

## UNDERSTANDING WORD RESPONSES IN COMPETITIVE DYNAMICS

HE GAO  
Michigan State University

TIEYING YU  
Boston College

ALBERT A. CANNELLA, JR.  
Texas A&M University

We explore the role of word responses in the competitive engagements of rival firms. Different from action responses, word responses are language issued by a firm in public forums and in response to a rival's attack. We challenge an implicit assumption in extant competitive dynamics research that firms do nothing if they do not respond to attacks with actions. Drawing from the three drivers of competitive response (awareness, motivation, and capability), we build a framework to theorize why firms sometimes use actions, sometimes use words, and sometimes use both in response to a rival's attack. By placing two frequently studied characteristics of attacks (attack magnitude and attack complexity) in a  $2 \times 2$  matrix, we predict that word responses are more likely when attacks are not of low magnitude and low complexity. By integrating word responses into the traditional action-response perspective, we hope to develop a more complete understanding of competitive engagement among rival firms.

Predicting competitive response has been a central issue in competitive dynamics (CD) research (Chen, Smith, & Grimm, 1992; Smith, Ferrier, & Ndofer, 2001). While firms can gain advantages over competitors through actions, those advantages can be eroded by timely and appropriate responses from competitors (Porter, 1985). Building on organizational information processing theory, Smith, Grimm, and Gannon (1992) developed the action-response perspective to explain how competitive attacks evoke responses from rivals; this perspective has become a cornerstone for CD research (e.g., Chen, 1996; Ferrier, Smith, & Grimm, 1999; Marcel, Barr, & Duhaime, 2011; Young, Smith, & Grimm, 1996). A key premise of the action-response perspective is that when a firm (the attacker) initiates an attack that challenges a rival's competitive position, the rival (the responder) can choose either to respond with action(s) or to not respond at all (e.g., Chen & MacMillan, 1992). However, this conclusion seems unduly restrictive,

since we often observe firms responding not only with actions but also with words.

While language has been a topic of interest to organizational scholars (Barnard, 1938; Mintzberg, 1973; Phillips & Oswick, 2012), it has seldom been considered in CD research, and we know little about how language is used in competitive engagement. One exception is Rindova, Becerra, and Contardo (2004), who discussed how language can be used to energize employees and stakeholders in competitive settings by shaping their mindsets into an enemy mode. In that study, however, the focus of discussion is on how language influences the perceptions of stakeholders, not direct competitors. In contrast, we study the role of language in direct interfirm competitive engagement to better understand why firms sometimes use actions, sometimes use words, and sometimes use both in response to a rival's attack. An attack can be a single action or, more likely, a sequence of actions closely linked in time.

We introduce a new concept—word response—which we define as a specific and public statement made by a focal firm that is prompted by a competitor's attack. Accordingly, we consider only action-based attacks and leave word-based attacks and nonresponses outside the scope of this

---

We gratefully acknowledge the helpful comments of Trevis Certo, Amy Hillman, Metin Sengul, former associate editor Cynthia Devers, and three anonymous reviewers on earlier versions of this manuscript. We want to thank all of our former colleagues at Arizona State University for their help and support.

research. We separate word responses from the more traditional action responses and nonresponses. Notably, word responses are characterized by a level of commitment that falls between the extremes of a competitive action already executed and "cheap talk" (Farrell & Rabin, 1996). A word response is not the announcement of an action that has already occurred or is imminent. It is also not costless cheap talk because it can create publicity, drawing attention and commitments from stakeholders, and has important implications for a firm's reputation. In accord with Porter's (1980) seminal work on competitive strategy, we consider that an important objective for both action responses and word responses is to reduce the intensity of rivalry. Because action responses carry more commitment value than word responses (Chen & MacMillan, 1992; Porter, 1980; Schelling, 1960), we assume action responses are more effective than word responses in deterring rivalry. However, departing from research on cheap talk, we emphasize that word responses can also be effective, providing an alternative tool to manage ongoing competitive engagements. When used well, they can not only help firms forestall further attacks from rivals but also sometimes secure the withdrawal or rollback of the initial attack.

