The five forms of transmissible, usable marketing knowledge

John R. Rossiter
University of Wollongong, Australia

This is a reply to the commentary articles by my colleagues Brodie, Uncles, Wierenga, and Midgley. For convenience and with respect, their surnames are used throughout; each is a first-name friend of the author and a member of the Marketing Knowledge Project's international academic committee, though this closeness clearly did not limit their strong criticisms. This article addresses their criticisms and, it will be stated at the outset, provides a defence of the author's approach.

The commentary articles are discussed in their order of publication, which does not imply any dimension of priority. Each of the articles argue that Rossiter's (2001) derivation of the forms of marketing knowledge is too restrictive. Brodie argues that relationship marketing has been left out. Uncles argues that a fifth potential form of marketing knowledge, empirical generalizations, has been omitted. Wierenga argues that marketing practitioners' decision-making knowledge must be included. Midgley confirms the split between academic marketing knowledge (marketing science) and practitioners' marketing knowledge (which he labels as marketing engineering), and argues that the two domains serve different purposes and are useful to different segments.

Is relationship marketing included?

Brodie suggests that Rossiter's proposed list of topic areas for marketing knowledge is based on traditional 'transactional marketing' and does not accommodate the new 'relationship marketing' approach. That table, which is reproduced in Brodie's article (p. 341), is meant, as its title shows, to provide topic areas for just one, the most basic, form of marketing knowledge: marketing concepts. The CMP
program, on the other hand, identifies *domains of application* of marketing knowledge, not forms of marketing knowledge. Indeed, the five types of marketing practice identified in the CMP project would be accommodated under the first heading of business strategy concepts. Additionally and more specifically, database marketing would be included under product and service concepts and e-marketing would be included under the heading of distribution concepts. Interaction marketing (developing interpersonal relationships between individual buyers and sellers) is part of the subject matter of buyer behavior concepts. It is true that network marketing (positioning the firm in a connected set of inter-firm relationships) is not clearly represented and this might best be handled by adding another topic area to the list — seller behavior concepts — to go with buyer behavior concepts (cf. Hunt, 1991).

It remains to be seen what new *marketing concepts* will be required to account for these modern marketing practices. Most important, another existing form of marketing knowledge — strategic principles — will be used to operationalize these newer categories of marketing practice. A major set of principles would specify the multiple *conditions* in which each of these five different types of marketing is the optimal strategy for the firm, or for specific products within the firm’s portfolio. A start towards identifying the necessary conditions for successful pursuit of interactive marketing, which often includes database marketing and e-marketing, especially as contrasted with ‘traditional’ transaction marketing, has been made by Peterson et al., (1997) and by Dowling (2002). The CMP project, by the way, has so far been mainly descriptive rather than prescriptive — principled — about the five types of marketing practice.

Brodie then provides a framework (in his Figure 1) in which now three, not the five, types of marketing are identified by pulling out ‘employees’ as a separate node from the usual two nodes of ‘corporation’ and ‘customer’. This additional node of ‘employees’ seems artificial. To say that interactive marketing is the link between employees and customers is literally true in the sense of implementation but, conceptually, interactive marketing is simply a subcategory of external marketing, which is already represented by the link between the corporation and the customer. Similarly, placing internal marketing (which is not one of the five types in CMP) as the link between employees and the corporation is to identify an implementation issue, a matter of procedural knowledge that only incidentally involves, but *should* involve, marketing knowledge (see especially the commentary articles by Wierenga and by Midgley and the article by McIntyre and Sutherland in this volume). Brodie comments that ‘[i]t may be argued that internal marketing and interactive marketing are beyond the scope of marketing as such, and are more to do with general management’ (p. 341). For the former, this is certainly the case.

Finally, the table adapted from Grönroos (1996), Table 2 in Brodie’s paper, is instructive in distinguishing the characteristics of relationship marketing and transactional marketing. However, the first bulleted comparison, between simply attracting customers in transactional marketing and building relationships with customers in relationship marketing, begs the question of conditions under which each is the optimal strategy. The next five bullet points under relationship
marketing pertain to general management and procedures and do not represent differences from transactional marketing in marketing knowledge requirements. The final two bullet points under relationship marketing identify potential market research principles that are not the exclusive province of relationship marketing. For instance, individual customer segmentation is often used in transactional marketing when a firm has few but large customers in business-to-business marketing, and ‘continuous information from the customer interface’ is often put to adept use in transactional marketing without the necessity of a personal relationship (e.g. many readers’ transactions with the on-line bookseller, Amazon.com).

