi-ambiguous pictures and sentence completion techniques represent an intermediate position on the stimulus continuum (Wagner 1995, Graham and Lilly 1984). It is assumed that the more unstructured and ambiguous a stimulus, the more the subjects will project their emotions, motives, attitudes and values.

Another advantage of using projective techniques is that they can stimulate and activate different areas of the brain than rational or direct questioning approaches to research can (Boddy 2004). The growing acceptance of left brain (rational) and right brain (emotional) thinking, reinforces the importance of including more intuitive insights that projective techniques can provide, alongside more formal management science-based research techniques (Lilienfeld, Wood, and Garb 2000).

6 Some Current Issues

Since it seems that projective techniques have an active role to play in business and management research, potential users of the techniques need to consider the research mechanisms associated with developing, implementing and analysing projective techniques.

Design

Conducting research that transcends organisational and geographic boundaries successfully requires both sensitivity and understanding to cultural, institutional and linguistic diversity, (Deacon 2000). However a lack of familiarity with stimuli or response formats creates challenges for researchers and their potential respondents. This will necessitate the ability to think creatively and be sensitive to diversity (cultural, linguistic and institutional) in designing instruments that are readily understood and devoid of bias. Schlackman (1989) has previously stated that researchers rarely explain how projectives are derived with a lack of general guidance still prevalent. The only guiding principle we have discovered for the design of the projectives is 'simplicity', (Gordon and Langmaid 1988, Catterall and Ibbotson 2000). The techniques tend to be highly specific to the research agenda and therefore cannot easily be obtained from an 'off the shelf' research handbook. It is recommended that in their construction, projective techniques should not be

over complex, dull, abstract, hard to believe, difficult to apply or irrelevant. A relatively short familiarisation with the important academic and practitioner literature should provide an experienced researcher with the theoretical and practical underpinning to successfully design, execute and analyse projective techniques in a business research project.

Reliability and validity

In any research the interpretation of the researcher is paramount where the general weakness is that if two equally competent researchers interpret the data in a 'significantly' different manner, this may call into question the reliability and validity of the technique. (MacFarlane and Tuddenham 1951). As a valid research instrument, projective techniques are, in a business and management research context, only evolving, and may subsequently be highly contested due the non-categorical and highly interpretative approach, (Thorne 1997). Indeed from a projectives perspective it is suggested that interpretations often say more about the researcher than about the psychological motivations and personality structure of the respondent (Seitz 2001).

However, projective techniques can be justified and the integrity of the data maintained when: the theoretical position is well established; there is correspondence between the research approaches/methods employed; strategies are in place to establish rigour; and an explanation is provided about the analytical lens through which the data are examined.

Ethical concerns

Research participants have voiced concerns about the ethics of using projective techniques because they could be seen as a sneaky way of getting at the truth of a situation regardless of whether the respondent wants the truth to be uncovered or not (Boddy 2005). This uneasiness about the ethics of using projective techniques to get at the 'truth' of a situation is perhaps understandable. The use of projective techniques means that the respondent cannot easily tell what is wanted or expected in their answers or how answers will be interpreted and so they cannot guard against revealing the truth about themselves by giving self-censored answers or answers that show them in a desirable light. The respondents' defences are bypassed and fundamental information about their personalities is revealed.

Whilst this uneasiness with the approach is understandable it does not stand up to close scrutiny for a number of reasons. Respondents have usually been promised anonymity in the research and have typically given their permission to be involved. What they may reveal in answering projective

questions will thus be anonymous anyway and typically reported in an aggregate fashion.

7 Projective Techniques and Management Research - a Clash of Paradigms?

The principal rationale behind projection and the associated projective techniques advocated in this paper, is that if researchers want to understand 'real' behaviour within a business and management context, they have to focus on perceptual psychological and cognitive factors that, for example, cause decision-makers to make imperfect decisions. That is how they (decision-makers) interpret new information and direct their behaviour towards the attainment of organisational goals.

It is interesting that the early work on decision making in organisations at Carnegie-Mellon University recognised the possibility of going beyond the fence of bounded rationality (March and Simon 1958, Cyert, Simon, and Trow 1956, etc.). However in operationalising the concept of unstructured decision making, empiricists adopted the then dominant positivist approach, (Mintzberg, Raisinghani, and Theoret 1976, Mason and Mitroff 1981). Thus while both standard theoretical management decision making frameworks such as Anthony's (1965) triangle and management textbooks relating to decision making (c.f. Zwass 1992, p.494) recognised the limits of bounded rationality, its implications for research were largely ignored. Even as strategic management slowly replaced strategic planning (Mintzberg 1994) the limitations of traditional quantitative and qualitative methodologies for addressing the challenges of bounded rationality were not generally recognised. Projective techniques may go some way towards offering a solution to some of the challenges due to their ability to address both the widely varying decision processes and individuality of respondents (Lilienfeld, Wood, and Garb 2000).