According to CD research, a firm is more likely to launch an action response when it is aware of the attack and has the motivation and capability to fight back. Building on these three behavioral drivers of interfirm rivalry (awareness, motivation, and capability, or AMC), we predict that word responses are more likely to be observed when firms (1) do not have a clear awareness of the strategic intent behind the attack, (2) are not motivated to escalate rivalry or are motivated to de-escalate rivalry, and (3) need time to marshal resources to launch an effective action response. To predict the likelihood of observing word responses, we rely on two frequently studied characteristics of attacks: attack magnitude (the level of resources committed to the attack) and attack complexity (the extent to which the attack is composed of heterogeneous moves). We chose these two characteristics because they are the two most commonly used dimensions to capture the degree of aggressiveness of an attack, which, according to the CD literature, is an important predictor of the likelihood and the type of response (Chen et al., 1992; Ferrier, 2001; Ferrier et al., 1999; Hambrick, Cho, & Chen, 1996; Smith et al., 1992). Additionally, and more important, the two characteristics affect the three driving

forces of responses (AMC). Specifically, we expect that both the magnitude and the complexity of attacks may increase the likelihood of word responses because they hinder one or more driving forces of action responses (AMC), as we discussed earlier.

Analyzing a  $2 \times 2$  matrix of attack magnitude and attack complexity, we classify attacks into one of four quadrants and theorize about how the attributes of each type of attack (each quadrant) influence firms' likelihood of responding with words or actions. We argue that a firm is more likely to respond with actions to attacks of low magnitude and low complexity, because such attacks do not require substantial resource commitments and are fairly easy to interpret. In contrast, firms are more likely to respond with words when they are challenged by attacks of low magnitude and high complexity, attacks of high magnitude and low complexity, and attacks of high magnitude and high complexity. We also discuss the content and the consequences of word responses.

Our study makes three primary contributions. First, we incorporate the role of language into CD research using the foundational action-response perspective, expanding its range to include word responses and challenging the implicit assumption that firms do nothing if they do not respond with actions. Second, our model contributes to the language literature, which has seen a significant uptick in interest from researchers in the social sciences over the past two decades (Alvesson & Kärreman, 2000; Phillips & Oswick, 2012). Although in much research scholars have concluded that language can shape stakeholders' perceptions (e.g., Elsbach & Sutton, 1992; Lounsbury & Glynn, 2001; Westphal & Zajac, 1994), the power of language has seldom been extended to competitive contexts. We argue that language can influence the mindsets of rival executives, thereby deterring rivalry or altering its course. Third, our study contributes to industrial organization economics research (Farrell, 1987; Ghemawat, 1991; Porter, 1980). Although some previous studies have considered verbal statements as important competitive signals, most research has dichotomized verbal signals into either credible or noncredible categories. We find this typology problematic because it ignores the complex nature of verbal signals. By examining word responses as public statements with varying degrees of commitment value, we aim to improve

our understanding of the antecedents and consequences of verbal signals.

### WORD RESPONSES

In today's business world we often observe firms using language in public settings—such as technology conferences, interviews, press releases, industry journals, business newspapers, or earnings conference calls—with the clear intent of influencing competition. For example, after McDonald's introduced McPizza in selected restaurants to test the market in 1989, Pizza Hut president Steve Reinemund immediately threatened, "We're ready to give them a fight with everything we've got" (Chaudhry, 1989). The frequently observed use of language in competition suggests the need for a framework to help further our understanding of this phenomenon. We believe it is important to study word responses for the following two reasons.

