A Critical Realism Methodological Framework for Undertaking Conceptual and/or Empirical Research: The CER-model

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- Work in progress -

Abstract:

Over the years marketing scholars have repeatedly requested more conceptual work to the field of marketing. Despite these various calls conceptual contributions within the discipline has been declining. This paper argues that a vital reason for the missing conceptual contributions interlinks with a lack of methodological frameworks guiding and accrediting the creation of conceptual scientific knowledge. The paper offers an extensive research process framework – the CER model. The novel contribution of this framework is that it insists on giving equal "academic" weight to both conceptual and/or empirical based research paths. The CER model builds on four premises: 'differentiated time perspectives', 'path dependency', 'eclectic approach', 'theoretical/conceptual orientation' and consists of thee embedded layers – 'ultimate presumptions', 'abductive logic' and 'research design(s)'. And it explains and guides the non-liner, interactive, complex, and creative process it is to create "real world" marketing research within a critical realism paradigmatic position.

Keywords: Conceptual research methodology, research methodology, production of new knowledge, methodological framework, scientific method, marketing research, scientific process

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Introduction:

The marketing discipline has for some time been calling for more conceptual or theoretical marketing research (Kerin, 1988, MacInnis, 2011; Yadav, 2010, Webster, 2005). Conceptual papers not only provide new ideas but are disproportionately more influential (e.g. in terms of citations and scientific awards) than empirical papers. However the proportion of papers in top marketing journals that are purely conceptual is declining and is presently at less than 15% (Yadav 2010).

It is suggested that the reasons for this decline is due to the complexity of evaluation criteria of conceptual contributions (Yadav, 2010). Stewart and Zinkhan (2006) find that it is more difficult to get conceptual work published. Other researchers argue that the problem relates to an inadequate mental model of editors and reviewers who stipulate that "theory is crafted around data". Essentially, this implies that knowledge production has to be intertwined with empirical findings (Markus and Saunders, 2007; Sutton and Staw, 1995). However in marketing, there is a often a distinction between empirical and theoretical (or conceptual) work with a number of journals explicitly classifying their published papers as being *either* empirical *or* conceptual (Elder and Paul, 2009). The implication may well be a surplus of papers being classed as empirical and/or there being a focus on the empirical at the expense of the conceptual.

The paper argues that underpinning these issues is a lack of methodology for conceptual research. In the empirical research context, the methodological literature is substantial, addressing research design, process and analysis. In contrast in a conceptual research context, there is little methodological direction nor is there a substantial literature addressing the interplay between conceptual and empirical research (Borg, 2012).

This paper addresses this gap. A model is presented that considers the production of knowledge in process terms with the processes of both empirical and conceptual research paths as well as the interconnections between them central. The model is constructed within a critical realism paradigm and is intended for researchers with this, or related, paradigmatic positions. In this manner, the paper contributes to the IMP literature as many papers in this tradition are conceptual in nature and positioned within the scientific philosophical stance of critical realism. Hence it contributes to the needed methodological discourse within IMP (Easton, 2002).

The remainder of the paper is organized as follows: the first section links to the notion of undertaking research, more specifically, it reflects on the correlation between the craftsmanship of scientific research and the production of new scientific knowledge. The aim of this section is to build credibility to a central contention of this paper, namely, that a reason for the decline of conceptual knowledge production in marketing (despite many calls) is partly due to lack of a methodological framework supporting this kind of research. The second part of the paper presents the premises and building blocks of the CER framework. Hereafter the CER framework itself is

presented. Finally, the paper concludes with future research perspectives and implications of the framework for researchers and research students within the field of marketing.

The craftsmanship of scientific research and the production of new knowledge

Work considering how researchers learn the "craft" of research (e.g. Petre and Rugg on how to get a PhD) indicates the nature of the emerging researcher is based on early experiences and the unfolding process of researching and that it includes a researcher's mental model on how to create new knowledge. Mental models can be defined as "deeply ingrained assumptions, generalizations, or even pictures or images that influence how we understand the world and how we take action" (Senge et al. 2008, p. 8). This is the context in which the *creative activities* (Myers 2009) that comprise research occur. Arguably all humans do research in that they attempt to understand, explain and predict the world that we live in (Okasha 2002).

However, what distinguishes science from the wider community's attempts to explain the world scientific researchers' methodologies. This "goes far beyond simple description, common sense or anecdote" (Pole and Lampard 2002, p. 2) and involves systematic collection and interpretation of information (Saunders *et al*. (2009) through time, involving the continuing generation of theories, models, concepts and categories (Gummesson 1991). This is combined with what Robson (2009) calls the *scientific attitude,* i.e. that research is carried out systematically, sceptically and ethically. Systematic research involves the researcher reflecting upon what, where, how and why the research is done in a particular manner. Scepticism involves subjecting results must to scrutiny and possible disconfirmation, and ethicality means that the researcher should follow some code of conduct, which protects the interests of people participating in the research. This discussion highlights three components of a (the) scientific method: a research process which involves is producing and shaping knowledge in a creative manner; the new knowledge produced which might be in the form of frameworks, theories, models, concepts and/or categories); and evaluation of the quality of the knowledge produced (sometimes considered in terms of the the truthfulness of the research).

This paper argues that a workable (and usable) model of research method must include these elements. (Space limitations dictate that the focus is on the first two components.) In addition, it is argued that there is need for consideration of research method in terms of process where initial conditions/early experiences shape a researcher's mental model of craftsmanship of scientific research. This is then the context in which subsequent experiences and outcomes are evaluated. If as asserted in the introduction of this paper, little or no methodology/training exists that explicitly encompasses conceptual research or the interplay between conceptual and empirical research (Borg, 2012), then a context that considers primarily empirical research is established and built upon. To address this, a model accessible to early career researchers/research students is needed such that they will build processes whereby conceptual methods are grown and used and conceptual knowledge is produced.

Premises and building blocks of the CER framework

At the heart of the CER model are four interrelated premises that reflect the craftsmanship process discussed above:: (1) differentiated time perspectives, (2) path dependency, (3) eclectic approach, (4) theoretical/conceptual orientation.

Differentiated time perspectives are at the heart of any process-based model. From a research process perspective this means that there is recognition that can be considered as singular, i.e. one single research project which has a distinct beginning and ending, but which occurs through time. This can also conceptualised as part of a greater process, i.e. a single research project/paper can form part of larger whole of a multi-component project and/or a research programme occurring over a number of years, as might be the case for academic researcher.

