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THAT'S OUR TURF! IDENTITY DOMAINS AND COMPETITIVE DYNAMICS

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We examine the effects of organizational identity on the competitive dynamics of firms. Identity increases the awareness, motivation, and capability to respond to competitors' actions within the firm's identity domain, defined as cognitive competitive space that holds psychological value for a focal firm's management. Because of the psychological and motivational importance of a firm's identity, we predict that the actions and reactions within an identity domain may not adhere to traditional economically based explanations of managerial behavior.

Why does a firm attack certain markets with vigor while ignoring other seemingly equally attractive markets? Why does a firm aggressively react to the actions of certain rivals to defend some markets but seem to overlook, ignore, or half-heartedly respond to others? These questions are of central importance to researchers interested in understanding competitive dynamics—the actions and reactions of firms (Smith, Grimm, Gannon, & Chen, 1991). Chen, Su, and Tsai (2007), building on work by Smith and others (e.g., Basdeo, Smith, Grimm, Rindova, & Derfus, 2006; Chen, 1996; Ferrier, Smith, & Grimm, 1999; Gimeno & Woo, 1999; Smith et al., 1991), recently refocused the search for answers to these questions and suggested that psychological and cognitive theories are likely to provide useful answers. Therefore, beyond merely looking at firm actions as outcomes of the competitive process, it is important to understand the underlying antecedents to managerial behavior, which highlight the influence of certain affective, psychological, and cognitive processes top managers exhibit when making strategic and competitive decisions.

By beginning to explore the psychological antecedents that give rise to rivalrous action and competitive dynamics, Chen et al. (2007) make an important contribution that opens the path to refocus research energy on seeking theoretical understanding of intriguing research results. However, they stop short by not diving deeply into cognitive and psychological theory. Specifically, organizational identity theory provides a promising theoretical grounding that Chen, his colleagues, and others have sought in order to enrich understanding and extend competitive dynamics research.

This paper attempts to bridge the gap between organizational identity theory and competitive dynamics by introducing a new concept—*identity domain*—to explain why firms compete vigorously in certain competitive arenas (even ones with less economic potential) than in other potentially more financially rewarding arenas. Organizational identity has been defined as "the members' consensual understanding of 'who we are as an organization'" (Nag, Corley, & Gioia, 2007: 824) that emerges from that which is "central, distinctive, and enduring" to the organization as a whole (Albert & Whetten, 1985: 265). Building on this conception of identity, we define an identity domain as the top management team (TMT) members' consensual understanding of the competitive arena that best demonstrates and reinforces organizational identity in the marketplace.[1] The firm is likely to compete in many arenas that are not its

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[1] To simplify the development of the theoretical model, we focus on the beliefs of executives, who are responsible for the strategic direction and competitive actions of the firm. We relax this focus in the discussion section.

identity domain, and not all of these arenas are of equal importance to managers. Just as some aspects of the internal environment are viewed as central, distinctive, and enduring, and thus are part of the organization's identity (Albert & Whetten, 1985), some external, competitive environments are also viewed by managers as more central, distinctive, and enduring arenas where competitive actions and reactions carry greater psychological consequences for the very definition of the firm; this particularly salient competitive arena is what we call the "identity domain." To use a sports metaphor, if organizational identity is who we are, then the identity domain is "our home turf" that carries high psychological value for the firm's managers.

In sum, the organization's identity is how the firm sees itself, whereas the identity domain is the competitive arena that best captures and reinforces this sense of its identity in the marketplace. In this paper we use the term *identity domain* to highlight the cognitively privileged competitive arena that holds the highest psychological value for a focal firm's managers such that they will take strategic actions that may be at odds with economic rationality. Thus, identity domain theory can help explain why firms act and react the way they do above and beyond behavior predicted by traditional economic theory.

Within the competitive dynamics research stream, the awareness-motivation-capabilities (AMC) perspective has been championed to explain the antecedents to competitor actions and reactions. Specifically, awareness, motivation, and capabilities have been posited to be three key drivers of interfirm rivalry (Smith, Ferrier, & Ndofor, 2001). The AMC perspective draws on the salience model discussed in social cognition (e.g., Dutton & Jackson, 1987; Fiske & Taylor, 1991). Applied to competitive dynamics (Chen, 1996; Chen, Smith, & Grimm, 1992) and combined with the literature on organization change, learning, and decision making, the AMC perspective provides an excellent backdrop for our discussion of identity and competitive dynamics. As Chen (1996) argued, competitive action is predicated on three conditions: the extent of *awareness,* the level of *motivation,* and, finally, the *capability* to respond.

The addition of organization identity—and specifically identity domain theory—advances the field's understanding of each component of the AMC perspective. First, identity increases awareness of the competitive environment relevant to the formation, threat, and/or strengthening of the identity domain by focusing limited managerial attention on these most salient arenas while simultaneously leading managers to be less aware of competitors' actions outside the identity domain. Second, the psychological and emotional ties to identity increase the motivation to act and react within the identity domain. Finally, the alignment between identity and strategic decisions via capital allocation and other corporate- and business-level actions increases the capability of the focal firm to be competitive in a particular domain while directing resources away from other, perhaps even more economically promising, arenas.

One of the key questions in competitive dynamics research is how firms facing the same industry environment act and react differently with each other. What has been overlooked, however, is *why* firms facing the "same" industry environment act and react differently. Identity domain theory begins to provide an answer: what is objectively the same may not be the same to managers of all firms competing in the industry, since certain competitive arenas are more important than others above and beyond purely economic considerations. Specifically, the model developed in this paper provides a better understanding of the impact of organizational identity on competitive dynamics by providing a richer theoretical grounding of the awareness, motivation, and capability to act and react.

Researchers taking a cognitive approach to strategic interactions have focused on management's scanning and interpretation of the external environment to form conceptions of competitive interactions or competitive space, rather than on the actions and reactions themselves (e.g., Porac & Thomas, 1990; Porac, Thomas, & Baden-Fuller, 1989; Reger & Huff, 1993). On the other end, most competitive dynamics research has largely overlooked the cognitive processes and motivations of managers as they engage their firms in strategic actions and reactions and have assumed managers are guided purely by economically rational or profit-maximizing principles. Therefore, we introduce identity domain theory as a plausible explanation for why managers might not act in such a manner. A new look at competition in light of the cognitions of managers and the powerful forces involved with creating and defending a firm's identity domain can help us understand why managers behave the way they do when making strategic decisions to guide the firm. In addition, since most prior competitive dynamics research has largely failed to take into account the actual cognitive processes and motivations behind strategic actions and reactions, this paper also adds to this stream of research by using the identity domain concept to directly link identity—a cognitive concept—with competitive dynamics. Exploring and articulating the fundamental relationship between being (identity) and doing (action) promises to ignite key research progress in both domains by bringing together insights from two streams of research that have all too often worked in isolation from one another.

