ALTERNATIVES TO GENERIC STRATEGY TYPOLOGIES IN STRATEGIC HUMAN RESOURCE MANAGEMENT

Clint Chadwick

Peter Cappelli

Management Department

The Wharton School

University of Pennsylvania

3620 Locust Walk, Suite 2000 SH-DH

Philadelphia, PA 19104

phone: (215) 898-6598

fax: (215) 898-0401

Forthcoming in Wright, Dyer, Boudreau, and Milkovich (eds.), *Research in Personnel and Human Resources Management*, Greenwich, CT: JAI Press.

RUNNING HEAD: Alternatives to Generic Typologies in SHRM

ABSTRACT

The common use of generic strategy typologies in strategic human resource management (SHRM), such as the typology proposed by Michael Porter (1980), is inaccurate and probably obsolete. SHRM research that examines the performance effects of human resource (HR) systems does not need to invoke the strategy construct in order to fulfill its goals. SHRM research that uses organizations' strategies to predict their HR practices or which explore the effects of fit between HR systems and strategies should use measures of strategic content which are well grounded in issues pertinent to their specific empirical contexts. Alternatively, SHRM research can embrace dynamic perspectives of strategy, which will shed light on how human resource systems become strategically valuable organizational capabilities.

It is fashionable to raise questions about the viability of Strategic Human Resource Management (SHRM) as a research field because, while the topic is provocative, the research stream has had mixed results. One of the most common complaints is that empirical studies lag far behind SHRM's theoretic underpinnings (e.g., Dyer and Reeves 1995). Such situations are common for complex topics, of course, where it can be easier to craft models than to test them. However, the extent to which SHRM's problems lie simply with designing better empirical tests may be overstated. There are important problems with the theoretic underpinnings of SHRM research that have contributed to significant shortcomings in empirical research, particularly in how the strategy construct has been used to achieve SHRM's goals. SHRM research usually attempts to 1) include human resource practices in performance models predicting organizational outcomes, often incorporating concepts of internal synergies across practices, 2) include organizational strategies in models predicting organizations' sets of human resource practices, and 3) to use the degree of fit between human resource practices and organizational strategy to predict organizational outcomes. In our view, a major conceptual problem within the SHRM field lies in its view of strategy as a summary of either the competitive environment or of organizations' strategic positioning within it. This has led SHRM researchers to use excessively simplistic generic typologies to operationalize strategy. Essentially, SHRM researchers have been looking for simple independent variables which will neatly encapsulate the insights of the strategy field for inclusion in SHRM models. As we argue below, this approach is misleading both in general and in the particular typologies which are commonly used. To assume that a generic typology summarizes the range of insights from strategy is akin to researchers in the strategy field believing that they had captured the collective effects of a set of human resource practices with a single typology, such as the extent to which practices are "participative" or "inclusive." Human resource scholars would rightly object that such an approach could be inaccurate in its details and, more importantly, would ignore important viewpoints from the rest of what constitutes HR. Moreover, excessive use of a static, content-oriented typology could blind researchers to dynamic processes which could generate understanding of the causal mechanisms linking key constructs.

THE GOALS OF DIFFERENT TYPES OF SHRM RESEARCH

Part of this difficulty in SHRM is that researchers are using the term "strategic" to mean very different things. Some research under this label explores how human resource practices, such as selection mechanisms, training programs, and autonomous work teams, affect organization level performance outcomes. Research in this tradition is loosely synonymous with concerns about organizational performance, and the term strategic is presumably used because it relates to the strategic level of thinking within organizations, i.e., the top executives and their concern with the bottom line. Recognition of the goals of capital-providing stakeholders, primarily through increased emphasis on bottom-line, financial performance, has been a major conceptual departure for researchers interested in employment relationships. This shift in emphasis is appropriate because management's power to shape the arena in which tactical maneuvering between management and labor occurs is impressive (Kochan, McKersie, and Cappelli 1984), and this power is usually aligned with the interests of capital-providers.

Pressures for HR and other corporate staffing functions to demonstrate the value of their contributions to the bottom-line became increasingly insistent in the era of intensified international competition that began in the 1980s (Dyer and Reeves 1995) and accelerated with the rise of strategic renewal movements such as total quality management (TQM) and reengineering, which took a systemic approach toward evaluating the worth of organizational activities. Similarly, all types of SHRM research focus on interlinked sets of HR policies and practices and their relationships with their broader organizational and competitive contexts, rather than on individual HR policies or practices.

In contrast, the traditional approach toward measuring the performance impact of Human Resource Management (HRM), utility analysis, which only measures costs and benefits within a single functional area within HRM, may be too narrow to address organizational performance questions (Hackman 1985). While adopting a systemic point of view, some performance-oriented SHRM research simply aims to demonstrate that HRM influences organizational performance (e.g., Koch and McGrath 1996) and does not require the strategy construct at all. Likewise, when practitioners use the SHRM label, they often mean approaches that reveal the bottom line impact of sets of human resource practices.

A second use of the term "strategic" in SHRM applies to examining how organizations' strategic choices affect the evolution of their human resource practices. In the past, "strategic" thinking about choices in individual human resource practices usually meant little more than long-range planning, such as succession planning in a human resource development program. In contrast, SHRM researchers examine how the evolution of interlinked sets of human resource practices is influenced by organizational strategies and environmental contingencies. Strategy represents fundamental choices about organizational intentions and implies the capabilities and resources, including employees and human resource practices, needed to realize those intentions. Thus, it is often assumed that organizations' human resource practices should reflect their strategies. What SHRM scholars mean by an organization's strategy is a summary of its approach to managing its competitive environment. Also, by extension, SHRM scholars tend to treat strategy as a summary of the selection pressures in an organization's competitive environment. In other words, SHRM scholars sometimes use strategy as a lens through which they can view the effects of organizations' competitive contexts on the contents of their sets of human resource practices.

A third distinct use of the strategic label ties human resource practices to performance by examining the degree to which organizations' sets of human resource practices are matched to the requirements of their general strategies, a type of external fit argument. External fit is expected to amplify the effects of organizational strategies, whether these effects are positive or negative, though the positive interactions have received the most attention in SHRM literature. These arguments include configurational approaches, where similarity to a small set of theoretically predetermined optimal configurations of human resource policies and organizational strategies, such as those in Miles and Snow's generic strategy typology (Miles and Snow 1978), are expected to be associated with higher levels of performance. Both of these latter versions of SHRM explicitly use strategy in their models in the sense that researchers in other areas of management use it: to describe an organization level approach to competitive markets.

SHRM theorists also argue that synergies (or internal fit) between human resource practices will positively enhance organizational outcomes, and supporting evidence for this is beginning to emerge. Indeed, one of the most provocative emerging findings in current SHRM empirical research is that the impact of sets or "bundles" of interrelated HR practices can be distinctly greater than the additive impacts of the individual practices comprising the bundle (Arthur 1992; Huselid 1995; Ichniowski, Shaw, and Prennushi 1997; MacDuffie 1995)--i.e., that synergies among HR practices can exist. Synergy concepts have wide application in SHRM research. Along with systemic perspectives, a complementary interest in internal and external fit issues is a second defining characteristic of all kinds of SHRM research.

Strategy is a complex construct, and SHRM researchers create unnecessary confusion when they do not clearly specify the type of strategy they are using. Moreover, confounding more than one type of strategy in a study's empirical and theoretic pieces is a hazard which can undermine the ability to make inferences, leading to theoretic conclusions which are not supported by the analysis. SHRM scholars need to be clear what they mean when they discuss strategy, beyond simply acknowledging the importance of human resource practices for organizational performance. Here, we can learn a lot from the strategy field's struggles with different conceptualizations of the strategy construct, especially in its use of generic strategic typologies.

THE GOALS OF THE FIELD OF BUSINESS STRATEGY

SHRM is not the only field that uses the term "strategic" in different ways. The field of business strategy in management also uses the term to explain 1) the differences in the economic rents which accrue to organizations, or what drives differences in competitive advantage, 2) what factors influence the choices organizations make in their approaches toward generating strategic advantage, and 3) how environmental contingencies affect the value of strategic actions. Research on this second objective in the strategy field has grown exponentially in recent years. A large proportion of the energy being expended in strategy today involves describing how and why strategic actions occur. Because strategy is a multidisciplinary field where inquiry is driven by the phenomena under study, the strategy field's priorities are embedded in a much broader set of theoretic concerns than occur in SHRM, such as why firms differ, what determines how firms behave, and what determines the relative success of different firms (cf. Rumelt, Schendel, and Teece 1994, pp. 564-9).

