SHAPING STRATEGY AS A STRUCTURATION PROCESS

PAULA JARZABKOWSKI
Aston University

Research on top managers' strategizing behavior has addressed how they shape either the structural context or the interpretations of organization members. I offer a structuration theory framework integrating these two partial explanations and treating strategy shaping as socially dynamic. A qualitative seven-year analysis of top managers in three universities shows a sequential pattern of shaping strategy first in the action and then in the institutional realm, and also a simultaneous pattern of shaping strategy in both realms at once. Both patterns are successful in weakly institutionalized strategy contexts, whereas the simultaneous pattern is more successful in strongly institutionalized strategy contexts.

There is still considerable ambiguity about what top managers actually do in the strategy process. Mintzberg's (1978) concept of strategy "formation," in which strategy formulation is entwined with implementation in an ongoing, mutually constructive process, positions top managers as active participants in the strategy process (Mintzberg & Waters, 1985). Recent literature on strategizing further develops this research agenda, recommending a focus upon the "pixels of managerial influence"[1] within the social dynamics of strategy formation (Denis, Langley, & Rouleau, 2007; Floyd & Lane, 2000; Jarzabkowski, 2005; Jarzabkowski, Balogun, & Seidl, 2007; Johnson, Melin, & Whittington, 2003; Whittington, 2006). Floyd and Wooldridge identified strategizing as managerial behaviors that shape strategy evolution, noting that "strategies evolve over time, not from discrete decisions but from indeterminate managerial behaviours embedded in a complex social setting" (2000: 87). In this article, I address the strategizing research agenda by eliciting patterns of top manager strategizing behavior and analyzing how such patterns are implicated in shaping strategy within complex social settings over time. The term "shaping strategy" (Pettigrew, 1990) reflects the "structurational" nature of strategizing, in which top managers indirectly influence, or shape, the evolving path of a strategy

through their interactions with organization members and the organizational practices in which they engage, even as their actions are shaped by these settings (Child, 1997; Giddens, 1984; Whittington, 1992). This article thus applies structuration theory as an interpretative framework for explaining managerial strategizing behavior.

THEORETICAL BACKGROUND

Since Bower's (1970) seminal work, much strategy process research has focused on the interplay between top managers, the structural context that they establish, and strategic activity (Burgelman, 1983, 1996; Chakravarthy & Doz, 1992; Doz, 1996; Johnson, 1987; Noda & Bower, 1996; Pettigrew, 1990, 1992; Van de Ven, 1992). *Structural context* is defined as the administrative procedures, such as planning, resource allocation, and monitoring and control systems, that enable top managers to establish links between corporate strategy and the actions of middle and operational level managers (Bower, 1970; Burgelman, 1983, 1996; Chakravarthy & Doz, 1992). Although Bower (1970: 71) excluded cultural and historical aspects of context from his definition on the basis that they are not generalizable, later process scholars have acknowledged that administrative procedures are contextualized by social, political, and cultural factors (e.g., Johnson, 1987; Lovas & Ghoshal, 2000; Noda & Bower, 1996; Pettigrew, 1985). Nonetheless, the main definition of structural context remains administrative procedures and systems, and how these procedures interact with other factors in shaping strategy is relatively underexplored.

In the dominant research stream, structural context serves primarily as a control mechanism for influencing members' contributions to an organization's strategy (Lovas & Ghoshal, 2000; Simons,

[1] I wish to thank associate editor Chet Miller for this phrase, which encapsulates the aims of the strategizing research agenda.

1994). Such research explains strategy processes by showing how top managers embed strategy in administrative structures that guide the actions of others. However, it has also surfaced a paradox in top managers' relationships with their structural contexts. Top managers can shape strategy through their control over a structural context, but once they embed strategy within an administrative procedure, such as resource allocation, they find it hard to alter or shape related activity. As Noda and Bower noted, "Structural context, once designed and institutionalized as part of a firm's administrative systems and processes, seems to present a strong source of a firm's inertia . . . regardless of possible subsequent changes in top managers' intention" (1996: 186). Top managers' influence over structural context is important in institutionalizing strategy, yet it is unclear how they then retain the ability to shape strategy or to introduce new strategies.

As Mintzberg and McHugh noted, assumptions "that the intentions of the leadership are the intentions of the organization may not be justified, since others can act contrary to these intentions" (1985: 162). Mobilizing managerial intentions within organizations is often seen as an interpretative behavior; top managers effect change through their ability to frame the meanings that other actors attribute to strategy (Child & Smith, 1987; Gioia & Chittipeddi, 1991; Ford & Ford, 1995; Greiner & Bhambri, 1989). For example, Gioia and Chittipeddi's (1991) study illustrated how top managers' interpretations of strategic change were communicated to organization members over a period of two and a half years and amplified into a collective framework of meanings that were used to initiate strategic change. The cited studies have suggested that through power and information asymmetry, top managers are able to influence the interpretative schemes and meanings adopted in an organization (Bartunek, 1984; Lukes, 1974; Ranson, Hinings, & Greenwood, 1980). However, research into the interpretative schemata of lower-level employees during strategic change suggests that organizational meanings tend to be incremental and fragmented (e.g., Balogun & Johnson, 2004; Blackler, Crump, & McDonald, 2000; Isabella, 1990). Research conducted from a top manager perspective has suggested that top managers successfully shape new interpretations of strategy, and research at lower levels has indicated that organization members are slow to accept these new interpretations, which leads to unintended strategy consequences (Balogun & Johnson, 2005), organizational dissonance (Blackler et al., 2000), and failure of new strategies (Maitlis & Lawrence, 2003) as new meanings fail to be mobilized in collective strategic action. Hence, there is clear evidence that top managers communicate their interpretations of strategy, but less clarity about how these interpretations are embedded in ongoing, persistent organizational actions (Maitlis, 2005).

These two veins of research highlight different ways in which top managers shape strategy, and each highlights a problem, either of inertia through strategy institutionalization or of mobilizing managerial intentions within persistent organizational actions. There is, however, little connection between these approaches as explanations of the social dynamics through which top managers shape strategy. I therefore drew upon structuration theory (Giddens, 1979, 1984, 1989) as a theoretical resource for understanding and analyzing managerial strategizing behavior.

Structuration Theory

Structuration theory's fundamental premise is that actors produce and reproduce the institutionalized social structures that persist over time and space and provide guidelines for action (Giddens, 1979, 1984). This process is termed "duality of structure." Structure refers to the *institutional realm*, which is a historical accumulation of beliefs, norms, power, and interests that, although constructed through and existing within the actions of individuals, over time becomes dissociated from individuals, generating an institutionalized social order that has a longer duration than any individual actor or action. These institutions frame the *action realm*, in which individuals realize institutional orders within their day-to-day actions. Institutions guide actions, yet this relationship is not deterministic, as actors remain knowledgeable, reflexive agents who have the capacity to choose to act otherwise, thus either sustaining or modifying institutions through their actions (Giddens, 1979, 1984). For example, Orlikowski (1996) explained how the institutionalized work practices and coordination mechanisms at a software company she researched were gradually transformed through structuration as individuals adjusted to and improvised with a new workplace technology. In this case, technology became part of structuration, as actors appropriated the technology in their daily actions and adapted it to their work practices, which then led to changes in the way the technology guided those actions. This change occurred over five subtle shifts in technical and managerial work practices at the action level and in the normative properties of work coordination at the institutional level, illustrating the reciprocal process of shaping work practices within the action and institutional realms.

The institutional realm comprises three structures—signification, domination, and legitimation—that, although inseparable in practice (Giddens, 1979, 1984), may be distinguished analytically. Structures of *signification* are institutionalized interpretive schemes, such as the identity, beliefs, and values that ascribe meaning to people's actions. Structures of *legitimation* are institutionalized norms, constituted in the tacitly understood moral imperatives and normative sanctions through which people exercise their social obligations (Clegg, 1989). Structures of *domination* are the institutionalized mobilization of power, which takes two forms (Giddens, 1984). First, resource-allocative structures of domination involve the institutionalized distribution of material resources, such as goods, objects, and property, including the way that different groups access and deploy those resources. Second, authoritative structures of domination refer to the institutionalized authority relationships involved in mobilizing power, which are reflected in the way that the interests of different groups are represented within a social system (Giddens, 1984; Whittington, 1992). Authoritative structures are connected to structures of legitimation, as authority relationships may be normative in shaping which interests are perceived as legitimate, and indeed, in shaping how individuals perceive what is in their interests (Clegg, 1989; Giddens, 1984; Lukes, 1974).

The action realm refers to the actions and interactions through which social life unfolds moment-by-moment (Barley & Tolbert, 1997; Ranson et al., 1980). Inherent in this realm are three elements—meaning, power, and norms—that correspond to institutional structures and explain how these structures are instantiated and adapted in the daily actions of individuals. In essence, the action realm contains both habitual and purposive interactions that communicate meanings, deploy power, and invoke norms and sanctions (Giddens, 1979, 1984). In these interactions, actors either realize existing institutions, enabling their persistence, or act in ways that modify institutions (Orlikowski, 1996). For example, through the communication of meanings, individuals either realize or modify existing institutionalized structures of signification. By deploying power in their interactions, individuals either realize or modify existing structures of domination. In exercising their obligations to each other, individuals either realize or modify existing structures of legitimation. Instantiation of institutional structures arises from interactions between actors at different social levels, rather than as a property of one class of actors, such as managerial elites (Clegg, 1989). However, because of power asymmetr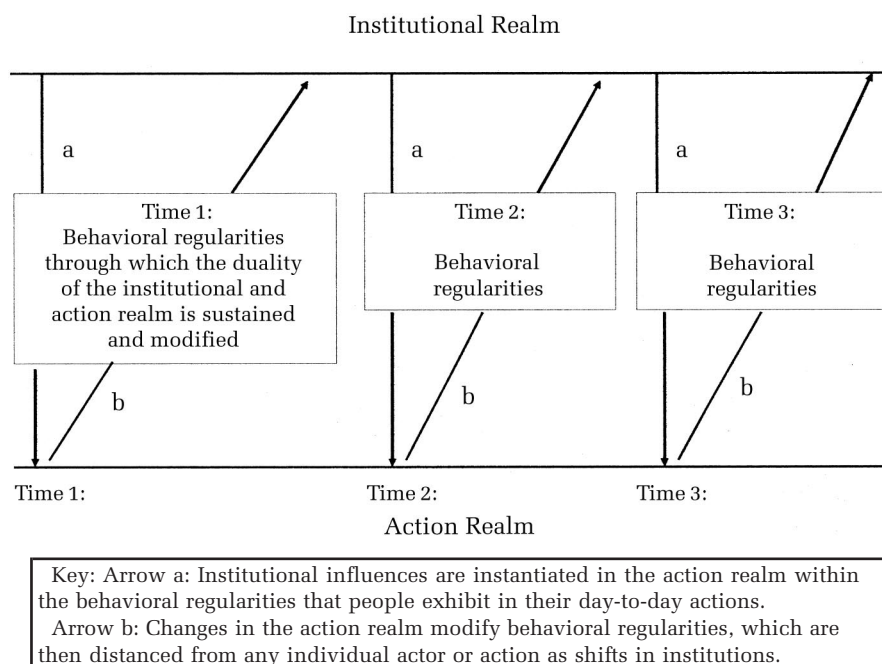ies, elites may have greater influence than other classes over the process of realizing or modifying existing institutions (Child, 1997; Ranson et al., 1980; Whittington, 1992).