The paper is structured as follows. First, we briefly review prior research regarding competitive dynamics and organizational identity. We then propose a model that highlights how identity domain theory aids understanding of a firm's competitive actions and reactions in psychologically important strategic arenas. Within competitive dynamics research, our model draws most heavily on the AMC perspective (Chen, 1996; Chen et al., 2007) and provides important theoretical foundations for the understanding of competitor actions and reactions (Smith et al., 1991) and how these might change in predictable ways. We then explore potential areas for future research and discuss further implications of the study of identity domains.

THEORETICAL BACKGROUND

Competitive Dynamics

The way a firm acts and reacts in a market determines its ultimate economic performance (Porter, 1980; Smith et al., 1991). The field of competitive dynamics attempts to explore the actions and reactions that firms take in the marketplace. Following the competitive dynamics literature, an action is defined as a specific and detectable competitive move, such as a new product introduction or price change, initiated by a firm to improve or defend its competitive position; a reaction is defined as an observable and discernible counteraction taken by a competing firm to defend or improve its competitive position (Chen et al., 1992; Porter, 1980). Although in most extant competitive dynamics research scholars have looked at the interactions of rivals in the same industry, we define a competitor as any other firm that has the potential to acquire resources the focal firm would like to acquire, even if they are not in the same industry or product/market space (Chen, 1996).

Much more is known about the actions and reactions of firms as outcomes than is known about the reasons firms undertake these actions and reactions in the first place. Schelling (1960) argued that the success of a competitive move depends on the commitment (or apparent commitment) to the act and the likelihood of a competitive response. Likewise, Schumpeter (1934) theorized that the longer an action can go without a competitive response, the longer the initiating firm can realize abnormal profits—also termed *first-mover advantage* (Lieberman & Montgomery, 1988). Furthermore, from the proactive focal firm's perspective, a competitive advantage gained from initiating an action will be more profitable if it minimizes the total intensity and diversity of competitive reactions performed by its competitors (Chen et al., 1992; Macmillan, McCaffery, & Vanwijk, 1985; Porter, 1980; Smith, Grimm, Chen, & Gannon, 1989). Based on this line of reasoning, researchers have particularly examined the following dimensions of competitive action and reaction: intensity (separated into the number and timing) and diversity (Chen et al., 1992; Ferrier et al., 1999; Lee, Smith, Grimm, & Schomburg, 2000; Smith et al., 1991). Competitive dynamics scholars have studied competition between actors in an industry based on SIC codes (Ferrier et al., 1999; Young, Smith, & Grimm, 1996), archival data analysis (Baum & Korn, 1999; Chen & Hambrick, 1995; Chen et al., 1992; Gimeno & Woo, 1996, 1999; Smith et al., 1991), and theory (Chen, 1996) while paying little attention to cognitive aspects of competition.

Although Chen and his colleagues (Chen, 1996; Chen et al., 2007) are an important exception, overall, this line of research predominantly has explored *how* competitive dynamics works and the consequences of competitive action-reaction strategies for firm performance, with antecedents to action receiving significantly less research attention. In particular, the AMC perspective (see Chen et al., 2007) suggests the need to understand the *why* or the antecedents to competitive actions and reactions based on the subjective assessments and beliefs of managers. Recently, building on the AMC perspective, Chen and colleagues' examination of "competitive tension," which they define as "the strain between a focal firm and a given rival that is likely to result in the firm taking action against the rival" (Chen et al., 2007: 102), pointed to the underlying cognitive attention of managers as they interact with firms in their industry. This important notion of competitive tension begins to shed light on why certain events cause some firms to act and react forcefully, whereas other firms in the same industry do not. Competitive tension is an outcome of the asymmetry between various firms' managers' competitive perceptions and motivations.

However, the theoretical underpinnings supporting the AMC perspective have not been well articulated (Chen et al., 2007). Implicit in this work is a cognitive perspective resting on the assumption that both managers and firms are limited information processors (March & Simon, 1958) faced with a surfeit of ambiguous and complex information about their environments (Schwenk, 1984; Starbuck & Milliken, 1988; Walsh, 1995). The cognitive work in organizational studies is predated by foundational work in psychology exploring the cognitive mediators between environmental stimulus and human reaction (Fiske & Taylor, 2008; Neisser, 1967). This work has posited that individuals' limited attention (Posner, 1982) and information processing capacities (Miller, 1956) lead these individuals to react only to stimuli they are aware of, motivated by, and capable of reacting to (Walsh, 1995). Guiding awareness, motivation, and assessments of capabilities are knowledge structures or mental models of both the firm and its environment (Fiske & Taylor, 2008; Walsh, 1995). In other studies of organizations, Weick (1979) and Gioia (1986) were among the first authors to note the benefits and liabilities of such knowledge structures, creating a "paradox" that "schematic information processing can be at once enabling and crippling" (Walsh, 1995: 282).

A particularly powerful mental model is the set of beliefs members hold about the fundamental nature of their organization—their organizational identity (Elsbach & Kramer, 1996; Scott & Lane, 2000). Using organizational identity—and, by extension, the identity domain—as a key perceptual filter and motivational force behind competitive action and reaction, we attempt to further explore *why* managers act the way they do with their competitors.

Organizational Identity

Theorists have put forth a number of definitions of organizational identity. In this paper we use the term to mean the set of constructs managers use to describe what they believe is central, distinctive, and enduring about their organization (Albert & Whetten, 1985; Dutton & Dukerich, 1991; Fiol & Huff, 1992; Reger, Gustafson, DeMarie, & Mullane, 1994)—"the members' consensual understanding of 'who we are as an organization'" (Nag et al., 2007: 824). Although the concept of organizational identity has received much attention in recent management research (e.g., Brickson, 2005, 2007; Corley & Gioia, 2004; Nag et al., 2007; Ravasi & Schultz, 2006; Whetten, 2006), this research has focused primarily on the internal environment. In this paper we extend the consequences of organizational identity to the external environment by relating it directly to competitive dynamics. Organizational identity then becomes the cognitive, affective, and psychological antecedent to competitive action and reaction.