A crucial dimension of any discussion of business strategy concerns the amount of freedom to act strategically that organizational actors possess, sometimes referred to as intentionality. The concept of intentionality presumes that organizations face decisions where optimal choices are neither obvious nor easily determined by internal consensus--i.e., where organizational actors have reasonable discretion, a condition which generates strategically significant differences across organizations (Nelson 1991).

The presence of causal ambiguity, multiple organizational performance imperatives, costly information, or bounded rationality presents organizational decision makers with multiple plausible options, each with different apparent advantages and disadvantages which are imperfectly known. Thus, strategy explicitly rejects the simple environmental determinism of neoclassical economics (Rumelt, Schendel, and Teece 1991). However, strategy researchers disagree about the amount of intentionality which exists in most strategic actions.

Intentionality is a key issue in SHRM research that attempts to examine relationships between organizational attributes and performance. If there is no choice but to place certain human resource practices together or to group a set of practices together with certain organizational strategies, then as a purely practical issue, it is impossible to measure synergies because such measurements require comparing incidents where practices covary to those where they do not. Further, the prescriptive or normative aspects of SHRM demand that organizational actors can consciously influence these processes. If managers cannot do anything to influence SHRM relationships, SHRM research becomes irrelevant to the practitioners for whom it is at least partially intended. (Consider, for example, how little influence the field of population ecology has had on managerial practice or pedagogy, despite its considerable research stream, because of the lack of intentionality in its paradigm.)[1]

This is why the first type of SHRM research discussed above, which only looks at the performance impact of HR systems, would not be considered as "strategic" from the point of view of some members of the strategy field.

The goals of SHRM and strategy are, in principle, synergistic: SHRM research can shed light on how a specific set of organizational attributes (human resource practices) can enhance competitive advantage from within the organizational black box. Strategy scholars can help SHRM researchers think about how organizational decision makers respond to competitive contexts, and in turn, how those responses help determine human resource practices. But there has been little cross-fertilization in practice. SHRM models often assume conceptual clarity where it does not exist, particularly concerning the strategy construct, and ignore important insights from SHRM and strategy field researchers, both of which limit our ability to build on previous research. This, in part, reflects the fact that most HRM researchers were not trained as strategists, nor do most strategy researchers have backgrounds in HRM, as others have also observed (Lengnick-Hall and Lengnick-Hall 1988, p. 467).

In the arguments that follow, we consider some of the underlying problems with the way in which business strategy is used in SHRM and suggest alternatives which are, perhaps, more suited to its particular needs and objectives.

THE PORTER TYPOLOGY AND ITS PITFALLS

Most SHRM research uses notions of strategy which are being dismissed as inadequate and perhaps even obsolete in the field of business strategy. These center on the keystone strategic typologies developed in the late 1970s and early 1980s by Miles and Snow (1978) or Porter (1980; 1985) to describe a firm's orientation toward its product markets (see Begin 1991; and Huselid 1995, respectively, for examples). Because SHRM researchers have consistently employed these typologies both empirically and theoretically, the problems they create for research go beyond poor operationalizations of a major construct to misleading conceptions of the business strategy construct itself. The most widely used strategic typology in SHRM research is the one popularized by Michael Porter. Although our criticisms focus on Porter's strategic typology specifically, many of them also apply to Miles and Snow's typology (and, indeed, to the other generic strategy typologies). Porter's typology often does not describe organizational strategies accurately because it's based on questionable notions of mutually exclusive tradeoffs between certain strategic priorities, because it's generality hinders its usefulness and conceals significant details, because it is sometimes used at the wrong level of analysis in SHRM research, because it leads to overly simplistic thinking about human resource systems, and because it is poorly matched to the resource-based view of the firm.

Coming from the perspective of Industrial Organization economics (Porter 1981), Porter's strategic typology was originally designed to guide firms in determining whether to enter or exit a particular industry. This analysis was based on competitors' product market positioning and on the relative market power of current industry players (suppliers, customers, potential entrants, and providers of substitute products) to appropriate economic rents for themselves. However, the common use of Porter's approach is to analyze relative market power in a particular industry in order for current players to determine strategic actions to take, rather than whether to enter or exit the industry. This is often known as "Five Forces" analysis, referring to the factors used in making that judgment. If the framework is applied correctly, it was argued, firms could learn how to position themselves to increase their relative market power and capture rents from the industry for themselves. One of Porter's important innovations was to apply concepts from Industrial Organization (IO) economics to a managerial perspective:

> By making managerial choice in an explicitly economic environment the focal point of analysis, Porter succeeded in turning IO economics on its head. Its traditional role was to identify socially wasteful sources of "monopoly" profits, but Porter instead used the framework to define

> and explain the strategies available to firms in their quest for survival and profit. (Rumelt, Schendel, and Teece 1994, p. 23)

In Porter's framework, organizational decision makers are supposed to determine which of a small range of generic strategies, based on basic product market positioning options available to firms, is most appropriate for their organization. Porter's three "generic" organizational strategies are cost leadership, differentiation, and focus. Cost leadership seeks strategic advantage through reductions in a firm's overall cost structure. While this may lead to a low pricing strategy in product markets (price leadership), a cost leadership strategy does not necessarily require it; the excess margins gained from a low cost structure could presumably be used to fund research and development or investments in brand equity, for example, to create a competitive advantage. Wal-Mart is a popular example of a firm following a cost leadership strategy. Differentiation strategies seek to distinguish a firm's products from the products of competitors by making it "unique in its industry along some dimensions that are widely valued by buyers" (Porter 1985, p. 14). Freshness dating for mass marketed beverages is an example of a strategic thrust aimed at differentiating a product. Finally, a firm following a focus strategy concentrates on a particular niche of the market in order to render excellent service to the preferences of a limited clientele. Mercedes in the auto industry has been a common example of a niche focus strategy.

Firms with a generic strategy are supposed to outperform firms without one. According to Porter, a generic strategy aligns organizational resources so that they work together in mutually supporting ways (an internal fit argument). Exactly how this alignment occurs or how strategies are implemented is not articulated.

A key dichotomy in Porter's framework contrasts cost leadership and differentiation or quality-focused strategies, based on the assumption that high quality and low cost are incompatible goals (Galunic and Eisenhardt 1994). One of the central lessons from the Total Quality Management (TQM) movement, however, is that high quality and low cost can be complementary rather than mutually exclusive objectives. Indeed, many firms, particularly in heavy manufacturing industries such as steel or autos, the favorite haunts of SHRM empiricists to date, are pursuing strategies which consciously aim to combine these and other goals (Flynn and Flynn 1996; MacDuffie, Sethuraman, and Fisher 1996; Cole 1992). Thus, Porter's framework may be unable to adequately describe an organization's strategic intentions because such a trade-off is neither recognized nor inevitable now. This is not to say that institutionalized beliefs about this trade-off may not persist in some quarters, or even that they might not have been dominant in the early 1980s when Porter formulated his framework, but times have clearly changed.

Porter derived his typology in part from the classic "strategy-structure-performance" paradigm in strategy, which asserts that greater alignment between an organization's strategy and its structure leads to better performance. This general perspective is in harmony with the concept of synergies in SHRM research. The problem lies with the built-in, mutually exclusive trade-offs between different product market strategies in Porter's typology, such as cost versus differentiation or quality, which may now be obsolete. In fact, according to Porter, it is a cardinal strategic sin to be "stuck in the middle," pursuing two or more generic strategies, but this is exactly where most manufacturing firms now want to be. As other observers have noted:

> Simply put, the traditional conceptions of strategy, [organizational] structure, and performance are outmoded, reflecting 1970s and 1980s business conditions. The accelerated speed, globalization, and competitiveness engulfing many firms has led to revitalized strategies and structures, which the traditional concepts only inadequately capture. (Galunic and Eisenhardt 1994, p. 240)

The contents of generic strategies may also suffer from serious omissions which undermine their validity: Generic strategies are often too general to have useful interpretations in specific contexts, and meaningful relationships between strategic choices and HR practices can be masked by the crudeness of the aggregation. Thus, the very generality of generic strategies hampers their usefulness, a feature which only exacerbates the problems caused by built-in, questionable tradeoffs. For example, the concept of a "differentiation" strategy could include everything from innovative products closely tailored to the emerging needs of clients to extraordinary customer service that adapts standard products to client needs. The internal organization and HRM practices of firms pursuing these two strategies would be significantly different. In other words, these typologies for describing organizational strategies inevitably truncate the analysis by lumping together qualitatively different strategic actions which should be examined more closely.