Path dependency is a central component of complexity theory. Simply stated, it highlights that present and future possibilities are limited by the past, i.e. history matters (Wilkinson and Young 2002). This extends the idea of differentiated time perspectives where past single events and larger processes extending over time determine what is possible. One way this can be envisaged is in terms of learning. Ely *et al*. (1991, p. 47) consider this in terms of doing qualitative research: "We come to qualitative research with whatever understanding of analysis we bring from previous work, the conventions of our respective disciplines and professions, the advice of our mentors and the models we have internalized from whatever we have read". We argue that this time and process-dependent view is equally valuable in other research contexts, including the development of conceptual understanding and knowledge. This is supported by writers such as Darden (1991) who suggests that in general knowledge development is a gradual process in which key building blocks are added over a long period of time. This is reflected in the notion of a research method of systematic combining which has been described as "a nonlinear, path-dependent process" (Dubois and Gadde 2002, p. 556).

Particularly relevant to the model presented here, the notion of path dependence also has been deployed in the economic history and historical sociology literatures to explain sequences of events related mainly to technological and institutional evolution. Araujo and Harrison (2000) adopt a notion of path-dependence that subdivides sequences of events into self-reinforcing and reactive sequences. Dosi (1988) suggests that path dependence in terms of paradigms is due to the base of common knowledge that is developed within a certain area. In line with this, we adopt a notion of path dependence in a research context that highlights how specific historical events can contribute to their reproduction or transformation, i.e. that that new knowledge is partly shaped by former knowledge.

An 'eclectic approach' is concerned deriving ideas, style, or taste from a broad and diverse range of sources. In a methodological context, this is in line with the informed eclecticism research paradigm, which is considered the paradigm for 21st century marketing research industry (Barker *et al*., 2001). Robson (2009) refers to an eclectic approach as taking aspects from a broad range of

theoretical positions. Barker *et al.* (2001) define research eclecticism as applying combinations of theories, models, concepts, and metaphors. This breadth is coupled with knowledge and appreciation of how different disciplines, theories, models and metaphors can bring different perspectives and thus greater insight to marketing issues. - particularly appropriate in conceptual knowledge production processes.

A theoretical/conceptual orientation has obvious relevance. This has been recognized by authors such as MacInnis (2004) and Yadav (2010) who categorize marketing literature in terms of its conceptual content (C-present or C-absent) and empirical content (E-present or E-absent). C-absent/E-present papers are characterized as "data-driven." A more likely combination is C-present/E-present, i.e. theory testing papers. C-absent/E-absence papers that are labelled "descriptive" (it is argued though we are less certain that description has no role to play) have little or no value for the marketing discipline. Importantly this categorization recognizes C-present/E-absent - conceptual contributions that focus on theoretical development without empirical data. However few marketing researchers, including those focussing on methodology, consider the notion that scientific research might not only consist of a purely empirical research process (Borg 2012). However the tendency for research in marketing to be "data centred" has been noted by others. In particular Arndt (1985) notes the "colonisation of empiricism" and the need to break free from it.

These four premises underpin the research process model presented in the following section (Figure 1).

The Key Research Process Model – The CER Model

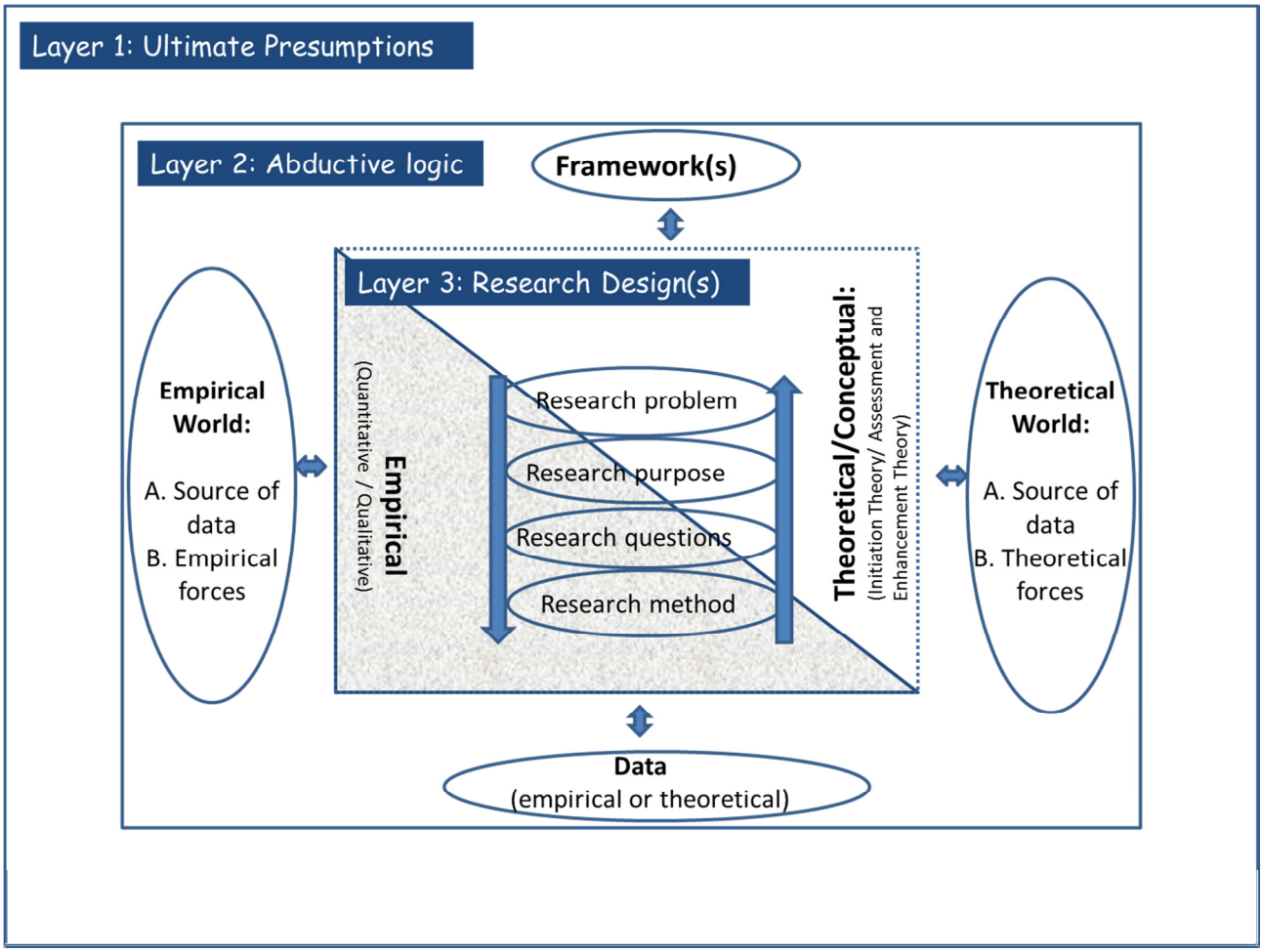
The CER model presented in Figure 1 is grounded in wide-ranging extant theoretical-methodological literature including: Systematic combining philosophy by Dubois and Gadde (2002), the ultimate presumptions, and the connection between philosophy of science and methodology choice by Arbnor and Bjerke (2009), Hunt's (2011) inductive realist model of theory status, Yadav's (2010) theory development strategies, Jensen's (1995) split between practical and theoretical research problems, Flick (2009) and Punch's (1998) theory on high-quality research questions, Freytag and Philipsen's (2010) perception of the purpose of theoretical construction, Denzin's (1988) four types of triangulation, and Andersen's (2003) research purpose classifications and science productions elements.