Since this paper deals with strategic decisions made by executives, we use identity to describe TMT members' beliefs about the fundamental nature of their firm: "who" they are as a firm, "what" they stand for, and "why" they are successful (Hambrick & Mason, 1984; Kimberly, 1979; Reger, Mullane, Gustafson, & DeMarie, 1994). We adopt this simplifying notion to advance our theory because top managers' beliefs are more closely tied to firm-level actions than are the identity beliefs of other members of the organization (e.g., Reger et al., 1998). As identity becomes central, distinctive, and enduring to TMT members who are responsible for making strategic decisions that guide the actions and reactions of the firm, it becomes the foundation of the firm's "theory of being" (Reger et al., 1998) that impacts competitive decisions such as *where* and *how* the firm will compete, which has been called the TMT's "theory of action" (e.g., Reger et al., 1998). Over time, as firms act and react, these actions shape the competitive arena, further impacting the fit between firm capabilities and the environment. Thus, the psychological construct organizational identity may have real effects on firm behavior, competitive dynamics, and competitive arenas, which are at the heart of the identity domain concept.

TOWARD AN IDENTITY DOMAIN THEORY OF COMPETITIVE DYNAMICS

Although organizational identity and competitive dynamics are separately useful perspectives, combining the cognitive and behavioral ramifications of organizational identity with the notions of formation and protection of competitive space from the competitive dynamics perspective provides a reconceptualization of competitive actions and reactions. Instead of being described as purely economically motivated behavior between rational unified firms, we view competitive interactions as richly economically *and* psychologically motivated behavior initiated by cognitively limited and differentially capable human actors whose actions not only have immediate effects on firm performance but also have lasting effects on industry structure and competitive dynamics.

An identity domain can be manifested in several different ways. For example, at one point in the firm's history, the identity domain might have been the largest or most economically important market. Or an identity domain can be geographically focused, such as a company's headquarters or main "flagship" location. Further, an identity domain can be centered on certain products or services. The point is that the identity domain represents the competitive arena that best represents the organizational identity of the firm and, thus, carries certain psychological and cognitive importance, becoming the turf most salient to the firm's top managers. However, economic rationality and identity-driven decision making may diverge since objective markets and competitive circumstances may change more quickly than do managers' subjective beliefs. It is in this case—where beliefs fail to match objective reality—that the impact of identity domain theory on awareness, motivation, and capability to act and react in competitive dynamics is most interesting.

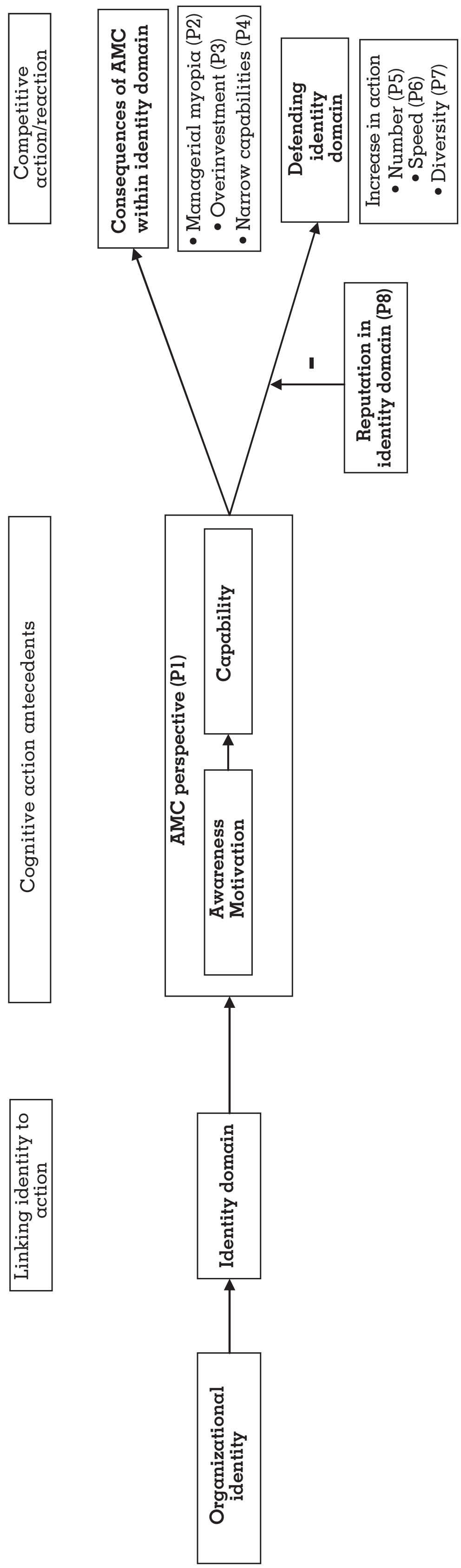
The following sections support a new model of the importance of an identity domain in understanding the competitive actions and reactions of firms, which is graphically depicted in Figure 1. In addition, in the following paragraphs we develop our theoretical arguments and suggest propositions based on this model. Specifically, we examine each component of the AMC perspective individually and discuss how they can impact each other as cognitive antecedents to competitive action. We then discuss the potential negative consequences of the AMC perspective on strategic decisions made by TMT members in the identity domain. Further, we explore identity domain theory in the context of traditional competitive dynamics research on the number, speed, and diversity of competitive actions and reactions. Finally, we discuss how the identity domain can legitimate the reputation of a firm as a credible actor in the competitive environment.

AMC Perspective

While industrial economic theory (Bain, 1950; Porter, 1980) provides the baseline for understanding the outcomes of competitive dynamics, the AMC perspective has begun to advance our understanding of the antecedents to individual firms' competitive action (e.g., Chen, 1996; Chen & Miller, 1994; Chen et al., 2007; Ferrier, 2001; Gimeno, 1999; Smith et al., 1991; Yu & Cannella, 2007). Much of this prior work has focused on firm-level capabilities and has only begun to scratch the surface in understanding factors that drive awareness and motivation. Specifically, awareness is essentially a perceptual phenomenon: Are managers aware of actions taken by their competitors and other events that provide opportunities for competitive action? Motivation is a psychological and cognitive phenomenon: Do managers have incentives or psychological motives to act?

