

Reflections on the art-science debate

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This paper reflects upon the science versus art debate in marketing. It tracks the development of marketing science and the rationale for its promotion. The paper argues that marketing science has damaged marketing's credibility because data and methodology have dominated academic research at the expense of theory development and practical relevance. It also sees the scientific approach as a principal factor in the academic-practitioner divide. The paper concludes that despite the solid arguments in favour of the abandonment of the scientific platform too many scholars have a vested interest in the scientific approach for change to come about.

Keywords Art, Marketing science

Introduction

For years marketers have argued about the discipline's status as either an art or a science. Over that period many researchers (including one Nobel prize-winning economist) have passionately and eloquently argued against scientific methodologies in the social sciences. Despite these appeals nothing much has changed and the scientific paradigm that has dominated marketing for half a century is as entrenched as ever in marketing academics' collective psyche. As Brown (1996, p. 261) has noted some researchers believe "*marketing is an art, it has always been an art, and it always will be*" but they have been in the minority for over fifty years. Is now the time to admit that scientific marketing, as represented by the manipulation of data, for data manipulation's sake, has led marketing and marketers astray? Should we be challenging the establishment for refusing to recognise how much damage scientific marketing has caused and how little it has contributed? If this is beginning to sound dangerously revolutionary and perhaps, to some, "over the top" it simply echoes the frustrations of Dostoyevsky's civil servant¹ in that "*I've only taken to an extreme that which you haven't even dared to take halfway*".

¹ *Notes from the Underground* by Fyodor Dostoyevsky (1821-1881). Translated by Constance Garnett (1862-1946).

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The scientific marketer

How did science get to this position of strength in the field of marketing? In the early 1950s the Ford Foundation started an initiative to infuse scientific theory into US business systems and marketers were quick to get involved. US Business Schools responded to the call by raising admission standards and including more mathematics, statistics, economics and other sciences to the curriculum (Mentzer and Schumann 2006). Not everyone agreed that this was the right way forward. Hutchinson (1952, p. 290) reminded academics at the time that the forebears of marketers were merchants not scientists and that it was a *"travesty to relate the scientist's search for knowledge to the market research man's seeking after customers"*. Nothing, however, could dampen the ambition of the academic marketing fraternity to have the discipline designated a science. Once they had taken on the scientific mantle university business schools could claim that their departments were indeed truly academic (Locke 1989). As the American model of business and management spread around the world this scientific aspiration followed it.

In the 1960s marketing academics were being encouraged to push to heighten marketing's scientific status further because of the perception that the rational/scientific approach increased the clarity and legitimacy of marketing (Bourassa et al. 2007). To do this it had to separate itself sufficiently from mundane practices of practitioners and assume some of the characteristics of an abstract science (Clegg and Ross-Smith 2003). One factor that was to have an immense affect was the rapid development of computer technology. This tool enabled researchers to undertake sophisticated mathematical modelling of marketing problems. The scientific analysis approach was greatly advanced by Professor Paul Green, who developed conjoint analysis in the late 1960s. This enabled researchers to analyze consumer preferences (albeit simplistically) and buying intentions, as well as measure how they might react to changes in existing products/services or product introductions.

In the 1970s Kotler was the greatest and most influential advocate of the science-based approach. Doubts might be raised, however, as to whether Kotler's dedication to the cause was to aid the search for knowledge or whether it was the *"hubris of physics envy"* (Clegg and Ross-Smith 2003, p. 86). In an article reflecting on his career Bourassa et al. (2007, p. 180) note that the *"evidence suggests Kotler sought to associate marketing with science as a way of gaining legitimacy or credibility for marketing as an academic discipline"* rather than for any claims of methodological superiority *per se*. He believed strongly that scientific models commanded greater respect and, therefore, sought to badge the discipline as the *"scientific study of marketing exchange"* (Kotler 1972, p. 1). Others in the field were enthusiastic supporters of the scientific cause. The promotion and application of increasingly sophisticated models was seen by Lutz (1979, p. 3), for example, as a *"necessary step forward in the discipline"*. Hunt (1983) was optimistic that scientific endeavour would lead ultimately to a general theory of marketing and that the pursuit of such would be a *"worthy quest"* (p. 16). Such was the dominance that the general view of marketing academics was *"to be against science is to be against motherhood"* (Buzzel 1963, p. 32).