In the CER model, the way these are combined results in a view of the research process that contrasts with the linear frameworks presented, e.g. Robson (2009, p. 82), Maxwell (1996, p. 5), and Booth *et al.* (2003, p. 58). These frameworks present linear and empirically oriented processes– theory and purposes lead to research questions, which in turn lead to methods and sampling. The CER model explicitly views craftsmanship of research as a non-linear process. The research process is depicted as an incremental abductive, intertwined, creative process which explicitly encompasses

conceptual and empirical research; and it argues that both require the researcher to reflect on research problems, purposes, questions, and methods.

As presented in Figure 1, the model consists of three interacting layers: 'Ultimate presumptions', 'Abductive logic', and 'Research design(s)'. The research process involves reflections and actions within each and these are linked to each other.

Figure 1: The Key Research Process Model – The CER Model



Layer 1: Ultimate Presumptions

The outer layer in Figure 1 represents the foundation of a research process. It illustrates the notion that behind or underneath all conducted research are some ultimate presumptions stored in the mind of the researcher. These assumptions influence a person's stance within the philosophy of science and the chosen paradigm within which a person is positioned. Further, they guide the method(s)

used to create knowledge (Arbnor and Bjerke, 2009). Ultimate presumptions might be explained as "a fundamental belief of reality and life, which cannot be empirically or logically tested, but which influences and steers each and every one of us when acting as knowledge creators" (Arbnor and Bjerke, 2009, p. 427).

Ultimate presumptions impact on the researcher's research design(s). Lundgren (1995, p. 70) addresses the issue in this manner: "the underlying frame of reference does not only affect what we will see, it also indirectly determines the results". Similarly, the importance and impact of the ultimate presumptions in a research process is captured in a quote by Bateson (1972, p. 314), saying that: "the living man is thus bound within a net of epistemological and ontological premises which – regardless of ultimate truth or falsity – becomes partially self-validating for him".

This highlights that ultimate presumptions impact upon the second and third layers of the figure. In other words, these presumptions impact upon how the researcher: sees, understands and approaches the empirical and theoretical worlds; how they choose to collect and understand data, and how they choose to develop their framework(s). As depicted this is an evolving process, ultimate presumptions are in turn influenced by these choices – in line with the premises of differentiated time perspective and path dependency. It has however been argued that such evolution is not inevitable and is never rapid. For example Arbnor and Bjerke (2009, p. 11) suggest that "ultimate presumptions seldom change, and if they do, this normally takes place as gradual modification of a paradigm over a longer time". Ultimate presumptions are often discussed in terms of eptistomological stance, which also are relatively fixed. It is beyond the scope of this paper to provide a comprehensive discussion of this, we do however note (as indicated in the introduction) that our model may have greater resonance and usability for those with epistemological orientation towards the complex, i.e. critical realists who believe that primarily, explanation lies in the interconnections between processes and that there is the need to embrace conceptual and empirical methods that explore these.

Layer 2: Abductive Logic

The generation of knowledge, regardless of whether it is empirical or conceptual in nature, might be explained according to the mentioned definition by Myers (2009) - as a *creative activity*. This creative perception of research is likewise embraced by systematic combining. Dubois and Gadde (2002, p. 558) see this as creative problem solving and use a "jigsaw puzzle" analogy. At the beginning of a research process, few pieces seem to fit, but patterns become progressively clearer. Additionally, they note that pieces from many jigsaw puzzles tend to show up and call for *selection* during the research process. A researcher is confronted with many selection schisms in a research process, i.e. of theory, propositions, hypotheses, interviewees when collecting empirical data, co-authors, journals to approach, conferences etc. As discussed, path dependence and differentiated time highlight that these selections influence a researcher's subsequent research processes.

Essentially, these processes are linked by an over-arching abductive logic as indicated in the model: Abduction can be envisaged as the systematised creativity or intuition in research to develop "new" knowledge (Andreewsky and Bourcier, 2000; Kirkeby, 1990; Taylor *et al.*, 2002). It is said that creativity is necessary to break out of the limitations of deduction and induction, which function (instead) to establish relations between already-known constructs (Kirkeby, 1990). Instead, advances in science are often achieved through intuitive leaps that come forth as a whole (Taylor *et al.*, 2002). This often emerges from an unexpected observation that cannot be explained using an established theory (Alvesson and Sköldberg, 1994; Andreewsky and Bourcier, 2000; Dubois and Gadde, 2002).

This 'abductive logic' layer of the CER model seeks to capture and explain this creative element. It draws on systematic combining processes from Dubois and Gadde (2002) and processes of deepening and/or creative explanation it can facilitate (Danermark et al 2002) in both empirical as well as conceptual research. The CER model suggests abduction in that researchers continuously move between the four research elements depicted in layer 2 – 'framework(s)', 'empirical world', 'theoretical world' and 'data' (explained in greater detail shortly). This corresponds to the abductive logic of systematic combining which sees the research process as an intertwined process between framework, data sources and analysis (Dubois and Gadde, 2002, p. 556).

The CER model extends notions of abductive logic. Within the non-linear movements between the various research elements to create new knowledge, matching mechanisms operate. These involve a 'matching process' and a 'direction and redirection process' in which one's own theory (framework) is matched the other elements of the layer (Dubois and Gadde 2002). However, the CER model extends this to include the guidance of not only the empirical world, but also the theoretical world A meta-analysis is an example of a research process that builds theory based on data solely from published theoretical work (i.e. the theoretical world). This extends the interrelated research elements beyond the case research orientation of Dubois and Gadde's original model to include conceptual and (many kinds of) empirical research. The four research elements 'framework(s)', 'the theoretical world', the 'empirical world' and 'data' - are explained in greater detail in the following sections.

The Framework(s)

The framework(s) element of the CER model captures the notion that new knowledge, i.e. theory, models or concepts, is successively reoriented and refined in the empirical and/or conceptual research process. Dubois and Gadde (2002, p. 555) claim that concepts constitute "input as well as output" in an abductive study. However in contrast to Dubois and Gadde's original framework, the CER model incorporates multiple 'frameworks. These multiple frameworks or the research output notion of the CER model is in line with Freytag and Philipsen (2010) who argue that the aim of marketing is to build theory that can be helpful for practitioners, politicians, researchers and others in understanding marketing phenomena. Furthermore, these researchers argue that theoretical constructions, such as models and frameworks, should be helpful in identifying problems, raising

questions, showing possible pathways for identifying solutions, and questioning solutions (Freytag and Philipsen, 2010). Finally, the frameworks or research output *per se* may take many forms or shapes, i.e. theories, models, concepts and categories (Gummesson, 1991).