First, word responses are not always just cheap talk. One reason language has been ignored in CD research is cheap talk theory. Crawford and Sobel (1982) argued that if the incentives of two parties are not aligned, the communication between them can quickly reach a "babble equilibrium," in which the content of the language is irrelevant (see also Farrell, 1987). Cheap talk theory predicts that private language will not affect the payoff of a game when the information receiver believes the sender has incentives to lie. Obviously, competitors, by definition, have conflicting interests. Following the reasoning of cheap talk theory, language from competitors is of no value and, thus, should be ignored. We believe this conclusion is incorrect. As Porter (1980) noted, language from competitors is often not simply bluffs but can include viable commitments and warnings. It is important for a firm to understand what its rival will try to do next or what the rival expects the firm to do next. Even though sometimes the words issued by a rival are deceptive, Porter (1980) noted that ignoring signals from competitors is equivalent to ignoring competitors altogether. Additionally, we believe that words are important when the information revealed is verifiable and/or has longer-term consequences for the talking firm and its stakeholders. The implications of public statements for firm and managerial reputations work to bond the speaker to the statements. For example, a market leader can benefit from having a strong reputation for releasing credible information (Ferrier, 1997), whereas firms that frequently issue false or misleading statements

soon find that their words are broadly discounted (Kim, 1996; Stocken, 2000). A false announcement can be costly because it can damage the firm's or its executives' reputations (Kim, 1996).

Second, prior research across a variety of disciplines has suggested that language can be used as a strategic tool in many settings. For example, the competitive signaling perspective endorsed by Porter and others suggests that word signals revealing (or seeming to reveal) a competitor's intentions and attitude constitute an important form of engagement between rivals when they are striving for competitive advantage (Heil & Robertson, 1991; Moore, 1992; Porter, 1980). In entrepreneurial settings, language (e.g., entrepreneurial storytelling) can be used to reduce ambiguity and secure resources from important stakeholders (Aldrich & Fiol, 1994; Cornelissen & Clarke, 2010; Lounsbury & Glynn, 2001; Martens, Jennings, & Jennings, 2007). In image-threatening settings, language (e.g., a spokesperson's statements) can be used to manage stakeholder impressions and gain legitimacy when the company's image is threatened by controversial events (Elsbach, 1994; Elsbach & Sutton, 1992; Marcus & Goodman, 1991). In governance settings, language (e.g., long-term incentive plans and stock repurchase announcements) can be used to align the interests of executives and shareholders (Westphal & Zajac, 1994, 1998, 2001; Zajac & Westphal, 1995, 2004). According to all of these studies, language is often capable of influencing audience perceptions and actions, even if there are conflicts of interests between the speaker and the audience.

In sum, we argue that neither competitors nor management scholars can ignore the role of language in competition. Our theory of word response aims to challenge the conventional thinking that talk is cheap among competitors and the implicit assumption of the extant CD literature that firms do nothing if they do not respond with actions. We next introduce our theoretical framework.

### THE ANTECEDENTS OF WORD RESPONSES: A THEORETICAL FRAMEWORK

Building on Schumpeter's (1934) concept of creative destruction, scholars in the CD literature have examined the active, energetic, and primarily purposeful process by which firms interact with each other. In a number of studies, researchers, using the individual competitive move as the unit of analysis, have examined rivalry by

analyzing the exchange of moves and counter-moves between two rivals. Chen noted that "the action-response dyad is consequential because it is at this level where competitive engagement occurs and where the dynamic nature of strategy and competition and the mutual interdependence of firms are best captured" (1996: 109).

Studying competitive responses is important because attacks are rarely made with impunity and the ultimate effectiveness of an action often hinges on the defender's response (Chen & MacMillan, 1992; Smith et al., 1992). Expectations about how rivals will respond drive competitive decision making. Additionally, research has also shown that responses matter to the responder's performance. Early responders gain market share relative to late responders, and the greater a firm's tendency to respond, the better its performance (Smith, Grimm, Gannon, & Chen, 1991).

Competitive responses are widely believed to be important, but responses are often not observed after competitive attacks. For this reason, it is not surprising that considerable research has focused on the determinants of competitive responses. CD scholars have suggested that competitors will respond to an attack only if they are aware of the attack, have the motivation to respond, and are capable of doing so (Chen & Miller, 2012; Chen, Su, & Tsai, 2007; Livengood & Reger, 2010; Yu & Cannella, 2007). The level of awareness is important because it affects the extent to which a firm understands and comprehends the consequences of its actions and its rivals' actions within the competitive landscape (Chen, 1996). A firm can be aware of its rivals and the competitive environment without being motivated to respond. The motivation to respond will be greatest when the potential responder feels that something important is at stake (Atkinson, 1964). Last, even if an attack puts much at stake, the responder still must have the capability to respond (Chen et al., 2007). The resource-based view of the firm highlights the importance of heterogeneous resources and capabilities in defending and sustaining competitive advantage (Barney, 1986; Dierickx & Cool, 1989; Peteraf, 1993). Thus, if the resources and capabilities for responding are not available, the firm may delay its response or not respond at all.