An Example: Life Insurance

Our research in the life insurance industry illustrates how the real context of an industry makes generic typologies difficult to interpret and how generic strategies conceal important details. Consider, for example, the business strategy identified as "cost-focused." In a business like life insurance, real feedback about accurate product costing comes only years after these decisions are made. To be blunt, only after customers have begun to die in significant numbers do life insurance firms really learn whether they accurately priced risk in their product offerings. Aggressively underpricing competitors or paring back office cost structures can have serious repercussions in future years if current cash flow cannot cover payouts because too many high risk clients were insured. In fact, it's not unusual for firms to learn that certain products ultimately carry negative net values because accumulated premiums do not cover payouts. Life insurance firms would find it very difficult to be single-mindedly cost focused as an approach to competition, though attention to costs is not unimportant. The key driver of success in life insurance involves accurately pricing risk, a capability which does not fit neatly into the Porter product market strategies.

Indeed, some of the most important strategic actions that life insurance firms take, such as tightly monitoring sales agents' behavior to prevent abuse of customer relationships, do not obviously fit into the generic typologies. Perhaps tight agent monitoring is a type of differentiation strategy (i.e., "We are the firm which monitors its agents most closely"), but it's unlikely that customers will become aware of how much a firm monitors its agents unless serious abuses come under public scrutiny, and choices on this issue are only one element in a range of strategic choices made by life insurance firms. Other types of significant strategic thrusts ostensibly pertaining to costs, focus, and differentiation are bundled together in ways which make Porter's unitary representations of SBU-level strategies nonsensical. For example, one firm in our study reported a strategy emphasizing providing products with many features (differentiation), high levels of customer service (differentiation), high levels of agent service to policy holders (differentiation), operating efficiency/cost control (cost focus), serving special market segments (focus), providing services to agents (indeterminate), and adding new distribution channels (indeterminate). Another firm reported emphasizing providing products with many features (differentiation), high levels of customer service (differentiation), high levels of agent remuneration (indeterminate), operating efficiency/cost control (cost), and providing services to agents (indeterminate) in its strategy.

In general, because the generic strategy typologies are based on product market issues, such as pricing, which are only a small portion of most firms' strategic concerns, they ignore the details of such important strategic issues as technology, finance, manufacturing, and importantly in insurance, the distribution system through which products are sold. Even the treatment of product markets, while not necessarily wrong, is rather limited, glossing over such factors as cycle times for product production and delivery. A number of firms, such as FedEx, incorporate speed of service as an important element in their product market strategies (Galunic and Eisenhardt 1994).

To illustrate how the Porter strategies fail to match well-contextualized strategies, Table 1 is a correlation matrix showing the Porter generic strategies and industry-specific strategic thrusts for our sample of life insurance firms (n=55). A Porter generic strategy was assigned to a firm based on responses from a chief executive about the firm's strategic intentions. The same survey also asked our respondents to indicate their firm's behavioral emphasis (using a five-point Likert scale) on each of sixteen different industry-specific strategic thrusts, such as providing services to agents in the sales force or adding new forms of product distribution (sales). These strategic thrusts were identified in the survey development phase through extensive structured interviews with chief executives from a small sample of major life insurance firms that represented the spectrum of market positions (e.g., first-mover innovators vs. fast followers, niche-focused vs. broad marketing) and organizational structures (e.g., direct mass media marketers, mutuals with exclusive agent marketing) in life insurance. The strategic thrusts describe most of the key strategic issues occupying these firms' attentions.

TABLE 1 ABOUT HERE

Table 1 shows that these contextually-grounded descriptions of the content of firm strategies share many significant intercorrelations. Evidently, many of these strategic thrusts are related to each other. However, they are rarely significantly correlated with Porter's generic strategies, even in seemingly obvious places, such as the correlation between emphasizing operating efficiency or cost control and having a low-cost Porter strategy. Since these data were taken from the same survey, monomethod bias should increase the likelihood of even a spurious correlation between the Porter strategies and strategic thrusts, yet few significant correlations exist. It's hazardous to draw attributions from the absence of significant results, as there may be many potential explanations for them. However, this pattern of outcomes parallels the difficulties that other researchers have had in finding significant relationships with generic strategy typologies, and it complements our arguments about construct validity problems with generic strategies.

The Lack of Empirical Effects for Generic Strategy Measures

This questionable validity may account for the all too common experience of many SHRM empiricists who informally report difficulties in finding statistically significant relationships when using the Porter strategies, particularly when attempting to use strategy to predict HR practices (e.g., Hunter 1996). Our own research using establishment-level data suggests that few effects on performance can be attributed to the Porter strategies after controlling for other important factors which are known to affect performance in the sample. The data come from a national probability sample of private sector establishments (e.g., manufacturing plants or retail stores) having over twenty employees in the United States. Table 2 shows hierarchical regression analyses for two different dependent variables, log of sales revenues and log of gross margin on sales, respectively, the latter defined as sales revenues minus costs for input labor and materials.[2]

TABLE 2 ABOUT HERE

For each dependent variable, the first regression is a basic performance model which was determined in a larger previous study using these data. The second regression adds dummy indicators for each of the Porter strategies, as reported by survey respondents (the omitted category is either an undefined strategy or an innovation-oriented strategy), to the basic performance model. Not only are none of the strategy dummies statistically significant in Model 1b and in two cases in Model 2b, but adding the Porter strategy variables as a group to the basic performance model yields negligible increases in model fit for both dependent variables.

We are not alone in questioning the utility of Porter's generic strategy. A non-comprehensive search of theoretic and empirical research over the past fifteen years reveals thirteen published articles which question the content validity of the Porter typology, sometimes by generating different typologies of strategy through factor or cluster analyses of empirical data, sixteen articles which raise doubts about the idea of mutually exclusive tradeoffs, particularly the cost vs. differentiation tradeoff, and three articles which challenge the usefulness of following Porter generic strategies to boost performance. This is not to say that all of the myriad research using the Porter typology rejects it--quite the contrary. Much of the research which utilizes the Porter typology does not question its validity or utility at all. But those studies which have attempted to evaluate Porter's generic typology have often ended up questioning its basic assumptions, challenging its usefulness, and suggesting modifications. These studies generally suggest at least two caveats for using Porter's generic strategy typologies:

First, that the empirical incidence of the Porter strategies as pure types is rare, so their empirical utility is questionable; Second, that these strategies may have more pertinence in certain specific contexts rather than in all industries, undermining their generalizability. For example, Wright and Parsinia (1988) suggest that a focus strategy may be mostly useful for smaller firms rather than for larger firms because niches are, by definition, of limited size. O'Reilly (1995) finds all three strategies to have been associated with better performance than being "stuck in the middle" in the specific context of the U.S. airline industry since deregulation. Miller (1992) suggests that Porter's generic strategies are probably most useful when a large portion of a market has overriding preferences for price or quality.

The unitary representation of firm strategies in generic typologies has other repercussions for their use in SHRM research. Porter's typology is meant to describe strategies at the strategic business unit (SBU) level, which is at least one step down from the organizational (e.g., corporate) level.[3] Nevertheless, it's not unusual for SHRM scholars to apply generic strategic typologies to the more aggregated organizational level, which may mask important differences in strategic emphases across SBUs (e.g., Huselid 1995). In contrast, in our insurance study, life insurance qualifies as an SBU-level depiction of strategy. Many insurance firms offer additional insurance products in distinctly different lines of business, such as property and casualty or workers' compensation insurance. Yet even on this more appropriate level, our life insurance data suggests that we should avoid using generic strategies altogether and focus on the strategies that are more pertinent to this context, which can have much more compelling, interpretable meanings.

Overall, the strategy of a large, diversified firm operating in a number of different industries is virtually impossible to describe accurately with a single measure. Thus, applying the Porter strategies on the organizational level uses this tool at a level of analysis where its underlying assumptions may not hold (cf. Hunter 1996), and should not be done without explicit justification. Empirical evidence that organizational strategy may be more usefully examined at the SBU level has been accumulating (e.g., McGahan and Porter 1997; Rumelt 1991; Schmalensee 1985), though the issue is still in dispute. In one well-quoted study, Rumelt (1991) estimated that corporate-level effects accounted for 0.8% of differences in return on capital, a financial performance indicator, while 8.3% of the variance was due to industry effects and 46.4% was attributable to SBU-level effects. This suggests that moving away from descriptions of strategy on the organizational level is an important conceptual as well as methodological frontier, and that the aggregation of strategy relationships at the corporate level may mask important systematic differences at the next level down.