Data

The CER model argues that similar to the *evolving* framework notion described in the above section, data is also *evolving* during the research process. Hence, more and more data is available and selected during the processes of research. This impacts on nature and quality of knowledge generated, which emerges from selected data.

What constitutes "data" has been characterised/classified in a number of ways e.g. primary-secondary (Saunders *et al*. 2009) and for empirical data as quantitative-qualitative (Robson 2009). Further sub-categories of these are also suggested. Of particular interest are secondary data typologies (e.g. Saunders *et al.'s* 2009). These provide support for our assertion that there is both 'theoretical data' (observations derived from the theoretical world, from previously published material accredited or validated by the theoretical community) and 'empirical data' (observations derived from the empirical world). However we recognize that 'secondary data' includes *both* 'theoretical data' (i.e. a published theory in a journal) and 'empirical data' (i.e. a company's annual report). This is important in that it recognizes that both empirical and theoretical data are information used in the creation of new knowledge. Combined with processes of abduction described previously, this allows to include conceptual development in the process of science – in contrast to those who suggest that being "scientific is based on an explicit relation between ideas and empirical observation" (Arbnor and Bjerke 2009, p. 48).

The Empirical World and the Theoretical World

Observation is intended to align reality and ideas about reality. And, the nature and "knowability" of reality is a key differentiator in epistemological stances. The abductive approach of Dubois and Gadde (2002, p. 554) is grounded in critical realism, which seeks to use empirical methods to better understand "what is going on in reality". The CER model extends consideration of this, recognizing there are, at least, three types of reality that affect, and are affected by, the generation of new knowledge. These include: A. the subjective reality of the researcher, linked to the ultimate presumptions of the researcher undertaking the research (this is considered in layer 1). B. the empirical reality (the empirical world), although critical realism recognized this 'real' world can never be fully grasped or disclosed by the researcher; in other words, there is a "real" world to discover even though it is only imperfectly apprehensible (Guba and Lincoln, 1994; Healy and Perry, 2000); and C. the theoretical reality (the theoretical world).

In line with Figure 1 layer 2, 'Hunt's (2011, p.164) inductive realist model of theory status', distinguishes the theoretical world from the empirical world. In Hunt's model, the theoretical world, which consists of scientists and their communities, will evaluate and judge proposed theories, and accept the theory if it is the best theory available to explain and predict the phenomena in the

theory's domain relating to the empirical world. According to Hunt (2011 p. 165), the accepted theory will be recommended by the theoretical world as the most appropriate for guiding interventions (actions) in the empirical world. However, the theoretical world (in line with the critical realist stance) knows that all theory is fallible and thus only represents approximate truths about the empirical world. And, history tells us that scientific consensus very fallible and is regularly overturned. Multiple realities are also reflected in published scientific marketing papers, where researchers frequently distinguish between the *implications* of their research for (i) "practitioners" alias managers or management or other stakeholders (from the empirical world) and for (ii) other researchers or scientists "belonging" to the theoretical world. Finally, this distinction is, in a way, also evident in the on-going debate in marketing about whether research should be undertaken for academics (the theoretical world) or for businesses (the empirical world), see e.g. (Ellson, 2009; Geuens, 2010; Reibenstein *et al*., 2009).

As visualized in Figure 1, the CER model argues that both the 'empirical world' and the 'theoretical world' are sources for empirical and theoretical data. The model also argues that forces from the two worlds potentially have the power to influence the research process (despite considerable effort, we have not been able to find this explicitly mentioned in any other methodological research process framework). Theoretical forces (i.e. from the theoretical world) may be manifested in individuals, groups, norms, standards or other factors. Kuhn (1962) suggests that knowledge output of a discipline results from a complex interplay of many individual, group, and institutional factors. The factors mentioned by Kuhn overlap with the theoretical forces notion as suggested in the CER model. These underlying forces are multiple and diverse in nature, perhaps coming from various conference presentations, from colleagues within the research instruction where the researcher is located, from co-authors or supervisors, from the review processes, from methodological guidelines, from courses, or from norms "accepted theoretical standards" within a scientific community. The latter is in alignment with Hanson's (1958) claim, namely that extant theories create path dependencies in the pursuit of knowledge in a scientific community.

The CER model indicates that the theoretical world interacts with the 'empirical world'. The latter involves two sub-elements. It acts as a source of data. And, empirical forces such as political or legal institutuions impact on the production of knowledge, or influence from experts or firms from the empirical world on one's work, or impact from grant or funding institutions have the potential to impact the production of knowledge. Other empirical forces which have the potential to greatly influence new knowledge production come from incidences, constraints or learning linked to empirical findings in the empirical world. The potential of these forces is considered in the introductory part of Dubois and Gadde's (2002, p. 553) paper where they describe how the research domain of their research was completely altered due to unexpected empirical incidences (empirical forces).

Layer 3: Research Design(s)

The third layer in Figure 1 is concerned with 'research design(s)'. It shows it to be influenced by and interacting with not only with the researcher's ultimate presumptions but also the adaptive logic philosophy and processes. Figure 1 indicates that this is case regardless of whether the researcher is seeking to make theoretical or empirical contributions. The four interrelated research design elements indicated are the 'research problem', 'research purpose', 'research questions', and 'research method'. This research design process is perhaps obvious in an empirical research context, but building on the original framework by Darden (1991), Yadav (2010) states that a similar process seems to be occurring in a theoretical research process context. Even though the four elements (research problem, research purpose, research questions, and research method) are traditionally taught as a linear process (Flick, 2006), the discussion thus far highlights that good research rarely moves smoothly from research problem to research output (as indicated by Silverman 2010). Instead, it is claimed that the research design process will proceed in accordance with abductive processes.

The Research Problem

Jensen (1995) distinguishes between practical and theoretical research problems. According to the researcher, practical problems (links to the empirical world) occur when it is possible to imagine a situation that is better than the present. Practical problems typically have a normative dimension. The solution of the problem, according to Jensen (1995), has two steps: to find possible routes to the new situation, and to implement the solution. A practical problem is not solved before something is done or is changed. A theoretical problem (linking to the theoretical world), on the other hand, is based on a pre-existing theory investigation. A theoretical problem occurs when there is evidence that something is wrong or missing with the existing theory or there is a gap in existing theory.

