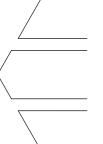
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THE EXPANDING DOMAIN OF STRATEGIC MANAGEMENT RESEARCH AND THE QUEST FOR INTEGRATION

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Research summary: This special issue of Strategic Management Journal was motivated by concern that the growing scope and diversity of the strategic management field creates the risk of incoherence and fragmentation and the belief that research reviews could contribute to synthesis and integration. In this introductory essay, we address the expanding domain of strategic management, consider where its boundaries lie, identify the forces engendering fragmentation, and discuss how this special issue—and research reviews in general—can assist convergence within the field of strategy. We conclude by addressing the potential for integration more broadly in relation to the theories we deploy, the phenomena we investigate, and cohesiveness of our scholarly community.

Managerial summary: The expanding domain of strategic management reflects the widening range of strategic issues that practising managers face. However, the fragmentation that has accompanied this broadening scope impedes the usefulness of strategic management research in guiding strategic decision making. We argue that reviews of strategic management research, such as those included within this special issue, can support the accumulation of an integrated, empirically-validated knowledge base which is essential to informing management practice. Copyright © 2016 John Wiley & Sons, Ltd.

INTRODUCTION

Is everything "strategy"? Since its formal inception in the late 1970s, the strategic management field has experienced rapid growth as an area of research and as a community of scholars. In particular, the field has broadened in the range of phenomena studied, the concepts and theories used to analyze these phenomena, and the empirical methods deployed. However, the expanding scale and scope of strategic management has been accompanied by increasing disquiet over its direction of development.

Keywords: literature reviews; paradigm; scholarly field; fragmentation, integration

On the one hand, scholars criticize the field's fragmentation, its preference for novelty over incremental advancement, its lack of rigorous theory building, its unwillingness to document and report on empirical facts, its inability to subject its many theories to systematic empirical testing, and the limited guidance it provides to managers. A common theme among the many critics is a call for a period of consolidation, integration, and redirection. In contrast, other scholars view fragmentation, rather than convergence, as a sign of the field's richness and vitality. For instance, explaining firm heterogeneity, a long-standing focus of the strategic management field, warrants theoretical and methodological pluralism since differences among firms depend on many different factors. As such, steps to narrow theoretical diversity risk stifling new ideas, whereas steps to

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foster methodological coherence risk deterring the selection of the most appropriate methods for studying a given problem or phenomena. Importantly, both views advocate upgrading of scholarly standards with regard to both theory and empirical methodology. It is this contradictory state of strategic management that provides the background and the motivation for this special issue of SMJ. Reviews of strategic management research were seen as having "the potential to make an important contribution to the literature both in appraising the current state of strategic management research and in providing a platform for the future development of the field" (Call for papers, 2013). Inevitably, a special issue that comprises just six review articles can make only a limited contribution to this task of appraisal and development. Hence, the purpose of our introductory essay is to set these articles within a broader context. Editing this special issue—in particular, administering a selection process in which 186 initial submissions were reduced to six final articles—provided us the opportunity to ponder the state of the field of strategic management and consider how reviews of strategy research might address some of the criticisms levelled at the current state of the field and resolve aspects of the present predicament. In this introduction we address four questions:

- 1. How has the field evolved and what are the primary sources of domain expansion?
- 2. What is the field of strategic management and where do its boundaries lie?
- 3. What are the primary drivers of the field's fragmentation and how have they affected the field's progress?
- 4. How can reviews of strategy research contribute to the integration of the field?

We conclude with a broader consideration of the kinds of initiatives needed to assist the advancement of strategic management through promoting cohesiveness and integration.

We begin by addressing the origins of the field's remarkable breadth and diversity.

THE EXPANDING DOMAIN OF STRATEGIC MANAGEMENT

Between the late 1960s and early 1980s, institutional events and community development

established the foundations for strategic management as an accepted academic field within business schools (see Rumelt, Schendel, and Teece, 1991, 1994). For example, in 1969, the American Assembly of Collegiate Schools of Business (AACSB) revised accreditation standards to include a capstone course that required students to integrate the knowledge gained from specialized and function-specific courses. The business policy course, with its focus on the work of general managers, fulfilled this objective, conferring upon the emerging field a central role in the business school curriculum (AACSB, 1969: 30; Hambrick and Chen, 2008). The ensuing demand for policy instructors spurred the development of doctoral programs in business policy and strategy in the mid-1970s. Additionally, a conference of business policy scholars held in Pittsburgh in May 1977 is viewed as a key event in establishing strategic management as a discipline that integrated research, teaching, and management practice (Schendel and Hofer, 1979). The founding of Strategic Management Journal (SMJ) in 1980 and the Strategic Management Society (SMS) in 1981, as well as the Academy of Management's renaming of its Business Policy and Planning Division as the Business Policy and Strategy (BPS) Division in 1981 provided an infrastructure for the new discipline.