This link between the actions and interactions of daily life and the realization or modification of institutionalized structures makes structuration theory a valuable interpretive framework for understanding strategizing. For example, it may explain existing research into managerial influences on either structural context or organization members' interpretations. Each vein of research examines a different aspect of structuration, focusing primarily upon either the institutional or the action realm. However, in order to study strategy as a socially dynamic process, it is necessary to look beyond managerial strategizing behaviors in one realm or the other, adopting a more structurational view of strategizing within both realms. This study addressed this gap by asking: (1) *Are there discernible patterns of strategizing behaviors through which top managers shape strategy within the action and the institutional realms?* As strategizing is a dynamic process occurring over time, this also raises a second question about the implications of any structurational patterns of strategizing behavior for shaping the evolving path of a strategy, in terms of changes in strategy content and/or process: (2) *What are the implications of structurational patterns of top manager strategizing behavior for shaping strategy over time?*

Using Structuration Theory Empirically

One problem with using structuration theory empirically is that, despite it's being a processual theory, Giddens (1984: 29) presented the concepts synchronically, as simultaneous reciprocity between action and institutions, making it difficult to analyze how actions reproduce or modify institutions over time (Barley & Tolbert, 1997; Jarzabkowski, 2004). Therefore, many authors have proposed a diachronic model, in which they bracket the action and institutional realms into different time periods in order to analyze sequential shifts between the two (Barley & Tolbert, 1997; de Sanctis & Poole, 1994; Langley, 1999; Orlikowski, 1996; Pozzebon & Pinsonneault, 2005). Figure 1 captures the principles of this sequential bracketing, drawing primarily upon Barley and Tolbert (1997), who recommended analysis of how sequential actions constitute and transform the institutional realm over time. In Figure 1, organizations and their actors exhibit behavioral regularities through which institutions are instantiated in the daily actions of organization members (arrow a). Usually actors perpetuate existing institutions within their daily

FIGURE 1
The Duality of the Institutional and Action Realms over Time[a]

Institutional Realm

Key: Arrow a: Institutional influences are instantiated in the action realm within the behavioral regularities that people exhibit in their day-to-day actions.
Arrow b: Changes in the action realm modify behavioral regularities, which are then distanced from any individual actor or action as shifts in institutions.

[a] This model draws primarily from Barley and Tolbert's (1997: 101) framework (see also Orlikowski 1996; Pozzebon & Pinsonneault, 2005). Barley and Tolbert used the term "scripts" but explicitly noted that these are not cognitive scripts but "behavioral regularities," which are "observable, recurrent activities and patterns of interaction characteristic of a particular setting" (1997: 98). The term "behavioral regularities" is used here to avoid confusion with the term "script."

actions because they have internalized those institutions as guiding principles of action (Barley & Tolbert, 1997; Berger & Luckmann, 1966; Giddens, 1979). For change to occur, actors' existing internalization of institutions must be disrupted, raising the possibility of their acting counter to these institutions (Barley & Tolbert, 1997; Clegg, 1989; Giddens, 1984). The potential for daily actions to either reinforce or modify existing institutional guidelines is captured in arrow b. Barley and Tolbert (1997) conceptualized this complex process, which Giddens (1984) termed "distanciation," by suggesting that a single or few new actions will not generate a shift in institutional orders. Rather, new actions must be mobilized collectively to alter institutions (Lawrence, Hardy, & Phillips, 2002). Institutionalization of new actions is evidenced through changes that adopt a repetitive pattern that is dissociated from any particular individual or action and is reproducible over time (Barley & Tolbert, 1997: 103; Berger & Luckmann, 1966). Analysis over time—in the figure, times 1, 2, and 3—will explain how sequences of action and institutional influences sustain or modify organizational behavior. This sequential structuration was a useful starting point for informing my analysis of how patterns of

managerial strategizing behavior shape strategy within the action and institutional realms over time.

RESEARCH CONTEXT AND METHODS

The empirical study was conducted in three universities. Universities, like other professional organizations such as hospitals, cultural organizations, and professional service firms, typically have diffuse power relationships and autonomous professional workforces, and they deal in knowledge-based goods and services (Hinings & Leblebici, 2003; Slaughter & Leslie, 1999; Trank & Rynes, 2003). As management fiat cannot be assumed in these contexts, they are insightful research sites for examining top managers as active participants in strategizing (Denis, Lamothe, & Langley, 2001).

Case Selection and Data Sources

A case method was adopted in three U.K. universities (Eisenhardt, 1989). Drawing upon existing typologies (O'Leary, 1997), I selected cases of three types in order to reflect the parameters of the U.K. university sector outside the ancient universities, Oxford and Cambridge, which were excluded be-

cause of their unusual governance structures. Three cases that were within a realistic travel distance for rich qualitative data collection were selected on the basis that they offered equally high-quality access and were well-ranked examples of their types within U.K. university ranking tables, heightening process comparability (Pettigrew & Whipp, 1991). *Metropolitan* was an institution developed in the late 20th century to further the sciences and, therefore, it was strongly research oriented. It was mainly concerned with excellent research but also had internationally recognized teaching programs and was developing a commercial strategy. *Campus*, developed in the 1960s to cater to the United Kingdom's widening higher education agenda, was oriented toward both teaching and research but also had a strong reputation for its commercial strategy. *Urban* was a new university developed from the 1970s' polytechnics (which were primarily for vocational education). It had a reputation for excellent and innovative teaching and was attempting to strengthen its commercial and research strategies.

Top managers initially were identified by hierarchical level, and I validated these identifications through interviews. Each case involved similar participants, who have been given the following standardized titles and abbreviations: vice chancellor (VC), deputy vice chancellor (DVC), registrar, deputy registrar, senior academic, and governor.

Qualitative data were collected for a seven-year period, six years of which (1992–97 inclusive) were retrospective and one year of which (1998) was "real-time." To counteract post hoc rationalization of the past, which is often prevalent in retrospective research (Golden, 1992), and avoid potential bias (Eisenhardt, 1989), I used a range of field methods. Specifically, I collected and transcribed 49 open-ended, audio-taped interviews, 20 at Campus, 18 at Metropolitan, and 11 at Urban, which included all individuals occupying the designated top manager positions over the seven-year period in each case. Nonparticipant observation was conducted at 51 key strategy meetings identified in the three cases, 19 at Campus, 17 at Metropolitan, and 15 at Urban. At these meetings, I took detailed field notes, including as many verbatim quotes as possible, and I wrote the notes up within 24 hours, as Yin (1994) recommended. I also engaged in other forms of on-site fieldwork, including making pre- and postmeeting observations, shadowing senior managers at Campus and Urban for a week each, and spending whole days in the senior management wing at Metropolitan. Detailed notes and verbatim quotes from these interactions, which added depth to the data and enabled firsthand observation

of top manager strategizing behaviors, were also written up within 24 hours. Finally, I undertook extensive documentary analysis, searching books of minutes, calendars, annual reports, audit documents, and other memoranda and documentary information in each institution. These documents were searched twice. Initially I took detailed field notes to construct case stories, which formed the background to interview questions, and used the second search to validate interviews and antecedent material from the year of current observations.

Data collection progressed as follows: First, preliminary interviews with key informants in each case were used to identify current strategies and those from the past six years. I then used multiple documentary sources, such as archives, minutes, calendars, and memos, to validate and extend this identification, constructing detailed strategy case histories. These case histories were the basis for more extensive interviews with all current top team members, some former team members, and other key individuals, during which I reconstructed events. Interviews also examined real-time events as strategies were ongoing. The real-time components of interviews, combined with nonparticipant observation of strategy meetings, pre- and postmeeting observations, shadowing, and other on-site observational data, enabled me to explore strategizing behaviors and processes as they unfolded. Real-time data contextualized and deepened my understanding of retrospective data. In particular, in the 51 meeting observations I also collected the minutes of the meetings I attended. These minutes corresponded to the minutes books from those meetings in previous years, which I had read as part of my documentary data sources. I was thus able to gain richer insights into the minutes books as documentary evidence of actual events. At the end of the year of real-time data collection, I returned to the documentary sources to check any missing facts and make sure that the story was as complete as possible for each of the main strategies in each case. The interview transcriptions, field notes, and documentation case histories comprised the full data set for analysis. This use of multiple data sources, combined with prolonged engagement in the field, enhanced the trustworthiness of the data set (Lincoln & Guba, 1985).

Coding and Analysis

As Langley noted, with qualitative process research "no analysis strategy will produce theory without an uncodifiable creative leap, however small" (1999: 691), although a number of techniques can be followed to give confidence in the

analytic process. In this section, I explain the five analytic phases I undertook. First, I constructed a thickly descriptive, chronological story of each strategy in each university (Langley, 1999). Each university was pursuing four strategies: a research strategy, a teaching strategy, a commercial income strategy, and a size-and-scope strategy. These formed the basis of 12 chronologies, one for each strategy in each case, that were presented to the research participants to validate them and enhance the trustworthiness of the analysis (Lincoln & Guba, 1985).

Second, I decomposed each chronology into analytic periods, time 1, time 2, and if relevant, time 3, according to key strategic responses or a discernible shift in top manager behavior (Van de Ven, 1992). Third, in response to the first research question, about discernible patterns of top manager strategizing behaviors, I coded the behavior of the top managers during each of these time periods, using a data reduction process (Strauss & Corbin, 1998) often used by qualitative researchers with mass data or multiple cases (e.g., Brown & Eisenhardt, 1997; Maitlis, 2005), to move from mass descriptive codes to fewer, conceptually abstracted codes. I generated codes describing what top managers did during the various time periods, such as allocating resources, developing plans, establishing control processes, analyzing performance indicators, refining incentives, reinforcing monitoring systems, negotiating with key people, calling meetings, reviewing departments and their staffs, talking to junior staff, holding workshops, and so forth. I then reduced these descriptive codes to interpretative clusters (Miles & Huberman, 1994), according to whether they were qualitatively similar or different in character and purpose, using two questions to guide the clustering. The first question, Is this code similar to that code?, helped me to develop internally consistent clusters, and the second, Are these codes different from those codes?, was intended to ensure that the clusters were discrete. The clusters were generic in the sense that each one could be seen in multiple time periods. In essence, the clusters indicated the types of behavior that could occur in any time period.

Initially two main clusters were developed, one involving forms of direct, face-to-face interaction between top managers and organization members, such as talking to and calling meetings with staff. I labeled this behavior *interactive strategizing* to describe what top managers were doing. The second cluster dealt with the range of formal procedures for repeatedly administering strategy, such as planning, control, and monitoring systems, incentive schemes, and performance indicators. Analysis

showed that this repeated administration behavior was discrete from direct interactions with organization members, as top managers used planning and administrative procedures without direct contact with organization members. I labeled this behavior *procedural strategizing*.

Some data did not fit either cluster when examined in the context of the strategy chronologies, although they included elements of both. I thus developed a third cluster that was not interactive or procedural strategizing but a simultaneous integration of the two that had a different character in use. This behavior was a tightly linked iteration between face-to-face interaction and the development and modification of administrative procedures. I labeled this behavior *integrative strategizing* to describe how it integrated direct interactions and administrative procedures within a single, simultaneous behavior. Some sparse data that did not fit any of the three clusters were then discarded, as these data were outside the organizational strategy processes that I was studying. In the iterative process of checking my codes against categories used in extant research (Eisenhardt, 1989; Suddaby, 2006), I found that the two behaviors, interactive and procedural strategizing, had similarities to two existing concepts, the interpretative and structural approaches to strategy. This check provided helpful validation, as a finding of no similarities with prior work would have been questionable (Eisenhardt, 1989). However, I avoided the terms from the literature, both because they did not capture all of my data and because they implied a specific research focus, such as how top managers influence schema development (e.g., Balogun & Johnson, 2004) or develop resource allocation mechanisms (e.g., Burgelman, 1983). As my research was not exploring these theoretical concepts but examining *patterns* of managerial strategizing behavior, I wished to remain open to the implications of the behaviors I had identified.

Using a method similar to that of other qualitative studies (e.g., Dutton, Ashford, O'Neill, & Lawrence, 2001; Isabella, 1990), I then checked the reliability of the coding framework using coanalysts. Two doctoral students were trained in the coding framework (Miles & Huberman, 1994) and then given identical samples of raw data, as well as relevant sections of the strategy chronologies, enabling them to contextualize the data. They were asked to work with the raw data to check my coding framework, repeating my steps by asking, (1) Is this code similar to that code? (to ensure the internal consistency of each cluster) and (2) Are these codes different from those codes? (to ensure that the clusters were discrete). The coanalysts were also free to

identify where they felt that the data did not fit the coding framework. Dividing the number of coding agreements by the total number of coding agreements and disagreements (Miles & Huberman, 1994) yielded initial reliability ratings (coanalyst 1: interactive strategizing, 97%; procedural strategizing, 95%; integrative strategizing, 95%; and coanalyst 2: interactive strategizing, 92%; procedural strategizing, 96%; integrative strategizing, 95%). After three-way discussion, all these ratings increased to between 97 and 99 percent. The findings on the three strategizing behaviors are presented below in "Results, Section 1." Fourth, I analyzed the *action and institutional realms*. Drawing upon Barley and Tolbert's (1997: 96, 103) definition of the institutional realm, I explored each of the 12 strategy chronologies (four strategies times three universities) for evidence of an accumulation of practices, interests, and beliefs about that strategy. Data were classified into the institutional realm if they fitted two criteria supporting the cumulative and shared nature of institutions (Zucker, 1977); displayed a repetitive pattern within the data (Berger & Luckmann, 1966); and were evidenced in at least three out of the four data sources, indicating that they involved widespread understandings. I drew upon Giddens's (1984) categories to analyze how institutionalized patterns were expressed within a strategy chronology, examining the values attached to a particular strategy (structures of signification); how material resources were allocated to the strategy (allocative structures of domination); how different interests and authority relationships were represented in the strategy (authoritative structures of domination); and how the strategy attracted social obligations, norms, and sanctions (structures of legitimation). Although these are analytically distinct structures, empirically they are interrelated and inseparable (Giddens, 1984). Hence, a single datum is likely to provide evidence of multiple structures; for example, it might exhibit values that also justify norms and obligations and legitimate authority relationships and political interests (Clegg, 1989). I therefore gave some data multiple codes, as doing so reflected the multiple institutional structures represented within those data.