The Attraction of Simplistic Typologies

The attraction of reducing business strategy to a single variable for SHRM research is in large measure because this makes it easy to incorporate into statistical analyses: Ask respondents to choose one of three generic strategies and then code the results as a dummy variable, with the comparison being against the third, omitted strategy. Again, this approach can be seriously misleading for comparisons among organizations of different sizes and structures.

Similar problems come from describing organizations' HR systems with generic typologies. A major attraction of the both Miles and Snow's and Porter's typologies are that they seem to offer simple prescriptions for human resource practice. For example, Porter's cost focus strategy is usually seen to require extensive cost reporting measures, well defined, objective measures of performance, and conservative spending on human resource compensation, acquisition, and development (Porter 1985; Schuler, Galante, and Jackson 1987). Miles and Snow's prospector organizations are characterized by low mechanization, highly skilled employees, decentralized control, flexible organizational structures, and incentives for innovation and marketing, all designed to keep the organizations interacting with and adapting to their competitive environments (Miles and Snow 1978, p. 66).

It's ironic that SHRM researchers would use typologies of human resource practices that have been created by business strategy researchers, and the practice leads to some now common difficulties. Do large, multi-divisional firms really use the same HR system for executives, managers, supervisors, and line workers? If not, which hierarchical level's HR practices affect organizational performance most, and which one should drive the classification into generic strategy categories? What are the performance effects of different combinations of HR practices across different hierarchies or functions within organizations? Is there only one configuration of HR practices which support a generic strategy, or are there multiple ways of achieving, say, a cost leadership position? The unitary perspective does not suggest these kinds of important questions. Thus, resorting to simple HR prescriptions from generic typologies may have prevented many SHRM researchers from doing much of the hard work of understanding HR systems in totality and determining how organizational strategies should then be linked to them. With rare exceptions (e.g., Ichniowski et al. 1997; MacDuffie 1995), neither SHRM researchers nor practitioners really seem to understand what strategies require of human resources on a systemic level.

An easy step forward is to make our measures of strategy more sophisticated. For example, if researchers need simple classifications for the purposes of their research designs, then a great deal of information can come from knowing a firm's relative level of emphasis on each dimension of a business strategy or human resource system, rather than simply which dimension is emphasized most. A dichotomous measure of strategy suggests that firms can only have one strategic emphasis at a time and that options which are mutually exclusive on survey instruments are traded off against each other in practice, reinforcing the conceptual shortfalls inherent in generic typologies. Either assumption may be seriously misleading, the better approach being to assess differences of degree of emphasis on each strategic dimension.

The Mismatch Between Generic Strategies and the Resource-Based View of the Firm

Implicit recognition of the preceding conceptual concerns with generic strategic typologies partly accounts for the popularity in SHRM research of the resource-based view (RBV) of the firm as a theoretic way of describing competitive advantage. The RBV contends that certain attributes make resources more likely to generate competitive advantages than others, including: 1) strategic value, the utility of a resource in helping an organization reach its strategic objectives, 2) rareness, or the fact that most competitors do not have the resource, 3) imperfect imitability, a quality which makes these resources hard for competitors to imitate, and 4) the lack of strategically equivalent substitutes (Barney 1991). In other words, strategically valuable resources can lead to competitive advantage to the degree that they are unique: They are not readily purchasable by competitors in a market, are difficult to develop, and cannot be closely approximated.

SHRM scholars find common ground with the RBV's focus on internal sources of competitive advantage, which are labeled resources. The RBV's concept of resources readily includes such human resource management factors as employees, the ways in which employment relationships are governed, and the organization of work within an organization. The RBV's contention that organizational resources become more strategically valuable as their inimitability and rareness increase also points toward employees because social systems, including interrelated systems of HR practices, are some of the most unique and difficult-to-imitate facets of any organization, primarily because many of their most important characteristics are tacit and highly complex.

The RBV also suggests a fundamental problem with the generic typologies' prescriptions for organizations. These prescriptions presume that strategically advantageous choices for firm positioning (picking a generic strategy to follow) can be made on the basis of information that is easily accessible to organizational decision makers (e.g., marginal costs, elasticity of product demand given changes in product quality, power of suppliers to set prices, etc.). Let us set aside for a moment the often formidable problems in *actually* acquiring such information and consider the concept of generic strategies. If almost anyone can figure out and copy what a firm should do from a generic typology, where is the competitive advantage? More formally, the question is where strategic rents accrue if generic strategies yield prescriptions which are easily knowable and imitable. (Indeed, by this logic, research that makes the effects of human resources on organizational competitiveness more explicit will probably reduce the strategic value of HR practices by making it easier to understand and copy advantageous configurations.)

Part of the value of even a generic strategy may lie in the fact that, contrary to the spirit of Porter's typology, putting organizational resources to work in support of an intended strategy is no easy task. Thus, path dependencies, including organizational culture or previous investments in physical and human assets, may close out some options prescribed by Porterian analysis, making imitation by competitors difficult even when the optimal strategy per a Porterian analysis is obvious to all players. The obstacles to strategic implementation can be quite complex. To illustrate, consider the metaphor a of "fitness landscape," where the competitive environment is represented by a multidimensional landscape of peaks and valleys, which organization theorists use to explain strategic dynamics in populations of organizations. This topography is created by localized optima, or peaks, in the competitive landscape--places where organizations can enjoy local competitive advantages. At birth, an organization lands somewhere on this fitness landscape and, if it survives, begins to respond to local competitive conditions by adapting itself to those demands--in the metaphor's terms, to climb the nearest peak or hill. Some peaks are taller than others, however, reflecting the fact that some local optima offer more absolute competitive advantage than others. Organizations which exist at the top of a fitness peak have attributes which are highly adapted to local competitive conditions--in SHRM terms, they have good external fit. If this condition has persisted for some time, these organizations' internal attributes are likely to be tightly interlinked, just as SHRM literature suggests.

However, at times, an organization may find itself to be adapted to conditions which are less valuable than other optimum points or have become irrelevant through important changes in the terms of competition. Either condition may lead to a decision to change the location of the organization in the competitive environment. This highlights the liability of external fit: The tighter the fit to external conditions, the greater the liability when terms of competition change. Levinthal (1997) demonstrates that the problem of pulling off strategically valuable incremental changes in complex, interlinked systems of organizational characteristics, such as a set of HR practices, becomes increasingly difficult as the number of elements in the system and the tightness of their linkages increase. This is the liability of internal fit. Wholesale systemic changes (Romanelli and Tushman 1994) are a possible solution, but run the risk of destroying existing competencies in favor of an uncertain future where the hazard of organizational mortality is "reset" to that of a brand-new organization. This phenomenon is sometimes known as the "liability of newness" (Amburgey, Kelly, and Barnett 1993; Levinthal 1997).

In the metaphor's terms, the ideal solution is to leap from one peak to a better one, but organizations run a high risk of landing in a valley where they will die before they can climb out. Thus, this metaphor holds a place for both a "best practices" approach and a contingency approach to fit. Adaptation to contingencies gets an organization to the top of a particular peak, but a single peak in the competitive landscape may be more valuable than any other. An appropriate question for organizations is whether the added value of attempting to get to another peak, including the "best practices" peak, is worth the risk.

A key feature of the fitness landscape which figures in such a decision is the number of peaks and the differences in their heights, or how "rugged" the fitness landscape is. If there are only a few peaks, for example, it may be easier to jump from one to another because the specifics of the other configuration are more obvious. The ruggedness of the fitness landscape also bears on the meaningfulness of generic strategies. If only one peak exists in a fitness landscape, then a single optimal configuration exists. On the other hand, if many peaks of roughly equal heights exist, then multiple optimal configurations exist, or, in other words, equifinality, achieving comparable success through different configurations, is possible. For a fitness landscape with only a few optima, the configurations corresponding to these peaks may be seen as a limited set of "generic strategies" for that fitness landscape.

However, in a fitness landscape which is broad enough to include all organizations, there may be scores of more or less equally tall peaks, rather than just a few dominant peaks (cf. Levinthal 1997). Landscape ruggedness is increased by interdependence, the degree to which "the fitness contribution of a particular attribute of an organization's form depends on other attributes of the organization" (Levinthal 1997, p. 936). Thus, landscapes with greater interdependence in the effects of important organizational attributes, such as HR practices, on organizational survival will be more rugged and may therefore have many more than three or four optimal "generic" configurations, suggesting another reason why generic strategies which are intended to apply to all organizations have limited usefulness.