During this period, the range of phenomena and theories the field embraced were comparatively narrow (for example, see Schendel and Hofer, 1979). The primary research stream explored relationships between context (especially industry structure), strategy, and performance. Another prominent stream addressed strategy processes. The dominant context-strategy-performance stream drew heavily upon industrial organization economics (especially the structure-conduct-performance model) together with microeconomic concepts such as economies of scale and scope, transaction costs, and agency theory.

Since the early 1980s, the phenomena researched and the theoretical and methodological tools deployed have expanded greatly. New areas of research emerged, including: organizational capabilities (including routines, processes, and dynamic capability); interfirm relationships—both competitive (competitive dynamics) and cooperative (including transaction costs, alliances, firm networks, and business ecosystems); knowledge creation and diffusion (including innovation, organizational learning, and best practice transfer);

behavioral strategy; institutional influences and corporate social responsibility—to mention but a few. The expanding scope of study has been facilitated by the growing availability of new sources of data at the micro and macro level (e.g., social networks details, fMRI content, comprehensive industry and sector data, etc.), new compilations of data (e.g., machine readable patent and company accounts data), technologies that ease the process of data collection (e.g., pdf readers, data scraping programs), increasingly rigorous qualitative and quantitative methodologies, and novel analytical techniques allowing for the systematic analysis of data that previously could only be analyzed qualitatively (e.g. textual analysis) (see Arora et al., 2016).

Bibliometric analysis identifies major themes in strategy research and confirms its widening scope. Applying factor analysis to articles published in SMJ between 1980 and 1986, Nerur, Rasheed, and Natarajan (2008) identified five major streams within the literature: one based on organization theory, one dominated by industrial organization; one based upon agency theory; one centered upon the concept of strategy; and a process school emphasizing organizational decision making. During 1987-1993, the number of significant streams increased from five to eight, while during 1994-2000, an additional research stream based upon theories of the firm—the resource-based view in particular—rose to prominence. The overall picture was one of "greater fragmentation arising from exogenous theoretical influences and endogenous theoretical developments" (Nerur et al., 2008: 331). Don Hambrick observed that "The number of possible combinations of theoretical lenses and interesting phenomena is staggering" (Hambrick, 2004: 92).

As the domain of strategic management widened, so it has encroached on other fields of business and management research. These include organizational structure and design, international management and international business, technology management and the economics of innovation, marketing, human resource management ("strategic human capital"), business ethics, government-business relations, entrepreneurship, and organizational behavior. As a result, the boundaries that distinguish strategic management from management as a whole have become increasingly difficult to discern.

WHAT IS STRATEGIC MANAGEMENT?

The widening realm of strategic management research is a tribute to the field's dynamism, but it creates uncertainty as to what strategic management is and where its boundaries lie. A field of study may be characterized by the theory it deploys, the phenomena it investigates, and the community it comprises. To what extent can strategic management research be described—and, hopefully, circumscribed—by these three distinguishing characteristics?

Strategic management as theory

From the beginning, strategic management has been a multidisciplinary area of research. In addition to borrowing heavily from economics, sociology, and psychology, it has imported concepts and theories from political science, evolutionary ecology and biology, systems science, and philosophy. Its eclecticism has been extended by the development of its own concepts, theories, and research streams including the resource-based and knowledge-based views of the firm, behavioral strategy, competitive dynamics, competitive heterogeneity, cooperative strategy, corporate-level strategy, global strategy, industry dynamics and evolution, innovation and technology strategy, institutional and nonmarket strategies, stakeholder theory, strategic change, strategic leadership, strategy as practice, and strategy processes.

Clearly, the strategic management field is far from converging around any singular theoretical base. Not only has strategic management failed to evolve toward a single paradigm, the field seems to lack the "shared theoretical beliefs, values, instruments and techniques, and even metaphysics" (Bird, 2013) that form the "disciplinary matrix" of established scientific fields (Kuhn, 1970). It is also unclear whether strategic management possesses a well-defined "research program": a sequence of theories governed by "methodological rules" in the form of "what paths of research to avoid (negative heuristic) and what paths to pursue (positive heuristic)" together with a "hard core" of axioms surrounded by "auxiliary hypotheses" (Lakatos, 1968: 168-169).

Yet, strategic management does display observable research traditions—including those based upon industrial organization economics, the resource-based view, transaction costs, and agency

theories (Hoskisson *et al.*, 1999)—even if these do not qualify as Kuhnian paradigms. Many additional streams gained traction during the 1990s, and the present century has seen the continuation of conceptual and theoretical diversification reinforcing the field's open, flexible, and pluralistic nature.