Centered on these three behavioral drivers of competitive response, CD scholars have identified and empirically substantiated a number of action attributes that may affect the likelihood of action responses. For example, Chen et al. (1992) found that the total number of competitors affected

by an action and the importance to these competitors of the markets under attack by the action increase the number of action responses. Strategic actions, as opposed to tactical actions or actions that require substantial implementation effort, reduce the number of rivals' counterattacks. Additionally, Smith et al. (1992) showed that action complexity and action dissimilarity reduce the likelihood of action response.

While research on actions and responses is voluminous in the CD literature, its focus has been only on action responses, largely ignoring how and why firms might respond verbally, which is a gap we attempt to fill in this article. As we noted before, we assume that tit-for-tat is the most effective strategy to deter rivalry—that is, when a firm is being attacked by a rival, an action response is the most effective tool to forestall further attacks (Axelrod, 1984). As a result, we expect that when being challenged by an attack, rivals will respond with actions when they clearly understand the intent behind the attack and have the motivation and capability to launch an action response. On the other hand, we expect that rivals are more likely to respond with words when they (1) cannot clearly understand the rationale behind the attack, (2) are not motivated to escalate rivalry or are motivated to de-escalate rivalry, and (3) do not have the necessary resources in place to launch an effective action response. This key premise of our study is consistent with prior research. For example, Porter (1980) noted that a firm will take a brute force approach against its rivals only if the firm enjoys clear superiorities over those rivals. Even if a firm possesses clear superiority, winning is still not guaranteed, given the complexity and uncertainty of competitive interactions. As a result, when a firm is threatened by an attack, managers may hesitate to launch an action response because they are afraid that doing so might escalate the rivalry, perhaps setting off a war.

We chose to use two attack attributes to predict rivals' use of action or word response. Following Ferrier, we define a competitive attack as a single event or, more likely, "an ordered, uninterrupted sequence of . . . competitive action events" (2001: 859). The two attack attributes we selected are attack magnitude and attack complexity.<sup>1</sup> Attack magnitude represents the degree of organizational

<sup>1</sup> It is important to note that Ferrier (2001) used both attack magnitude and attack complexity in his study, where he measured them as two continuous variables. We dichotomized the two attributes for ease of explanation.

commitment to a given attack. Based on attack magnitude, previous researchers have distinguished between major attacks and minor attacks. According to Chen et al., a major attack "generally involves a more significant commitment of resources—especially investment in fixed assets, major reorientation or realignment of the organization-environment relationship, major change in the definition of the business, reconfiguration of organizational structure, and radical changes" (1992: 445). In contrast, a minor attack requires relatively small, routine changes resolvable by middle- or low-level managers. Fewer resources are committed, and procedural modification can generally be substituted for structural reformation. Some examples of major attacks include building a new manufacturing plant, investing in breakthrough technology, and entering into a new country market. Some examples of minor attacks include cutting prices and minor new product introductions (e.g., changing the color and door design of a new car model).