In a recent paper, Soley (2010) suggests reasons why projective techniques have failed to become popular in business and management research. He uses the now generally accepted conception of paradigms introduced by Kuhn (1962). Projective techniques are based on the psychoanalytical paradigm and were therefore alien to management researchers following the then, endemic positivist perspective of post war years. The technique therefore lacked institutional bases and academic champions who could develop and promote it. Further, Soley (2010) argues that projective techniques were marginalized, criticized or misunderstood by adherents of the dominant positivist paradigm, and that these criticisms were not sufficiently countered because

of the lack of champions of projective techniques.

Authors of papers in the area have found the editors and reviewers of main stream management journals are generally sceptical of the techniques. Typical of the argument used against the techniques are those of Westen, Lohr, Silk, and Gold Kerber (1990) and Yoell (1974). They have derided their scientific shortcomings, viewing them as naive and inappropriate. Further to this, projective techniques were also reported to be unreliable and lacking validity. It is only in recent years (see Soley 2010, for review) that research based on projective techniques has shown that they are much more reliable than previous critics contended, and that they exhibit greater predictive validity than many positivist measurement instruments do. At a practical level Soley (2010) suggests that projective techniques are not widely used in management research because they are not widely taught in universities, and so are not widely known about by management researchers, and are seen as being novel. Also they appear less straightforward than other more direct questioning techniques (Boddy 2008)

8 Projective Techniques: Moving Central Stage?

Recent economic events have involved widespread corporate and financial collapses due to poor corporate governance in companies across the western world (Asthana, Balsam, and Krishnan 2010). Simple neoclassical economics no longer seems adequate to describe the actions of organisations. The work of Baumol (1961),Cyert and March (1963), Marris (1964), Williamson (1964) etc. seems relevant. Once one accepts that decision makers are concerned with more than simple profit maximisation, the area seems ripe for the employment of projective techniques.

In Boddy (2011), it has been noted that these collapses are probably due in part to the unfettered greed and the single-minded pursuit of profit related bonuses by senior financial managers. Previous research (Goldman 2006, Stein 2003, Natale and Sora 2010, Clements and Washbrush 1999) had argued that such managers may have various personality disorders such as narcissism, Machiavellianism and psychopathy, and may therefore have no conscience towards, or empathy with, other stakeholders. The earlier research was handicapped by the lack of empirical data to support these hypotheses. This, perhaps, illustrates how ill-equipped much scientific management research has been to uncover the real reasons for these epoch changing events. Thus the use of 'face-saving' projective techniques should be pursued. They offer the researcher a chance to go beyond the fence of bounded rationality and start to address many of the issues that alternative theories

are beginning to raise. Projective techniques have the ability to investigate the sub-conscious beliefs and attitudes of respondents that traditional mixed methods fail to reach (Boddy 2005, Day 1989, Ramsey and Bond 2007). Projective techniques have multi-dimensional potential from a cultural perspective, not only to hear, but also to see the stories behind the participants' perceptions and experiences

9 Conclusions

In this review paper projective techniques have been introduced and discussed. The paper has shown how the philosophical basis for projective techniques is one of the underlying paradigms of management theory. The paper has also discussed the argument that projective techniques do not have as central a role in the management research toolbox as might be expected, because of the endemic nature of the positivist paradigm in the second half of the last century. As many of the challenges facing management research are due to the restrictions introduced by bounded rationality, projective techniques seem to offer a possible alternative to traditional mixed methods.

Hopefully this paper will help stimulate new thinking about management research methodology and encourage researchers to consider carefully the paradigms on which their research is based. As Savage (1954) in his seminal book on the foundations of statistics noted:

> "It is often argued academically that no science can be more secure than its foundations and that if there is controversy about the foundations , there must be even greater controversy about the higher parts."
>
> (Savage 1954, p.1).

This paper has highlighted that the psychoanalytical foundations of much management theory and its implications for management research, needs to be more openly discussed. This is especially true given the decline in influence of the positivist paradigm.

References

Abt, L. E., and L. Bellak (1959): *Projective Psychology: Clinical Approaches to the Total Personality.* New York: Grove Press.

Anderson, J. C. (1978): "The validity of Haire's shopping list projective technique," *Journal of Marketing Research*, 15, 644–649.

Anthony, R. N. (1965): *Planning and Control Systems: A Framework for Analysis*. Boston: Harvard University Press.

Asthana, S. C., S. Balsam, and J. Krishnan (2010): "Corporate governance, audit firm reputation, auditor switches, and client stock price reactions: the Andersen experience," *International Journal of Auditing*, 14, 274–293.