Additionally, strategic management possesses unifying beliefs concerning what is to be observed, what questions to explore, how those questions are to be structured, and how the results of the inquiry are to be interpreted. These beliefs include: a focus on the organization (the business enterprise in particular) as the primary level of analysis; recognition that organizations differ—in value creation, value capture (firm performance), and value distribution, as well as in intermediary outcomes such as, but not limited to, innovativeness, competitive intensity, legitimacy, reputation, and status. An important character of strategic management as a field of study is its emphasis on practical application. It is this orientation toward the tasks and challenges of general managers that has been an enduring feature of the field since its origins in business policy. The quest for solutions to the problems of general managers drives theoretical pluralism and implies that the field of strategic management is defined as much by its subject matter as by the theory it deploys.

Strategic management as a set of phenomena

As noted above, firm performance—in particular, the origins of differences in performance among close competitors—is widely viewed as the fundamental domain that strategy addresses. Thus, among the 2,125 strategy articles published in leading management journals from 1986 to 2005, "performance" was the most prominent keyword used (Furrer, Thomas, and Goussevskaia (2008). Among the 421 articles published in *SMJ* between 2009 and 2013, 46.1 percent involved dependent variables relating to three types of performance measures: financial performance (37.5%), innovation (6.7%) or corporate social responsibility, stakeholder performance or reputation (1.9%) (Wang and Reger, 2014).

Over time, the analysis of *differences* in performance among close competitors has evolved beyond traditional operational dimensions such as static or absolute metrics (e.g., financial or accounting-based measures of profitability; productivity, etc.) to include constructs that attend to

temporal dynamics (e.g. survival, rates of growth, change, and profit persistence/convergence), as well as differences in outcomes (e.g., abnormal, relative, or advantage-based profit measures). These traditional measures enhance our understanding of the supply side of value creation—relating a firm's activities, resources, and capabilities to differences in performance or outcomes. However, the total value created by a firm also includes the surplus it provides to its customers. As a result, to develop a fuller understanding of competitive heterogeneity, scholars employ a bargaining model, the Value-Price-Cost (VPC) framework, that encompasses both the demand and supply side aspects of value creation. In this framework, the firm that produces the largest difference between the value it provides to the customer and the cost to provide that value holds an advantage over rivals (Besanko, Dranove, and Shanley, 1999; Hoopes, Madsen, and Walker, 2003; Peteraf and Barney, 2003; Priem, 2007; Ryall and Gans, this issue). This approach expands the focal phenomenon of analysis to include value creation, value capture, and value distribution.

The quest to understand competitive heterogeneity also has motivated researchers to explore its origins. This has spawned a broad stream of research at multiple levels of analysis wherein the traditional predictors of performance differences, whether micro or macro, become the focal phenomena of interest.

Recognizing that the value created by a firm comprises that received by a broad set of stakeholders (e.g. employees, customers, suppliers, and communities) has implications for how value is defined and measured and the processes through which it is distributed (Coff, 1999; Hillman and Keim, 2001; Hull and Rothenberg, 2008). It also means that these different stakeholders have an important influence on firm strategy and performance (e.g., Durand and Vergne, 2015; Harrison, Bosse, and Phillips, 2010; Roberts and Dowling, 2002). The interacting players comprise not only traditional industry participants (e.g., competitors, suppliers, customers) but also other actors such as financial organizations, regulatory agencies, standard-setting institutions, industry consortia, government institutions, NGOs, and so on. The diversity of competitive heterogeneity's origins, and their interrelationships, is so vast that the field's scope of phenomena inevitably increases and fosters the development and growth of new streams of research.

Strategic management as community

To define the field of strategic management solely by the theories it deploys and the topics it addresses is to ignore its social dimensions. "Science is not a magnificent march toward absolute truth but a social struggle among scholars of the profession to construct truth" (Cannella and Paetzold, 1994: 332). The observation that "an academic field is a socially constructed entity" (Nag, Hambrick, and Chen, 2007: 935) reflects Kuhn's (1970: 176) recognition that "Scientific communities can and should be isolated without recourse to paradigms."

In the case of strategic management, the formation and growth of a scholarly community was central to its establishment as an academic field. According to Hambrick and Chen (2008), scholarly communities develop through three interrelated processes of differentiation, resource mobilization, and acquiring legitimacy (see also Abbott, 2001). As the field's evolution demonstrates, this three-pronged process is apparent in the case of strategic management. Both the BPS division of the Academy of Management and the SMS have experienced persistent growth since their founding and comprise international communities of strategy scholars. As they have grown, these organizations also have supported the advancement of scholarly microcommunities. Although university departments named solely "strategy" or "business policy" are rare due to the aggregation of strategy, organization theory, and/or organizational behavior scholars into "strategy and organization" or "strategy and management" departments, the discipline remains a robust component of undergraduate, graduate and PhD programs, across universities worldwide. Its research is published in its flagship journal, SMJ, but also in other outlets such as Academy of Management Journal, Administrative Science Quarterly, Management Science, or Organization Science. Additionally, the last 15 years have brought the founding of additional strategy-focused journals such as Strategic Organization and Strategy Science.