During this phase, I realized that the strategies had *different degrees of institutionalization* at time 1 (Tolbert & Zucker, 1996; Zucker, 1977) because of their histories at the particular universities. For example, at Urban teaching was a strongly institutionalized strategy. By contrast, other strategies were less institutionalized, being new to the organization or of less importance. Thus, I categorized each strategy at each university as either strongly institutionalized, meaning there was evidence for

all of Giddens's dimensions that was played out in a historical understanding about how that strategy should be conducted, or as weakly institutionalized, meaning that there was little or partial evidence for the dimensions and no particularly strong historical understanding of that strategy. Importantly, the data showed that not only could existing strategies be strongly institutionalized, but also that historically institutionalized reasons for not pursuing a strategy could exist, with evidence for all the Giddens dimensions suggesting the strategy was not acceptable in the focal context. Strategies were categorized as strongly or weakly institutionalized at time 1.

The action realm refers to the actions and interactions in which actors engage in the day-to-day unfolding of social life (Giddens, 1979, 1984; Ranson et al., 1980). Therefore, I looked at the chronologies to identify specific actions being undertaken, such as developing a commercial course, undertaking a research review, improving a research ranking, agreeing to a planning procedure, rejecting a planning procedure, appointing new staff, implementing a new teaching procedure, vetoing a commercial proposal, and submitting research grants, among others. I grouped these actions according to the time periods identified in each chronology, tracing how various actions were involved in particular periods of a strategy's evolution. I then used multiple data sources to examine how meanings were attributed, power was deployed, and norms were invoked in actions, analyzing whether these actions sustained or modified existing institutional structures (Giddens, 1979, 1984).

Fifth, I mapped the three managerial strategizing behaviors over the duration of the 12 chronologies to elicit *patterns in strategizing behavior*. Two strategizing patterns and one outlier were found. The first pattern, found in 6 of the 12 chronologies, involved a sequence of interactive strategizing followed by procedural strategizing. The second pattern, which was found in the other 6 chronologies (including the outlier), involved integrative strategizing. In the outlier, procedural strategizing was initially used but, when it failed to have the desired effect, top managers turned to integrative strategizing.

Analysis of these patterns against their implications for shaping strategy in the institutional and action realms revealed that strategizing patterns could be more or less successful in achieving top managers' desired outcomes. Hence, each chronology was analyzed for *success or nonsuccess.* Wherever managerial strategizing behavior was able to achieve a desired outcome of either (1) changing a strategy within the institutional and action realms or (2) reinforcing a strategy within the institutional

TABLE 1
Stages of Analysis

Stages	Tasks	Outputs
1. Developing chronological case histories	1. Identify four strategies in each university: research, teaching, commercial income, and size-and-scope 2. Develop 12 detailed chronologies, one for each strategy in each university, telling the story of that strategy over time, which I then used as my core level of analysis.	Twelve thick descriptions of strategy chronologies as the level of analysis
2. Analyze time periods in chronologies	1. Analytically decompose each chronology into distinct time periods—time 1, time 2, and, where relevant, time 3—according to key strategic response from top managers or a discernible shift in their behavior.	Chronologies decomposed into time periods
3. Identify managerial strategizing behaviors through a data reduction process	1. Develop descriptive empirical codes of what top managers were doing, such as establishing and refining resource allocation models, planning processes, incentives, and control systems; talking to key organizational members; calling workshops and meetings; meeting junior staff; and reviewing departments. 2. Cluster descriptive codes interpretatively according to their character and purpose, querying: Is this coded datum similar to that datum? to ensure within-cluster consistency, and Are these coded data different from those data? to ensure that clusters were discrete. 3. Derive three clusters and label them according to their empirical characteristics as *interactive strategizing*, *procedural strategizing*, and *integrative strategizing*. 4. Check coding reliability: Use two coanalysts, following Miles and Huberman (1994) method, to check whether clusters were internally consistent and discrete, achieving final rankings of 97–99 percent.	Three strategizing behaviors
4. Identify the action and institutional realms	1. Code data in each chronology for textual evidence of institutional realm, drawing upon Giddens's classification of structures of signification (values attached to a strategy); resource-allocative structures of domination (material resources allocated to the strategy); authoritative structures of domination (patterns of interests and authority relationships); structures of legitimation (persistent social obligations and norms). 2. As structures are analytically distinct but empirically interrelated and inseparable, give some data multiple codes where more than one institutional structure applies. 3. Classify degrees of institutionalization of each strategy at time 1, according to whether the strategy: Shows evidence of institutionalization in all the Giddens structures, which are reflected in historically institutionalized ways of pursuing a strategy, or historically institutionalized reasons for not pursuing a strategy (strong institutionalization); or Whether evidence is partial or weak, with no distinct ways of acting (weak institutionalization). 4. Establish specific actions undertaken in each case chronology, such as developing a commercial course, undertaking a research review, appointing new staff, and implementing a new teaching procedure, among others. 5. Group actions according to time periods, in order to trace how various actions were involved in particular stages of the strategy process. 6. Analyze the meanings, power, and norms being either habitually or purposively deployed within these actions. 7. Analyze these actions against the institutional structures, in order to determine whether they are sustaining existing institutional structures or modifying those institutions.	1. Establish the institutional realm and strong or weak institutionalization of strategies at time 1. 2. Establish the action realm and identify whether actions sustain or modify existing institutional structures in different time periods.
5. Analyze patterns of strategizing behavior and outcomes	1. Elicit two main patterns of strategizing behavior and one outlier over the duration of the 12 strategy chronologies (3 universities × 4 strategies): Interactive followed by procedural strategizing (6 out of 12), and Integrative strategizing (6 out of 12, as outlier becomes this pattern at time 3). 2. Map patterns of strategizing behavior in different time periods to changes in institutional and action realms. 3. Identify successful and unsuccessful outcomes according to whether strategizing pattern: Enables top managers to achieve desired change in, or reinforcement of strategy (successful); or Does not enable top managers to achieve desired change in strategy (unsuccessful). 4. Confirm trustworthiness and reliability of successful and unsuccessful classifications in two ways: Return to initial participants' interpretations of their ability to shape each particular strategy. Ask coanalysts to read each chronology and give their impressions of successful or unsuccessful outcomes.	1. Two strategizing patterns 2. Identification or more or less successful outcomes for top managers in shaping each of the 12 strategies

and action realms, it was defined as successful, whereas when top managers were unable to generate desired institutional and action effects, the pattern was termed unsuccessful. I confirmed the trustworthiness of these classifications in two ways. First, I checked them against participants' impressions of their ability to influence each strategy from my presentation of the findings to participants during phase 1 of the analysis (Lincoln & Guba, 1984). Second, I returned to my coanalysts, who read each chronology for their own impressions of successful or unsuccessful outcomes and confirmed my findings. These findings are reported in section 2 of the results. Table 1 summarizes the five stages of analysis, from which the two sections of results were drawn.

RESULTS, SECTION 1: THREE TYPES OF STRATEGIZING BEHAVIOR

This section presents the three strategizing behaviors—interactive, procedural, and integrative strategizing—providing a short vignette characterizing each and an analysis of its structurational implications.

Interactive Strategizing

Interactive strategizing involves direct, face-to-face interaction by top managers to shape how organization members instantiate strategy in their actions, as exemplified at Metropolitan. Top managers were concerned about enhancing Metropolitan's research rankings in a government assessment made every four years, the Research Assessment Exercise (RAE): "How can we get people to rally around the RAE?" (VC in a meeting). They felt that recruiting some world-class research professors would help: "The VC's aim is for all departments to get a 5 [the top RAE score] . . . he's been trying to tackle this by bringing in world-class scholars in the weak areas" (senior academic). However, this was a contentious action at Metropolitan, as professorial research appointments were approved by the Appointments Committee without managerial intervention. A series of face-to-face interactions were necessary to persuade others that these appointments would support Metropolitan's elite reputation: "Metropolitan on a world stage, top academics influencing thought on a world stage" (deputy registrar). The VC first talked with the chair of the Appointments Committee: "He obviously turned to me and I made sure the Committee was well mobilized to deal with that" (senior academic). Negotiations with the key professors on the Appointments Committee helped to mobilize support prior to the meeting: "I did my best and persuaded colleagues" (senior academic). These interactions were effective in persuading "opinion leaders" that top appointments would support the research strategy: "We could have said no. Why did we say yes? We are very conscious of the RAE and the need to be 5*. The VC made a very convincing case. . . . And we thought this was a good thing" (senior academic).

Although the Appointments Committee was mobilized, resources still had to be approved by the Resource Committee. Recognizing that "one has the opportunity to command resources but . . . only in a way that you persuade people" (DVC), Metropolitan's top managers undertook further interactions with Resource Committee members to ensure the necessary resources: "He then had to go to Resource Committee but, because [member] was on board, that wasn't too big a problem" (DVC).

This example illustrates how interactive strategizing shaped the meanings, power, and norms through which organization members instantiated strategy (Giddens, 1976). Meanings were attributed to the action of appointing new professors, emphasizing its reputational benefits and making a "convincing case." At the same time, interactive strategizing enabled top managers to instantiate resource allocation power, "commanding resources" through persuasion and mobilizing authority relationships, such as the support of "opinion leaders" who "could have said no." These interactions also instantiated structures of legitimation, evoking the obligation "to be 5*" and endorsing such norms as "a good thing." Interactive strategizing thus shaped the action realm by influencing the meanings, power, and norms attributed to a specific action.

Procedural Strategizing

Procedural strategizing is the use of administrative procedures, such as performance indicators, budgets, operating plans, and other administrative systems, to shape strategy. In order to give a strategy persistence beyond single instances of action, top managers embed it in plans, performance indicators, and targets that have cumulative effects, as exemplified by the size-and-scope strategy at Urban.

Top managers were concerned that the size-and-scope strategy at Urban reflect the financial viability of a department: "It will be important to resolve the issues regarding under-recruiting subject areas . . . [and] consider the withdrawal of provision where . . . [a discipline] is no longer viable" (1995 Planning Committee minutes). They devel-

oped a set of budget guidelines for growth and minimum student recruitment, which they linked to staff retention and departmental resources. These guidelines were incorporated as parameters for departmental viability within the annual planning cycle. Each year departments had their budgets cut or attracted a greater proportion of resources, according to their student recruitment. One department that was struggling to retain student numbers was progressively reduced over a three-year period, until in 1998 it was no longer financially viable and was targeted for closure at the end of its existing student intake: "The budget model penalizes them because if they don't recruit to target, then their budget is reduced which is why [Department X] ended up in this intolerable position, heading for a huge budget deficit" (DVC, finance).

Procedural strategizing is a managerial behavior that embeds strategy within specific planning systems and performance indicators that are part of the institutionalized resource allocative structures of domination within an organization. For example, the size-and-scope strategy at Urban was embedded in the planning cycle, with resources and targets attached to it that were annually monitored and reinforced. Actions by organization members that were related to recruitment and departmental size became embedded within these procedures, without active managerial intervention: "the budget model" "penalized" departments. Such procedures comprised resource-allocative structures of domination because they enabled patterned, recurrent allocation of resources to repetitive actions (Clegg, 1989; Giddens, 1984); higher-recruiting departments could grow, while lower-recruiting ones would remain stable, shrink, or even be closed.