In the mid-nineties Stephen Brown (1996) published an article in the *Journal of Marketing Management* which sought to challenge the dominance

of marketing science. He contended that for 50 years marketing had searched and failed to find the *"holy grail of science"* (p. 243) and suggested that now was the time to decide on which of several directions the discipline should follow. Brown's favoured alternative was to abandon the pursuit of marketing science in favour of marketing aesthetics, favouring the artistic above the scientific approach, but he saw little hope of this in the short-term. The default choice was to carry on chasing the science with ever larger data sets, ever more powerful technology and ever more sophisticated models in search of the elusive general theory of marketing. Another option, associated with the continuance of this scientific path, was to break away entirely from any pretence that marketing was an applied discipline. This was not that revolutionary as the direction of marketing science-based research was heading this way anyway. The pure science culture that had grown up tended to treat knowledge as inherently good and to disregard and even disdain practical application (Rust 2006). There has always been a faction within marketing who saw the pursuit of marketing theory as an endeavour that was valuable on its own terms irrespective of its practical usefulness (Cornellisen 2002). Indeed Holbrook (1986) argued for the complete abstention of all practitioner intervention and mediation in academe including applied research and consultancy. The majority of marketers, however, appeared concerned about the dislocation between research and practice and frequently called for closer ties while the reality was both side were and are drifting further apart. As early as 1977 the American Marketing Association and Marketing Science Institute convened a commission to evaluate the effect of research on marketing practice (Mentzer and Schumann 2006) the conclusion of which was that academic marketing had little if any impact on improving marketing practice (Myers et al. 1980). According to McDonald (2003) much of marketing's current malaise is a symptom of this disconnection from the real world of commerce.

Why this disconnect? The problem is that marketing practitioners regard most academic research as irrelevant (see Brennan and Ankers 2004). Witness the decline in readership of marketing journals by practitioners that can be tracked back directly to the time when marketing became more scientific and specialised in the 1960s and 1970s (Bauerly 2005). This is because most practitioners do not see marketing as a science as they do not process their experiences in a scientific way (Tapp 2004). Rather they make judgements based on that experience. Academic research over time has become so scholarly, abstract and difficult to follow (McKensie et al. 2002) that it has become unfathomable. As Kent (2005, p. 1010) puts it marketing research is *"a veritable Tower of Babble"*. We, it seems, *"babble"* and are subsequently ignored. Research by Sawyer et al. (2008) confirms the notion that academics are out of touch with practitioners when it found counterintuitive relationships between readability and factors such as the number of citations and the rejection of manuscripts by journals.

Marketing credibility

There is, therefore, a reasonably cogent argument that the mantle of science may have severely damaged academic marketing's credibility and certainly

its applicability. Data and methodology have come to dominate academic research at the expense of theory development and practical relevance in a rapidly changing environment (Webster 2005). The vast majority of marketing researchers continue to work within the broad, realist, empiricist, instrumentalist, positivist tradition so beloved of the marketing science establishment (Brown 1996). Science-based academics had hoped that their systematic research would lead to a body of established knowledge into which every marketer could have access and find the best way of launching a product or developing a relationship (Griseri 2002). In adopting this approach and in seeking to discover patterns and laws these marketers have replaced all notions of human interaction, the backbone of the discipline, with a firm belief in causal determinants (Ghoshal 2005). As Clegg and Ross-Smith (2003, p. 87) note, the contrast between the laws of natural science and the science of management is that

there is far more indeterminateness. Patterns are established by rules that are applied locally, in situ, by the actors themselves... They are, instead, the result of a complex mastery of skills that enable the actors to cope with new situations.

Marketing, therefore, should be about using experience and skills to create a desired (or otherwise satisfactory) outcome and not the fruitless search for law-like generalisations.

The OED definition of "art" as the "skill in doing anything as a result of knowledge and practice" more closely reflects marketing as it is actually operationalised than its science-based nemesis. Science, defined as "the state or fact of knowing" in marketing terms suggests that a "secret formula" exists and that all we have to do is find it. Marketing, however, is not formulaic. As Greek philosopher Heraclitus noted around 500 BC "a man never stands in the same river twice". Every new management situation is a "new multiplex, a manifold of different aspects" that have to be thought through afresh every time (Griseri 2002, p. 2). Apply the same knowledge, effort and resources in two situations and it is highly unlikely that the outcomes will be the same and the potential exists for them to be considerably different. There are always subtle, frequently immeasurable or even indescribable, differences that scientific marketing does not have the finesse to accommodate. This should have convinced researchers of the futility of searching for generalised theories yet it continues regardless. The complexity associated with the social sciences ensures that the more we simplify the further from precision we become. Unlike theories in the physical sciences those in social sciences tend to be self-fulfilling as, if they gain sufficient currency, they are adopted by academics who then act accordingly, and in support of, these theories (Ghoshal 2005).