Attack complexity, our second attack dimension, reflects the degree to which the attack is composed of actions of different types (Ferrier, 2001; Ferrier, Phionnlaoich, Smith, & Grimm, 2002; Ferrier & Lyon, 2004). Attack complexity is a function of managers' knowledge about different ways of competing (Miller & Chen, 1996). This knowledge can be enhanced by prior experience with various competitive methods and by exposure to a diversity of rivals and customers. Consider the following auto industry examples. In November of 1996 in Japan, Saturn unveiled its right-hand-drive sedan, wagon, and coupe at the Osaka import auto show. The company then broke ground on its first Japanese dealership, Saturn of Yokohama, and launched newspaper advertising to warm up consumers (Chappell, 1996). In this example the attack (the series of moves) Saturn launched against rivals such as Toyota, Nissan, and Honda included three types of actions—introducing new products, entering a new country, and marketing—illustrating attack complexity. In another example of a complex attack, in January of 2000, Toyota increased its manufacturing capacity from 600,000 to 800,000 vehicles, introduced the award-winning Yaris in France, and revamped its European distribution and dealer networks (Kurylko & Catterall, 2000). In this example the attack Toyota launched against rivals such as Renault, Peugeot, and Fiat included three types of actions: increasing manufacturing capacity, introducing new model(s), and revamping dealerships.

Next we crossed the two attack attributes in a  $2 \times 2$  matrix (as illustrated in Figure 1), developing a conceptual framework to predict the responder's choice of word response versus action response when challenged by one of the four types of attacks: minor and simple attacks, minor and complex attacks, major and simple attacks, and major and complex attacks.<sup>2</sup>

## MINOR AND SIMPLE ATTACKS

In Quadrant I, attacks are characterized by low magnitude and low complexity. Attacks are considered "minor" if they do not require extensive fixed outlays and are incremental in nature (Chen et al., 1992; Hambrick et al., 1996; MacMillan, McCaffery, & Van Wijk, 1985). They are considered "simple" if they are composed of one or a narrow range of moves (Ferrier, 2001; Ferrier et al., 1999). Simple attacks require minimal search activities among competitive options or coordination across departments to implement. Minor and simple attacks are the most common form observed in competitive engagement and, as such, are typically routine based.

Among the four quadrants illustrated in Figure 1, this type of attack requires the least information to understand and the least resources to respond. To signal a firm's commitment to defend its market position and to prevent further attacks, we expect that the firm will be motivated to respond with actions when being challenged by an attack of low magnitude and low complexity. (In other words, we expect that such attacks satisfy the three driving conditions of action responses.) In fact, responding firms often have routine-based responses ready to match attacks characterized by Quadrant I.

For example, when Southwest Airlines introduced special companion fares (two travelers flying on one full-fare ticket), Trans World Airlines quickly offered the same deal for its domestic flights on the same routes (Dow Jones News Service, 1996).

<sup>2</sup> There are several assumptions underlying our model of word responses. First, we assume that information is asymmetric among competitors. Under most cases of incomplete information, firms need to find ways to help them estimate the attacker's intent and the payoffs associated with responding. Second, we assume that public statements are accessible to all rivals via a variety of channels and that managers can access public channels when they seek to respond with language. Third, similar to extant CD research, we assume repeated competitive interactions, and our model is most appropriate in an oligopolistic market where a high degree of interdependence exists among rivals.

**FIGURE 1**  
**A Framework for Understanding Word Responses**

		Attack complexity	
		Simple (low)	Complex (high)
Attack magnitude	Minor (low)	I Action response	II <b>Word response and action response</b>
	Major (high)	III <b>Word response</b>	IV <b>Word response and action response</b>

Similarly, days after Virgin Atlantic initiated an ad campaign featuring a television series star, British Airways matched with a similar advertising campaign (*The Times*, 1996). Both Southwest's fare promotion and Virgin Atlantic's marketing campaign represent minor and simple attacks. When facing such attacks, both Trans World Airlines and British Airways chose to launch action responses to match.

In sum, we predict that the expected response to a minor and simple attack is an action response.

*Proposition 1: Following an action-based attack from a rival firm, a focal firm is more likely to respond with action (not words) when the magnitude and complexity of the attack are both low.*

### MINOR AND COMPLEX ATTACKS

In Quadrant II, attacks are characterized by low magnitude and high complexity. The planning and execution of complex attacks usually involve broad managerial knowledge, significant search activities, and interdepartmental coordination. For the responder, attacks characterized by low magnitude and high complexity are difficult to interpret. As March and Simon (1958) noted, complexity limits managers' ability to rationally account for important factors in decision making. Research has shown that the more complex the environment is perceived to be by managers, the more difficult it becomes for them to respond to changes in the environment (Aragón-Correa, Alberto, & Sharma, 2003; Smart & Vertinsky, 1984). The CD literature also suggests that complexity in a firm's attack may signal an aggressive attempt to shift the rules of competition

(D'Aveni, 1994). The continuous development of new action types thus delays competitors' responses and results in superior performance (Ferrier, 2001; Miller & Chen, 1996).