Whether it is possible to make a distinction between a practical and theoretical problem is debatable. For example, the stance taken by Booth *et al*. (2003) is that behind every theoretical research problem there should be a practical problem. Other researchers, like Myers (2009), suggest that a researcher should identify a research problem, a gap in an existing research domain, which is relevant to the body of knowledge in a particular discipline and contribute with new knowledge to that particular discipline and the particular gap. This implies that it is possible to identify a purely theoretical problem. Marshall and Rossman (1989) widen the view of the research problem element, stating that the research questions could come from (a) current practical business problems, (b) a theoretical problem or (c) your own intuitive hunches. Finally, the philosopher Murray Davis (1971) argues that: "all interesting theories, at least all interesting social theories, … constitute an attack on a taken for granted world of their audience". Furthermore he argues: "the 'taken-for granted world' includes not only this theoretical dimension but also a practical dimension as well. A theory will be considered truly interesting only if it has repercussions on both levels" (ibid, p. 311).

In relation to this discussion, the CER model suggests that a research problem can be either theoretically and/or practically driven and can contribute to one or both worlds. This is illustrated in Figure 2.

Figure 2: The Research Design Model

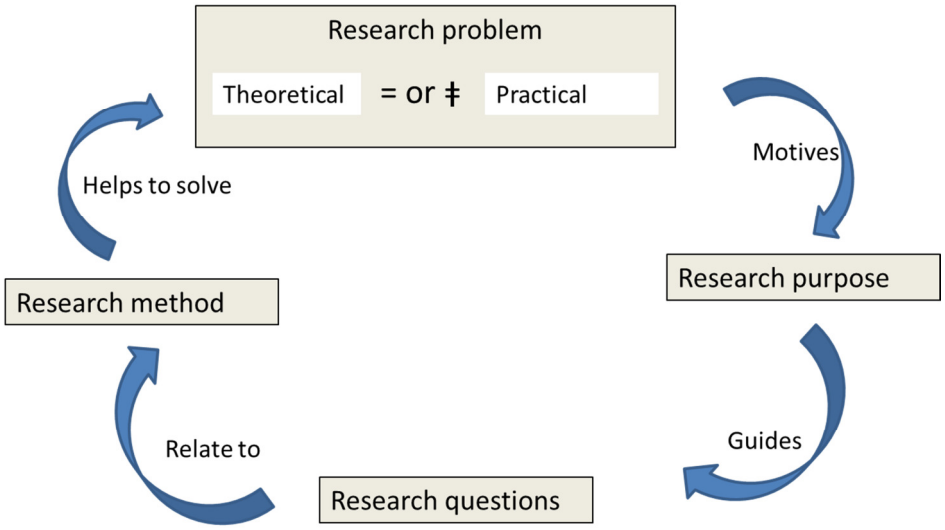


Figure 2 considers the inner layer of figure 1 in greater depth; it shows that a research design might build on either a theoretical and/or practical problem. These may or may not be overlapping. Further, Figure 2 suggests that the research problem provides the motive to write the research purpose, which guides the research questions. These in turn relate to the research method, which leads to the findings, which then again help to solve the research problem. It is noted that the cycle may well not be completed in a straightforward manner; instead it is likely to proceed in a more abductive manner, i.e. intertwining with elements from layers 1 and 2.

The Research Purpose

The second element in the third layer in Figure 1 involves the 'research purpose'. The CER model adopts Andersen's (2003) theory on the subject. He suggests that a research effort may serve any one out of seven different purposes. Effort with a (1) descriptive intent may attempt to describe how several variables are interconnected. Effort with (2) an explorative aim investigates relations and/or phenomena about which there is little extant knowledge. As such, they identify problems or areas to be further inspected. Projects with a (3) diagnostic purpose are linked to the explorative aim, as they take their point of departure based on a series of pre-defined symptoms, the impetuses for which they then seek to delineate and prioritise. Studies with an (4) explanatory objective seek to elucidate the background for certain observed phenomena. In other words, research efforts of this type see to generalise. If a researcher is seeking to (5) create understandings, then he or she tries to go behind certain phenomena so as to uncover new ways of viewing and understanding the phenomena. Research effort with a (6) normative intent focuses on pinpointing a range of concrete solutions to

an identified problem. The final research effort which focuses on (7) intervention, such as action research, assumes that the researcher participates actively in the problem-solving process, so as to be able to report on this process. The CER model argues that any of the 7 research purposes might be valid in a research process.

The Research Questions

It is argued by Flick (2009) that researchers often lack either the specific research questions or reflections about the formulation process of their research questions. However, essentials in formulating high-quality research questions, according to Flick (2009) and Punch (1998), involve the following:

(A) Formulation of the questions occurs in several stages of the research process and the questions will transform during the process in accordance to new knowledge obtained;

(B) A research project often consists of several questions, as such they organise the project and give it directions and coherence;

(C) The questions point to the methods and data that will be needed. According to Myers (2009), "what, why, how and when" stated research questions are typically pointing towards qualitative research. Robson (2002) suggests that "what" questions in the sense of "what is going on" indicate a more qualitative approach and "how and why" questions could be both qualitative and quantitative, but often indicate qualitative approaches.

D) They provide a framework when writing up the research.

(E) They should link to the research problem, the research purpose and have an impact on the research output.

The Research Method

The CER research process model offers an overall methodological framework, which underlines that the nature of a research process might be empirical or theoretical or both. As such it highlights some important overlaps in these perspectives. However, as noted in Figure 1, the model does provide some reflections with respect to research methods. First, both theoretical research methods (initiation theory or theory assessment and enhancement) as well as empirical research methods (both quantitative and qualitative) are in line with the model. Second, a researcher's choice of research method should align with the researcher's set of ultimate presumptions. Third, the model also implies that all research methods involve an abductive processes and this may involve interaction with the empirical and/or theoretical world. Further, it accepts that a matching process and direction and redirection process exist in the production of new knowledge (frameworks). Fourth, the model suggests that all research methods should build on reflections related to research problem, research purpose and research questions.

The CER model does not judge which research method is best, it simply acknowledges that many different research paths exist and are equally acceptable as pathways in the production of new knowledge. The research process is presented as a creative intervened process, with many potential discourses, which might potentially alter during the process. This idea resembles Gordon's (1999)

'prosearch' notion, which is multi-disciplinary, bringing different perspectives and interpretations to research issues, data, and suggests a "bricolage" in methodology; thus, using whatever methods are available and providing insight (Barker *et al*., 2001, p. 10). Furthermore, the researchers claim that prosearch is about a culture that is not afraid to generate new ideas, and reward those who can contemplate and cope with uncertainty and ambiguity...it is about creative productivity" (Barker *et al*. 2001, p. 11).

Another argument for the acceptance of bricolage in methodology is presented in a paper on how to judge the quality of qualitative research within a critical realist paradigm (Healy and Perry 2000). They argue that triangulation is one way to increase the quality of the work. Denzin (1988) makes the important distinction between four types of triangulation: (1) Data triangulation: which means using more than one method of data collection, (2) Observer triangulation: which means using more than one observer in the study, (3) Methodological triangulation: which means combining qualitative and quantitative approaches in the same study and (4) Theory triangulation: which means using multiple theories and perspectives. This relates to CER model's approach which recognizes the interactions of these elements of research.