Therefore, as a community, strategic management possesses strong and effective institutions that foster identity and promote belonging. As already noted, central to this identity are priorities and traits that distinguish strategic management from other areas of management and organizational studies, notably a practical orientation. For example, interest in improving organizational performance by

addressing the problems faced by managers draws many strategy scholars toward the normative application of their knowledge and clinical engagement with practitioners. In sum, the community's diversity reinforces the field's theoretical and analytical eclecticism.

THE CURRENT CHALLENGE—FRAGMENTATION

The above conditions have opened the door for almost any topic or phenomena to be categorized as fitting within the strategy domain and, in turn, generate concerns over the field's direction of development. At the core of these concerns is the fear that fragmentation threatens the field's capacity for cohesive knowledge accretion. Let us examine this problem using the three characteristics of the field discussed in the previous section.

Theory fragmentation

Conventional paths to scientific progress typically involve the accumulation of knowledge where theories build upon and replace each other, possess coherence in theoretical structure—including lack of ambiguity regarding core concepts and their definitions—and become integrated within more general, overarching frameworks through tests and refutations (Hull, 2001; Popper, 1972). Most of strategic management's theoretical traditions lack these attributes. Rather, the continued emergence of new streams, which neither reconcile nor replace existing theories, raises doubts over the progress within our field. For one, connections among the various research streams often appear tenuous, giving the impression that they are not guided by, or embedded in, an overarching structure or frame.

Strategy scholars offer multiple explanations for strategic management's failure to build an integrated, empirically validated knowledge base. One view is that the burgeoning theoretical eclecticism simply stems from scholars' quests for additional tools to analyze strategic phenomena. The ongoing pursuit of theoretical novelty also has discouraged knowledge consolidation and synthesis (Agarwal and Hoetker, 2007; Cornelissen and Durand, 2012, 2014; Hambrick, 2004). This quest for theoretical innovation seems to be driven by "the field of management's devotion to theory" involving "idolization" and "fetish" (Hambrick, 2007). Furthermore,

the journals' insistence that articles make distinctive theoretical contributions results in scholars building theories that are premature, ad hoc, and/or incommensurate. Hambrick (2004: 91) summarizes these concerns: "Our field is rapidly being pulled apart by centrifugal forces" and "suffers from the persistent invention of theories designed to distance themselves from everything that came before."

Although strategic management's theoretical pluralism reflects the field's intellectual dynamism and emphasis upon investigating phenomena, does or will the absence of a dominant paradigm impede or facilitate the field's development? Pfeffer (1993) argued that consensus around a single paradigm facilitates development within a field of study. In contrast, other scholars reason that the progress or evolution of knowledge requires management studies to have "fuzzy boundaries" as well as a receptivity toward a "plurality of paradigms" (Cannella and Paetzold, 1994: 332). Falsification in management studies—and in the social sciences more generally—is not always feasible (Foss, 2012; Mahoney, 1993) since empirical studies, no matter how carefully designed and executed, rarely deter all alternative explanations. These conditions inhibit determining which paradigm "is a priori deserving of a dominant position" (Cannella and Paetzold, 1994: 332). More importantly, searching for an overarching paradigm encourages an "absolute conformism" (Mahoney, 1993: 178) and discourages diverse intellectual views that have powered the field's growth. As Dan Schendel (1994: 2) observed: "strategic management is fundamentally an interdisciplinary subject, a field of practice and application, whose perspectives will shift and whose research approaches will be incommensurable, rendering it unlikely that a single paradigm will ever govern the field". As a result, "the Kuhnian model may not be the best way to think about the state of strategic management or assess its progress" (Rumelt et al., 1994: 1).

Theoretical pluralism facilitated the development of the strategic management field in the past, however, there is no guarantee that it will continue to do so. At some point, the sheer diversity of theoretical traditions might hinder the advancement of knowledge and, thus, warrant systematic action to maintain coherent progress. As the field enters its midlife phase, will its embrace of openness, multiple disciplines, and theoretical plurality pose challenges to continued development? Is the marketplace of ideas now too broad? Or, is the field at a tipping point

where the diversity of views will inhibit quality and, in turn, progress? Clearly, there are both benefits from and costs to theoretical pluralism; however, given the proliferation of the theories developed and deployed by strategy researchers, we consider the current priority to be consolidation and theoretical integration within the field¹.