We expect that when challenged by a minor and complex attack, the responding firm, although perhaps having the motivation and the capability to launch an action response, may need extra time and effort to determine the strategic intent of the attacker and the most effective way of responding. As we suggested earlier, word responses are more likely when one or more driving conditions of action responses are not satisfied. Thus, we propose that the responding firm can use word responses as a strategic tool to express irritation with the attack and, more important, to seek more information to understand the attacker's intent.

Consider, for example, the competitive engagement between Western Pacific Airlines and United Airlines. In early January of 1996, Western Pacific, a low-cost airline in operation since April 1995, launched a series of minor moves. It displayed colorful advertising featuring *The Simpsons* and Colorado Springs' famous Broadmoor Hotel on the facade of its planes, extended the "Winter Wonderfares" discount ticket program to the end of the month (*Business Wire*, 1996), and added more commuter service to Colorado's ski resorts (Vogrin, 1996b). Colorado Springs, a Western Pacific hub, is quite close to Denver, a United Airlines hub. Western Pacific's series of minor moves (advertising activity, promotion, and additional service) motivated United to respond. Although United was capable of using a tit-for-tat strategy to match the attack, it hesitated to do so because it wanted to be clear about Western Pacific's intentions and plans. Instead of an action

response, United Airlines used a word response first to indicate its displeasure and gain more information about the attack. On January 10, United chairman Gerald Greenwald responded, "I am guessing they [Western Pacific] are not planning to make a fundamental hit, but they are, in an economic sense, a nuisance" (*Colorado Springs Gazette Telegraph*, 1996: D1). In this example Western Pacific's attack definitely attracted United's attention. United responded with words because it was not sure whether Western Pacific's true intent was to invade its hub in Denver, and it did not want to get into a price war from acting hastily.

In sum, we predict that when the attack is minor and complex, there is a high likelihood the responding firm will use a word response in preparation for its next action move.

*Proposition 2: Following an action-based attack from a rival firm, a focal firm is more likely to initially respond with words when the magnitude of the attack is low and the complexity of the attack is high.*

According to communication and rhetoric theories (Burke, 1969; Shannon & Weaver, 1949), there are two basic functions of language: reducing information asymmetry and resolving conflict of interest. When being challenged by an attack of low magnitude and high complexity, the responding firm can use word responses to reduce the information asymmetry between it and the attacker. We expect that the content of such responses tends to focus more on seeking information and expressing displeasure and less on making strong verbal commitments (threats) about future moves.

We are left, then, with the question of what will happen once the responder feels it understands the intent behind the initial attack. When this occurs, we expect that an action response will likely be launched after the word response. Using the AMC framework, when the responder has the necessary information to understand the attack, it will be motivated to launch an action response, given such a response is the most effective means of deterring rivalry and does not require substantial resource support. Continuing with the above example, soon after the word response from United Airlines, Western Pacific vice president Thomas DeNardin stated that Western Pacific had "no impact whatsoever [on United]. . . . We are nothing to United—not a threat or nuisance"

(*Colorado Springs Gazette Telegraph*, 1996: D1). Here Western Pacific tried to send a signal back to United that Western was small and believed the market was big enough for both firms. United stayed put.