Competitive dynamics theory is well developed in understanding economic incentives; we know less about the role noneconomic factors play in understanding competitive dynamics. Some prior research has shown how certain concepts, such as TMT characteristics, relate to more than one component of the AMC perspective (see Ferrier, 2001), but more work is needed. We examine each of these concepts in light of identity domain theory and show how they build on each other to help further explain the actions and reactions of managers.

FIGURE 1
Proposed Model of Identity Domains and Competitive Dynamics



To help illustrate this impact of the identity domain on competitive action, we turn to a practical example in the automotive industry. Each automobile manufacturing company seeks to position itself within the industry as being "the leader" at something, which we interpret as its identity domain. For example, Volvo identifies itself with safety, Honda touts its fuel efficiency ("greenness"), BMW is the "Ultimate Driving Machine," and so on. Therefore, one would expect Volvo to invest heavily in making its cars safe, but not necessarily fuel efficient. In fact, these two characteristics may be mutually exclusive, since being safe means thicker metal, more airbags, and other specifications, all of which make the car heavier and therefore lower fuel economy. So even though Volvo might be viewed consistently with other car manufacturers in similar price, geographic, or product markets, its identity domain of safety may dominate its strategic actions and reactions.

Awareness. The psychological importance of a firm's identity will be the catalyst for the salience of the competitive environment in which it resides. Because the identity domain represents the competitive arena that is most central, distinctive, and enduring, managerial time and attention will be most focused in the firm's competitive environment that is of highest importance to its identity. Top managers, then, will be more aware of the general environmental factors affecting this competitive arena. In addition, the competitive activity of rivals will be more salient in this primary domain (Ocasio, 1997), which will then allow them to respond more efficiently and effectively. Continuing our auto industry example from above, Volvo's safety identity domain will increase the focus on factors and trends that are related to safety. Not only will Volvo proactively initiate actions to make its cars safer but it will also be more attentive to actions by competitors that could potentially threaten its identity as the safe car leader.

Motivation. The psychological importance of the identity domain directly affects the motivation of top managers to act and react to factors that affect this domain. Although the financial implications of success in an identity domain can themselves be a motivating factor, including incentives and pay structures (Cho & Hambrick, 2006; Kaplan, 2008), the cognitive and psychological essence of the identity domain also plays a major role in understanding why managers are prompted to act the way they do. Even though a firm can and will indeed act outside this identity domain, competing with other firms in its identity domain can also act to strengthen the firm's sense of identity, as delineations are drawn more sharply, values are emphasized, and "we/they differences are accentuated" (Ashforth & Mael, 1989: 25). This strengthening of identity will also motivate top managers to act and react in the firm's identity domain. Threats to organizational identity will increase the executives' motivation to act against something that hits close to home in order to "defend their turf."

Capability. The model developed in this paper suggests a sequence from awareness and motivation to capabilities, providing an important conceptual refinement to the AMC perspective. Whereas most prior studies have looked at these constructs in isolation from one another, our model predicts that increased awareness and motivation in the identity domain will, in turn, increase the capabilities of the firm inside that domain and decrease its capabilities outside the identity domain. This occurs because the increased time and attention in the identity domain, combined with a motivation to act and react in that domain, will increase resource allocation to business operations in the identity domain. This refinement of the AMC perspective is also supported by recent empirical work that has shown how increased managerial attention to a particular domain, as well as increased incentives to act, will increase investment in that domain (Kaplan, 2008). Increased focus on the identity domain can lead to an increase in organizational capabilities as expertise is gained and learning curve advantages are realized (e.g., Lieberman, 1987). Thus, for a firm like Volvo, the heightened importance of being the industry safety leader as part of its identity will make it a central part of its operations. The capabilities to be successful in that identity domain will therefore increase to reinforce its sense of identity. Combining the three aspects of the AMC perspective, we propose the following.

> *Proposition 1: Because of increased awareness, motivation, and capabilities, a firm is more likely to act or react to competitive activity within its iden-*

tity domain than outside its identity domain.

Negative Consequences of Increased Awareness, Motivation, and Capability in the Identity Domain

The positive outcomes that result from the heightened awareness, motivation, and capabilities for successfully competing within an identity domain are easy to see. We now turn our attention to the negative side of identity domains. Building on Porter's concept of blind spots (Porter, 1980; Zajac & Bazerman, 1991), the identity domain can restrict the competitive actions and reactions a firm takes, potentially prioritizing the defense and continuation of its identity over making a profit and thereby increasing the likelihood of management's blindness to important aspects of the competitive environment outside the identity domain. By overfocusing limited attentional resources on the identity domain, managers may overlook competitive developments and opportunities in economically important areas outside the identity domain of the firm, which will result in managerial myopia (Levinthal & March, 1993; Miller, 2002). In addition, as awareness within the identity domain increases, managers may be unaware of potential threats originating from outside the identity domain. Therefore, although the concept of managerial myopia has long been discussed in organizational research, identity domain theory helps explain why this myopia may be stronger in certain psychologically important competitive arenas and weaker outside those arenas.

For example, Barr, Stimpert, and Huff (1992) examined two firms in the same industry and built theory on how the mental maps of managers can help shape the competitive environment, and especially the competitive actions of firms. The central hypothesis of the study suggests that organizational decline may result if managers fail to make significant changes in their mental models given substantial changes in the environment. The successful company changed the definition of its identity from a "railroad" company to a "transportation" company. In addition, the more successful firm changed its efficiency measures from "load per train" to "higher productivity" and "streamlined operations," which helped it to further break away from a confined railroad company identity. We argue that this expanded view of its identity domain opened up the successful firm to viewing opportunities in the environment, allowing it to improve its performance relative to the firm that defined its identity too narrowly.

Conversely, the firm that focused too much on a specific industry structure and product mix was not able to adapt effectively to the evolution of the environment in general. Therefore, the increased awareness, motivation, and capability building in the narrowly and rigidly defined identity domain led to managerial myopia. Similarly, the Xerox Corporation[2] is another example of a firm that potentially suffered negative consequences by defining itself too narrowly as a "copier" company, which rendered it incapable of exploiting opportunities created by its own technologies. As a consequence of greater awareness, motivation, and capability in the identity domain, we propose the following.