Attending to the ruggedness of a fitness landscape in SHRM research could help resolve the conflict between making strategies contextually valid, which, pushed to its extreme, makes each organization's strategy unique, and studying similarities across sets of organizations. Data on organizations which are gathered from a fitness landscape that is defined at a modest scope and ruggedness (for example, by restricting the sample to firms in the life insurance industry) may find a few optimal configurations of HR practices which are relevant for that limited context, as MacDuffie (1995) did in auto assembly plants, where a "lean production" manufacturing strategy, coupled with complementary HR practices, was the optimal strategy. However, these common strategies are unlikely to generalize to all organizations. The factors which influence ruggedness could help determine where SHRM researchers should demarcate an empirical sample frame.

Overall, this perspective on organizational adaptation suggests that strategies may, in many cases, be better formed by looking for ways to apply existing organizational resources strategically through the perspective of the RBV than by determining a general product market strategy and attempting to fit internal resources to it (Cappelli and Crocker-Hefter 1996). If a Porter strategy is hard to imitate, the factors which drive this inimitability are likely to lie in differences in the resource endowments of different players. For example, consider again the life insurance industry, where a previous strategic choice about the type of product distribution system a firm will use (e.g., exclusive agency force, non-exclusive agents, licensed stock brokers, mass media, etc.) may function as both a valuable resource and as a constraint in strategic decisions because of the large investments in organizational assets which they demand. It would be myopic for a firm like State Farm to casually throw away its extensive investment in an exclusive agent distribution channel. Instead, State Farm, which was has been best known for its property and casualty and automobile insurance businesses, has been leveraging relationships between customers and exclusive agents to cross-sell life insurance products.

These resource-driven strategies are unlikely to fall into the neat categories of generic strategy typologies that are rooted in product market positioning vis-à-vis competitors. Thus, to the extent that resources really do drive the contents of organizations' strategies, typologies like Porter's are unlikely to provide a very precise description of organizational strategies. Therefore, Porterian operationalizations of strategy may not be appropriate to test theoretic propositions derived from the RBV because these are two very different brands of strategy, and inferences which are derived from empirical tests of the Porter strategies may not apply in the same way to resource-based strategies.

Generic strategies come up short in either of two different ways. If they are easy to imitate, they cannot yield competitive advantage, and if they are not easily implementable because of resource constraints, then the RBV is probably a more accurate clue to the content of realized strategies and a better description of strategy making processes.

The Need to Measure Causal Mechanisms

This mismatch between conceptions of internal resources and operationalizations of strategy raises another fundamental question which SHRM has yet to resolve adequately: What are the theoretical rationales for relating strategy, HR practices, and organizational outcomes? For example, what are the proper HR practices for supporting a focus strategy? Is it possible that more than one configuration of HR practices enhances a focus strategy? Would a different characterization of strategy have different relationships between human resource practices and organizational outcomes? Unfortunately, empirical SHRM research usually accepts the simple configurations of strategy and HR practices propounded by generic typologies, rather than measuring mechanisms directly. This underscores how little we know about how external fit really works.

Similarly, the external fit arguments in SHRM usually assume knowledge of supporting details which have yet to be clearly expounded or measured. As Cappelli and Singh (1992) note, SHRM hypotheses are based on two unstated propositions: 1) A particular business strategy demands a unique set of responses from employees (behaviors and attitudes) and 2) A particular set of human resource policies produces a unique set of responses from employees. Arguments about fitting business strategy to human resource practices are really hypotheses about the relationship between Propositions 1 and 2. These hypotheses cannot be true unless both propositions are also true, and the main difficulty facing attempts to do research on strategy and human resources is that we do not have a well-developed body of knowledge associated with Propositions 1 and 2 (pp. 170-1).

Progress in understanding hypotheses associated with Proposition 1 depends on using a wider range of strategy concepts than has been the norm in SHRM research to this point. This will help SHRM researchers to comprehend the mechanisms underlying synergies and enhance the contextual validity of their work. However, this will not occur if SHRM scholars continue to be content focused, essentially looking for neatly packaged descriptions of strategy for insertion as independent variables into SHRM models. Moreover, the answer is not in new and better generic strategy typologies. Generic strategies (i.e., strategies which are intended to apply to all organizations) may well describe certain general organizational priorities, but, as we noted above, they are not at deep enough levels of specificity to help SHRM scholars delineate the complex linkages between human resource practices, strategies, organizational outcomes, and they are probably too few in number to effectively describe the many optimal configurations which are likely to be present among the set of all organizations.

In summary, the widespread use of generic typologies of business strategy in SHRM research creates serious problems. First, generic typologies can be highly inaccurate ways to characterize strategy in specific empirical contexts, and they exclude other, potentially important conceptualizations of strategy. Consequently, theoretical inferences based on research using generic typologies may be inadequate for a particular sample and inaccurate for drawing inferences about the influence of the strategy construct as a whole, which includes much more than the contents of the commonly used generic typologies. Second, describing both firm strategy and HR systems in a unitary fashion on the organizational level can mask important attributes of organizations which would enhance our understanding of the effects of HR and strategy on organizational outcomes. Third, operationalizing strategy with generic typologies does not match the RBV theoretic approach, which seems more suited to the needs of SHRM research. Doing so can generate misleading inferences about the relationships between strategy, human resource practices, and organizational outcomes.

NEW DIRECTIONS FOR USING STRATEGY IN SHRM RESEARCH

If generic strategies are obsolete, with what should they be replaced? Strategy scholars have no uniform answer, as no widely accepted replacements for generic typologies have appeared. In recent years, the field has been absorbed with perspectives oriented toward internal organizational characteristics, particularly the resource-based view of the firm. However, the value of firm resources is determined in interactions with external markets, so analyzing organizations' competitive environments is still salient. As Michael Porter remarked: "Stress on resources must complement, not substitute for, stress on market positions. Resources are not valuable in and of themselves, but because they allow firms to perform activities that create advantages in particular markets" (1991, p. 108).

In this spirit, strategy scholars have begun to move from discussing stocks of organizational resources to organizational capabilities, the abilities to use resources in strategically advantageous ways (Stalk, Evans, and Shulman 1992). This can be thought of as a more dynamic and externally oriented recasting of the RBV, and it has intensified strategy scholars' growing emphasis on delineating strategy making processes, rather than simply describing the elements which make up strategies. By framing strategy questions differently, these new approaches can generate new issues for SHRM researchers to explore. For example, joint ventures allow partner organizations to expand, acquire control, or liquidate their holdings in the joint venture at different points in its history. Some innovative strategy research has reframed these decisions to expand, acquire, or liquidate joint ventures as the equivalent of stock futures where partner organizations buy the right to acquire strategic capabilities, if they materialize in the joint venture, at a future date (Hurry, Miller, and Bowman 1992; Kogut 1991). Some of these capabilities may include new kinds of human resource systems, such as the high performance work systems employed at the NUMMI auto plant in Fremont, California, a joint venture between Toyota and General Motors. (Apparently, General Motors has not been very successful in extending the integrated HR system at NUMMI to its other operations. This suggests that the general ability to successfully absorb new strategic options is also important.) This metaphor can be extended to strategic resource investments in compelling ways (Bowman and Hurry 1993). For example, contingent or contract worker arrangements may also be thought of as employment relationships which give organizations options to acquire employees who demonstrate strategic value, not just ways to reduce benefits costs and increase employment flexibility.[4] Clearly, new approaches to strategy such as these offer both challenges and opportunities for SHRM research.

Reassessing the Need for Strategy in SHRM

Whether SHRM can make use of the new approaches--and if so, how--begins with a careful assessment of exactly what SHRM needs from the strategy literature. As we noted before, the first type of SHRM research described above, which examines the effects of HR systems on organizational outcomes, does not require strategy at all and is agnostic about strategic intentionality. The second and third approaches to SHRM, which use business strategy to predict HR practices and examine the performance effects of "fit" between practices and business strategy, respectively, clearly do rely on the concept of strategy. But in what ways?

SHRM, as traditionally practiced, has no real need for an answer to the question that currently dominates strategy research, which is how business strategies are formulated. Instead, what it needs is an accurate description of the contents of business strategies that emerge from the formulation process. Business strategies, in turn, have been used in models to drive the adoption of HR practices. What contemporary research offers in this regard is a very complex description of strategy outcomes, one that is specific to contexts (e.g., applies only to within-industry studies) and offers an array of criteria for describing strategies (e.g., degrees of emphasis across a range of factors). Further, what many believe is the most promising conceptualization of the strategy process, the RBV and arguments about competencies, may well turn the implicit assumptions of SHRM on their heads, suggesting that strategy is the result of internal practices and resources rather than their cause. The attempts in SHRM to see whether fit between business strategy and HR practices improve organizational performance are removed somewhat from the problem of causation. If the goal is to examine whether a given combination of business strategy and human resource practices create synergies that improve performance, it may not matter whether strategy drives the HR practices or vice versa. But even these fit hypotheses need an explanation one way or the other about which strategies and practices go together, and that is rooted in understanding the dynamic mechanisms linking these two constructs.