Fragmentation: expanding phenomena and analytical issues

The persistent expansion of the range of phenomena studied by strategy scholars, when combined with theoretical and analytical issues, is a formidable source of fragmentation within the field. For one, the heterogeneity of phenomena explored leads scholars to employ a wide variety of operational designs and analytical approaches from qualitative analyses of single firm case studies to quantitative analyses leveraging multiple integrated, longitudinal, and archival data sources (of entire industries or fields). A second critical issue lies with the tendency for scholars to generate new labels and definitions for previously studied phenomena as well as their affiliated theoretical concepts (Cornelissen and Durand, 2012). When debates over conceptual definitions persist beyond the early stage of a concept's development (beyond their usefulness), they fuel fragmentation, rather than coherence, in a field's knowledge base. A lack of theoretical integration exacerbates this problem since it inhibits convergence in the operationalization of theoretical concepts. Indeed, the alignment between theory and construct design in our field's empirical studies often leaves much to be desired. As one example, the resource-based view is laden with empirical studies that espouse contributions to the theory of competitive advantage, but lack any measure of it, as well as studies that employ macro constructs as "indicators" of resources or capabilities (Hoopes and Madsen, 2008). Additionally, because some

¹ Mahoney and McGahan (2007: 80–84) identify four areas of strategic management with potential for "integrative theory": the impact of context and structure on firm behavior and performance; the analysis of competitive interaction that extends beyond conventional theories of industrial organization; theories of firm behavior that integrate sociological, social psychology, and cognitive approaches; and linking strategy and firm performance to managerial behavior within a multilevel theory of the firm. In addition, Durand (2014) identifies the adjacencies between strategic management and organizational theory and the areas where each discipline would benefit from the other's research advancements.

constructs can be used to measure different concepts in different traditions, this phenomenological fragmentation nurtures theoretical fragmentation. These conditions make it difficult to identify common patterns of results associated with a particular phenomenon and, in turn, extract systematic conclusions that would inform the field's "stylized facts" or a unified knowledge core. Despite the advancement of empirical methods that facilitate more robust investigation of complex patterns of causation (Arora et al., 2016), a lack of consensus around a set of ground rules concerning empirical methods and the interpretation of their results continues to limit the field's capacity to accumulate verified knowledge. Criticism of empirical methods and their application include the bias toward hypothesis confirmation, particularly through data mining and the search for theory that matches empirical results (Bettis, 2012; Bettis et al., 2016; Goldfarb and King, 2016), a lack of replication studies (crucial to clarifying boundary conditions) (Bettis et al., 2016; Tsang and Kwan, 1999), the problem of endogeneity in empirical research (Hamilton and Nickerson, 2003: Semadeni, Withers, and Trevis Certo, 2014), unreceptiveness to studies that document and investigate phenomena rather than test hypotheses (Helfat, 2007), and problems presented by variables that are unobservable and/or unmeasurable (Durand and Vaara, 2009; Godfrey and Hill, 1995).

The above suggests that training and guidelines are needed to encourage scholars to draw on, and contribute to, established conceptual and operational definitions in a cumulative way and to foster coherence in operational designs to support the replication and comparison of empirical results. This guidance is critical to balancing the advantages and disadvantages of analytical and methodological diversity. Graduate programs, professional associations, and journals have a key role in establishing and updating criteria for robust scientific inquiry, including guidance regarding theoretical and operational alignment, data analysis, and methodological rigor.

Community fragmentation

Although institutional forces initially promoted common ground within the strategy field, enabling community growth in numbers, international reach, and scholar legitimacy, more recently these same forces appear to balkanize the field as particular groups seek distinctive identity and legitimacy within the expanded community. These forces are apparent in the niche that organizational ecology established, separating it from both strategic management and organizational sociology, more recently in the emergence of "strategy-as-practice" as a distinct subfield within strategic management research (Carter, Clegg, and Kornberger, 2008), and in the proliferation of interest groups within the SMS. Hence, there is a risk that strategic management becomes more a confederation of clans than a single community. The threat posed by this trend is that tight-knit academic clans often act as gatekeepers, taking a protective stance over their domains in efforts to control the intellectual process of creation, publication, and diffusion. The outcome is likely to be a focusing of research efforts around a narrow set of questions and problems, which encourages scientific incrementalism. A byproduct of this threat is the tendency for scholars to ignore phenomena that do not fit within any single group's domain but would benefit from work at the intersection of domains.

However, scientific progress requires debate and disagreement among different schools of thought within a community (Kuhn, 1970). Building barriers by refining the field's boundaries inhibits this process and, therefore, the evolution of knowledge. In fact, the field's nonlinear development appears to stem less from periods of stable discourse and convergence and more from scholars' efforts to embrace alternative views, invoke distant knowledge, and challenge tradition through different paradigms. As Feyerabend (1983: 162) states: "Great scientific advances are due to outside interference which is made to prevail in the face of the most basic and most rational methodological rules."

Although protective of their interests, strategy scholars appear more tolerant of, or comfortable with, theoretical pluralism than not. This attribute has enabled the field to retain its overall identity. In fact, the formal identification of subdomains within SMS or conference sub-tracks within the BPS Division's annual program has opened up space for more scholars to become involved in shaping the field, dampening perceptions that self-proclaimed elites control its direction.