> *Proposition 2: The more focused the firm is on its identity domain, the lower the likelihood it will respond to threats or explore opportunities outside its identity domain.*

Psychological ties to identity can also cause firms to overpersist, even to the point of damaging financial performance. For example, Burgelman (1991) conducted an in-depth case study of Intel and its decision to continue with the Dynamic Random Access Memory (DRAM) business. Intel was the first company to successfully manufacture and market DRAM, virtually inventing the business. Intel executives began to think of Intel as "the memory company," and this became an important identity domain in the minds of Intel's executive team. In 1985, despite the objective reality that Intel's market share in DRAM was only 3.4 percent (placing it ninth in the industry), top managers decided to invest a substantial amount of key resources in the DRAM business—approximately one-third of the entire R&D budget of $195 million (Burgelman, 1991).

Burgelman (1991) explained that Intel's decision a year later to finally exit the business that had shaped its identity was lauded by stakeholders both inside and outside the organiza-

[2] We are grateful to an anonymous reviewer for suggesting this example.

tion. Andy Grove later explained that the decision to exit DRAM memory was difficult and "gut wrenching" for Intel's TMT (Grove, 1996). We argue that the emotional and psychological importance of DRAM to Intel's identity motivated its managers to continue to invest in DRAM, disregarding the relevant financial implications of this strategic action.

When conclusions from economic and identity considerations are the same, no conflict exists and the managers are expected to act in line with the firm's best financial interests. However, situations exist where the two perspectives may be at odds with one another and identity is not merely a proxy for profit motivations, such as the DRAM example above. In this case the Intel TMT acted in ways that were misaligned with the financial well-being of Intel, violating rational economic theory; identity domain theory therefore helps explain why they acted in such a noneconomically rational manner. We argue that overattention to this identity domain, combined with increased motivation to perpetuate business activity in the identity domain, caused Intel's managers to delay reacting to competitive changes in its environment. The lack of awareness of the changing competitive landscape that left Intel behind in the DRAM business and the lack of appropriate and timely response can best be understood by an identity-based rather than economic-rationality-based perspective. Thus, we propose the following.

> *Proposition 3: The more focused a firm is on its identity domain, the longer the firm will invest in its identity domain business, regardless of performance implications.*

Although increases in awareness and motivation can increase capabilities within the identity domain, they can also be a detriment to an organization's ability to learn new capabilities, especially if the identity domain is narrowly construed, as in the railroad example above. Cohen and Levinthal (1990) described a condition of lockout, which happens when an organization fails to invest in absorptive capacity—its ability to learn and evolve. This lockout reduces the ability of the organization to recognize innovative and productive ideas when they occur, thereby missing an opportunity to learn. If a firm fails to invest in its absorptive capacity to expand its knowledge inventories (Levinthal & March, 1993; Miller, 2002), future learning opportunities might be missed because of the lack of capacity to recognize a learning situation, which is referred to as a *competency trap* (Levitt & March, 1988).

Consistent with our predictions of capabilities within an identity domain, we expect Volvo will develop deep knowledge and diverse capabilities to make its cars safer but will not necessarily develop a wide range of capabilities in such areas as fuel efficiency or styling. To the extent that safety remains a viable identity domain, Volvo will have gained the necessary capabilities to act diversely to competitive threats in that particular arena, thereby deterring further competitive action in its identity domain and effectively defending its turf. However, this narrow range of capabilities that could apply only to this arena might not allow Volvo to act or react effectively outside the safety domain, such as actions in terms of fuel economy.

> *Proposition 4: The more focused a firm is on its identity domain, the narrower the range of capabilities the firm will develop outside its identity domain.*

Defending the Identity Domain

A common theme of study on organizational identity is in the context of organizational change as threats to identity (Elsbach & Kramer, 1996). Extant research has focused on how identity threats affect the organization internally, such as individual organization members' identification with and collective belief in the identity (Czarniawska & Wolff, 1998; Ravasi & Schultz, 2006; Scott & Lane, 2000), organizational culture (unification or change environment; Fox-Wolfgramm, Boal, & Hunt, 1998; Golden-Biddle & Rao, 1997; Martins, 2005), or organizational processes (Labianca, Fairbank, Thomas, Gioia, & Umphress, 2001). To our knowledge no studies have looked at how competitive threats to identity affect externally oriented processes, such as managers' formation of strategic actions and reactions.

However, some research has taken a more action-oriented lens—albeit still largely internally focused— based on emotional principles regarding the impact of threats to identity. Reger, Fiol, and their colleagues (Fiol & O'Connor, 2002; O'Connor, Fiol, & Guthrie, 2006; Reger et al., 1994) theorized about how resistant individuals within an organization can be to major organizational change because it threatens the identity of the firm. For example, Fiol and O'Connor (2002) described how "hot" people can get when their identities are threatened, highlighting the emotional connection individuals have with their identity. In related research Elsbach and Kramer (1996) investigated the personal connection between organizational action and individual motivation (Dutton & Dukerich, 1991) when identity is threatened and focused on cognitive tactics individuals use to cope with threats to identity.

Building on these researchers' insights, we extend their findings and logic to expectations about the external strategic reactions of firms to threats to an identity domain, regardless of whether these threats are real or, as some scholars have argued, a "strategic resource diversion" used to manipulate strategic reactions of other firms (see McGrath, Chen, & MacMillan, 1998). Traditional competitive dynamics research has established that intensity (measured by number and speed) and diversity (measured by the number of different types of responses) are conceptually the most critical dimensions of competitive reactions. The number, speed, and diversity of reactions help to reduce the financial incentive of rivals' competitive actions, and the faster a firm acts, the more aggressive its actions might be perceived by its competitors (D'Aveni & Gunther, 1994; Ferrier et al., 1999; Smith, Grimm, Wally, & Young, 1997).

Along these lines, if another car manufacturer—for example, Volkswagen—takes action to show how safe its cars are, what will its competitors do? Since Volvo's identity is based on being *the* leader in safety, identity domain theory predicts that Volvo's managers will competitively react to reaffirm its position as the safe car market leader. Although safety is important for all cars, other car makers will not be expected to respond as directly or as quickly to Volkswagen's action as Volvo will because safety is not the identity domain for other car manufacturers.