The way forward for SHRM offers some interesting choices. To pursue its traditional questions, SHRM needs some indication of which aspects or conceptualizations of business strategy "matter" for human resource practices. Likewise, if strategy is to be used simply as a summary of the competitive environment, direct measures of the environmental factors which "matter" should be used. The assumption previously was that the generic typologies must apply because they seemed to describe fundamental differences in how firms were organized and operated. That no longer appears to be true, and it does not seem likely that the field of business strategy will offer up a compelling alternative. The reason, of course, is that business strategy researchers are not especially interested in identifying which firm choices are important for human resources. That leaves SHRM researchers to solve the problem for themselves.

The most promising avenue for doing so is probably not to look from the top of the organization down, but to begin at the level of human resource and work organization practices, things which SHRM researchers tend to know well, and work up. For example, arguably two of the most influential empirical studies in the emerging SHRM tradition are Ichniowski, Shaw, and Prennushi's (1997) study in the steel industry and MacDuffie's (1995) in automobile assembly. Both craft their explanations within the context of a single industry, and both look for the drivers of HR practices not at the level of business strategy but at the level of production systems, in choices or "strategies" of manufacturing technology. For example, Ichniowski, et al. ground their performance equations in a thorough understanding of the production process in steel finishing production lines and of the configurations of human resource practices which are prevalent in this context. They use this knowledge to check the validity of their groupings of human resource systems. MacDuffie develops a strong argument for synergistic human resource practices based on the requirements of "lean production" in automobile mass manufacturing. Different choices in manufacturing systems are seen as requiring different work organization and employment practices which can be specifically hypothesized about a priori. The manufacturing strategies in each study are unique to that industry and do not aggregate up to any generic typology, despite that fact that the label "high performance work systems" has been invoked in each case (Dyer and Reeves 1995). Yet they work well in their specific contexts.

Similar arguments can be made about the research on business strategy and labor relations which predates most SHRM research. In these studies, the outcomes of the collective bargaining process were seen as driven in part by the bargaining power that management derived from its ability to manipulate employment levels unilaterally. Therefore, once the management choices through which employment could be shaped unilaterally were identified, such as investment decisions that closed existing plants or opened new ones, then researchers had "discovered" the business strategy choices that were needed to drive their explanations of collective bargaining outcomes (Cappelli and Singh 1992).

In industries where the human resource implications of a dominant production technology or employee governance mechanism are not obvious, making sense of the multitude of strategic actions firms might take can be a major problem. This might be true, for example, in a service industry such as life insurance. One solution is to break the organization into pieces where a dominant organizational logic does prevail, such as in an R&D division of a consumer electronics firm or in the sales division of an insurance company, as we implied in our discussion of fitness landscapes. An empirical operationalization of strategy might use factor or cluster analysis to determine how specific strategic thrusts are combined by SBU-level organizations in the sample. These groupings could then be theoretically related to HR practices through mechanisms which are plausible vis-à-vis the prevailing organizational logics in the sample and are informed by the strategy field's current thinking about how organizational capabilities and strategic decision making co-evolve. Of course, the difficulty with this approach is that it trades universal descriptions of the relationships between strategy, HR practices, and performance for contextual validity, but the potential gains in understanding make this a good bargain at this point.

This suggestion is not an appeal to ad hoc methodologies. Descriptions of strategic content and of the particular approach to strategy used to describe linkages between HR systems and strategies should be based on a thorough knowledge of the empirical context for a particular study. Thus, a priori hypotheses about the relationships between HR practices, strategy, and organizational outcomes will be informed by theoretic mechanisms which are contextually relevant. Also, any operationalization of strategy should be well matched to the theoretic arguments it helps to examine, in contrast to default usage of generic typologies.

A Different Course: Dynamic Capabilities and SHRM

Another very different route for SHRM is to pursue the approach in the first type of SHRM studies, examining the impact of HR practices on organizational performance, yet to do so with a different goal in mind. Researchers in business strategy are spending a great deal of time working in the resource-based view and competency traditions to identify sources of competitive advantage for firms. Research on the performance impact of HR practices is designed to do exactly that. SHRM researchers might simply focus their studies on identifying why human resource and work organization practices generate returns in one setting but not in others in order to understand why human resources become strategic competencies. In short, the audience for traditional SHRM research may become much broader if the studies were pointed away from simple measurement of effects toward these larger questions. Moreover, attention to how strategic capabilities evolve will shed light on how bundling or synergies really work, which would enhance SHRM work on fit and on how strategy influences organizations' sets of HR practices. Hence, SHRM can also gain much from a more dynamic approach to studying strategic advantage. Again, this effort should draw on existing process-oriented strategy theories to generate new hypotheses about how and why internal and external fit occurs, as well as how resources may give rise to strategies. To illustrate how this might work, we briefly discuss some dynamic strategic process approaches and some of their potential applications to SHRM research below.

One dynamic approach to strategy seeks to determine organizations' strategies by observing patterns in their strategic actions over time. This approach is reflected in such definitions of strategy as "consistencies in the behavior of organizations" (Mintzberg and Waters 1982) and "a pattern in a stream of [organizationally relevant] decisions" (Mintzberg 1978). Generally, this approach depicts strategy as organizational interactions with uncertain or dynamic environmental conditions that make strategic planning by top management less useful because of bounded rationality (Mintzberg 1992). Thus, this approach emphasizes the dynamic organizational processes which help generate strategic opportunities, rather than the comparative statics of most economics-based approaches. While scholars in this tradition are generally skeptical of top management's ability to set appropriate strategies as complete, finished wholes, they acknowledge that strategic content and processes are subject to a degree of conscious shaping by organizational actors, but argue that this occurs incrementally (Quinn 1980).

SHRM research using this approach could draw on existing models of internal coalition building and sensemaking processes in describing how HR policies and practices are determined and in how sets of HR policies and practices are given a degree of coherence (e.g., Abrahamson 1996, 1997; Bamberger and Fiegenbaum 1996; Johns, 1993). These notions of strategy recognize the advantages of fluid strategic adaptation, making for rich description of the organizational processes which create and support adaptive strategies, and are often only peripherally concerned with enumerating the appropriate content of specific strategies. They thus form a basis for describing how organizational actors can help human resource systems become strategically valuable strategic capabilities.

In one version of this approach, strategic options bubble up the organizational hierarchy to top managers, who can assign resources to promising alternatives, while allowing other options to die. Management can achieve strategic coherence by constraining supported strategic thrusts to fall within predetermined general parameters (Perry, Stott, and Smallwood 1993). For example, Xerox supports strategic innovation in a number of ways within the firm, but keeps supported options within its self-defined identity as "the document company." One way in which this perspective sheds light on the development of capabilities is by suggesting that differences in the timing of managerial decisions about which strategic thrusts will be supported and in the breadth of the parameters which determine what organizations will and will not do can impact internal fit. For example, management can encourage more strategic variety by delaying its resource allocation decisions until innovative strategic thrusts have time to mature. Likewise, widening an organization's general strategic parameters can encourage strategic variety, but both of these moves may be costly to internal fit. Perhaps different kinds of strategic capabilities are more likely to develop under different combinations of these two variables (see Table 3).

TABLE 3 ABOUT HERE

To illustrate, it would be interesting to compare the impact of HR systems on firm performance in firms that combine delayed resource allocation decisions with tight general strategic parameters (firms in Quadrant D in Table 3) to the strategic value of HR systems in firms which have chosen tight strategic parameters and early resource allocation decision points (firms in Quadrant C in Table 3).

Dynamic approaches to understanding strategy formulation also include evolutionary economics (e.g., Nelson and Winter 1982), which introduce such concepts as tacit knowledge and organizational routines and examine their implications, and resource dependence theories, which describe how organizational decisions are made, based on the relative power of various factions within each organization (e.g., Pfeffer 1978). This research stream also includes the important voices of political scientists, cognitive psychologists, organizational culture theorists, and advocates of "learning" organizations. Clearly, dynamic approaches to strategy offer a variety of perspectives.