Integrative Strategizing

Integrative strategizing involves simultaneous direct interaction with organization members about performance monitoring and administrative procedures at the same time as these procedures are being modified, often on the basis of the interactions. In integrative strategizing, the use of procedures was not remote from organization members and their actions but required intensive managerial interaction with others about both their actions and the procedures for embedding those actions, as exemplified at Metropolitan.

Faced with excessive and unbalanced growth, top managers needed to change organization members' actions to achieve the size-and-scope strategy. They worked with organization members from the Resource Committee on modeling resource alloca-

tion procedures. Together they devised a new procedure, the "earned points score" (EPS). The EPS was "meant to be a fairly flexible operation that deals with contraction and growth, that brings some kind of responsibility to departmental level" (deputy registrar). The EPS represented the income a department earned, net of costs such as space and administrative charges, divided by the department's total staff and student entitlement. It provided the metrics for exercising resource allocative control over departmental growth: "Here's a subject that we ought to keep in our portfolio but can we afford to keep it at this size" (deputy registrar). The EPS for different departments was transparently disseminated as the basis for discussions about departmental size, recruitment, and growth. In these discussions, top managers explained how the EPS would help departments to manage their strategy. For example, the DVC emphasized how departments could use the new system, and the VC explained that the figures were not stable but would be continuously monitored and modified to align strategic and departmental needs. In doing so, they were embedding changes in action in changed resource-allocative structures but also focusing on the meaning attributed to these structures and the way that they constituted norms for action: "The way EPS is constructed tries to encourage departments to act in particular ways" (deputy registrar, Planning).

Through integrative strategizing, top managers focused on organization members' actions in order to change strategy at the same time as they were developing procedures to embed those actions in new resource-allocative structures of domination. By managing the meanings and norms surrounding the new procedures, they ensured that changes in resource allocation would align with changes in structures of legitimation, such as social obligations placed upon departments to manage their own growth in order to avoid impinging on others. This process evoked new norms in which departments were encouraged "to act in particular ways" because they acknowledged the part that their actions played in the size-and-scope strategy. Departments thus modified their actions and so began to instantiate modifications to the institutional structures. In integrative strategizing, top managers simultaneously shape institutional structures and the actions through which those structures are instantiated.

Table 2 summarizes the characteristics of these three strategizing behaviors, interactive, procedural, and integrative strategizing, and gives additional representative examples from the data.

TABLE 2
Characteristics of Three Strategizing Behaviors

Behavior	Characteristics	Representative Data Examples
Interactive	Direct, face-to-face interactions with organization members to persuade and convince them about the desirability of specific actions	Attributing meaning: "*The central message that we sought to communicate through it was that we can't be content with where we are now; that the status quo is not an option.*" (Urban) Evoking norms and social obligations: "*Kind of saying to people, 'Look, you've got to be more research active, otherwise you are effectively freeloading on everybody else.' *" (Metropolitan) Deploying power through emphasizing mutual interests: "*We get other people to think that they want what we want.*" (Metropolitan) Deploying power through emphasizing material interests: "*We're currently talking to all the departments about what they envisage in terms of international recruitment. I mean, we say to them, we want to double numbers. We want them to think about increasing the bottom line.*" (Urban)
Procedural	Administrative procedures generate recurrent processes that can be repeated annually and are remote from interaction with organizational members	Embedding actions within resource-allocative structures of domination: "*The University needs to know about individual performers and what it can actually do with nonperformers who aren't old enough for early retirement. We need a clear strategy of how to move people around . . . and have some punitive measures as well.*" (Metropolitan) Cumulative reinforcement of resource-allocative structures of domination: "*The second cycle of reviews would be subject to some cash limit with the distribution to and retention of resources by departments being much more rigorously linked to their performance in generating income.*" (Metropolitan) Institutionalized monitoring of action without active managerial intervention: "*The way that Urban operates its model is that we emphasize financial viability within a department, so if a faculty wanted to operate a new discipline, and was willing to subsidize it then that was okay, but the University wouldn't make a big decision about it.*" (Urban)
Integrative	Ongoing behavior, simultaneously interacting with members about the meaning, power and norms instantiated in administrative procedures, even as these procedures are being modified or maintained.	Using administrative procedures to attribute meaning and legitimacy to the commercial strategy at Campus: The deputy registrar, finance registrar, and academic DVC talk about a commercial course on which "*the academics are dragging the chain.*" The DVC points out, "*The academics won't be keen if they perceive nothing in it for them; they won't get the money as it goes into central revenue.*" The finance registrar replies, "*They* do *get income because it enhances the surplus and they get access to the surplus that's there for everyone. I could do the financial modelling to show how central surplus is increased from the course and how much that would create in funds back to the departments.*" The academic registrar says, "*If you could, that would be good because it would keep the academics sweeter.*" They agree to do this. Later the academic registrar and the DVC sit down with the relevant department and go through the financial model, showing them the benefits, even so that it is not a direct return of income. The model is then adjusted to better account for the departmental interests. Developing procedures and interacting with departments about their meaning, which invests institutional structures with meaning and instantiates them in members' actions: "*Trend analysis has been introduced this year. We've showed the heads of departments the trends against their performance and pushed their estimates up where these were too conservative. . . . It means that departments think carefully about what they are doing and become self-conscious about their activity.*" (Campus) Embedding changes in action in changed resource allocative procedures that are invested with meaning: "*There is more of a will towards income generation now. We have incentives. For example individuals get paid for things like their actual teaching in summer schools, plus their department gets a cut of the profit. So they are beginning to see some benefits in resource gain which they can use. You have to show them how it can be helpful to them and you won't do that with managerial speak.*" (Metropolitan)

RESULTS, SECTION 2: SUCCESSFUL AND UNSUCCESSFUL STRATEGIZING PATTERNS

This section explains the two patterns of strategizing behavior: (1) interactive strategizing followed by procedural strategizing and (2) integrative strategizing. These two patterns are associated with successful or unsuccessful outcomes, according to the relative institutionalization of a strategy. As it is not possible to present detailed stories of all the results in comparative qualitative analyses (Eisenhardt & Graebner, 2007), this section presents a representative sample of 4 of the 12 strategy chronologies, which constitute the main findings of this analysis.

An Interactive to Procedural Strategizing Pattern Is Successful with a Weakly Institutionalized Strategy: The Commercial Strategy at Urban

Time 1: A weakly institutionalized commercial strategy. At Urban, under structures of signification and legitimation, commercial income was valued only as tangential to the work of the university: "Entrepreneurial activity and income generation are not integrated into the ethos of the institution but are perceived as "bolt-ons" (consulting report, 1989). Commercial interests were perceived as "inferior in significance to those of the academic community," and this perception also informed authority relationships and social position, as those performing commercial activities were considered "inferior operatives" (ibid.). Staff had no obligation to generate commercial income, which was not included in the formal university objectives. This weakly institutionalized strategy was of disinterest to academic staff, albeit not a source of active resistance.

Time 2: Interactive strategizing mobilizes action. Top managers felt that a commercial strategy was essential to the University's survival. Therefore, in mid 1993 they embarked on a campaign of interactive strategizing within the action realm, which they later labeled "Agenda for Urban." These interactions were "an effort to re-identify where Urban was going" (former DVC) that engaged people from all over the university, including senior managers, heads of departments, academics, and administrators, in discussions about changes to the strategic profile of the institution. Interactions were used to attribute meanings of inevitability to commercial income: "As the finances tighten you have to steer the University . . . down the income generation route" (corporate DVC). Attributing inevitability to commercial income subtly deployed power to convince people that the strategy was in their interests. For example, the intractable nature of the environment was emphasized with statements such as "the status quo is not an option" (former DVC), at the same time as commercial income was positioned as a key option: "The answer must lie in growth so the big challenge is to grow additional activities, additional income" (VC). It was important to "convince the departments that they need to make income" (finance DVC). Interactions became widespread, engaging much of the university community in discussions about Urban's strategy (Agenda for Urban documents, 1994). Top managers focused upon attributing new meanings to the commercial strategy, deploying power to highlight collective interests in survival and invoking new norms of commercial action to support that collective interest. By the end of 1994, this interactive strategizing had had an effect, as organization members agreed to include commercial objectives in the new strategic plan, to "secure the future direction of the University" (strategic plan, 1995).

Time 3: Procedural strategizing embeds action. Top managers developed a set of formal administrative procedures to embed the new commercial activities within the annual strategic planning cycle (SPC) and enable their persistence over time. For example, in the 1995 SPC, departments were given targets to increase commercial income by 10 percent over the next three years. Departments responded to the targets with formal plans to increase full fee–paying students, develop potential partnerships, undertake consultancy, and commercialize intellectual property. In 1996, greater financial incentives for commercial activity were allocated in the SPC. At the same time, departmental operating plans began to reflect the commercial strategy, with increases in fee-paying recruitment. The 1997 SPC was even more commercially focused, with clear targets for recruitment, short courses, and consultancy, and cost-to-income ratios encouraged departments to increase their commercial appeal. Procedural strategizing thus embedded the changes within the institutional realm, initially by changing allocative structures of domination, allocating resources according to performance of the commercial strategy, which had cumulative effects as procedures were repeated and further enforced in each annual cycle.

Progressively, the principles of commercial income embedded in the allocation of resources began to infiltrate the other institutional structures. For example, in 1998 there was evidence of changing structures of signification as business values began to be adopted and an emphasis on "departments thinking of themselves as a business, developing income through various diverse activities

and reinvesting that income" (top management team [TMT] meeting) that also filtered into the authoritative structures, as commercial income became part of the academic interest. Key performance indicators were increasingly weighted toward commercial activity, with incentives being used to differentiate between departments with high and low earnings, so altering authority relationships. These targets and controls reinforced the commercial strategy: "They'll have to pull their finger out or they'll end up with a loss-making course on their hands" (TMT meeting). Procedural strategizing "embed[s] this in the University culture; that you will be held accountable for your performance" (TMT meeting), emphasizing the material and normative sanctions that legitimated commercial accountability.

By 1998–99, this pattern of interactive strategizing followed by procedural strategizing had been successful in changing academic disinterest in the commercial strategy to acceptance of it as a key strategy. For example, allocative structures of domination supported the commercial strategy, as the budget model penalized or rewarded departments according to their achievement of targets, while authoritative structures of domination and structures of legitimation had changed from time 1, when those performing commercial actions were "inferior operatives," to their time 3 social status, in which those who "generate more resources . . . are more central to the University" (research DVC). Rather than commercial income being "inferior in significance" (time 1), top managers referred to it as "a key strategic driver" (time 3, departmental meeting). Departments instantiated the new strategy in their actions by initiating ways of increasing income, which they saw as in their interests. Indeed, departments were implementing increases in commercial activities in advance of their formal targets. This pattern was successful because it enabled top managers to generate a desired change in the specific actions of organization members and embed these actions in the institutional realm.

An Interactive to Procedural Strategizing Pattern Is Unsuccessful with a Strongly Institutionalized Strategy: The Teaching Strategy at Urban

Time 1: Existing strategy is strongly institutionalized. Under historical structures of signification, Urban's identity, values, and beliefs were based on high-quality and innovative teaching. The school had pioneered modular learning in the 1970s; in the words of its academic DVC, "Urban's heartland is teaching and learning." Structures of legitimation and authoritative structures of domination reflected teaching's central role in the interests, norms, and obligations of organization members: "It does as an institution take itself very seriously about being student-centered" (academic DVC) and "Commitment to the students was tangible . . . people did more than they had to do to commit to that regularly" (former DVC). Teaching also pervaded the allocative structures of domination, as the university's annual activities, material resources, and administrative procedures were structured around the modular teaching programs.