Similarly, if Honda takes action to make its cars more fuel efficient, we expect that Volvo will not react, or if it does react the reaction will be less emphasized, since fuel efficiency claims are not a direct threat to Volvo's safety-oriented identity domain, even though fuel efficiency is important to all automobile manufacturers. In other words, our theory predicts that firms will be territorial in defending their identity domain within an industry, generating more, faster, and more varied actions and reactions. Therefore, building on an important dimension of strategic reactions studied by competitive dynamic scholars, we propose an increase in the number of competitive reactions.

> *Proposition 5: A firm that perceives a competitive action that threatens its identity will respond more than to competitive actions that fall outside its identity domain.*

As discussed earlier, Schumpeter (1934) theorized that the longer an action can go without a competitive response, the longer the initiating firm can realize abnormal profits. From a reactionary standpoint, then, the quicker a firm responds to a competitor's action, the less of an advantage that initial action will bring (Lieberman & Montgomery, 1988). In prior work competitive dynamics scholars have studied how the speed of a reaction can reduce the competitive advantage of firms (Chen et al., 1992; Macmillan et al., 1985; Porter, 1980; Smith et al., 1989). Following our discussion of the AMC perspective above, a firm will be more aware, more motivated, and more capable of responding speedily to competitive threats to its identity.

> *Proposition 6: A firm that perceives a competitive action that threatens its identity will respond more quickly than to competitive actions that fall outside its identity domain.*

In addition, firms that respond to the competitive actions of others have a range of reactions to choose from (Ferrier et al., 1999; Grimm & Smith, 1997). These reactions can include price cuts, product innovations, marketing campaigns, new market openings, mergers and acquisitions, diversification, and other actions (Basdeo et al., 2006; Derfus, Maggitti, Grimm, & Smith, 2008). The broader or more diverse a firm's set of competitive reactions, the more the firm will be perceived as aggressive and willing to defend its identity domain (Ferrier et al., 1999). Reacting in broadly diverse and therefore unpredictable ways can be a way of dissuading further competitive action by rivals, thereby increasing the reaction's effectiveness. Although we mentioned previously how the increased focus in a particular identity domain might limit the overall capabilities of the firm (see Proposition 4), the increased attention and motivation predicted by identity domain theory would lead to an increase in expertise within the identity domain, thereby increasing the capabilities and competitive repertoire of reactions by the focal firm in its identity domain. As such, and consistent with prior competitive dynamics literature, we propose the following.

> *Proposition 7: A firm that perceives a competitive action that threatens its identity will respond more diversely than to competitive actions that fall outside its identity domain.*

Reputation As a Moderator of Competition

We expect one important exception to influence the number, speed, and variety of competitive moves in an identity domain. The more a firm acts in congruence with its identity, the more external parties will recognize the firm for this domain, establishing or further solidifying its reputation in the marketplace. As Scott and Lane point out, "When beliefs about organizational attributes become so widely accepted in the public arena that they are largely taken for granted (e.g., 3M is an innovative company), we can speak of this as organizational reputation" (2000: 45). This alignment—or consistency—creates an internal environment that allows for employee buy-in and will also help create an external view of the firm that leads to establishing its reputation and acceptance by the market (Fombrun & Shanley, 1990).

Identity and reputation are two sides of the same coin. Reputation is defined as "stakeholders' perceptions about an organization's ability to create value relative to competitors" (Rindova, Williamson, Petkova, & Sever, 2005: 1033). Therefore, identity is the way the firm sees itself, while reputation is the way outsiders see the firm. Accordingly, actions that reinforce a firm's identity will also reinforce the firm's reputation, assuming the signals emitted from the firm are appropriately perceived by the outside stakeholders (Fombrun & Shanley, 1990). This reputation establishes a firm's "territory" as its identity domain and acts as a signal to other competitors that the firm is both willing and able to compete in this arena.

Thus, a firm with a reputation of vigorously defending its identity domain may not need to be proactive in that domain. As the reputation of a firm increases, the need to proactively establish or reactively defend its identity domain becomes less important, since reputation and legitimation effects can be a substitute for deliberate action. Specifically, the reputation literature describes the "Matthew effect" (coined after Matthew 25:29, a passage in the Bible), which is the concept of "the rich getting richer" (Merton, 1968; Rao, 1994). Therefore, a firm that has a reputation, for example, for being a "credible defender" of its identity domain does not necessarily need to act within its identity domain, since the mere perception by outsiders of the firm's willingness and ability to defend might deter the outsiders from challenging in that arena (Clark & Montgomery, 1998; Fombrun & Shanley, 1990; Weigelt & Camerer, 1988). Accordingly, the competitive actions a firm initiates might decrease within its identity domain because its reputation for defending its identity substitutes for action.

> *Proposition 8: As reputation in an identity domain increases, competitive actions within that identity domain will be fewer, slower, and less diverse than outside the identity domain.*

DISCUSSION

Implications for Organization and Strategic Theories

In this paper we have introduced a new concept—identity domain—to provide greater theoretical grounding to the AMC perspective in competitive dynamics research. Although traditional economic theory suggests that actors in a competitive environment act in a dispassionate and rational manner (e.g., Scherer & Ross, 1990), a growing body of research suggests that strategic decisions and competitive actions are often influenced by factors other than economic rationality (Kahneman, Slovic, & Tversky, 1982). For example, a recent surge in studies of emotion and affect highlights the importance of these concepts when making strategic decisions (e.g., Amabile, Barsade, Mueller, & Staw, 2005; Baron, 2008; Ganster, 2005; Seo & Barrett, 2007). Similarly, the study of heuristics and bounded rationality emphasizes the narrow range of information and mental models managers typically rely on to make sense of the world around them (Simon, 1955; Walsh, 1995). Finally, the literature on bandwagon and herding effects downplays the economic actor's independent rationality in place of "following the crowd" (Abrahamson & Rosenkopf, 1993; Fiol & O'Connor, 2003; McNamara, Haleblian, & Dykes, 2008).