Whereas relationship marketing requires a different ‘mindset’ from managers, it does not require different forms of marketing knowledge – marketing concepts, structural frameworks, empirical generalizations (see below), strategic principles, and market research principles. In other words, the forms of marketing knowledge do not exclude transactional marketing but of course do add to the content of the concepts, frameworks, empirical findings, and principles necessary to formulate a comprehensive body of marketing knowledge about relationship marketing.

Conceded: five forms of marketing knowledge

Uncles' is a thoughtful and idealistic commentary. The crux of the matter is indeed linguistics, which is not merely 'word games' but the starting point of any philosophy of science, including that of marketing (see Teas and Palan, 1997).

The linguistic distinctions offered by Uncles are not trivial. They begin with the title 'From marketing knowledge to marketing principles'. This implies that marketing principles are somehow different from marketing knowledge whereas Rossiter's definition of marketing knowledge includes marketing principles (strategic principles) in (as one form of) marketing knowledge. A difference can only be achieved, as Uncles seems to do, by drawing the following distinction: that the forms of marketing knowledge should consist of Rossiter's first two forms of marketing knowledge, marketing concepts and structural frameworks, plus a third, empirical generalizations ('if, then' statements as exemplified by the Dirichlet buyer behavior generalizations in his article). Strategic principles ('if, do' statements) and presumably market research principles ('if, use' statements) would then be regarded as 'qualitatively different' (p. 348) in that they represent uses and applications of marketing knowledge.

This distinction, upon further reflection, is valuable because it raises two points. In the first place, not only Uncles but most other members of the Marketing Knowledge Project team felt uncomfortable omitting empirical generalizations as one of the forms of marketing knowledge. The original reason for Rossiter's doing this was that empirical generalizations, in Rossiter's view, are strictly precursors to strategic principles, just like any other buyer behavior data (see Rossiter, 2001: 12, 18). For example, the 'double jeopardy' relationship, DJ—
the observation that in most markets the smaller the market share of the brand, the fewer buyers it tends to have and the less frequently they buy it — is a vital empirical generalization to know about. However, what is the manager supposed to do about the D|J phenomenon if it characterizes the brands in the manager's market? That requires the addition of a strategic principle over the top of the empirical generalization. For example, the typical and most likely explanation of the double jeopardy effect is the limited distribution attained by smaller brands (Uncles' dismissal of this explanation is unfair because he does not deny it but simply assumes it away; 'for D|J to exist all brands are assumed to be in roughly equal distribution', p. 349). It seems readily verifiable that smaller brands are not distributed through as many outlets as larger brands, and thus fewer people can buy them, and that they cannot be bought as often because smaller outlets tend to stock only the several larger, more popular brands. The action part of the strategic principle, quite obviously, is that the manager should try to increase distribution, that is, if sales volume rather than, say, unit profit margin, is the marketing objective. Hence, in Rossiter's original formulation, empirical generalizations were placed in 'limbo', as conditions awaiting the addition of the recommended actions required to transform them into strategic principles. However, it seems strange to regard empirical generalizations as not being marketing knowledge.

A resolution is suggested by Uncles' distinction. Marketing concepts have primary status because they are necessary components of both strategic frameworks and of strategic (and research) principles. Structural frameworks, on the other hand, being just a nominal list or arrangement of marketing concepts, can be used on their own or can have strategic principles added to them. In this sense, it has to be conceded that empirical generalizations have much the same status. Empirical generalizations are associations (or correlations) of marketing concepts, and thus differ from the independence of marketing concepts in themselves and the merely nominal relationship between marketing concepts in structural frameworks. (See Figure 1 for these relationships.) It then makes sense to regard marketing concepts as having first-order status as a form of marketing knowledge; strategic frameworks and empirical generalizations as having second-order status, since they combine concepts; and strategic principles and research principles as having third-order status as forms of marketing knowledge, since they causally combine marketing concepts and are therefore at the top of the hierarchy of usefulness.

Strategic principles and market research principles, as emphasized in the original article, are essentially theories: they represent causal-relationship explanations of marketing phenomena (Rossiter, 2001: 15–16). They are the ultimate aim of developing marketing concepts, structural frameworks, and empirical generalizations. To make this clear with a couple of examples, the idea is that distribution (concept 1) causes the number of people who buy the brand, known as the brand's 'penetration' (concept 2), and also causes those people to buy it more frequently, known as the brand's 'repeat-rate' (concept 3). The strategic principle 'If yours is a repeat-purchase brand, then get its distribution as high as is practically
The five forms of transmissible, usable marketing knowledge
John R. Rossiter

possible' (Rossiter, 2001: 16) depends on there being a causal, not simply correlational, association between the concepts. Similarly, research principles, which are of the form 'In situation X, use technique Y', implies that the use of technique Y causes the best solution to be found to the research problem.