Time 2: Interactive strategizing mobilizes action. However, top managers felt that undergraduate teaching was using too much staff time, leaving little spare capacity to pursue other strategies: "We were too busy teaching!" (former DVC). Therefore, during meetings on the Agenda for Urban discussed above, they engaged in interactive strategizing throughout the university to change the meanings organization members currently attributed to actions associated with the teaching strategy. Top managers used interactive strategizing to "raise a challenge to teaching method and the sustainability of it in the resource context" (former DVC), attempting to deploy resource power away from the modular program toward less resource intensive teaching methods. At the same time, they tried to convince others that after 25 years it was time to appraise whether the modular program was still innovative: "A feeling that the University was too complacent, too elitist, perhaps unthinking in what it was doing, what it was delivering to students, whether it was giving value, whether it was really up to what the market was expecting of it at the time" (corporate DVC). They pointed out that it was important to engage in "new ways of teaching and assessment" (former DVC) to remain innovative: "We could be very good at becoming maybe the first of a certain sort of another breed again" (academic DVC). Top managers worked hard to convince others over a period of some year and a half of interactive strategizing, as this was perceived as a radical change in the teaching strategy: "It is nothing less than revolutionary!" (academic DVC). Their efforts appeared to be successful, as the Agenda for Urban ended with a "kind of confirmation that we needed to renew our teaching objectives. We had agreement to develop objectives within a clearly defined strategic planning process" (former VC). The new plan would manage changes in the teaching strategy within the context of other strategic objectives for the university (strategy document, 1995).

Time 3: Procedural strategizing fails to embed action. Top managers engaged in procedural strategizing in order to embed the changes. As part of

freeing teaching resources for reallocation, they incorporated teaching cost reduction measures within the annual strategic planning cycle. In 1995–96 they proposed that departments plan "upon achieving a 10% reduction in cost" (planning minutes, 1995) in preparation for a 1996–97 "saving of 10 to 20% of formal teaching responsibilities and 10 to 20% of assessment time. These savings may then be used to redeploy resources into strategic priority areas" (planning minutes, 1996). These targets were the basis of formal controls, as departmental operating statements were required to "confirm how they are implementing resource redeployment" of the reductions in staff time (planning minutes, 1997).

After three years of reducing teaching time through formal procedures, top managers felt the university was ready to redeploy the saved resources by implementing a change in the teaching year from three 11-week terms to two 13-week semesters. As staff normally taught all three terms, this would mean less teaching and more time to devote to other activities: "The University will action a number of reviews aimed at releasing staff time for re-investment . . . specifically the university will review the length and shape of the academic year" (planning minutes, 1998). However, despite the potential reduction in teaching time, academics strongly resisted the change, legitimizing their actions within existing institutionalized beliefs about teaching by claiming that these structural changes were negative for "the students and their rights and needs" (Academic Board meeting). They eventually agreed only to scale down the teaching year from three 11-week to three 10-week terms, as the least disruptive option to the modular teaching program: "We didn't go for semesters in the end. Very strong feelings in the University about this" (research DVC).

After three years of procedural strategizing, there was no real change in the teaching strategy. Despite changed resource-allocative structures, organization members reinforced their belief in teaching and the modular program within their daily actions: "It is fine to talk about assessment, but you actually get people to try and think concretely about how we are going to reduce assessment load and there are a million reasons why it has to be exactly as it is at the moment" (academic DVC). Organization members thus retained their beliefs about the teaching strategy, protecting their interests in those beliefs and reproducing the existing institutional structures in their actions: "To say resistance is not quite right . . . it had something really very good going for it 25 years ago [and] it still thinks of itself as innovative" (academic DVC).

This pattern of interactive strategizing followed by procedural strategizing was unsuccessful because top managers were unable to generate desired change in the action and institutional realms. Rather, organization members reinforced the institutional structures surrounding the teaching strategy.

Comparison: Successful and Unsuccessful Interactive to Procedural Strategizing Patterns

When the examples of successful interactive to procedural strategizing were compared with the unsuccessful examples, the distinguishing feature that emerged was whether the pattern occurred in the context of a weakly or strongly institutionalized strategy. This contextual feature illustrates the strengths and weaknesses of interactive strategizing in influencing strategy within the action realm. With a weakly institutionalized strategy, interactive strategizing is more able to influence the action realm because there are no strong opposing institutional guidelines. As seen in the commercial income example at Urban, top managers did not have to counteract strong existing institutional structures to communicate meaning about the importance of a commercial strategy, deploy power by emphasizing the collective interest, and invoke new norms of commercial action. Rather, academics accepted managerial arguments that new commercial actions were in their interest. By contrast, in the example of a strongly institutionalized strategy, interactive strategizing had not only to communicate a new strategy but also to counteract strong opposing meanings, power, and norms that were invoked within organization members' actions. This made it more difficult to convince people that changing existing patterns of action was in their interest, even where there appeared to be agreement to change, such as the establishment of a new planning procedure. To better understand this problem, it is necessary to look at how procedural strategizing embeds changes within new institutional structures.

With a weakly institutionalized strategy, procedural strategizing is able to embed changes in the institutional realm because it does not have to counteract strong existing institutions. Procedural strategizing works primarily upon changing the allocative structures of domination by altering the patterns of resource distribution, in terms of what is resourced and how access to those resources is gained. As shown in the commercial strategy at Urban, over time this process is successful in generating changes in the other institutional structures of legitimation, signification, and authoritative

domination because these structures do not strongly counteract the effect of changes in allocative structures of domination. However, as the unsuccessful example shows, procedural strategizing is less able to embed change with a strongly institutionalized strategy. The problem is twofold. First, as discussed above, interactive strategizing is less likely to have mobilized support for change in the action realm. Second, institutionalized structures of signification, authoritative domination, and legitimation are aligned against shifts in resource-allocative structures. This pattern was evidenced in the example of the teaching strategy at Urban, where organization members persisted in their existing patterns of action. They argued against change, validating their interests in and beliefs about appropriate teaching conduct within the existing structures of legitimation, signification, and authoritative domination. Thus, with a strongly institutionalized strategy, the sequential pattern of interactive strategizing followed by procedural strategizing was inadequate to shape the strategy process.

An Integrative Strategizing Pattern Is Successful at Changing a Strongly Institutionalized Strategy: Commercial Income at Metropolitan

Time 1: Strongly institutionalized context. Metropolitan's identity had been built upon research excellence, and this tradition was accompanied by a strongly institutionalized resistance to commercial income. For example, in the structures of signification pursuing commercial income was antithetical to academic values, and it was an inappropriate academic activity under structures of legitimation: "There are people who strongly resent the idea that an academic institution should want or need to engage in [commercial] activities, which they see as rather low status and dubious" (senior academic 1). Metropolitan academics were "not given to commercially induced whims or undermining of academic standards" (senior academic 5). These norms and values aligned with authoritative structures of domination at Metropolitan, emphasizing the threat that commercial activity posed to the collective interest in high-quality research and academic standing: "If [commercial activity] fed through into their mind-sets, they would lose their research rating" (corporate DVC).

This strongly institutionalized resistance to commercial income was embedded in the allocative structures of domination, which did not acknowledge variation in departmental earning capacity. Indeed, the idea that commercial income generation could be used to differentiate resource allocation was socially illegitimate and outrageous in the Metropolitan context: "Why should we give money to these people?" (senior academic 4). Academics actively resisted commercial income activities. For example, in 1994 they vetoed a commercial income proposal by blocking it at the Academic Board. Institutionalized structures opposing a commercial strategy were thus instantiated through the actions of organization members, both in the way they responded to potential incentives for commercial income and in their resistance to specific commercial activities.

Time 2: Integrative strategizing mobilizes and embeds change in action. Because of financial pressures, top managers needed to legitimate a commercial strategy with the academic body: "We have GOT to raise more free money" (registrar). They began a process of integrative strategizing, counteracting perceptions of threat to research by developing rudimentary incentive systems to deploy resources from commercial income for research support: "This is then linked to the incentive, research time" (Resource Committee). This minor administrative procedure was significant, as a differentiated resource allocation mechanism was attributed acceptability for the first time by aligning it with institutionalized beliefs in the primacy of research. At the same time, top managers deployed power to support this change in action by actively appealing to collective survival interests during interactions with organization members, explaining that "the university was not yet in a financial crisis, but would be within three years if it did not address the underlying imbalances between its income and expenditure" (Resource Committee minutes).

The process of aligning changes in action with changes in institutional structures was challenging because of academic adherence to existing institutional structures: "It is sheer moneymaking activity for the University and I do fear diversion of effort into that" (senior academic 2). In discussions with key academics, top managers appealed to existing authority relationships, in order to align them with changes in resource structures: "This [commercial activity] can really work BUT only if it has strong support from the important constituents of the University" (Resource Committee). They began to make departmental income performance figures more transparent in collective interactions, such as during the bimonthly meeting of departmental heads, so that lower performers would be more aware, in the company of their peers, of their relative contributions; this awareness generated normative sanctions: "It has taken time and effort to do that because it's offended the collegiality ethos. The management information we are able to gener-

ate . . . is useful in letting the information make the point" (registrar). At the same time, during explanations of commercial activities at meetings and in interactions with professorial staff, great care was taken to attribute institutionally acceptable meanings to commercial activities; "It's got to be financially viable but at the same time it must be seen as core by the University. . . . They must be seen as somehow central to its mission" (senior academic 4).

Integrative strategizing thus attributed meaning and deployed power, legitimizing the collective interest that could be achieved through differentiated procedures for monitoring commercial income: "You have to make sure they see how it is not at variance with the core business and also how it can benefit them" (registrar). Performance-monitoring procedures enabled top managers to highlight different performance levels transparently. Although they paid attention to existing authoritative and legitimation structures, emphasizing that lower income would not attract sanctions, the managers were able to use the figures during interactions to invoke new commercial performance norms: "Not everyone has the same potential [social science department], for example, but we need to feel that all departments are doing as much as they reasonably can" (senior academic 3 at a Resource Committee meeting). Integrative strategizing shaped acceptance of the new commercial strategy and also the procedures for embedding it, so that those procedures were integrated into the social obligation to produce commercial income, "putting the onus on departments to actually think of ways that they can generate more income" (senior academic 6).

Integrative strategizing aligned change in the action and institutional realms, developing reciprocally supportive links between the two. Changes in allocative structures of domination were supported with changes in other institutional structures in terms of interests, social relationships, norms, and values. For example, by 1998 commercial income was a legitimate interest: "There is more of a will towards income generation . . . they are beginning to see some benefits in resource gain" (registrar). Authority relationships had also changed, as income generation now conferred higher social position: "Somebody who is from a very successful department, one which generates enormous surplus for the University . . . has a kind of moral authority" (senior academic 1). Normatively, increased transparency of commercial performance increased its legitimacy, "giving them [organization members] the message obliquely that they aren't performing and it is noticed and they have to do something about that" (registrar). Thus, the institu-

tionalized values expressed at time 1, when organization members "resented" the idea of commercial income, shifted: "Income generation is on the rise as the academics begin to understand it" (registrar). This mobilizing of new actions and their embedding within modified institutional structures was brought about through integrative strategizing. In this example, commercial income underwent a shift from being unacceptable at time 1 to being a legitimate strategy that carried social obligations and sanctions at the end of time 2.

Comparison: Unsuccessful and Successful Changes of a Strongly Institutionalized Strategy

Although the interactive to procedural strategizing pattern was unsuccessful at changing a strongly institutionalized strategy, the above example has shown that integrative strategizing was successful. Integrative strategizing simultaneously mobilizes support for change in the action and institutional realms, working within existing institutional structures to attribute acceptable meanings to changes in action, counteracting institutionalized opposition and, at the same time, subtly altering these structures. In the above example, top managers emphasized the support that commercial income could bring to research, counteracting institutionalized suspicion that it would detract from it. At the same time, they embedded this change within new resource allocation mechanisms that diverted some commercial income into research support. However, unlike in procedural strategizing, in integrative strategizing top managers paid attention to the meanings attributed to the new allocative structures of domination, working within the action realm to gain acceptance for these changes as well by aligning them with existing institutional structures. For example, they attended to collegial norms and social position by emphasizing collective interests and so invoked new norms that placed an "onus" on organization members to undertake commercial income generation. Playing upon the collegial norms and social obligations implicit in structures of legitimation and authoritative domination in turn subtly modified these structures to align with the new resource allocative structures, supporting ongoing efforts to mobilize changes in action. This comparison of successful and unsuccessful outcomes from different patterns of strategizing behavior indicates the importance of simultaneously mobilizing change in the action and institutional realms with a strongly institutionalized strategy.

Integrative Strategizing Is Successful at Reinforcing a Strategy: The Research Strategy at Campus

Time 1: Integrative strategizing with a strongly institutionalized strategy. Campus had ranked high in each of the state's four-yearly RAEs, which added to its identity and reputation as a leading research university. The research strategy was thus institutionalized within the university's beliefs and values ("Campus prides itself, rightly so, on being a research-led university" [academic registrar]) and in its resource-allocative structures, where there was strong material support for research: "We mean business. We absolutely mean to invest on the research side of the University" (finance registrar). There were strong social obligations for all academics to engage in high-quality research in order to support the collective interest of the university: "Because we think we're a research university, everybody should be performing on the basis of the research model" (registrar). Research was thus also institutionalized within the structures of legitimation and authoritative domination.