The ongoing challenge is to ensure that the emergence of, and differentiation by, specialist subgroups does not undermine the cohesiveness of the strategic management community as a whole. As

the number of strategic management scholars continues to grow and the diversity of theories and phenomena within strategic management continues to expand, so specialization into subfields is both inevitable and conducive to the advancement of knowledge. Since establishing the identity for a subfield encourages differentiation and boundary building, an ongoing challenge is ensuring that the field's sub-communities avoid orthodoxy and ideology and remain open to diverse knowledge sources. Thus, the same way that any organization's division of labor necessitates coordination, so knowledge accumulation in a scientific field requires that the centrifugal forces of specialization and the quest for innovation and novelty are balanced by the centripetal forces of openness to ideas and findings, communication, and shared scholarly norms.

HOW REVIEWS OF STRATEGY RESEARCH CAN HELP INTEGRATE THE FIELD

We have established that strategic management's eclecticism is unlikely soon to conform to conventional notions of normal science, grouped around a core of tightly knit definitions and principles. Nonetheless, the current state of the field warrants establishing standards for developing theory and conducting empirical analysis as well as mechanisms that facilitate integration among the different specialists and sub-communities that populate the field. Moreover, while fluid boundaries characterize the field and its subareas, future progress also may require consensus on the type of phenomena that are best explored through the lenses of strategic management and on those that are not. To this end, SMJ is playing a leading role in promulgating norms and expectations regarding the conduct of research through editorial briefs, as well as special issues that promote replication studies, advance proper methods for empirical analysis and interpretation, and attend to the intersection of research and practice.

From the outset, our primary goal for the special issue was to contribute to the integration of the strategy field. But how can reviews of the research topics and themes accomplish this intent? Initially, we were unsure; however, as the process progressed and the papers developed, the sources and potential benefits of such integration became more apparent.

Our initial call invited proposals for papers in advance of full papers so that we could provide feedback on both the prospects for the proposed paper and its contents. We encouraged papers that addressed a major topic in strategic management research whether a phenomenon or a theoretical stream; that offered integration, synthesis, or interpretation of the literature in novel or meaningful ways; and that had the potential to stimulate and redirect future research into the topic. We discouraged papers that addressed topics we viewed as peripheral to the field, or of interest to only a small minority of strategy scholars, or which were limited to literature surveys—including purely bibliographic studies.

The 186 original proposals generated 46 submitted papers, which were reduced to six accepted articles. Given all we have said about the widening domain of the strategy field, such a small set of articles can make only a limited contribution toward integration and coherence within the strategy field. Nevertheless, we are optimistic that our special issue can offer valuable pointers as to the path ahead. Hence, drawing upon the articles included in this issue, Table 1 specifies five ways (not intended as mutually exclusive) in which research reviews can contribute to counteracting the fragmentation challenges many scholarly fields encounter as they grow and mature.

1. Identifying and promoting theoretical developments and empirical analyses that subsume and integrate multiple theoretical streams.

Both Hambrick (2004) and Oxley, Rivkin, and Ryall (2010) emphasize the need for contributions to strategy theory to build upon preceding theories. This process corresponds to Lakatos's reformulation of Popper's notion of "series of theories superseding one another" as a progressive research program guided by the heuristic rule: "devise conjectures which have more empirical content than their predecessors" (Lakatos, 1968: 165-168). The value capture theory outlined by Ryall and Gans (this issue) exemplifies such progress. It has the potential to address "blindspots" in the prevailing approaches to analyzing performance heterogeneity among firms including Porter's "five forces of competition" framework, the resource-based view, and transaction cost economics. In doing so, the value capture model provides a theoretical framework in which key

Table 1. Contributions of the Special Issue articles to integrating the field of strategic management

Source of fragmentation	Opportunity for integration	Examples from special issue
(1) Lack of a cumulative or accretive theoretical development and empirical analyses	Identifying and promoting theoretical developments and empirical analyses that subsume and integrate multiple theoretical streams	Ryall and Gans: Value Capture Model Dorobantu, Kaul, and Zelner: Nonmarket strategies
(2) Multiple theoretical streams and empirical findings that address the same phenomena	Reconciling different theories and results that address the same phenomena but with different, sometimes conflicting, predictions and outcomes	Zhao, Fisher, Lounsbury, and Miller: Optimal Distinctiveness Cattani, Porac, and Thomas: Categories and Competition McIntyre and Srinivasan: Networks, Platforms and Strategy
(3) Narrow-range theories that address specific phenomena or particular contexts	Applying a single theoretical approach to a range of separate but related phenomena	Cattani, Porac and Thomas: Categories and Competition Reuer and Trigeorgis: Real Options Theory
(4) Developing new concepts and theory to address novel phenomena	Extending and combining existing concepts, theories, and empirical results of strategic management research to analyze novel phenomena	McIntyre and Srinivasan: Networks, Platforms, and Strategy Dorobantu, Kaul and Zelner: NonMarket Strategies
(5) Ambiguity and imprecision over theoretical constructs, the relationships between them, and their operational designs	Building more precise, systematic theory comprising clearly defined concepts, explicit assumptions, and logically derived causal relationships to support cohesive empirical progress	Ryall and Gans: Value Capture Model Zhao, Fisher, Lounsbury and Miller: Optimal Distinctiveness Reuer and Trigeorgis: Real Options Theory

aspects and empirical tests of these prevailing theories can be subsumed and integrated. By focusing upon a broad—and potentially measurable—concept of value, the model also provides a basis for integrating and comparing shareholder and stakeholder approaches to firm goals. Likewise, Dorobantu, Kaul, and Zelner (this issue) revisit the nonmarket strategies literature and offer a typology, rooted in new institutional economics, that synthesizes and supersedes prior works. Their hope is to provide a more complete and integrated set of determinants of governance choices for organizations facing weak institutions either locally or internationally. Their governance-based framework is applied to three broad categories of nonmarket strategies: organizational, collective, and political.