As noted in Figure 1, the CER model explicitly mentions qualitative and quantitative methods as applicable in an empirical research process context. It is outside the scope of this paper to go through the large number of methods that potentially fit within these umbrella concepts. We refer readers to extant empirical methodological research textbooks for further guidance. However, in regards to often-neglected different conceptual methods, the CER model is consistant with and can be used in conjunction with the strategies proposed by Yadav (2010). Table 1 summarizes Yadav's (2010) suggestions for seven conceptual research method strategies. It is noted that they do not provide clear normative directions compared to the extensive body of literature covering the empirical methods; however, they do provide the researchers attempting to undertake theoretical research with some guidance as to which conceptual strategy or method he or she might take.

The seven conceptual methods are split into two subgroups: 'initiating theory development' and 'theory assessment and enhancement' which are based on the idea that conceptual work plays an important role along the discover-justification continuum that characterises the knowledge development process (Hanson, 1958). The context of discovery is related to the conception of new ideas (e.g. new constructs) or to the creative synthesis of existing ideas (e.g. new relationships between well accepted constructs). The context of justification concerns plausibility and acceptability of these new ideas. Together both contexts provide methods or strategies for conceptual theory development. As illustrated in Table 2, the first 4 methods link to the discovery part of development of new conceptual knowledge, whereas the remaining 3 are positioned in relation to the justification part.

Table 2: Methods of Conceptual Research

Conceptual theory development methods	Application/Example
Initiating Theory Development:	
1.Use analogy (compare with another problem/domain in which prior knowledge exists)	Can be used as a method for initiating theory development in a new or emerging substantive domain by comparing some elements of that domain with an existing, familiar domain. In essence, by juxtaposing the familiar and unfamiliar domains, this method attempts to generate new ideas that can spur theory development. Yadav (2010) provides an example of Hoffman and Novak (1996) initiated theory development in the emerging area of electronic environments by noting a connection between online navigation and the completion of tasks in other realms that facilitated or impeded the psychological state of "flow" (resulting from the match/mismatch of an individual's skills and task difficulty).
2. Invoke a theory type (leverage an established theory to explore a new or under explained phenomenon)	Is a method that leverages a well-established theory to initiate new theory development in an under-researched focal phenomenon. When using this method, researchers must decide which elements of the extant theory they want to emphasise or play down in an effort to make it appropriate for understanding the focal phenomenon. That is, there is a need for flexibility and creative adaptation. Yadav (2010) provides an example from Deshpandé and Webster (1989), which leveraged extant theories of organisational culture to propose an expanded research agenda for marketing that directed more attention at organisational issues.
3.Move to another level of analysis (switch level of analysis to explore a focal phenomenon)	Enables the researcher to examine a focal phenomenon from a different vantage point. When using this method for theory development, the researcher imagines alternative units of analysis for studying the phenomenon and delineates the implications for theory development. On the basis of this analysis, the researcher may purposefully adopt a previously overlooked but still relevant unit of analysis to spur new theory development. For example, Parasuraman *et al*. (1985) observed that the study of perceived quality in marketing has largely adopted a tangible goods perspective that could be different from an intangible services perspective. By switching from tangible to intangible (a different level of analysis), they developed their "gaps model" of service quality that led to theoretical and empirical advances in this area.
4.Use interrelations (combine previously unconnected fields or bodies of knowledge)	Spurs theory development by creatively integrating bodies of knowledge from one or more substantive areas to generate new insights and research opportunities. For example, Srivastava *et al*. (1998) developed a framework for studying market-based assets by integrating selected concepts from the fields of finance (e.g., cashflows, volatility, book and replacement value of assets) and marketing (e.g., customer relationships, channel relationships, partner relationships).
Theory Assessment and Enhancement	
5.Review and critique a focal theory (benchmark a focal theory against well-established criteria for evaluating theories)	Is a method where the researcher selects theories that have reached a level of maturation and are poised for the next stage of their development. For example Gaski's (1984) critical review of the theory of power and conflict in marketing channels illustrates this method. On the basis of his review, Gaski noted that the theory overemphasised a perception based view of power that one channel member has over another member (i.e., power is largely in the eyes of an affected party in a dyad of channel members).
6.Develop theoretical enhancement to address mixed/ambiguous evidence (isolate patterns in anomalies and/or mixed findings to justify proposed theoretical enhancements)	Is a method concerning conceptual work that develops theory to address mixed/ambiguous evidence. They account for anomalies or mixed evidence and advance ideas that can enhance (or, perhaps, even replace) an extant theory or theoretical perspective. The contribution of such papers often stems from their ability to detect patterns in seemingly unconnected pieces of mixed evidence that can provide opportunities for theoretical advancement. For example, Yadav (2010) suggests that Kerin *et al*.'s (1992) framework was motivated by ambiguities and mixed evidence in the mature literature on first-mover advantage. They contended that the prevailing theoretical view, that order of entry has a direct effect on market share, should be qualified in the context of a wide range of environmental and organisational contingencies (e.g., buying practices in an industry, switching costs).
7.Identify and address gaps in extant conceptualisations (add missing antecedents, mediating processes, and/or constructs)	Concerns a broad method used by conceptual researchers to identify and address gaps in extant conceptualisations. These gaps can take various forms, such as missing antecedents, mediating processes, moderating constructs, or incomplete specification of outcomes. For example, Frazier (1983) noted in the marketing channels literature that effective management of channels necessitates an understanding of three distinct but related stages: initiation, implementation, and review of relationships. He also noted that extant conceptualisations had focused almost exclusively on the second stage (implementation), largely ignoring issues related to the stages of initiation and review.

Source: Yadav (2010).

In sum, the third layer of the CER framework suggests that any attempt to make scientific research involves reflections about one's research problem, research purpose, research questions, and research method - all elements which aid to build valid theoretical frameworks. The model allows for a bricolage in methodology approaches including both qualitative and quantitative empirical methods as well as initiation and assessment/enhancement conceptual methods; building on either or both empirical and theoretical data. Finally, it is recognized that a research problem might be shaped by the theoretical and/or empirical world and as such theory created – framework(s) – might be suitable for either or both worlds.