Now back to the word game. Uncles claims that Rossiter 'explicitly excludes several possible candidates as forms of marketing knowledge – notably, empirical facts, empirical generalizations, laws and law-like relationships, and theories' (p. 346). First, empirical generalizations are now included, as discussed above, and Uncles' suggested distinction is to be credited for this. Second, 'empirical facts' are by no means excluded but they are not an additional form of marketing knowledge. Marketing concepts are symbolic facts (tautologies) in that they are true by definition. Empirical 'facts' arise when empirical generalizations are shown to hold in a particular market. There are exceptions – the generalizations do not hold for every brand in every market. 'Laws and law-like relationships' is playing with words. It cannot be shown that these two terms (and here it is assumed that Hunt's, 1991, terms are referred to) add anything beyond the term 'empirical generalizations', being merely grandiose names for better-established empirical generalizations. See Ries and Trout (1993) for a grandiose claim to have identified 'laws' of marketing, which are actually proposed strategic principles based on what they see as EGs. Finally, the other candidate, 'theories', certainly is included in Rossiter's forms of marketing knowledge, but not in theory form (see p. 12 of the original article). To be usable, theories have to be translated into strategic principles and, on the other hand, strategic principles and also market research principles are theories, as explained previously. Note here, however, that, contrary to the case with empirical generalizations, no suggestion is made that theories in theory form qualify as marketing knowledge, because such theories truly are in limbo status. A theory that does not have normative prescriptive actions spelled out from it is useless and cannot be considered as offering marketing knowledge until if and when it does. A noteworthy example, given in the original article, is the elaboration likelihood model, the ELM, which has never had prescriptive actions generated for it.

There is a further supplementary dispute concerning the types and degree of evidence warranted to support the forms of marketing knowledge. This is where Uncles' analysis becomes idealistic and perhaps unwittingly contradictory. In the ideal pursuit of 'truth status' for the content of the forms of marketing knowledge, he admits that '[i]nvariably, the assessment will be provisional and partial – we are not dealing with truth in an absolute sense' and yet he dismisses 'personal beliefs and opinions' as unsatisfactory (p. 347). As was stated in Rossiter's article, '[a] "best beliefs" criterion must be used . . .' (2001: 18). 'Epistemologically, all knowledge consists of "best beliefs" rather than absolute truths' (2001: 18). Not only are expert-generated 'best beliefs' unavoidable, for most of the content of marketing knowledge they are all we have and indeed can hope for given the current state of its development. Traditional empirical evidence (from case studies, surveys, and experiments) cannot be used to establish the content of all forms of marketing knowledge. Logic alone is sufficient in some cases (and logic does not rely on
First-order forms:

1. MARKETING CONCEPTS – marketing terms, each defined by its essential attributes

Second-order forms:

2. STRUCTURAL FRAMEWORKS – descriptive lists of concepts, in series or grid format

Third-order forms:

3. EMPIRICAL GENERALIZATIONS – observed 'if, then' relationships between concepts

Figure 1

Five forms of marketing knowledge
The five forms of transmissible, usable marketing knowledge
John R. Rossiter

4. STRATEGIC PRINCIPLES – conditional prescriptive 'if, do' statements of the best course of action to take in a given situation

If situation: Do action Best outcome

Causal relationship

5. RESEARCH PRINCIPLES – conditional prescriptive 'if, use' statements of the best research technique given the research question

If question: Use technique Best answer

Causal relationship

Figure 1 (cont.)

Five forms of marketing knowledge

empirical evidence). Expert ratification (which might be seen as 'empirical' in the sense that the experts' opinions are gathered empirically) is necessary in all cases for ratifying the content of all forms of marketing knowledge. The nature of evidence is taken up in Rossiter's Stage II analysis of 'What is marketing knowledge?' (available now as a working paper).

Does practitioners' decision-making knowledge take forms different from those in academic marketing knowledge?

Wierenga's commentary article makes good reading as indeed it should, as the substance is essentially a summary of his view of marketing knowledge in his excellent book (Wierenga and van Bruggen, 2000). However, his alternative view of marketing knowledge can be shown to represent, conceptually, a step backwards.