Baumol, W. (1961): *Economic Theory and Operations Analysis,*. Englewood Cliffs, New Jersey: Prentice Hall.

Bellak, L. (1992): "Projective techniques in the computer age," *Journal of Personality Assessment*, 58, 445–453.

Boddy, C. (2011): "The corporate psychopaths theory of the global financial crisis," *Journal of Business Ethics*, 102, 255–259.

Boddy, C. R. (2004): "Projective techniques in business research: are they useful?," in *Proceedings of the National Business Student Research Conference*. Curtin University Graduate School of Business, Perth.

——— (2005): "What do business research students think of the potential for Projective Techniques in business research? Quite a bit actually," in *Proceedings of the Academy of Marketing Conference*. Academy of Marketing, Dublin.

——— (2008): "Are Projective techniques actually projective or are market researchers wasting their time?," *Australasian Journal of Market and Social Research*, 16, 5–17.

Bond, D., and E. Ramsey (2010): "The role of information and communication technologies in using projective techniques as survey tools to meet the challenge of bounded rationality," *Qualitative Market Research: An International Journal*, 13, 430–440.

Boyatzis, R. (1982): *The Competent Manager: A Model for Effective Performance*. New York: Wiley.

Breuer, J., and S. Freud (1895): *Studien ber hysteria (Studies in Hysteria)*. Vienna: GW.

Burns, L., and S. Lennon (1993): "Social perception: methods for measuring our perception of others," *International Textile and Apparel Association Special Publication*, 5, 153–159.

Catterall, M., and P. Ibbotson (2000): "Using projective techniques in education research," *British Educational Research Journal*, 26, 245–256.

Clements, C., and J. B. Washbrush (1999): "The two faces of leadership: considering the dark side of leader-follower dynamics," *Journal of Workplace Learning*, 11, 170–176.

Colwell, J. (1990): "Qualitative market research: a conceptual analysis and review of practitioner criteria," *Journal of Market Research Society*, 32, 13–36.

Cyert, R., and J. March (1963): *A Behavioural Theory of the Firm,*. Englewood Cliffs, New Jersey: Prentice Hall.

Cyert, R. M., H. Simon, and D. Trow (1956): "Observation of a business decision," *Journal of Business*, 29, 237–248.

Day, G. (1989): "Deciding how to compete," *Strategy and Leadership*, 17, 18–23.

Deacon, S. (2000): "Creativity within qualitative research on families: new ideas forold methods," *The Qualitative Report*, 4, online.

Dichter, E. (1960): *The Strategy of Desire,*. London: TV Boardman & Co.

——— (1964): *Handbook of Consumer Motivations The Psychology of the World of Objects,*. London:McGraw-Hill.

Edwards, W. (1954): "The theory of decision-making," *Psychological Bulletin*, 51, 380–417.

Endres, J. (2004): "The language of the psychopath: characteristics of prisoners' performance in a sentence completion test," *Criminal Behaviour and Mental Health*, 14, 214–226.

Fisher, R. J. (1993): "Social desirability bias and the validity of indirect questioning," *Journal of Consumer Research*, 20, 303–315.

Fram, E. H., and E. Cibotti (1991): "The shopping list studies and projective techniques: A 40-Year View," *Marketing Research*, 3, 14–22.

Frank, L. (1939): "Projective Methods for the Study of Personality," *Journal of Psychology*, 8, 389–413.

Goldman, A. (2006): "High toxicity leadership: borderline personality disorder and the dysfunctional organization," *Journal of Managerial Psychology*, 21, 733–746.

Gordon, W., and R. Langmaid (1988): *Qualitative Market Research. A Practitioner's and Buyer's Guide*. Aldershot, Gower.

Graham, J., and R. Lilly (1984): *Psychological Testing*. Englewood Cliffs, New Jersey: Prentice-Hall.

Haire, M. (1950): "Projective techniques in marketing research," *Journal of Marketing Research*, 14, 649–656.

Kassarjian, H. (1974): "Projective Methods," in *Handbook of Marketing Research*, ed. by R. Ferber. New York: McGraw-Hill.

Krugman, P. (2009): "How did Economists get it so Wrong?," New York Times September 2nd.

Kuhn, T. (1962): *The Structure of Scientific Revolutions,*. Chicago: University of Chicago Press.

Lee, B., and C. Cassell (eds.) (2010): *Challenges and Controversies in Management Research*. Abingdon, Oxon: Routeledge.

Lilienfeld, S., J. Wood, and H. Garb (2000): "The scientific status of projective techniques," *Psychological Science in the Public Interest*, 1, 27–66.

Linzey, G. (1959): "On the classification of projective techniques," *Psychological Bulletin*, 56, 158–168.