2. Reconciling different theories and results that address the same phenomena but with

different, sometimes conflicting, predictions and outcomes.

A consequence of the multidisciplinary nature of strategic management is that different theories based upon different disciplinary traditions address the same phenomena—often with conflicting predictions. The most striking example is the prediction of economics-based approaches to strategy that differentiation is conducive to superior firm performance, as compared with sociological approaches to strategy that emphasize the advantages of legitimacy through conformity. Yet, as Zhao, Fisher, Lounsbury and Miller (this issue) show, such seemingly incommensurable theories can be jointly deployed to provide a richer and more nuanced understanding of the phenomenon. Cattani, Porac, and Thomas (this issue) also demonstrate the potential to integrate different theoretical traditions in the study of one strategic phenomena—market categories. They show that the categorization of firms is fundamental to the study of competition and competitive advantage by identifying theoretical bridges between the economic analysis of markets and industries, strategic group theory, and socio-cognitive approaches to firm categories. Cattani et al., also pay careful attention to multiple levels of analysis—firm, interfirm, and external audiences—which influence, through market categories, how value can be created and distributed. McIntyre and Srinivasan (this issue) grapple with reconciling disparate branches of literature to advance our understanding of strategy in the context of platform-mediated networks, where the generalizability of prior empirical studies often has been limited due to the unique attributes of different industry or ecosystem contexts. Their synthesis of the literature highlights prominent differences in focus and analytical development among the three areas. For instance, industrial organization studies on indirect network effects often "treat the relationship between complementors and firms as a 'black-box'," whereas studies by strategy scholars explicitly consider this relationship from different vantage points (McIntyre and Srinivasan, this issue).

3. Applying a single theoretical approach to a range of separate but related phenomena. The proliferation of theory within strategic management—encouraged, in part, by the convention that empirical papers should contribute to theory—has led to the development of theories with a narrow domain of application. These theories contrast with those that yield predictions across a wide range of phenomena. For example, economies of scope combined with transaction cost analysis offers succinct analysis of multiple dimensions of corporate scope. Similarly, the resource-based view's predictions concerning the rent-generating potential of resources and capabilities apply to many different resource types and business contexts. The proliferation of situation-specific theories is the reverse of Popper's notion of progress through new theories having greater empirical content than their predecessors. Several articles in our special issue outline theoretical approaches that offer predictions across a wide span of phenomena. Cattani et al. (this issue) provides a convincing treatment of related phenomena that

had remained previously disconnected: value

creation and appropriation via the VPC model, mediation of market relationships by external audiences and third parties, and characterization of market identity. Likewise, Reuer and Trigeorgis not only show how the three main approaches to real options analysis (real options reasoning, real options valuation, and behavioral perspectives) can be used in combination, but also how the theory can be applied to a vast range of strategic phenomena, including core issues such as: "the drivers of firm heterogeneity and competitive advantage..., organizational form and associated build-borrow-buy decisions ..., cooperation vs. competition tradeoffs..., and the role of headquarters in multinational firms" (Reuer and Trigeorgis, this issue). 4. Extending and combining existing concepts, the-

- ories, and empirical results of strategic management research to analyze novel phenomena. The emergence of new phenomena offers a potent incentive for the development of new concepts and theory. As technologies reshape markets and competition drives strategic innovation among firms, new forms of strategic behavior and competitive interactions arise. In recent decades these include new digital business models encompassing the sharing economy, strategic patenting behavior, novel forms of outsourcing and distributed innovation, mass customization, new approaches to product bundling, and organizational arrangements that permit unprecedented flexibility and responsiveness. The opportunities to exploit the network externalities resulting from digital technologies have especially important implications for strategic behavior. As noted above, McIntyre and Srinivasan (this issue) extend and combine the literature from industrial organization economics, strategy and firm dynamics, and technology management, to analyze the phenomenon of platform-based competition. Dorobantu et al. (this issue) utilize familiar tools of institutional economics—transaction costs in particular—to analyze the diversity of nonmarket strategies that have emerged in recent years in response to complex regulative and institutional situations.
- 5. Building more precise, systematic theory comprising clearly defined concepts, explicit assumptions, and logically derived causal relationships to support cohesive empirical progress.