In this paper we have added identity domain theory to this growing body of cognitive and psychological concepts to explain firm-level behavior. Thus, this paper specifically addresses a call by Chen et al. (2007) and others (Smith et al., 2001) for greater attention to the antecedents to competitive dynamics—focusing research attention on *why* firms act and react in competitive arenas, often in ways that are counterintuitive within a purely economic perspective. This paper fills the gap by addressing the dearth of theorizing about managerial cognition in competitive dynamics research. In addition, it extends organizational identity research by examining the impact of organizational identity on external firm-level action, specifically in competitive arenas.

Other theories might be usefully extended or refined in light of the theory developed here. For instance, the escalation of commitment literature (e.g., Brockner, 1992; Brockner et al., 1986; Sivanathan, Molden, Galinsky, & Ku, in press; Staw, 1981; Zardkoohi, 2004) and studies of strategic persistence help shed light on why some firms might stay with their core business longer than economically practical. Audia and colleagues (Audia, Locke, & Smith, 2000) found that managers who have achieved success in the past are more likely to stay with their strategies in spite of a change in the external environment that should "rationally" lead decision makers to change. Identity domain theory provides an elegant explanation of why a firm might persist and escalate in a particular domain, but easily abandon others. Thus, one fruitful avenue of research would be to reexamine the conflicting results in these bodies of literature in light of the model presented in this paper.

By exploring a theory of a firm's identity domain, we do not intend to discount the impact other theories prevalent in strategic management have on the antecedents to managerial actions and reactions. In addition, the identity domain concept is not meant to replace existing theories that have been used to examine managerial behavior and firm outcomes. Our intention, rather, is to highlight the importance of combining certain cognitive and psychological foundations for firm action that could potentially add to purely economically based theories of strategic management.

For example, one could argue that resource dependence theory (e.g., Pfeffer & Salancik, 1978) might make predictions similar to those of identity domain theory, since threats to access to resources and threats to identity might evoke similar responses by managers. Resource dependence theorists have focused primarily on how resources such as financial capital, legitimacy, political influence, and social capital (e.g., Aragón-Correa & Sharma, 2003; Hillman & Hitt, 1999; Hitt, Bierman, Shimizu, & Kochhar, 2001; Kassinis & Vafeas, 2006; Mitchell, Agle, & Wood, 1997) have impacted actions of firms. Similar to competitive dynamics research, however, a potential gap exists in resource dependence theory for researchers to further explore the cognitive and psychological factors that are the antecedents to the recognition of the importance of particular resources in the minds of top managers.

In addition, the reader might ask how the notion of an identity domain and competitive space differs from the more established concepts of strategic and competitive groups. A strategic group is commonly defined as a group of firms within the same industry making similar decisions in key areas (Mas-Ruiz, Nicolau-Gonzalbez, & Ruiz-Moreno, 2005; Porter, 1980; Reger & Huff, 1993). Porac and colleagues (1989) argued that competitive groups formed by managerial cognition differ from strategic groups in that they are social and psychological entities, not merely economic ones. Because strategic and competitive groups can be formed by the cognitions of managers (Porac & Thomas, 1990; Porac et al., 1989; Reger & Huff, 1993), they share similarities with an identity domain.

In particular, Peteraf and Shanley (1997) developed a theory of how a group of firms within an industry could develop a shared identity to provide a theoretical basis for the emergence of strategic groups. Our work differs fundamentally from theirs in that we are using identity to explain the actions and reactions of individual firms, rather than focusing on the isomorphic behavior of groups of firms. An identity domain is formed based on the views of top managers of an individual firm, who then act and react based on this identity. In our theory competition is not focused on a particular set of competitors—as with strategic groups—but is focused, rather, on the identity domain and, by extension, any and all threats to that identity domain.

For example, in the discount consumer retail industry (a subset of the consumer retail industry), Walmart might define Target, Kmart, Costco, and other similar firms as competitors and members of its strategic group. However, the identities of these firms are quite different, even though all are "low-cost" providers of retail goods. For example, Costco sees itself as an exclusive club for members only and strips down the shopping experience to a bulk warehouse environment. In addition, Costco typically pays its employees near the top in the industry and competes on quantity and "impulse" consumer goods. Walmart, on the other hand, is specifically concerned with price, evident by its "everyday low prices" slogan and focus. Walmart has been successful by gaining a reputation for the lowest-price option for the products it sells, and this organizational identity permeates everything it does, including the "price" it offers employees in the form of wages, perquisites, and benefits. For better or worse, Walmart has established its identity and reputation as being the lowest-cost producer, and it therefore competes in the identity domain of low cost within the discount retail industry. Other firms in this strategic group within the retailing industry may not necessarily compete on price but, instead, on selection, location, customer service, or other nonprice dimensions, all while trying to keep costs down (Bhatnagar, 2005). Thus, it is possible for members of the same strategic group to have different identities, and therefore to compete in different identity domains. We do not dispute the existence or usefulness of strategic groups, and we encourage future research that examines both identity domains and strategic groups in the same study to explore how the interactions among firm, dyad, group, and even industry actors impact competitive activity.

In this paper we have focused the identity domain concept primarily on rivalry within a single industry. However, we believe another fruitful extension of the concept will be to corporate-level strategy—thus our conscious choice to adopt the purposefully broad term *domain*. Specifically, we believe the application of identity domain theory will add to research focused on understanding actions and reactions in diversified firms. Although diversified firms, by definition, compete in many product, market, and geographic domains, our theory suggests that some of these domains will carry greater psychological weight in decision making. For instance, in the 1980s PepsiCo competed in the carbonated soft drink (CSD), snack food, and fast food industries. While all were considered to be important to PepsiCo's financial success by the TMT, not all were viewed as arenas that defined the essence of the organization. PepsiCo began as a CSD company and formed its identity around this important domain, not the other industries in which it was competing. Thus, the decision to exit fast foods could be made rather easily and on strictly financial considerations. Our model predicts that investment and competitive decisions in CSD will be driven by both identity and economic considerations, and, in fact, identity decisions might lead Pepsi to overinvest and persist in CSD beyond what is explained by economic rationality.