Loudon, D., and A. Della Bitta (1993): *Consumer Behaviour, Concepts and Applications*. New York: McGraw-Hill, 4 edn.

MacFarlane, J., and R. Tuddenham (1951): "Problems in the validation of projective techniques," in *An Introduction to Projectives*, ed. by H. Anderson, and G. Anderson. Englewood Cliffs, New Jersey: Prentice-Hall.

March, J., and H. Simon (1958): *Organisations*. New York: John Wiley and Sons.

Marris, R. (1964): *The Economic Behaviour of Managerial Capitalism*. London: Macmillan.

Maslow, A. (1943): "A Theory of Human Motivation," *Psychological Review*, 50, 370–396.

Mason, R., and I. Mitroff (1981): *Challenging Strategic Planning Assumptions*. New York: John Wiley and Sons.

McClelland, D. (1953): *The Achievement Motive*. New York: Appleton-Century-Crofts.

Mintzberg, H. (1994): *The Rise and Fall of Strategic Planning: Reconceiving the Roles for Planning, Plans, Planners*. New York: Free Press.

Mintzberg, H., D. Raisinghani, and A. Theoret (1976): "The structure of unstructured decision-making," *Administrative Science Quarterly*, 21, 39–58.

Murray, H. A. (1938): *Explorations in Personality*. New York: Oxford University Press.

Natale, S., and S. Sora (2010): "Ethics in strategic thinking: business processes and the global market collapse," *Journal of Business Ethics*, 94, 309–316.

Ramsey, E., and D. Bond (2007): "Evaluating public policy formation and support mechanisms for technological innovation," *International Review of Applied Economics*, 21, 403–418.

Ramsey, E., P. Ibbotson, and P. McCole (2006): "Application of projective techniques in an e-business research context: a response to Projective Techniques in market research - valueless subjectivity or insightful reality?," *International Journal of Market Research*, 48, 551–573.

Rogers, E., and G. Beal (1958): "Projective techniques in interviewing farmers," *The Journal of Marketing*, 23, 177–183.

Savage, L. (1954): *The Foundations of Statistics*. London: John Wiley and Sons.

Schlackman, B. (1989), i. . (1989): "Projective tests and enabling techniques for use in market research," in *Qualitative research in action*, ed. by S. Robson, and A. Foster, pp. 58–75. London: Edward Arnold.

Seitz, J. (2001): "A cognitive perceptual analysis of projective tests in children," *Perceptual Motor Skills*, 93, 505–522.

Soley, L. (2009): "Reassessing projective techniques," in *American Academy of Advertising Conference Proceedings*, pp. 70–72.

——— (2010): "Projective techniques in US marketing and management research: the influence of the achievement motive," *Qualitative Market Research: An International Journal*, 13, 334–353.

Stein, M. (2003): "Unbounded irrationality: risk and organizational narcissism at long term capital management," *Human Relations*, 56, 523–540.

Thorne, S. (1997): "The art (and science) of critiquing qualitative research," in *Completing a qualitative project: details and dialogue*, ed. by J. Morse, pp. 117–132. Thousand Oaks. CA: Sage.

Thorpe, R., and P. Ellwood (2010): "Positioning Current UK Management Research," in *Challenges and Controversies in Management Research*, ed. by B. Lee, and C. Cassell. Abingdon, Oxon: Routledge.

Wagner, E. E. (1995): "A logical analysis of projective techniques based on independence of items and latitude or response," *Perceptual and Motor Skills*, 81, 868–870.

Webb, J. (1992): *Understanding and designing marketing research.* London: Academic Press.

Wensley, R. (2010): "Seeking Relevance in Management Research," in *Challenges and Controversies in Management Research*, ed. by B. Lee, and C. Cassell. Abingdon, Oxon: Routledge.

Westen, D., K. Lohr, L. Silk, and K. Gold Kerber (1990): "Object relations and social construction in borderlines, major depressives and normals: athematic apperception test analysis," *Psychological Assessment*, 2, 355–364.

Will, O., V., D. Eadie, and S. Macaskill (1996): "Projective and enabling techniques explored," *Marketing Intelligence and Planning*, 14, 38–44.

Williamson, O. (1964): *The Economics of Discretionary Behaviour, Managerial Objectives in a Theory of the Firm,*. Englewood Cliffs, New Jersey: Prentice Hall.

Wood, F. (1969): "An investigation of methods of presenting incomplete sentence stimuli," *Journal of Abnormal Psychology*, 74(1), 71–74.

Yoell, W. (1974): "The fallacy of projective techniques," *Journal of Advertising*, pp. 33–35.

Zwass, V. (1992): *Management Information Systems,*. Dubuque, Wm.C. Brown.