To ensure that research maintained its high profile and continued to be done, top managers used integrative strategizing to reinforce the research strategy. For example, after the 1992 RAE results were released, they undertook extensive analyses of each department's performance. These analyses were used to reinforce the research strategy within members' actions, informing a series of face-to-face reviews with department heads and specific individuals in eight lower-rated departments, "It being the Committee's view that a rating of 3 was not an adequate research performance" (Strategy Committee minutes, 1993). Reviews emphasized existing norms of research performance by "going into some discussions with individual members of staff about what their research plans are" (finance registrar). At the same time, administrative procedures were modified, and individual research plans and departmental targets were developed as the basis for ongoing research discussions. In high-performing departments, discussions were held with departmental heads to "establish research profiles of each department" as a prelude for annual research reviews for all staff (Resource Committee, 1994). In these discussions and reviews, modifications were made to some departmental budgets "that gave the university flexibility to bring in new people" (former DVC). By attending closely to organization members' actions and modifying administrative procedures to ensure that they remained congruous with and embedded desirable actions, top managers were ensuring that people instantiated the re-

search strategy within their daily actions: "If you declare yourself to be a research-based university and you mean it then all your staff should go in to be assessed for their research work. That is a kind of an image; a moral argument" (finance registrar). Integrative strategizing enabled top managers to reiterate research values, emphasize the resources accruing to research performance, and ensure that the normative obligations to perform research remained meaningful to staff, thus reinforcing research as a collective interest of the university.

Time 2: Ongoing integrative strategizing. In the 1996 RAE, Campus ranked high overall and, in particular, six of the eight departments that had been subjected to intensive integrative strategizing increased their ratings. Top managers wanted to maintain this success. They thus continued with integrative strategizing, beginning a series of reviews in all departments: "Reviews pertaining to research performance [are] established with the objective of increasing the rating of all non-5* subjects by at least one grade by the next RAE"(Strategy Committee minutes, 1997). In these reviews, modified research plans, targets, and adjustments to budgets, including resources for research appointments, were discussed; "You have got to find out the kind of incentives that you give in order to help people move forward" (academic DVC).

Modifications to administrative procedures occurred as a series of discussions between top managers and departments about the nature of resource allocation mechanisms and corresponding departmental actions, ensuring that the two were aligned in common understandings: "I have talked with the chair of the department with a view to the way in which we arrange their package of resources. It is a central group striking an agreement with a department as to how things will operate" (academic DVC in meeting). The strong research performance of most departments supported the institutionalized interests, authority relationships, and social obligations at Campus. It was socially and normatively appropriate to expect research excellence from all organization members: "I'll never forget the last RAE where a couple of departments performed poorly and worse than people expected. And it was almost like vultures had descended upon them. I mean there was NO WAY the rest of the institution was going to put up with those departments letting the side down" (governor). Through integrative strategizing, top managers reinforced these institutionalized structures, sustaining existing beliefs, values, and interest in securing the university's research strategy and legitimizing sanctions for nonperformance: "If [a department] isn't a 5 [in the next RAE], I think there are some very serious ques-

tions that are going to have to be asked" (academic DVC). Integrative strategizing behavior thus continuously realized the research strategy within existing institutional structures and organization members' actions: "People round here genuinely believe that Campus is, and ought to be, a research-based university" (finance registrar).

Comparison: Integrative Strategizing Can Change or Reinforce a Strategy

The last two examples show that integrative strategizing can be successful at either changing or reinforcing a strategy within the action and institutional realms. In the Metropolitan example, there was progressive change in actions and institutions over time, whereas the purpose of integrative strategizing at Campus was to ensure that actions and institutions remained aligned around the strategy. Thus, top managers worked within the action realm through "discussions with individuals," at the same time as embedding actions in annual research reviews, targets, and "research profiles" to ensure their persistence.

Integrative strategizing not only aligns actions with institutions but also reproduces those institutions through organization members' actions. For example, at time 2 in the Campus chronology, organization members who were performing well in research had a vested interest in being part of a top research university, reinforcing the structures of legitimation and the authoritative structures of domination by "descending like vultures" on those who did not fulfill their obligations and "let the side down." Integrative strategizing reinforced a common understanding about what constitutes acceptable action, legitimating the deployment of power, attribution of meaning, and invocation of norms and sanctions in order to support the "genuine belief that Campus is, and ought to be, a research-based university." Thus, action was aligned with and reproduced the institutional structures. Integrative strategizing works within the institutional realm by continuously modifying administrative procedures to ensure that the allocative structures of domination can be instantiated in meaningful incentives and sanctions in the action realm. The allocation of resources is made meaningful through discussions and "agreements" in the action realm that position resources within the context of institutionalized structures of legitimation, signification, and authority relationships. By contrast with the change examples, where integrative strategizing generated subtle shifts in the action and institutional realm over time, in this example it continuously reinforced alignment between the in-

stitutional structures that guided members' actions and the way that these actions reproduced the institutional structures. This reciprocal process enabled the strategy to be consistently implemented over time.

The above section of the results has presented four representative examples of the 12 strategy chronologies, according to the strategizing patterns used by top managers and their successful or unsuccessful outcomes upon shaping strategy. The Appendix summarizes all 12 chronologies, with their strategizing patterns and successful or unsuccessful outcomes.

DISCUSSION

This article has addressed two research questions: (1) Are there discernible patterns of strategizing behavior through which top managers shape strategy within the action and institutional realms, and (2) What are the implications of these structurational patterns for shaping the path of a strategy over time? Two main patterns of strategizing behavior were found: a sequential pattern of action and institutional effects that unfolds as interactive strategizing is followed by procedural strategizing; and a simultaneous pattern of action and institutional effects using integrative strategizing. Comparison of these patterns showed that they were more or less successful for shaping strategy according to the relative institutionalization of existing strategies. I now discuss these patterns in an effort to derive a conceptual framework of findings. This framework will elaborate and extend the application of structuration theory to the study of strategy process by forwarding the proposal that, with strongly institutionalized strategies, more successful implications arise from a simultaneous, rather than a sequential, pattern of shaping strategy in the action and institutional realms.

With some rare exceptions (e.g., Heracleous & Barrett, 2001), most management studies that apply a structurational lens have analyzed the reciprocity between action and institution as sequential, separating them within time to explain their structurational effects over time (e.g., Barley, 1986; Barley & Tolbert, 1997; de Sanctis & Poole, 1994; Orlikowski, 1996; Pozzebon & Pinsoneault, 2005). In this sequential process, shifts occur within the action realm and are subsequently embedded in the institutional realm as a persistently modified social order. Shaping strategy in the sequential model involves shaping the meanings, power, and norms surrounding a strategy in the action realm during one time period and subsequently embedding these action effects within the institutionalized struc-

tures of legitimation, signification, and domination surrounding the strategy. This study illustrates that the sequential pattern does reflect the strategizing behaviors displayed by top managers and that this pattern is successful for shaping a weakly institutionalized strategy. The sequential pattern posited by the above authors thus provides an adequate explanation of how managerial strategizing behavior shapes strategy in weakly institutionalized strategy contexts. Although weakly institutionalized strategies are expected to be more vulnerable to change than strongly institutionalized ones (Greenwood & Suddaby, 2006; Tolbert & Zucker, 1996), scholars still have little understanding of how top managers formulate and implement strategy (Chakravarthy & White, 1992; Johnson et al., 2003; Pettigrew, 1992). It is thus valuable to understand that sequential patterns of shaping strategy within the action and institutional realms may be successful with weakly institutionalized strategies. This understanding comprises one element of my conceptual framework.

However, the sequential model is less successful in shaping strongly institutionalized strategies. Strongly institutionalized strategies have an embedded, preexisting structurational process guiding the way that organization members instantiate a strategy in their daily actions and thus reproduce it in the institutional realm. The recursive implications of this existing structuration process, in which structures guide actions that reproduce structures (Jarzabkowski, 2004), are difficult for top managers to counteract through sequential strategizing behaviors. These problems with the sequential pattern for shaping strongly institutionalized strategies elaborate understanding of the association between action and the reproduction or modification of institutional structures. In Barley and Tolbert's (1997) framework, the cumulative emergence of actions mobilizes support for a shift in institutional structures; a single or few action effects will not, however, be sufficient to modify the institutional realm. Although the top managers in the three unsuccessful examples of sequential strategizing were able to have some action effects, such as agreement to new planning procedures or to the appointment of new research staff, this did not constitute mobilization of change within the action realm.

This capacity to have an action effect that does not constitute a precursor to institutional change may be understood with reference to asymmetrical power in interactions. The highly focused nature of face-to-face interactions (Giddens, 1984; Weick, 1979) and, even within the diffuse power arrangements of universities, the power asymmetries that are present in a meeting between top managers and organization members (Clegg, 1989; Hardy, 1996; Ranson et al., 1980; Simons, 1994) may privilege top managers' influence, so that organization members agree with top managers during the period of interaction. However, given the interests and beliefs that organization members have vested in existing institutions, managerial interactions may have temporary effects that do not mobilize enduring change in members' actions.

This limitation in shaping the action realm was compounded in the sequential pattern because, when top managers turned their attention to embedding strategy within the institutional realm, they initially shaped the resource allocative structures of domination, deploying physical and financial resources toward desired changes in action. However, as the findings show, changes in resource-allocative structures may not align with the way that strategy is embedded in existing authoritative structures of domination and the structures of legitimation and signification (Hardy, 1996; Lukes, 1974). These institutional structures are interdependent in practice (Clegg, 1989; Giddens, 1984). They reinforce each other, so that strategizing behaviors that work predominantly upon one institutional structure will have trouble counteracting the combination of other institutional structures that support the existing structurational process (Clegg, 1989; Hardy, 1996; Hardy & Clegg, 1996; Lukes, 1974). Rather, these structures continue to be reproduced through organization members' actions. Thus, with a strongly institutionalized strategy, a sequential strategizing pattern is inadequate to explain how top managers shape strategy. This unsuccessful process provides deep insights into a recognized problem in the change literature, the situation in which organizations adopt new strategies and new formal procedures without these changes constituting a change in the actions of organization members (e.g., Doz, 1996; Johnson, 1987; Noda & Bower, 1996). A structurational lens shows, at a deep level, why new actions and new procedures may be formally established without being incorporated by organization members into their existing structuration of the strategy process. Limitations of the sequential pattern for shaping strongly institutionalized strategies comprise another element of my conceptual framework.

Integrative strategizing behavior was found to be successful in shaping strongly institutionalized strategies through a simultaneous process of shaping the actions in which a strategy is instantiated and influencing the way those actions are embedded within the institutional realm. Rather than a sequence of action effects in one time period fol-

FIGURE 2
Implications of Structurational Patterns of Strategizing Behavior for Shaping Strategy[a]
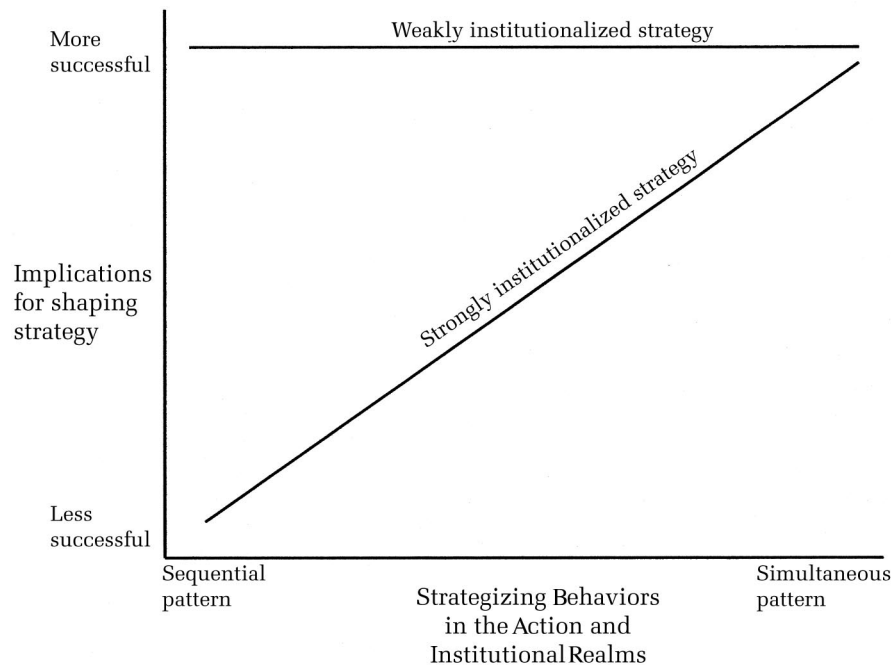
lowed by institutional effects in the next time period, simultaneous shaping of both realms occurs over time. As shown, this process may mobilize change, working with existing institutional structures to subtly shift the meanings, power, and norms through which actions are realized, in the process subtly modifying institutional structures to align with shifts in the action realm. Although the overt structures that top managers influenced tended to be the same administrative procedures that they used in procedural strategizing, attention was paid to the values, beliefs, meanings, norms, and interests that underpinned allocative structures of domination (Clegg, 1989; Hardy, 1996; Heracleous & Barrett, 2001; Lukes, 1974). Integrative strategizing thus penetrates the institutional realm by focusing upon the alignment between allocative structures of domination and structures of signification, legitimation, and authoritative domination. Effects upon the institutional realm are supported within the action realm by modification of the norms, power plays, interests, and meanings that are evoked in everyday action.