Advancement in a scholarly field requires consensus as to what is known. Such consensus involves lack of ambiguity over theoretical concepts and the relationships between them, alignment of theoretical concepts with their operational designs, and selection of the appropriate methods for analysis. This, in turn, necessitates precisely defined concepts, explicit assumptions, and logically derived causal relationships. An important contribution of the articles in this issue is in countering the fuzziness over concepts and theoretical relationships that have hampered progress in strategic management. This can be accomplished in multiple ways. For instance, Ryall and Gans's (this issue) exposition of the value capture model offers an analysis of profit determination and interfirm performance differentials based upon a carefully specified, formally derived theory of value determination. Although natural language is likely to continue to be the predominant means for describing concepts and their theoretical relationships, many phenomena we study in strategic management may lend themselves to formal modeling, whether mathematical or simulation based. However, it is verbally reasoned theory where the need for precision is most pressing. Thus, an important contribution of Zhao et al. (this issue) is to recast the genealogy of an idea (optimal distinctiveness), to reformulate it in more precise terms, and then to develop promising research questions within the reformulated theoretical context. Opportunities also exist for integrating formally derived and verbally argued theories. Reuer and Trigeoris (this issue) identify three areas of real option theory: real options reasoning, which uses verbal logic to explore the sources of real options and their potential to create value; real options valuation, which uses formal models; and behavioral perspectives, which address implementation questions. Because each approach is relevant to a different stage of the real options decision cycle, they demonstrate the complementarity of the three approaches.

THE QUEST FOR INTEGRATION

Reviews of research, such as those included in this issue, are a useful mechanism for fostering

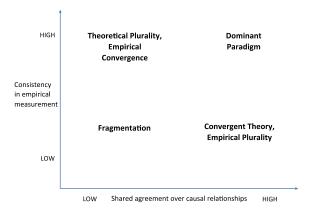


Figure 1. Paradigmatic stages of scientific development: an interfield positioning

integration within fields. Such syntheses can assist scholarly communities in distinguishing novel contributions from reformulations of existing knowledge and determining whether these new contributions clarify and advance, more than they obfuscate and hinder scientific progress. By articulating the state of knowledge in different subareas of a field, reviews such as those presented in this issue, could help reveal lines of inquiry that would benefit from replication studies, as well as those that possess more systematic theoretical validity.

Research reviews do not offer a unique view of past research and the integration they provide is likely only to be piecemeal. Yet, they are able to illuminate areas of a field where shared agreement exists in relation to two dimensions: (1) constructs and their relational properties and (2) consistency in the measurement of phenomena. Combining these two dimensions leads to the four situations illustrated in Figure 1. As the upper-right quadrant of Figure 1 illustrates, convergence in both dimensions yields a dominant paradigm state—the prevailing system relating theoretical constructs together with operational designs to test deduced relationships in a research area. In contrast, an area of study is characterized as fragmented when it lacks both consistency in empirical measurement and shared agreement on causal associations among constructs (Figure 1, lower-left quadrant). Where convergence exists around a single dimension, a state of partial convergence exists. Thus, the lower-right quadrant is a situation where different theories share broadly consistent relationships, but operational designs for testing these relationships vary. Such empirical plurality arises from multiple sources—improper use of methods, weak matching of theory with operational designs, lack of attention to methodological rigor and temporal effects, data availability and limitations, data mining, and heterogeneity in scholars' training and preferences, to name a few. Conversely, the upper-left quadrant is characterized by theoretical pluralism, but convergence in construct identification and measurement.

Where does the strategic management field locate on this map? We view the strategic management field's center of gravity as located somewhere in the lower-right quadrant, but close to its neighboring left cell. Substantial diversity exists in the positioning of the different subfields of strategic management within Figure 1. In relatively young subfields, we perceive both theoretical and empirical plurality. Within the majority of well-established subfields, however, we observe considerable consensus with regard to theoretical concepts and their causal relationships (we reckon that the majority of subfields belong to the right column), but often substantial variability in construct measurement. Thus, despite theoretical convergence, weak consistency in measurement fosters heterogeneity in empirical support for theory, thereby hindering different subfields' progress.

The location of the strategic management field (and of its various subfields) on Figure 1 illustrates where it can move forward and where reviews of past research and replications can contribute. With this special issue and the benefits of reviews for the field's integration, our community gains in realizing the areas of actual and future progress. We may disagree on whether an overall dominant paradigm is to be wished for or not, but, either way, theoretical eclecticism and empirical plurality remain core characteristics of strategy, and integration will require fostering both taxonomic and methodological commensurability among the different subfields and contributing disciplines. Ultimately, the counteracting power of fragmentation will depend upon the values and behaviors we embrace as a community of scholars. However, the same factors that have nurtured the remarkable development of the field over the past four decades—notably our willingness to embrace complex problems, to draw concepts, theories, and ideas from diverse disciplines, to contribute to practice, and to resist parochialism—are strong enablers of continuing progress.

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