The ambiguities here may be somewhat disconcerting to SHRM scholars who are used to the comforting certainties of the generic typologies. Nevertheless, exploring dynamic strategy theories offers great opportunities for SHRM. SHRM theorists generally do not yet have a good understanding of the mechanisms driving complementarities, and delving into them may suggest new questions as well as answers. For example, examining mechanisms could suggest that our attention may be profitably directed to a relatively unexamined general organizational capability, the ability to implement human resource policies consistent with organizational strategies, rather than on the specific contents of strategies and sets of human resource practices, since fit may be a phenomenon which is idiosyncratic at the organization level or even lower (Becker and Gerhart 1996; Huselid and Becker 1995). Indeed, attention to capabilities may justifiably bring SHRM research back to the organizational level of analysis, where capabilities are thought to reside (Stalk, Evans, and Shulman 1992).

Overall, the juncture of human resource management and strategy in SHRM suggests a way to merge internal and external views of strategic advantage by shedding light on how strategic capabilities develop. Human resource management's advantage here is its ability to help strategy researchers look inside organizational black boxes at the HR practices which govern employment relationships and determine the organization of work. Strategy contributes ways of thinking theoretically about the sources of competitive advantage. Together, strategy and human resource management may be able to define a priori theoretical rationales for linking human resource practices with organizational strategies and outcomes. Detailed understanding of both internal and external complementarities would be a major advance for SHRM and is a logical replacement for the simple but outmoded configurations described in generic strategy typologies.

AUTHOR ACKNOWLEDGMENT

We gratefully acknowledge the comments of Prashant Kale on strategy issues and of Larry Hunter on strategic human resource management.

NOTES

1. A central tenet of population ecology is that organizational inertia is so strong that organizations cannot effectively adapt to the demands of their competitive environments (i.e., that organizational attributes are essentially fixed; cf. Hannan and Freeman 1989).

2. This study and the one that follows are mentioned for illustrative purposes and should not be viewed as definitive tests of Porter's typology. A detailed description of these studies are available from the authors upon request.

3. We note that Porter's value chains analysis (Porter 1985) also incorporates factors which are conceived to operate on the corporate (organization) level, but that his generic strategies and Five Forces analyses are situated at the SBU level.

4. We thank Patrick Wright for suggesting this example.

REFERENCES

Abrahamson, Eric. 1997. The emergence and prevalence of management rhetorics: The effects of long waves, labor unions, and turnover, 1875 to 1992. *Academy of Management Journal,* 40(3): 491-533.

----------. 1996. Management fashion. *Academy of Management Review,* 21(1): 254-285.

Amburgey, Terry L.; Kelly, Dawn; and Barnett, William P. 1993. Resetting the clock : The dynamics of organizational change and failure. *Administrative Science Quarterly* 38(1): 51-73.

Arthur, Jeffrey B. 1992. The link between business strategy and industrial relations systems in American steel minimills. *Industrial and Labor Relations Review* 45(3): 488-506.

Bamberger, Peter A., and Fiegenbaum, Avi. 1996. The role of strategic reference points in explaining the nature and consequences of human resource strategy. Academy of Management Review 21(4): 926-58.

Barney, Jay. 1991. Firm resources and sustained competitive advantage. *Journal of Management* 17: 99-120.

Becker, Brian, and Gerhart, Barry. 1996. The impact of human resource management on organizational performance: Progress and prospects. *Academy of Management Journal* 39(4): 779-801.

Begin, James P. 1991. *Strategic employment policy: An organizational systems perspective*. Englewood Cliffs, NJ: Prentice-Hall.

Bowman, Edward H., and Hurry, Dileep. 1993. Strategy through the option lens: An integrated view of resource investments and the incremental-choice process. *Academy of Management Review* 18(4): 760-82.

Cappelli, Peter, and Crocker-Hefter, Anne. 1996. Distinctive human resources are firm's core competencies. *Organizational Dynamics* 24(3): 7-22.

Cappelli, Peter, and Singh, Harbir. 1992. Integrating strategic human resources and strategic management. In *Research Frontiers in Industrial Relations and Human Resources*, Lewin, David; Mitchell, Olivia S.; and Sherer, Peter, D., eds., pp. 165-192. Madison, Wisc.: Industrial Relations Research Association.

Cole, Robert E. 1992. The quality revolution. *Production and Operations Management* 1(1): 118-20.

Dyer, Lee, and Reeves, Todd. 1995. Human resource strategies and firm performance: What do we know and where do we need to go? *The International Journal of Human Resource Management* 6(3): 656-70.

Flynn, E. James, and Flynn, Barbara B. 1996. Achieving simultaneous cost and differentiation competitive advantages through continuous improvement: World class manufacturing as a competitive strategy. *Journal of Management Issues* 8(3): 360-79.

Galunic, D. Charles, and Eisenhardt, Kathleen M. 1994. Renewing the strategy-structure-performance paradigm. In *Research in Organizational Behavior,* vol. 16, Staw, Barry M., and Cummings, Larry L. eds., pp. 215-55.

Hackman, J. Richard. 1985. Doing research that makes a difference. In *Doing Research That Is Useful for Theory and Practice,* Edward E. Lawler, et al. eds., pp. 126-49. San Francisco: Jossey-Bass.

Hannan, Michael T., and Freeman, John. 1989. *Organizational ecology.* Cambridge, MA: Harvard University Press.

Hunter, Larry W. 1996. When fit doesn't happen: The limits of business strategy as an explanation for variety in human resource management practices. Paper presented at the annual meetings of the Academy of Management, Cincinnati, OH, August, 1996.

Hurry, Dileep; Miller, Adam T.; and Bowman, Edward H. 1992. Calls on high-technology: Japanese exploration of venture capital investments in the United States. *Strategic Management Journal* 13: 85-101.

Huselid, Mark A. 1995. The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal* 38: 635-72.

Huselid, Mark A., and Becker, Brian E. 1996. Methodological issues in cross-sectional and panel estimates of the HR-firm performance link. *Industrial Relations* 35(3): 400-22.

Ichniowski, Casey; Shaw, Kathryn; and Prennushi, Giovanna. 1997. The effects of human resource management practices on productivity: A study of steel finishing lines. *American Economic Review* 87(3): 291-313.

Johns, Gary. 1993. Constraints on the adoption of psychology-based personnel practices: Lessons from organizational innovation. *Personnel Psychology* 46(3): 569-92.

Koch, Marianne J., and McGrath, Rita Gunther. 1996. Improving labor productivity: Human resource management policies do matter. *Strategic Management Journal* 17: 335-54.

Kochan, Thomas A.; McKersie, Robert B.; and Cappelli, Peter. 1984. Strategic choice and industrial relations theory. *Industrial Relations* 23(1): 16-39.

Kogut, Bruce. 1991. Joint ventures and the option to expand and acquire. *Management Science* 37(1): 19-33.

Lengnick-Hall, Cynthia A., and Lengnick-Hall, Mark L. 1988. Strategic human resource management: A review of the literature and a proposed typology. *Academy of Management Review* 13: 454-70.

Levinthal, Daniel. 1997. Adaptation on rugged landscapes. *Management Science* 43: 934-50.

MacDuffie, John Paul. 1995. Human resource bundles and manufacturing performance: Organizational logic and production systems in the world auto industry. *Industrial and Labor Relations Review* 48: 197-221.

MacDuffie, John Paul; Sethuraman, Kannan; and Fisher, Marshall L. 1996. Product variety and manufacturing performance: Evidence from the International Automotive Assembly Plant Study. *Management Science* 42(3): 350-69.

McGahan, Anita M., and Porter, Michael E. . 1997. How much does industry matter, really? *Strategic Management Journal* 18 (special summer issue): 15-30.

Miles, Raymond E., and Snow, Charles C. 1978. *Organizational strategy, structure, and process*. New York: McGraw-Hill.

Miller, Danny. 1992. The generic strategy trap. *Journal of Business Strategy* 13(1): 37-41.

Mintzberg, Henry. 1992. Five ps for strategy. In *The Strategy Process: Concepts and Contexts*. Mintzberg, Henry and Quinn, James Brian, eds., pp. 12-19. Englewood Cliffs, NJ: Prentice-Hall.

----------. 1978. Patterns in strategy formation. *Management Science* 16(2): 44-53.

Mintzberg, Henry, and Waters, James A. 1982. Tracking strategy in an entrepreneurial firm. *Academy of Management Journal* 25(3): 465-99.

Nelson, Richard R. 1991. Why do firms differ, and how does it matter? *Strategic Management Journal* 12: 61-74.