This criticism can be illustrated at the outset by examining his proposed definition of marketing knowledge as 'all the insights and convictions about marketing phenomena that marketing managers use or can use for making marketing decisions' (p. 356). The sort of vagueness in the use of the terms 'insights and convictions' is exactly what Rossiter's (2001) article on the forms of marketing knowledge was intended to remove. 'Insights' must refer more concretely to the
understanding of marketing concepts, the appreciation of structural frameworks, and the awareness of relevant empirical generalizations. 'Convictions' must refer more concretely to 'best beliefs' about strategic principles and research principles. That is, the forms of marketing knowledge, in an advanced view, must be part of the definition of marketing knowledge, because marketing knowledge is itself a concept. The latter part of Wierenga's definition, the qualifying attribute in the definition, 'that marketing managers use or can use for making marketing decisions', is entirely appropriate. It is in accord with Rossiter's emphasis on transmissible, usable marketing knowledge.

The problem of conceptual clarification and specificity is further illustrated in the list that Wierenga uses to identify categories of academic marketing knowledge (MKA). This list, incidentally, is an example of the structural framework form of marketing knowledge. The list begins with the categories (forms) 'marketing laws/principles' and 'empirical generalizations' but then concludes with the odd (in this context) category of 'marketing science'. Marketing science is a domain rather than a type or form of marketing knowledge. Perhaps he means to specify a new category of marketing knowledge which would be called 'marketing theorems', as that is what his example of the Dorfman-Steiner Theorem implies. The few theorems that exist in marketing, the equation for a Nash equilibrium might be another, are an interesting category that can best be classified as one of Rossiter's proposed forms: strategic principles. For instance, the Dorfman-Steiner Theorem states that 'if you want to maximize profit, (do) set the brand's price elasticity, marginal revenue of advertising and distribution, etc., equal'. Marketing theorems are interesting in that they are an example of a strategic principle derived, not by empirical evidence, but by logic (analytically). This points to an exception to the usual stereotyped call that strategic principles must be based on empirical evidence (e.g. as Uncles does, 2002, this issue, and also Hubbard and Lindsay, 2002, this issue). Rossiter (2001: 19) gave additional examples of strategic principles derived by logic, such as Hauser's (1988) pricing and positioning principles. It is doubtful that much would be achieved, however, by classifying marketing theorems as a new form of marketing knowledge.

A further conceptual error occurs in the list provided by Wierenga to identify categories of marketing knowledge used by practitioners (MKP). The listed items - expertise/experience, mental models, analogies, intuition, and creativity - are not forms of marketing knowledge, used by practitioners or anyone else, but rather are potential sources of evidence for marketing knowledge, and principally sources of evidence for structural frameworks, strategic principles, and perhaps research principles. The result is that forms of marketing knowledge in the academic list are being impossibly compared with sources of evidence for marketing knowledge in the practitioner list. There is little wonder that there is scant overlap - indeed, how could there be any overlap at all? Practitioners must use the same forms of marketing knowledge as academics. Forms of marketing knowledge are independent of who uses them. That the content of these forms may differ between academics and practitioners is another issue altogether. This issue was taken up by Rossiter in his original article (2001: 17-18) and is addressed
more extensively in the commentary article by Midgley (2002, this issue) and the article by McIntyre and Sutherland (2002, this issue).

While on the list of evidence sources given by Wierenga for marketing practitioners, it may be commented that there is quite an unsatisfactory categorization here, too. In the first item, 'expertise' is conjoined with 'experience'. However, one may certainly have experience without possessing expertise, and, one may add, vice versa. The second item, 'mental models', does not really belong on the list because mental models are a result of one or more of the other sources of evidence. Indeed, in Rossiter (2001: 15), mental models, or 'cause maps', are noted as other names for strategic principles. The third item, 'analogy' (or case-based reasoning), is another type of evidence. The fourth item, 'intuition', is difficult to distinguish from the fifth item, 'creativity'. Missing from the list of types of evidence used by practitioners is empirical evidence from surveys and experiments. Surveys, and to a lesser extent laboratory experiments (e.g. ad testing) and field experiments (e.g. ad spending tests or product test-markets), are commonly used as a source of evidence for marketing knowledge by practitioners. Academic researchers also use these sources of empirical evidence, though their surveys and experiments are usually of more limited scope.

The supplementary list of marketing problem-solving modes given by Wierenga, and also by Wierenga and van Bruggen (1997), seems to be a further mixed bag. The first item, 'optimizing', seems to be a criterion, an alternative perhaps to 'satisficing', which is a goal for the other modes of problem solving rather than a mode of problem solving in itself. The second item, 'reasoning', could be part of, rather than an alternative to, the next two items, 'analogy' and 'creating'. The likelihood is that all instances of marketing problem solving involve some combination of deductive logic (applying a general structural framework or strategic principle to a specific case), inductive logic (formulating a strategic principle from a series of specific cases), what may be called transductive reasoning (analogy), and creative breakthroughs (which are often the realization of a new way to combine two ostensibly unrelated concepts to achieve a new outcome). Pure intuition is harder to document.