The introduction of identity domain theory to competitive dynamics research also allows for meaningful, theoretically driven research on diversified firms engaged in multipoint and multimarket competition (Chatterjee & Wernerfelt, 1991; Christensen & Montgomery, 1981; Hill & Hoskisson, 1987). Multimarket firms compete with numerous companies in various industries, and threats to a firm's identity via direct competition in its identity domain could have varying effects based on multiple firm identities emerging from multimarket involvement. Although a significant body of research on multiple identities exists, these studies have primarily focused on how multiple identities lead to conflict within the organization (Foreman & Whetten, 2002; Golden-Biddle & Rao, 1997; Ravasi & Schultz, 2006), how they affect reputation (Labianca et al., 2001; Martins, 2005; Whetten & Mackey, 2002), or how they act as a means of competitive advantage (Fiol, 1991; Pratt & Foreman, 2000). Multiple identities within the context of identity domains and competitive dynamics could add a new perspective to the discussion of the management and consequences of multiple identities within organizations. Whether multiple identity domains exist because of diversification, vertical integration, mergers and acquisitions, or other causes, how these various and potentially incompatible identities impact strategic and competitive decisions is fruitful ground for further scholarly attention.

In the opposite direction, as firms seek to divest unprofitable or nonsynergistic businesses, the identity domain concept could play an integral role. Based on the logic presented in this paper, certain businesses that are more central and integral to a firm's identity carry more psychological weight, and, therefore, top managers might be unwilling to let go of those identity-grounded businesses. For example, Greyhound began as a transportation company, which was the basis for its identity, yet it diversified into many other types of businesses, including Dial soap, cruise lines, meatpacking, money orders, airliner leasing, and several other diversified businesses. Greyhound eventually divested the namesake bus lines in the mid 1980s, admitting that this action was long overdue based on economic considerations. Executives at the Singer Corporation admitted to facing similar emotional obstacles in belatedly divesting its home sewing machine business, and some General Electric watchers have suggested that GE has held onto its light bulb business beyond the point of economic rationality. We argue that because GE executives view light bulbs as central to its identity, primarily because GE's founder, Thomas Edison, created the industry through his seminal invention more than 100 years ago, subsequent TMTs have been unwilling to divest this business.[3] Further research into divestitures could shed further light on the lasting effects of an identity domain on managerial decision making.

In this paper we have assumed the existence of an organizational identity and have not specifically discussed in detail how such an identity is formed. Although this is an important concept in the study of organizational identity (e.g., Scott & Lane, 2000), we have given little attention to identity formation, choosing to focus our attention on how identity impacts the actions and reactions of firms. Another extension to this discussion is how these actions can impact the organizational identity itself. As a firm continues to act within its identity domain, this concept could be strengthened or adapted to the competitive or environmental conditions the firm faces. In this manner identity and competitive dynamics can have a coevolutionary effect on each other as identity impacts actions and those actions, in turn, affect the organization's identity itself. How this coevolution works and the implications for managerial behavior are fertile ground for future research. And, perhaps even more fundamentally, a need exists for researchers to explore how the AMC perspective can advance our understanding of how managers' beliefs not only shape the actions and the reactions of competitors but also competitive space, as mentioned by Porac and Thomas (1990) and Reger and Huff (1993).

Finally, we have focused primarily on the cognitive underpinnings of managers' competitive and strategic decisions, but we have touched only briefly on the affective nature of managerial actions and reactions. Just as identity has a psychological importance to managers, so, too, could identity impact the affect of top managers, which could then further alter how economically rational their actions and reactions would be. Further study into how affect and emotions impact the strategic activities of firms is a natural extension of the cognitive and psychological topics discussed in this paper.

We recommend a variety of research methods to explore the existence of an identity domain and its implications for firm actions and reactions, including surveys and qualitative methods. We believe an especially promising method to study these phenomena in large-sample studies is content analysis (Duriau, Reger, & Pfarrer, 2007). Content analysis can be used to deduce a firm's identity domain by coding claims made in marketing slogans, annual reports, marketing campaigns, and internal marketing aimed at employees, such as company websites and other internal communications, which have precedent in earlier managerial cognition studies (e.g., Barr et al., 1992; Cho & Hambrick, 2006; Kaplan, 2008). Statements found in the "about us" and company history sections of corporate websites are especially promising since these are the messages the firm tells both insiders and outsiders about the central, distinctive, and enduring values and domains of the company. Content analysis can also be used to reliably

[3] On May 16, 2008, GE announced it was considering divesting light bulbs and appliances to focus on higher-growth opportunities.

code identity domain claims and other data generated from interviews and other qualitative methods. Researchers could then use traditional competitive dynamics methodologies to compare how a specific firm acts and reacts to other firms' competitive actions in that identity domain and in other domains less central to its identity.

Implications for Managers

Several important lessons for practitioners can be drawn from our discussion of the impact of organizational identity and competitive dynamics. We have highlighted how managers can succumb to making decisions that are at odds with economic theory. Managers, then, should be aware of certain psychological attachments and biases that may influence the strategic and competitive decision-making process. TMTs may do well to bring in outsiders who are not as tied to the organization's identity to serve on boards of directors, on TMTs, and in external advisory roles.

In addition, identity domain theory may have implications for competitive intelligence. Managers engaging in competitor analysis might include competitor profiling of other TMTs to understand when and where they are likely to be aware of the focal firm's actions, psychologically motivated to respond (or not), and capable of defending or attacking competitive actions. This analysis could supplement the well-known advice to focus on who is economically motivated and adequately positioned to reduce the competitive advantage of the focal firm.

According to the identity domain theory discussed here, although a firm cannot prevent another firm from entering its identity domain, actions taken early can build reputation that gives firms pause before entering. Such caution is warranted since encroachments into the identity domain can be expected to be fiercely defended to maintain the integrity of a firm's organizational identity. Wise competitors are smart to position their actions to be perceived as less threatening to the identity domains of established competitors, who will either not react—or will react more slowly and/or more narrowly—to the competitors' actions in other arenas.

CONCLUSION

The model developed in this paper provides a promising theoretical perspective to begin to explore implications of organizational identity with regard to the competitive actions and reactions of firms. It adds to extant competitive dynamics theory by providing a more sophisticated understanding of the psychological drivers of competitive actions and reactions, and it can lay the foundation for further examination of the influence of an identity domain on managerial cognition and decision making. We have attempted to tie various streams of management research together to help explain why top managers act the way they do when competing with rivals in an industry. The addition of the theoretical notion of an identity domain shows great promise for advancing competitive dynamics research. Ultimately, we believe that competitive dynamics research that incorporates identity domain theory will allow for more accurate predictions of competitive actions and reactions, and will also allow for more nuanced understanding of how competitive dynamics lead to performance outcomes.

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