Integrative strategizing does not always constitute change. Rather, the findings show that this pattern may be directed at maintaining a strategy over time, illustrating how top managers influence ongoing strategy implementation. Although there is a tendency for strategy to lapse into inertia and to

drift from strategic objectives as it is implemented over time (e.g., Doz, 1996; Gilbert, 2005; Noda & Bower, 1996), in this study strategy was continuously being reproduced in the action and institutional realms, ensuring its ongoing implementation. This simultaneous action and institutional effect was successful because it acknowledged the complex reciprocal relationships between the action and institutional realms, in which institutional structures are interdependent and mutually reinforcing, and actions reproduce but also modify those structures. The simultaneous pattern is significant because it was successful not only with weakly institutionalized strategies but also with strongly institutionalized strategies. Hence, this is the final element incorporated into a conceptual framework that explains the implications of top managers' strategizing patterns for shaping strategy within the action and institutional realms.

Figure 2 brings together the elements of a conceptual framework derived from this discussion of the empirical findings. This framework summarizes my contributions and is the basis for three propositions that might inform future research. The vertical axis indicates more or less successful implications of strategizing behavior in shaping strategy toward desired managerial outcomes, which may be either strategic change or reinforcement of strategy implementation. Although this study

found either successful or unsuccessful implications, the 12 examples might tend toward polar extremes; hence this axis indicates a continuum from less to more successful, providing for future research that might examine whether there is a range of success implications over a wider sample of cases. The horizontal axis explains the way that patterns of strategizing behavior shape strategy sequentially or simultaneously in the action and institutional realms. Again, I found polarities of either sequential or simultaneous patterns, but this axis also expresses a continuum because of the temporal element in a sequential model. Although the sequential patterns I found involved some one and a half years devoted to the action realm before attention was shifted to the institutional realm, it is possible that, as strategizing behavior approaches the simultaneous end of the continuum, more rapid sequences will have enhanced success. This issue is a topic for future research. The lines inside the figure indicate my findings about the implications of sequential or simultaneous strategizing behaviors with weakly or strongly institutionalized strategies, also illustrating a range of possibilities between the extremes as the basis for future research. The horizontal line illustrates a weakly institutionalized strategy, in which both the sequential and simultaneous strategizing patterns were found to be successful, indicating the following proposition:

Proposition 1. With weakly institutionalized strategies, strategizing behaviors that exhibit either sequential or simultaneous action and institutional patterns are likely to be successful at shaping strategy.

The diagonal line illustrates a strongly institutionalized strategy, in which the simultaneous pattern was found to be successful at shaping change in strategy, and the sequential strategizing pattern was found to be unsuccessful at shaping change in strategy, indicating the following proposition:

Proposition 2a. With strongly institutionalized strategies, strategizing behavior that exhibits a simultaneous action and institutional pattern is likely to be more successful at shaping change in strategy, but strategizing behavior that exhibits a sequential action and institutional pattern is likely to be less successful at shaping change in strategy.

The findings also showed that the simultaneous pattern was successful at reinforcing a strongly institutionalized strategy. However, in the 12 strategy chronologies that were the basis for this study, the sequential pattern was not used to reinforce a strat-

egy, providing no evidence of the relative success of the sequential pattern for reinforcing strongly institutionalized strategy. This lack of evidence about the sequential pattern provides grounds for future research, and the findings from the simultaneous pattern indicate a final proposition:

Proposition 2b. With strongly institutionalized strategies, strategizing behavior that exhibits a simultaneous action and institutional pattern is likely to be successful at reinforcing an existing strategy.

IMPLICATIONS AND CONCLUSIONS

This research contributes to the empirical application of structuration theory within the strategy process field and organization theory more widely. In particular, the structurational lens applied here provides deep insights into the pixels of managerial influence upon the social dynamics of strategy formation (Floyd & Lane, 2000; Jarzabkowski et al., 2007; Johnson et al., 2003). Structuration theory has not typically been used for conducting empirical analysis in the strategy field (Pozzebon, 2004; Pozzebon & Pinsonneault, 2005), yet this study has illustrated its analytic value. Structuration theory explains the effects and potential limitations of different patterns of managerial strategizing behaviors in shaping strategy in the action or the institutional realms. However, despite the structurational concept of actors as knowledgeable agents within a system (Child, 1997; Giddens, 1984; Ranson et al., 1980; Whittington, 1992), typically, empirical structuration analyses have not examined actors as instigators of structurational processes of change. Rather, they have focused predominantly on how the importation of external influences, such as a new technology, instigates structurational processes of change. Past authors (e.g., Barley, 1986; Heracleous & Barrett, 2001; Orlikowski, 1996) have examined how changing actions emerge and gain momentum in response to external influences, over time changing institutional structures; instead, this study examined the deliberate manipulation of action and institutional properties by a powerful group of actors, top managers. The findings show that managerial efforts are not always successful at motivating change, indicating the constraints of existing structurational processes upon managerial strategizing behavior. However, the integrative strategizing finding illustrates the enabling ways that top managers may work within existing institutions to influence actions and contribute to the reproduction or change of institutions. Future strategy research might thus undertake structurational

analysis of how actors work within an organizational system in order to shape its strategy over time.

This study also contributes to an increasing intersection between institutional and structuration theory and a growing interest in the way that actors and their actions shape institutions (e.g., Barley & Tolbert, 1997; Lawrence et al., 2002; Scott, 1994; Zilber, 2002). A particular question is how actors draw upon the institutional contexts in which they are embedded to effect change in those contexts (Greenwood & Suddaby, 2006; Reay, Golden-Biddle, & GermAnn, 2006). My findings illustrate how managerial actors may be constrained by or may mobilize existing institutional structures according to the particular structurational pattern that they use. These findings might usefully inform the overlap between institutional and structuration theory and research into how actors and actions shape institutions.

The three managerial strategizing behaviors identified here contribute to the strategy process literature by showing that managerial strategizing behaviors change over the course of shaping strategies. Most studies have explained one aspect of a strategy process, focusing either on how new meanings are established in strategic change initiation (e.g., Child & Smith, 1987; Gioia & Chittipeddi, 1991; Ford & Ford, 1995; Greiner & Bhambri, 1989) or on how administrative systems provide a structural context for strategy evolution (Bower, 1970; Burgelman, 1983; Chakravarthy & Doz, 1992; Noda & Bower, 1996). The findings presented in this article contribute to the literature on both the interpretative and the structural implications of top manager strategizing behavior.

First, much top-down interpretation literature tends to portray relatively unproblematic processes of managerial "sense-giving," in which the communication of new managerial meanings is amplified over time, building organizational consensus and commitment for change (e.g., Gioia & Chittipeddi, 1991; Greiner & Bhambri, 1989). Although these studies have shown that organization members appear to subscribe to managerial meanings, they tend to underplay institutionalized barriers to change, such as belief in existing strategies and their associated meanings. For example, the strategic change initiation process described in Gioia and Chittipeddi's (1991) work is similar to the interactive strategizing process I describe. However, their study concluded at the point of agreement to a new strategic planning process that is similar to the agreements at the end of interactive strategizing at time 2 in my cases. Thus, it is not known whether top managers were effective in embedding the new interpretations of strategy. By contrast, my study,

which examined the effects of embedding change within new strategic planning processes over time, showed that this was only successful for those strategies that were weakly institutionalized. The findings show that managerial interactive strategizing behavior can have action effects but that these do not necessarily constitute a commitment to institutional change by organization members. This distinction may explain why studies of middle manager interpretative schemes often show fragmented interpretations that result in unintended consequences for strategic change initiatives (e.g., Balogun & Johnson, 2004; 2005; Blackler et al., 2000), whereas studies focused on top managers indicate that dialogue and interaction result in consensus of meanings (e.g., Child & Smith, 1987; Gioia & Chittipeddi, 1991; Greiner & Bhambri, 1989).

Second, my findings contribute to the literature on managerial influences over the administrative procedures that comprise a structural context. Top managers establish these procedures, yet much of the research has focused on the way that administrative procedures subsequently constrain managerial action (e.g., Bower, 1970; Burgelman, 1983, 1996; Noda & Bower, 1996), emphasizing their institutionalized and inertial properties. My findings support these earlier ones, particularly where top managers work with strongly institutionalized strategies. However, as the integrative strategizing behavior shows, the institutionalization of organizational action within administrative procedures is neither immutable nor totally constraining to top managers. Rather, top managers may draw upon existing structures in the process of altering them, suggesting a more dynamic structurational process than the literature on structural context indicates.

Finally, this study contributes to the literature on strategy implementation. In particular, integrative strategizing indicates how strategy may be implemented over the long term in the absence of a strategic change initiative, which is an important finding as remarkably little earlier research concerns the ongoing implementation of strategy (Chakravarthy & White, 2002). Rather, strategy research has tended to privilege the study of strategic change from a variety of perspectives (see Rajagopalan & Spreitzer, 1996). There is a hidden assumption that change is more "strategic" than stabilizing a strategy and ensuring its ongoing implementation (Chia, 2002; Wilson & Jarzabkowski, 2004). Integrative strategizing provides a potential analytic resource for addressing this gap in the strategy literature.

The variations in managerial strategizing behavior found in this study suggest that many strategy

process studies offer highly focused but partial explanations of managerial behaviors in shaping strategy. This study offers a more dynamic explanation by showing that top managers may adopt patterns of sequential or simultaneous strategizing behaviors over time, patterns that are more or less successful according to the preexisting institutional conditions that they face. Future research could use a larger sample of cases to examine the model depicted in Figure 2, investigating whether there is a consistent relationship between sequential or simultaneous patterns of managerial strategizing behaviors as well as their implications for success and the degree of institutionalization of a strategy.

This study was conducted in universities, which, like other professional organizations such as hospitals and cultural and professional service organizations, tend to have diffuse authority relationships (Denis et al., 2001) and to deal in knowledge-based outputs (Hinings & Leblebici, 2003). Therefore, the findings are expected to be relevant in other professional organizations. In particular, as organizations are becoming increasingly fluid and as knowledge-based work grows increasingly important in many industries, the findings may have relevance to many organizations that share characteristics with universities.

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Paula Jarzabkowski (p.a.jarzabkowski@aston.ac.uk) is a professor of strategic management at Aston Business School and an Advanced Institute of Management (AIM) Ghoshal Fellow. She received her Ph.D. from Warwick University. Paula conducts research into the social practices of strategy in pluralistic contexts such as regulated commercial firms, and professional and public sector organizations, which are beset by contradictory and competing strategic demands.

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This article continues with an appendix.