Concluding remarks and future perspectives

Over the years, marketing scholars have repeatedly requested more conceptual work. Despite these calls, the number of conceptual contributions within the discipline of marketing has been declining. This paper has argued that a partial reason for this is because of a lack of methodological frameworks to guide and accredit the creation of conceptual scientific knowledge. Addressing this gap the paper offers an extensive research process framework – the CER model. At the core of the model is an articulation of conceptual development method processes. These are not different from empirical method processes, but the model highlights that each perspective is able to provide distinctive research outputs. The CER model's four premises of 'differentiated time perspectives', 'path dependency', 'eclectic approach', 'theoretical/conceptual orientation' and its three embedded layers – 'ultimate presumptions', 'abductive logic' and 'research design(s)' offer guidelines for researchers as to how to approach the creation of knowledge within a critical realist paradigmatic positioning and thus this represents an important step forward.

The CER model is aligned with the informed eclecticism research paradigm, which is considered the paradigm for the twenty-first century marketing research industry (Barker *et al*., 2001). In their research Barker and colleague's finds in a large scale study among members of the marketing research industry that the vast majority of researchers are positioned in the middle of the "paradigmatic scale" within a paradigm they label informed eclecticism. This paradigm requires a greater knowledge and appreciation of how different disciplines, theories, models and metaphors can bring different perspectives and so greater insight to marketing issues. Consequently, the CER framework, even though it has a narrow(er) critical realist paradigmatic perspective, still has the potential to be valuable for the majority of the marketing researchers –as the majority of marketing researchers is positioned in the middle of the paradigmatic scale (Barker et al. 2001).

A number of methodological books encompass a broader paradigmatic spectra (thus covering all perspectives from e.g. a positivist to constructivist position), when making methodological guidelines. In this paper we have attempted a different, more narrow approach thus providing a research process model applicable for the critical realists. This enables, we argue, a different and more in-depth conceptualization of a methodological framework for undertaking research It not only leaves room for a higher degree of creativity, it also enable researchers to break free from the inductive and deductive "standard research" approaches linking to a path dependency mental model of positivism emerging from the natural sciences. Instead, the CER model visualizes marketing researchers' guidelines on how to uncover underlying mechanisms of complex social phenomena's. Finally, linking to the opening statement by Yadav, the novel contribution of this framework is that

it insists on giving equal "academic" weight to both conceptual- and/or empirical-based research paths, as it argues that "real world" scientific marketing research is a non-linear, complex, and creative process.

Future work will consider how to further progress and guide conceptual research. These efforts may be pedagogical – attempting to develop more concrete prescriptions for how to approach conceptual knowledge development with suggestions for associated training. This may involve narrowing the context and more specifically considering the processes at play in business to business researching. Context-specific direction may better facilitate conceptual (and empricial) research into interactions, relationships and networks. We hope that the model will also guide other researchers in similar endeavours. A larger scale of inquiry will further legitimize this approach and this will assist in improving the quality of emerging conceptual research. Better research output in turn will hopefully assist in legitimizing conceptual research and arresting its decline within the marketing discipline.

References:

ALVESSON, M. & SKÖLDBERG, K. 1994. *Tolkning och Reflektion. Vetenskapsfilosofi och Kvalitativ Metod,* Lund, Studentlitteratur.

ANDERSEN, I. 2003. *Den skinbarlige virkelighed,* Gylling, Forlaget Samfundslitteratur.

ANDREEWSKY, E. & BOURCIER, D. 2000. Abduction in language interpretation and law making. *Kybernetes,* 29, 836-845.

ARAUJO, L. & HARRISON, D. 2000. Technological Trajectories and Path Dependence. *16th IMP-conference*. Bath.

ARBNOR, I. & BJERKE, B. 2009. *Methodology for creating business knowledge,* London, Sage Publications.

ARNDT, J. 1985. On Making Marketing Science More Scientific: Role of Orientations, Paradigms, Metaphors, and Puzzle Solving. *Journal of Marketing,* 49, 11-23.

BARKER, A., NANCARROW, C. & SPACKMAN, N. 2001. Informed eclecticism: a research paradigm for the twenty-first century. *International Journal of Market Research,* 43, 3-27.

BATESON, G. 1972. *Steps to an ecology of mind,* Chicago, The University of Chicago.

BHASKAR, R. 1979. *The Possibility of Naturalism,* Brighton, Harvester.

BOOTH, W. C., COLOMB, G. G. & WILLIAMS, B. C. 2003. *The Craft of Research,* London, The University of Chicago Press.

BORG, S. W. 2012. *Conceptualisations of a Relational Oriented B2B Selling Process - and Exploring the Role of Neuro-Linguistic Programming*. PhD, University of Southern Denmark.

BRINGBERG, D. & MCGRATH, J. E. 1985. *Validity and the Research Process,* California, Sage Publications.

BURRELL, G. & MORGAN, G. 1994. *Sociological paradigms and organisational analysis* Hants, Ashgate Publishing Limited.

CHALMERS, A. 1982. *What Is This Thing Called Science?,* Milton Keynes, Open University Press.

DANERMARK, B., M. EKSTRÖM, L. JAKOBSEN AND J. C. KARLSSON 2002. *Explaining Society Critical Realism in the Social Sciences*, Routledge.

DARDEN, L. 1991. *Theory Change in Science,* New York, Oxford University Press.

DAVIS, M. S. 1971. That's Interesting!: Towards a Phenomenology of Sociology and a Sociology of Phenomenology *Philosophy of the Social Sciences,* June, 309-344.