As early as 1942 F. A. von Hayek (who went on to win the Nobel prize for Economics) warned of having a "scientistic" attitude in the social sciences which he defined as "decidedly unscientific in the true sense of the word, since it involves a mechanical and uncritical application of habits of thought to fields different from those in which they have been formed" (quoted in Hayek 1989, p. 3). Thirty-two years later he was still arguing against the

prevailing attitude when he wrote that

unlike the position that exists in the physical sciences, in economics and other disciplines that deal with essentially complex phenomena, the aspects of the events to be accounted for about which we can get quantitative data are necessarily limited and may not include the important ones

(Hayek 1989, p. 3)

This is nothing new. The idea that “what you measure is what you get” is so old that it has been attributed to Plato (Clark et al. 2005, p. 254). Science-based researchers are prone to measure what is easy to measure. Anything that cannot be measured is often simply disregarded. Researchers then proceed with the fiction that the factors they can measure are the only ones that are relevant (Hayek 1989). Data, whatever its value, is what counts and inferences drawn regardless of the complexity are its outcome. Whatever amount of rigour goes into the calculations, if the measures are wrong then you will derive the wrong answers. It is an outcome that has been labelled “precisely wrong” (Shimp 2003). Critical realist research is equally unable to give firm outcomes but it does give clues to what the association (if there is one) might be. It may be said, therefore, to be “vaguely right”. Put another way, approximate answers to important questions or issues are more useful than precise answers to wrong, ill-defined, narrow problems (Lodish 1974 cf Raju 2005). Hayek (1989) too preferred true if imperfect knowledge, even if it left much undetermined and unpredictable, to the pretence of exact knowledge which is likely to be false.

The reality

According to Brown (1996) the simple fact is that marketing science has achieved little or nothing of note in over fifty years of scientific endeavour. However, despite the solid arguments in favour of the abandonment of the scientific platform it is highly unlikely that much will change in the direction of marketing research in the near future. Too many scholars have a vested interest in the scientific approach and it has become self-perpetuating. This is despite the fact that the output from the scientific research is rarely adopted by industry, and rarely replicated (except in other academic papers as proof that their approach is likewise correct).

In the US the dependence on citations ensure that the same ideas, derived from the same methodologies, in the same top-flight journals, circulating around a largely heterogeneous fraternity keep innovation (and overseas authors) largely at bay. In the UK a significant part of the problem lies with those in elite positions (RAE Assessors, Editors, Deans, etc.) whose “reward systems” ensure that the hard science-based systems of research maintain their prominence (Tapp and Hughes 2008). The much-criticised (but still actively supported) Research Assessment Exercise (RAE), in particular, is the buttress of scientific research. The peer-review system that supports it still emphasises methodological soundness and rigour that may add plenty to reliability and validity but, arguably, little to understanding (McDonald 2003). Four-star marketing journals use review standards that

favour methodological execution over and above ideas (McAlister 2005) and again this is self-perpetuating.

Does this matter? The problem is that scientific-driven approach is restricting unorthodox thinking and, in doing so, killing insight and understanding (Tapp and Hughes 2008). As Michael Baker (2006), publisher and former editor of the *Journal of Marketing Management*, has observed established journals are prone to overlook or reject work that challenges accepted orthodoxies. This leads to less intellectually stimulating articles for, if all those accepted for publication are reviewed by like-minded researchers who share the same methodological perspective, it hardly promotes new and sometimes provocative theory.

Despite the criticism it is easy to see why academics are attracted to the scientific approach. Researchers and particularly young researchers tend to be risk-averse. In scientific research terms as long as the "rules" are followed and structures applied, as long as some eminent author has previously validated your approach and that self-imposed barriers are set up (but can be overcome) then everything will be fine. Rigour (itself a highly debateable term) is what matters above everything including relevance. Sampling techniques and the rules of drawing inferences from quantitative data are often little more than an intellectual exercise in mathematics and statistics which claim (frequently with little evidence) to have scientific status (Gummesson 2001). What makes this worse is when the outcome of often dubious hypotheses are elevated to some supposed level of practical significance through the standard inclusion of a paragraph or two of "managerial implications" many of which are either downright obvious, irrelevant or hopelessly misleading.

Conclusion

It would appear that the arguments against scientific marketing will continue to fall upon deaf ears. Despite what appears to be unequivocal evidence to suggest there is a need to refocus marketing to reflect contemporary practice (McCole 2004) we continue along the path of scientific endeavour. Nothing is wrong with quantitative research *per se* (researchers can do what they wish within the privacy of their own homes) but the illusion that marketing is a science promotes a specific methodology's importance and the notion that this form of analysis is integral to the discipline. As with any other specialism, such as architecture, engineering and medicine, the acid test is "does this work" (Baker 2006, p. 12/3) and in marketing it evidently does not. Marketing cannot afford to become enmeshed in scientific rigour that requires the researcher to control or assume away complexity and yet this is precisely what goes on. Critical, realist methods can help create knowledge that is messier and possibly less pleasing than nice, clean marketing models but which are ultimately more practically valuable (Tapp and Hughes 2008). The dream would be that a mature marketing discipline will be "tolerant, confident, global, technologically savvy" and not to be ashamed to be primarily about marketing rather than mathematics (Rust 2006, p. 1).

Regrettably the majority of marketing scholars have so much invested in the scientific paradigm that any consideration of change is illusory. Those who oppose the generally accepted position are the outsiders and

perhaps vulnerable. To paraphrase Voltaire it is dangerous to be right when the establishment is wrong!

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