Nelson, Richard, and Winter, Sidney. 1982. *An Evolutionary Theory of Economic Change*. Cambridge, MA: Harvard U. Press.

O'Reilly, Dolores. 1995. Classical competitive strategy in newly deregulated industries--Does it apply? *International Review of Strategic Management* 6: 123-45.

Perry, Lee Tom; Stott, Randall G.; and Smallwood, Norman W. 1993. *Real-time Strategy: Improvising Team-based Planning for a Fast-changing World.* New York: Wiley.

Pfeffer, Jeffrey. 1978. *The External Control of Organizations.* New York: Harper & Row.

Porter, Michael E. 1991. Towards a dynamic theory of strategy. *Strategic Management Journal* 12: 95-117.

----------. 1985. *Competitive Advantage: Creating and Sustaining Superior Performance.* New York: The Free Press.

----------. 1981. The contributions of Industrial Organization to Strategic Management. *Academy of Management Review* 6(4): 609-20.

----------. 1980. *Competitive Strategy: Techniques for Analyzing Industries and Competitors.* New York: The Free Press.

Quinn, James B. 1980. *Strategies for Change: Logical Incrementalism.* Homewood, IL: Irwin.

Romanelli, Elaine, and Tushman, Michael L. 1994. Organizational transformation as punctuated equilibrium: An empirical test. *Academy of Management Journal* 37(5): 1141-66.

Rumelt, Richard P. 1991. How much does industry matter? *Strategic Management Journal* 12(3): 167-85.

Rumelt, Richard P.; Schendel, Dan, and Teece, David J. 1994. *Fundamental Issues in Strategy: A Research Agenda*. Boston, MA: Harvard Business School Press.

----------. 1991. Strategic management and economics. *Strategic Management Journal* 12: 5-29.

Schmalensee, Richard. 1985. Do markets differ much? *American Economic Review* 75(3): 341-51.

Schuler, Randall S.; Galante, Steven P., and Jackson, Susan E. 1987. Matching effective HR practices with competitive strategy. *Personnel,* 64(9): 18-27.

Stalk, George; Evans, Philip, and Shulman, Lawrence E. 1992. Competing on capabilities: The new rules of corporate strategy. *Harvard Business Review* 70(2): 57-69.

Wright, Peter, and Parsinia, Alex. 1988. Porter's synthesis of generic business strategies: A critique. *Industrial Management* 30(3): 20-23.

Table 1: Correlation Matrix for Porter Generic Strategies and Strategic Activities for Life Insurance Data

Variable	1	2	3	4	5	6	7
1. Cost strategy	1.00						
2. Differentiation strategy	-0.16	1.00					
3. Focus strategy	-0.19	-0.08	1.00				
4. Providing products with many features	0.05	-0.18	0.01	1.00			
5. High levels of customer service	-0.05	-0.22	0.10	0.66***	1.00		
6. High levels of agent service to policyholders	-0.20	-0.08	0.04	0.39**	0.61***	1.00	
7. Advertising aggressively	0.07	-0.17	0.13	0.19	0.49***	0.33*	1.00
8. High levels of agent remuneration	0.01	-0.33*	-0.02	0.60***	0.62***	0.50***	0.42**
9. Building a brand name for the company	-0.02	-0.01	-0.03	0.51***	0.59***	0.46***	0.44**
10. Operating efficiency/cost control	0.13	-0.27†	-0.03	0.67***	0.74***	0.60***	0.36**
11. Stringent (conservative) underwriting standards	-0.04	-0.11	-0.06	0.37**	0.22	0.32*	0.00
12. Premiums lower than competitors	0.01	-0.13	0.08	0.41**	0.27†	0.39**	0.20
13. Competitive conversion features	-0.19	0.03	0.18	0.37**	0.31*	0.36**	0.05
14. Serving special market segments	-0.05	-0.27†	0.35*	0.52***	0.55***	0.20	0.40**
15. Providing services to agents	-0.11	-0.19	-0.09	0.63***	0.67***	0.59***	0.25†
16. Adding new distribution channels	-0.11	-0.22	-0.02	0.65***	0.49***	0.32*	0.13
17. Providing higher investment returns	0.02	-0.21	0.16	0.53***	0.49***	0.38**	0.40**
18. Wide range of investment returns	-0.04	-0.14	0.10	0.40**	0.33*	0.12	0.17
19. Outside fund managers available	0.00	-0.19	0.14	0.39**	0.41**	0.13	0.30*

† p<.10, * p<.05, ** p<.01, *** p<.001

Table 1: Correlation Matrix for Porter Generic Strategies and Strategic Activities for Life Insurance Data

8	9	10	11	12	13	14	15	16	17	18	19
1.00											
0.47***	1.00										
0.67***	0.61***	1.00									
0.46***	0.21	0.39*	1.00								
0.48***	0.40**	0.45***	0.51***	1.00							
0.42**	0.43**	0.37**	0.38**	0.70***	1.00						
0.40**	0.39**	0.49***	0.34*	0.20	0.29*	1.00					
0.62***	0.46***	0.62***	0.42**	0.30*	0.35*	0.55***	1.00				
0.34*	0.37**	0.46***	0.29*	0.16	0.16	0.56***	0.58***	1.00			
0.62***	0.46***	0.41**	0.44**	0.53***	0.35*	0.41**	0.45**	0.33*	1.00		
0.15	0.32*	0.12	-0.14	0.13	0.26†	0.16	0.13	0.46***	0.43**	1.00	
0.24†	0.16	0.23†	-0.14	0.13	0.21	0.20	0.22	0.31*	0.52***	0.78***	1.00

† p<.10, * p<.05, ** p<.01, *** p<.001

Table 2: Porter Generic Strategies and Establishment Performance

Dependent Variables: Log of Sales Revenue and Log of Gross Margin on Sales

Independent variables	Model 1a	Model 1b	Model 2a	Model 2b
Intercept	7.3623***	7.323***	5.1408**	4.7982**
Basic Performance Model				
Establishment is part of a multi-establishment organization (dummy)	-0.3368***	-0.3445***	-0.5677***	-0.5824***
Log of total book value of establishment's capital equipment	0.2731***	0.2776***	0.3674***	0.3772***
Log of cost of goods sold	0.3943***	0.3986***	0.1202***	0.1327***
Log of average hours worked per week for technical, production, and clerical workers	-1.010**	-0.9876**	-0.5162	-0.4624
Percentage of capital equipment less than 1 year old	0.0047†	0.0027†	0.0049	0.0047
Percentage of capital equipment 1 to 4 years old	0.0041*	0.0039*	0.0044*	0.0039†
Operating above capacity (dummy)	-0.0010	-0.0052	0.0694	0.0054
Operating below capacity (dummy)	0.1759*	0.1867*	0.1492	0.1600
Percent of total 1993 sales exported	0.0130***	0.0125***	0.0145**	0.0125**
Establishment has a research & development center (dummy)	-0.1376	-0.1550	-0.1204***	-0.1395
Year establishment began operating	-0.1273**	-0.1205*	-0.1541*	-0.1272*
Porter Generic Strategies				
Low cost strategy		-0.2678		-0.5198*
Focus strategy		-0.1301		-0.2736
Differentiation strategy		-0.1350		-0.0660
Adjusted R^2	0.51***	0.51***	0.35***	0.36***
N	878	878	817	817

† p<.10, * p<.05, ** p<.01, *** p<.001

Note: Industry dummy variables included in all models, but not reported.

Table 3

Combinations of Resource Allocation Decisions

and Breadth of Strategic Parameters

	Early Resource Allocation	*Delayed Resource Allocation*
Broad Strategic Parameters	A	B
Tight Strategic Parameters	C	D

AUTHORS' BIOGRAPHICAL INFORMATION

Clint Chadwick is an Assistant Professor of Labor and Industrial Relations at the Institute of Labor and Industrial Relations, University of Illinois at Urbana-Champaign. His research interests include the strategic impact of human resource systems, reengineering, downsizing, and other strategic renewal efforts, and the impact of individuals' value-based differences on organizational effectiveness.

Peter Cappelli is Professor and Chair of the Management Department at the Wharton School, Director of Wharton's Center for Human Resources, and Co-director of the U.S. Department of Education's National Center on the Educational Quality of the Workforce (EQW). He has degrees in industrial relations from Cornell University and in labor economics from Oxford. Professor Cappelli's research has examined labor relations, changes in work and the effects on skill requirements, the contribution of work place attitudes and behaviors to job related skills, and the effects on work force skills associated with choices of employment practices.