APPENDIX
TABLE A1
Chronological Elements of 12 Strategies

University and Strategy	Time 1	Time 2	Time 3
(a) *Urban* Research—Unsuccessful	*Strongly institutionalized strategy* Historically strongly institutionalized structures that are against a research strategy: *"We took the view strategically that we couldn't be a research university."*	*Interactive strategizing* Mid 1993 to end of 1994: Top managers engage in extensive interactive strategizing with people at all levels in order to attribute new meanings to research and gain support for it as part of a changing strategic portfolio for the university. *Action effect* By the end of 1994, top managers believe they have had effect within the action realm, with agreement to incorporate research objectives in a new strategic planning process.	*Procedural strategizing* 1995–98: Research planning is introduced to embed the research strategy. Over three years, top managers strengthen the monitoring and control procedures intended to reinforce the research strategy: *"We're monitoring this closely."* Despite these attempts to institutionalize the research strategy within recurrent planning cycles, in 1998 academics still ignore or resist the research strategy: *"Why are we doing research?"* *Unsuccessful outcome* There are no significant changes to the institutional or action realms as people draw upon existing institutional structures to legitimize their nonresearch actions.
Teaching—Unsuccessful	*Strongly institutionalized strategy* Historically strongly institutionalized structures support the identity and reputation as an excellent teaching institution. *"We pride ourselves on teaching."*	*Interactive strategizing* Mid 1993 to the end of 1994: Top managers engage in extensive interactive strategizing at all levels in order to convince people that the current way of teaching is too resource-intensive and to generate support for minimizing teaching within the university's strategic portfolio. *Action effect* By the end of 1994, top managers believe they have had effect within the action realm, getting agreement to incorporate teaching reductions within the new planning process.	*Procedural strategizing* 1995–98: Over three years, top managers reduce annual allocation of staff teaching resources in the annual planning procedure. These savings are to be redeployed into other strategic priorities, necessitating a change in the modular teaching year. However, top managers are unable to implement a change in the teaching year from three terms to two semesters, as it contravenes academic values and beliefs about Urban's purpose as a teaching university. *Unsuccessful outcome* There are no significant changes to the institutional or action realmsas people draw upon existing institutional structures to legitimize their belief in the centrality of teaching: *"The last thing we want is for teaching to suffer."*
Commercial—Successful	*Weakly institutionalized strategy* Historically, Urban had not had a commercial income strategy, but this is weakly institutionalized: *"I wouldn't have said we were particularly entrepreneurial."*	*Interactive strategizing* Mid 1993 to end of 1994: Top managers engage in extensive interactive strategizing at all levels in order to emphasize the changing financial climate and generate support for a commercial element to the university's strategic portfolio.	*Procedural strategizing* 1995–98: Top managers introduce targets for increasing commercial income by 10 percent over a three-year period. Commercial activities are monitored each year, increasing incentives for better performance and sanctions for lower performance.

University and Strategy	Time 1	Time 2	Time 3
(a) *Urban* continued		*Action effect* By the end of 1994, top managers believed they have had effect within the action realm, with agreement to include commercial growth in the new strategic planning process.	*Successful outcome* By 1998, there is significant change in the institutional and action realms as people embrace the commercial strategy, adopting new values and actions around the centrality of commercial income for the university's future: *"We all pull together for survival."*
Size-and-scope—Successful	*Weakly institutionalized strategy* Historically, Urban had no particular size and scope strategy: *"We just went the way that the funding model took us."*	*Interactive strategizing* Mid 1993 to end of 1994: Top managers engage in extensive interactive strategizing at all levels in order to generate a view about the university's future size-and-scope policy, given its changing strategic portfolio. *Action effect* By the end of 1994, top managers believed they had had effect within the action realm, with agreement that financial viability should be key in the new size-and-scope strategy.	*Procedural strategizing* 1995–98: In the strategic planning cycle, top managers establish formal size-and-scope targets and monitor and reinforce them annually, to ensure the financial viability goal. *Successful outcome* There is significant change in the institutional and action realms, as academics recognize that financial viability determines their position and potential growth or retention in the university portfolio: *"We emphasize financial viability within departments."*
(b) *Metropolitan* Research—Unsuccessful	*Strongly institutionalized strategy* Historically, Metropolitan's identity as a world-class research university is embedded in strong institutional structures that support symbiosis between research excellence and academic autonomy: *"It's a free, noncoercive atmosphere which is highly conducive to research."*	*Interactive strategizing* Late 1996 to end 1997: Top managers engaged in extensive interactive strategizing in an attempt to gain more central control of the research strategy, because the current process is not adequately meeting external performance criteria that have financial and prestige implications for the university. *Action effect* Top managers are able to have some effects in the action realm, such as gaining agreement to central control over some research appointments.	*Procedural strategizing* Late 1997 to 1998: Top managers attempt to capitalize on their effects in the action realm by generating a new set of planning and control procedures for the research strategy. However, they are unable to get academics to accept these new procedures. Rather, academics draw upon existing institutional structures to reinforce their belief in the centrality of academic autonomy to the research process, rejecting managerial attempts to plan, monitor, and sanction research performance. *Unsuccessful outcome* No change occurs in the institutional and action realms, as academics persist with the existing autonomous research process: *"There is still a hands-off feeling to research."*

TABLE A1
Continued

University and Strategy	Time 1	Time 2	Time 3
(b) *Metropolitan* continued Teaching—Successful	*Weakly institutionalized strategy* Historically, teaching has not been viewed as important strategically: *"Teaching innovation is slow."*	*Interactive strategizing* Late-1995 to early 1997: Top managers engage in interactive strategizing to convince academics that is in their collective interest to secure high external teaching audit evaluations and ensure quality of teaching standards and service provision to international students. *Action effect* Top managers believe they have had an action effect as departments accept that teaching audits are important and agree to strategies for improving teaching service provision and monitoring of teaching quality.	*Procedural strategizing* 1997–98: Top managers embed changes in the teaching strategy within formalized administrative procedures to monitor teaching performance and quality, which can then be used to inform promotional criteria and formalized teaching recognition. They also establish a process for documenting teaching quality and service provision. *Successful outcome* There is change in institutional and action realms as organizational members acknowledge teaching as a strategic priority "*Teaching is much more important*"
Size-and-scope—Outlier: Unsuccessful at time 2 then successful at time 3	*Strongly institutionalized strategy* Historically, Metropolitan strongly supports the full range of disciplines and protects its size-and-scope strategy from market forces and "*transitory shifts of student fashion*" by allocating resources to all disciplines without tying this to market or growth implications.	*Procedural strategizing* 1995–96: Top managers wish to maintain size-and-scope objectives, but also to pay attention to market forces in order to control excessive growth in some disciplines and unbalanced composition of the student body. They engage in procedural strategizing, modifying the existing resource allocation and monitoring procedures in an attempt to ensure that all disciplines survive within realistic growth and resource targets. *Unsuccessful action effect* These procedures are ineffective, as academics ignore the procedural changes, which are counter to their existing experiences of the size-and-scope strategy. They fail to see the importance of attempts to change allocative structures of domination.	*Integrative strategizing* 1996/97–98: Top managers recognize that procedural strategizing is ineffective. They change to integrative strategizing, drawing upon existing institutional structures to frame meanings about the need to change actions in order to fulfil size-and-scope goals in a modern, market-based environment. At the same time, they develop a new, transparent resource allocation mechanism, using this to invoke new norms and encourage departments to take responsibility for a more realistic size-and-scope strategy, which will maintain all disciplines but also curb unplanned growth. *Successful outcome* There is a change in the action and institutional realms, as organization members accept the necessity of new resource allocation mechanisms and clear targets for "*contraction and growth*," in order to protect all disciplines and ensure control over the longer-term implications of the size-and-scope strategy.

TABLE A1
Continued

University and Strategy	Time 1	Time 2
(b) Metropolitan continued Commercial—Successful	*Strongly institutionalized strategy* Historically, Metropolitan is strongly resistant to commercial activities on the basis that this threatens the research identity: *"We're vulnerable to losing research excellence."*	*Integrative strategizing* In 1996, top managers engage in integrative strategizing in an effort to attribute more favourable meanings to a commercial strategy, counteracting institutionalized suspicion that it will detract from research at the same time as developing administrative procedures to support commercial income. They progressively develop stronger procedures for monitoring and controlling commercial performance at the same time as ensuring these procedures are accepted by paying attention to the meanings surrounding them and the way they embed changing values, beliefs and interests in a commercial strategy.
		Successful change outcome By 1998, there is a change in the action and institutional realms as organizational members acknowledge that a commercial strategy is in their collective interest: *"The critical issues are the financial viability of the University."*
(c) Campus Teaching—Successful	*Weakly institutionalized strategy* Historically, teaching had not been important strategically at Campus: *"Teaching innovation is at a departmental level."*	*Integrative strategizing* In 1994, top managers propose that a teaching strategy is important because of changing state teaching audits, accountability, and student demand. They engage in integrative strategizing to ensure that departments are convinced about the importance of teaching to the collective interest of the university at the same time as developing administrative procedures to monitor and evaluate teaching. They then work closely with departments to ensure that they take teaching quality seriously, understand the performance measures and their implications, and can achieve high rankings in the state teaching audit.
		Successful change outcome Throughout 1996 and onwards, there is evidence of change in the action and institutional realms as organization members acknowledge the importance of the teaching strategy and collaborate in ensuring that teaching quality is a key part of Campus's identity: *"We've done absolutely astoundingly well on the teaching quality side."*
Research—Successful	*Strongly institutionalized strategy* Historically, Campus derives reputation and identity from being a leading research university: *"We very clearly identify ourselves with other top research-led universities."* *Integrative strategizing* Throughout 1992–96 the research strategy is the subject of intense integrative strategizing to ensure that people continue to perform high-quality research.	*Integrative strategizing* In 1996, improved rankings from the four-yearly state research assessment exercise indicate to top managers that their integrative strategizing efforts have been successful. They continue with integrative strategizing by continuously modifying monitoring and control systems and incentive schemes and working with academics to ensure that these reflect the meanings attributed to the research strategy, enabling it to be realized in organizational members actions.
		Successful reinforcement outcome There is evidence that organization members embrace and reinforce the importance of the research strategy, reproducing the institutionalized structures that guide the research strategy through their actions: *"Campus prides itself, rightly so, on being a research-led university."*

University and Strategy	Time 1	Time 2
(c) *Campus* continued Size-and-scope—Successful	*Strongly institutionalized strategy* Historically the size-and-scope strategy at Campus is strongly institutionalized around cross-subsidy of those disciplines that are vulnerable to market forces, growth in the physical and experimental sciences, and upgrading capital infrastructure continuously in order to secure the university's growth aspirations. *Integrative strategizing* Through integrative strategizing, top managers ensure that the size-and-scope strategy is continuously instantiated in the action realm as well as maintained in the institutional structures.	*Integrative strategizing* In 1996–97, top managers saw opportunities to strengthen growth in the sciences by opening a department in a targeted area and growing another department. They therefore engaged in ongoing integrative strategizing with departments about their growth potential, the types of recruitment targets that would be necessary to furnish the growth, and the investments in capital infrastructure to be made. They both ensured that academics understood and accepted the growth objectives and also modified resource allocation mechanisms to deploy resources to the growth. At the same time, they maintained the commitment to viability of the nonsciences by coming to agreements about smaller and/or delayed investments in those disciplines' capital infrastructure for two years to release resources to other size-and-scope priorities. *Successful reinforcement outcome* The size-and-scope strategy was continuously reinforced in the action and institutional realms, ensuring that it could be implemented on an ongoing basis: *"We have continued with the principle of maintaining the university's infrastructure along with growth."*

<div align="center">Time 1</div>

Commercial—Successful	*Strongly institutionalized strategy* Historically, Campus has a reputation for strong performance in commercial income, having responded to the major higher education funding cuts in 1980 with a *"save half, make half"* policy, which is strongly embedded in the institutional structures: *"This is a university that has earned its living."* *Integrative strategizing* Throughout the study, top managers used integrative strategizing to ensure ongoing implementation of the commercial strategy. They consistently worked with all departments and other income-generating areas on maximizing their income stream activities as well as modifying administrative procedures to ensure that they continued to reflect agreed-on targets and projections and that individuals were instantiating the strategy in their actions. This continuously reinforced the strategy in the action and institutional realms: *"Campus has to make sure that the earned income activities maintain their momentum and deliver the financial returns because those underpin everything we do."* *Successful reinforcement outcome* The commercial strategy was maintained and reinforced within the action and institutional realms throughout this study. Campus maintained its surplus and its percentage of commercial income, which was widely understood as a source of the university's success: *"In this place, the self-evident fact is that the academic strength of the University is growing as a direct result of its financial success."*	