Probably the main point of the criticism of Wierenga's article is that linguistics do matter (see also the comments above pertaining to Uncles' commentary article). If we cannot get our basic terms straight and reach a reasonable consensus about them, we are not going to progress far in defining and identifying marketing knowledge.

Marketing engineering without marketing knowledge (declarative knowledge) is dangerous

Midgley, in his commentary article, somewhat like Wierenga in his commentary article, seems to award declarative knowledge (knowing 'what') exclusively to academic marketing scientists, and procedural knowledge (knowing 'how') to
marketing engineering practitioners (managers and, presumably, market researchers). There is no doubt that procedural knowledge is different. However, as Rossiter (2001: 12–13) argued in his original article, procedural knowledge can only be effective if it is based on sound declarative knowledge. A salient example of this is the all-too-easy, push-button approach to marketing engineering, whereby powerful ‘canned’ statistical procedures are now available to marketing managers (and marketing students). Anyone, for instance, can now do a factor analysis, but should they and why? This was the purpose of specifying research principles as a form of marketing knowledge: ‘If this is your research question, this is the best technique to use’. ‘Unprincipled’ marketing engineering seems like a grave danger rather than a laudable practitioner achievement. This is not to say that marketing engineering techniques should not be taught (transmitted). Practitioners (and students who are going to be practitioners) are as much handicapped by lack of declarative knowledge of marketing as they are of its procedural knowledge. But we cannot have the second without the first. Midgley, too, believes this: ‘a body of “engineering” knowledge . . . would hopefully be based on (or at least not inconsistent with) a qualified body of scientific knowledge’ (pp. 365–366). But he goes on to say that ‘However, they will take a very different form . . .’. (p. 366). This is disputable. Procedural knowledge in marketing engineering takes the form of research principles.

Procedural knowledge in the broader sense of knowing how to implement marketing plans may be explicit or it may be tacit, but it is still of ‘if, do’ form. Explicit procedural knowledge, like explicit declarative knowledge, can be tested on a questionnaire test. Tacit knowledge, as Midgley notes, can only be assessed by simulating the procedure itself, with an ‘in-basket’ test. The latter is not the objective, or certainly not the primary objective, of the Marketing Knowledge Project, because tacit knowledge is not transmissible, or certainly not easily transmitted, even if it is usable by an individual manager.

Particularly astute is Midgley’s observation about tacit knowledge being ‘dark power’ possessed by individuals. This counts against the hope expressed in the subsequent article by McIntyre and Sutherland (this volume) that marketing knowledge, both declarative and procedural, will be codified (for transmissibility) by the firm.

Summary

Intellectually speaking, these colleagues have fired their salvos at Rossiter’s (2001) proposal for the forms of marketing knowledge. The proposal is the better for their criticisms and suggestions and is now revised to identify the five forms of marketing knowledge, which are hierarchical in nature:

1 Marketing concepts (first-order)
2 Structural frameworks (second-order)
3 Empirical generalizations (second-order)
The five forms of transmissible, usable marketing knowledge
John R. Rossiter

4 Strategic principles (third-order)
5 Research principles (third-order)

In reply, it was further pointed out that the new types of marketing such as relationship marketing and e-marketing are domains for marketing knowledge, not forms of it. Practitioners' marketing knowledge must take the same forms as academic marketing knowledge (those above), even though the content of the two user groups' knowledge has much to benefit from by being merged or at least aligned. Finally, procedural knowledge in marketing engineering is necessary for applying marketing knowledge. This procedural knowledge is not 'marketing' knowledge on its own, nor is it sufficient on its own for effective marketing management. Teaching marketing engineering bereft of good declarative knowledge (knowing 'what') is like putting you or me behind the wheel of a Formula 1 race car – dangerous. The forms of marketing knowledge involved in marketing engineering are not different. Marketing knowledge exists independently of the individual manager's ability to use it, though we hope it can be used well.

Codifying the content of marketing knowledge, which is itself evolving, is the next big step for the Marketing Knowledge Project, to which these experts will valuably contribute.

References

John R. Rossiter is Research Professor of Marketing, University of Wollongong, Australia and Visiting Professor of Marketing at the Rotterdam School of Management. His research interests are marketing knowledge, consumer behavior, and advertising management. He has published 50 journal articles, including articles in *Marketing Theory, Journal of Consumer Research, Journal of Marketing Research*, and the *International Journal of Research in Marketing*. He has also co-written seven books, including the international advertising textbook *Advertising Communications and Promotion Management*.