However, on February 2, 1996, Thomas DeNardin visited Denver International Airport to discuss available space and rental costs for up to ten gates. During the visit, he said, "It is no big deal. . . . We are simply considering all our options. We have to look at expansion. That is critical to us. If we don't have the ability to expand here, we definitely have a problem" (Vogrin, 1996a: D1). This signal from Western Pacific was much clearer than the earlier one, conveying that Western Pacific was seeking to continue its competition with United and making plans to enter Denver. After ascertaining Western Pacific's intention to invade its hub, United Airlines immediately fought back with an action response. On March 7, 1996, United Airlines announced its intention to replace its 737s and start flying large, wide-bodied planes between Denver and Colorado Springs in order to fly as many people out of Colorado Springs as possible. Meanwhile, United slashed fares to Colorado Springs, and in some cases United's fares out of Colorado Springs were one-fifth those from Denver International Airport to the same destinations. Newspapers claimed United's moves were made "specifically to choke Western Pacific" (*Denver Post*, 1996).

## MAJOR AND SIMPLE ATTACKS

In Quadrant III, attacks are characterized by high magnitude and low complexity. Attacks are considered high magnitude (major) if they involve significant investment in specific and distinctive resources (Chen & MacMillan, 1992; Smith et al., 1991). For the attacking firm, an important motivation behind major and simple attacks is to make a significant improvement in its market position or to adapt in a substantial way to what may be a changed competitive environment. For the responder, attacks of high magnitude and low complexity represent significant challenges because although it is relatively easy to decode the intention behind such attacks, the responder might not have the motivation or the necessary resources in place to respond in kind.

Chen and his colleagues (1992) found that compulsive major action taken in response to a major attack runs a significant risk of spiraling

into a competitive war—one that is detrimental to all parties involved. Morrison and Winston (1996) estimated that between 1980 and 1990 the annual cost of price wars to the airline industry, in the form of reduced profits, was around \$300 million. Thus, we assume that it is in the best interests of most competitors not to get into a price war. Additionally, previous CD research has shown that it is time consuming to allocate resources to respond to a major attack. Major attacks require lengthy execution time and tend to reduce the number and speed of competitors' action responses (Chen & Miller, 1994; Smith et al., 1991). Therefore, we suggest that when the attack is major and simple, the responding firm might not have the capability and the motivation to respond immediately. As a result, it can use word responses as a strategic tool to signal its intent to retaliate, hoping that it can deter future attacks without having to actually fire its weapons.

Consider ValuJet Airlines' market entry and the responses from USAir (later known as US Airways) and Delta Airlines as an example. On January 25, 1996, ValuJet, a low-cost carrier that started operation in 1993, announced new services to begin on March 1: three daily Atlanta-Pittsburgh flights (with \$59 fares one way) and four Atlanta-Charlotte flights (with \$39 fares one way). Pittsburgh and Charlotte were principal hubs for USAir, and Atlanta was headquarters for Delta Airlines. Both USAir and Delta felt that their important territories were being threatened but did not want to immediately respond with action because of the concern that it would escalate the rivalry, leading to a protracted price war. As a result, USAir spokesperson Richard Weintraub responded with a public statement that USAir would take all necessary actions to compete "aggressively" on the routes. Similarly, Delta spokesperson Todd Clay also quickly responded that his airline would "compete on the routes where Delta now has frequent service" (Phillips & Swoboda, 1996).

Another example, mentioned earlier, is also instructive. After McDonald's introduction of McPizza in some area stores on July 10, 1989, Pizza Hut president Steve Reinemund, without fighting back immediately, vowed, "We're ready to give them a fight with everything we've got" (Chaudhry, 1989), and Pizza Hut's spokesperson Roger Rydell further noted, "We certainly don't take McDonald's lightly. It's an enormous company with tremendous resources. We're going to have to deal with it and we'll be fierce competitors" (Newby, 1989). The

attack from McDonald's was major but simple. Pizza Hut clearly understood what its rival's intentions were but hesitated to escalate the competition immediately with an action response, considering that the consequences of a major move could be very bad for both companies. Instead, Pizza Hut used a word response first as a warning in the hope that it would deter rivalry and reduce the chances that the two firms would be drawn unto a competitive war.

In sum, we predict that when the attack is major but simple, it is likely the responder will use a word response to deter escalation of rivalry.