DENZIN, N. K. 1988. *The Research Act: A Theoretical Introduction to Sociological Methods,* Englewood Cliffs, Nj, Prentice-Hall.
DENZIN, N. K. & LINCOLN, Y. S. 1994. *Handbook of Qualitative Research,* Thousands Oaks, CA, Sage
DOSI, G. 1988. The nature of the innovative process. *In:* DOSI, G., CHRISTOPHER FREEMAN, C., NELSON, R., SILVERBERG, G. & SOETE, L. L. (eds.) *Technical change and economic theory.* London: Pinter Publishers.
DUBOIS, A. & GADDE, L.-E. 2002. Systematic combining: an abductive approach to case research. *Journal of Business Research,* 55, 553-560.
EASTON, G. 2002. Marketing: a critical realist approach. *Journal of Business Research,* 55, 103-109.
EASTON, G. 2010. Critical realism in case study research. *Industrial Marketing Management,* 39, 118-128.
ELDER, L. & PAUL, R. 2009. *A Glossary of Critical Thinking Terms of Concepts: The Critical Analytic Vocabulary of the English Language,* CA, Foundation for Critical Thinking.
ELLSON, T. 2009. Assessing contribution of research in business to practice. *Journal of Business Research,* 62, 1160-1164.
ELY, M., ANZUL, M., FRIEDMAN, T., GARNER, D. & STEINMETZ, A. M. 1991. *Doing Qualitative Research: Circles within Circles,* London, Falmer.
FLEETWOOD, S. 2005. Ontology in Organization and Management Studies: A Critical Realist Perspective *Organization,* 12, 197-222.
FLICK, U. 2006. *An Introduction to Qualitative Research,* London, Sage Publications.
FLICK, U. 2009. *An Introduction to Qualitative Research,* London, Sage Publications.
FREYTAG, P. V. & PHILIPSEN, K. 2010. *Challenges in Relationship Marketing,* Viborg, Academica.
GEUENS, M. 2010. Where does business research go from here? Food-for-thought on academic papers in business research. *Journal of Business Research,* In Press, Corrected Proof.
GORDON, W. 1999. *Goodthinking: A guide to Qualitative Reserach,* London, Admap.
GUBA, E. G. 1990. *The Paradigm Dialog,* London, Sage Publication.
GUBA, E. G. & LINCOLN, Y. S. 1994. Competing Paradigms in Qualitative Research. *In:* DENZIN, N. K. & LINCOLN, Y. S. (eds.) *Handbook of Qualitative Research.* London: Sage Publications.
GUBI, E., ARLBJØRN, J. S. & JOHANSEN, J. 2003. Doctoral dissertations in logistics and supply chain management. *International Journal Physical Distribution & Logistics Management,* 33, 854-885.
GUMMESSON, E. 1991. *Qualitative Methods in Management Research,* California, Sage Publications.
HANSON, N. R. 1958. *Patterns of Discovery,* Cambridge, UK, University Press.
HEALY, M. & PERRY, C. 2000. Comprehensive criteria to judge validity and reliability of qualitative research within the realism paradigm. *Qualitative Research in Organizations and Management: An International Journal,* 3, 118-126.
HIRSCHMAN, E. C. 1986. Humanistic Inquiry in Marketing Reseach: Philosophy, Method, and Criteria *Journal of Marketing,* 23, 237-249.
HUNT, S. D. 2011. Theory Status, Inductive Realism, and Approximate Truth: No Miracles, No Charades. *International Studies in the Philosophy of Science,* 25, 159-178.
JENSEN, H. S. 1995. Paradigms of theory-building in business studies. *In:* ELFRING, T., JENSEN, H. S. & MONEY, A. (eds.) *European research paradigms in business studies* København: Handelshøjskolens Forlag.
KEAT, R. & URRY, J. 1975. *Social theory as science,* London, Routledge
KERIN, R. A. 1988. From the Editor. *Journal of Marketing,* 52 1.
KHUN, T. 1962. *The Structure of Scientific Revolutions,* Chicago, University of Chicago Press.
KIRKEBY, O. F. 1990. Abduktion. *In:* ANDERSEN, H. (ed.) *Videnskabsteori og metodelære.* Gylling: Samfundslitteratur.
LAYDER, D. 1990. *The realist image in social science,* London, Macmillan.
LUNDGREN, A. 1995. *Technological Innovation and Network Evolution,* New York, Routledge.
MACINNIS, D. J. 2004. Where Have All the Papers Gone? *Association for Consumer Research Newsletter,* Spring, 1-3.
MACINNIS, D. J. 2011. A Framework for Conceptual Contributions in Marketing. *Journal of Marketing,* 75, 136-154.

MANICAS, P. T. & SECORD, P. F. 1982. Implications for psychology of the new philosophy of science *American Psychologist,* 38, 390-413.
MARSHALL, C. & ROSSMAN, G. 1989. *Designing Qualitative Research,* London, Sage.
MASTERMAN, M. 1970. The Nature of a Paradigm. *In:* LAKATOS, I. & MUSGRAVE, A. (eds.) *Criticism and the Growth of Knowledge.* Cambridge: Cambridge University Press.
MAXWELL, J. A. 1996. *Qualitative Research Design - An Interactive Approach,* London, Sage Publication.
MAYER, D. & GREENBERG, H. M. 1964. What Makes a Good Salesman. *Harvard Business Review,* 42, 119-125.
OKASHA, S. 2002. *Philosophy of science* Oxford, Oxford University Press.
OUTHWAITE, W. 1987. *New Philosophies of Social Science. Realism, Hermeneutics and Critical Theory,* London, Macmillan.
PAWSON, R. & TILLEY, N. 1997. *Realistic Evaluation,* London, Sage Publications.
PETRE, M. & RUGG, G. 2010. *The Unwritten Rules of PhD Research,* Berkshire, Open University Press McGraw-Hill.
POLE, C. & LAMPARD, R. 2002. *Practical Social Investigation: Qualitative and Quantitative Methods in Social Research,* Harlow, Pearson Education.
PUNCH, K. 1998. *Introduction to Social Research: Quantitative and Qualitative Approaches,* London, Sage.
RAO, S. & PERRY, C. 2002. Thinking about relationship marketing: where are we now? *Journal of Business & Industrial Marketing,* 17, 598-614.
REIBSTEIN, D. J., DAY, G. & WIND, J. 2009. Guest Editorial: Is Marketing Academia Losing Its Way? *Journal of Marketing*.
ROBSON, C. 2009. *Real World Research,* Singapore, Blackwell Publishing.
SAUNDERS, M., LEWIS, P. & THORNHILL, A. 2009. *Research methods for business students,* Harlow, Pearson Education Limited.
SAYER, A. 1984. *Method in social scinece,* London, Routledge.
SAYER, A. 1992. *Method in social scinece: A realist approach,* London, Routledge.
SAYER, A. 2000. *Realism and social science,* London, Sage.
SENGE, P., SMITH, B., KRUSCHWITZ, N., LAUR, J. & SCHLEY, S. 2008. *The Necessary Revolution: How Individuals and Organizations are Working Together to Create a Sustainable World,* London, Nicholas Brealey Publishing.
SILVERMAN, D. 2010. *Doing Qualitative Research,* London, SAGE Publications Ltd.
STEWART, D. W. & ZINKHAN, G. M. 2006. Enhancing Marketing Theory in Academic Research. *Journal of the Academy of Marketing Science,* 34, 477-480.
TAYLOR, S. S., FISHER, D. & DUFRESNE, R. L. 2002. The Aesthetics of Management Storytelling: A Key to Organizational Learning *Management Learning,* 33, 313-330.
THYER, B. A. 2010. *The Handbook of Social Work Research Methods,* California, Sage Publication Inc.
TSOUKAS, H. 1989. The Validity of Idiographic Research Explanations. *Academy of Management Review,* 14, 551-561.
WALTERS, B. & YOUNG, D. 2001. Critical Realism as a Basis for Economic Methodology: a critique. *Review of Political Economy,* 13, 483-501.
WEBSTER, F. E. J. 2005. Back to the Future: Integrating Marketing as Tactics, Strategy, and Organizational Culture in Marketing Renaissance: Opportunities and Imperatives fro Improving Mareting Thought, Practice, and Infrastructure. *Journal of Marketing,* 69 4-6.
YADAV, M. S. 2010. The Decline of Conceptual Articles and Implications for Knowledge Development. *Journal of Marketing,* 74, 1-19.