*Proposition 3: Following an action-based attack from a rival firm, a focal firm is more likely to respond with words when the magnitude of the attack is high and the complexity of the attack is low.*

When being challenged by a major and simple attack, a firm is aware of the attacker's intention but is less motivated to respond and less capable of responding with actions. Thus, we argue that word responses can be used to resolve some conflicts of interest between the attacker and the responding firm. We expect that the responding firm will often make a promise about its next move in the word response. That is, if the attacker does not tone down or withdraw, the responding firm will implement its punishment as promised. Such a threatening word response does carry important commitment value because it involves the public reputation of the firm, which may endure long-term consequences if the firm does not walk its talk. For example, for a long while consumers and competitors did not take Microsoft's promise that "the new product will come soon" seriously because the firm repeatedly engaged in vaporware, a term for announced software that is never produced (Bayus, Jain, & Rao, 2001; Haan, 2003). Ghemawat (1991) suggested that commitment value depends on the extent to which the competitive move appears binding and irreversible. For action-based moves, the binding mainly comes from the invested tangible and intangible resources, while for word-based moves, the binding comes from the public nature of the promise about the next move.

Compared to major and complex attacks (Quadrant IV), major and simple attacks require fewer resources and less interdepartmental coordination and, thus, are more reversible. In addition, since threatening word responses may carry important

commitment value, we expect that word responses under such circumstances may have the potential to successfully deter future attacks. This prediction aligns well with the core argument of the competitive signaling perspective. As Porter noted, "An announcement can be a way to communicate a firm's commitment to carrying out a threat for the purpose of causing a competitor to either back down from or tone down a move or to not initiate it in the first place" (1980: 79). If the attacker reduces the intensity of rivalry because of a word response, the responding firm will not need a following action response to "realize" its promise because the attacker has altered its behavior.

Consider the following two examples. First, in the "pizza war" mentioned before, because of Pizza Hut's aggressive word response, McDonald's subsequently halted the introduction of McPizza. Second, on September 19, 2012, Apple released its own mapping application, Apple Maps, to compete head to head with Google Maps, and it replaced Google Maps as the default mapping application for Apple products. On September 25, Google executive chairman Eric Schmidt showed his irritation at a global technology conference in Tokyo:

We think it would have been better if they had kept ours. . . . But what were we going to do? Force them to change their mind? . . . I'm not doing any predictions. . . . I'm not going to speculate at all what they're going to do. They can answer that question as they see fit (Krolicki, 2012).

Additionally, Google strategically hinted that it might reconsider Apple's use of Google Search in Apple's varying devices. Three days later, partly because customers complained bitterly about the poor quality of Apple Maps, Apple CEO Tim Cook posted an open letter on Apple's website, apologized for the replacement of Google Maps, and encouraged customers to use competitors' products like Google Maps (Apple, 2012). On December 13, 2012, Google Maps was back on iPhone (Petri, 2012).

Sun Tzu had a famous saying: "The supreme art of war is to subdue the enemy without fighting" (Tzu, 1963: vii). As we explained earlier, word responses used in Quadrant II (low magnitude and high complexity) often need to be followed by action responses. As we will explain next, given the irreversibility of the attacks represented by Quadrant IV (high magnitude and high complexity), word responses might not be enough to reduce the negative impact (in terms of lost market share and profitability) caused by the attack.

Thus, we expect that word responses may have the most significant effect on rivalry reduction in Quadrant III, and it is our belief that the power of words in Quadrant III should demand more exploration. Drawing from the CD literature, we further propose that the rivalry-reduction effect of word responses in Quadrant III (low magnitude and high complexity) is affected by two factors: (1) strategic interdependence between the attacker and the responder and (2) the organizational slack of the responder.

Strategic interdependence refers to the extent to which one organization's outcomes (e.g., benefits) depend crucially on the decisions or actions of another organization, and vice versa (Sengul, Gimeno, & Dial, 2012). Pennings (1981) identified three general types of strategic interdependence: horizontal (e.g., multimarket competition), vertical (e.g., buyers and suppliers), and symbiotic (e.g., strategic alliances). A large body of research has shown that strategic interdependence is fundamental to understanding competitive behavior (Gimeno & Woo, 1996; Schelling, 1960). For example, multimarket competition research suggests that strategic interdependence (i.e., multimarket contact) can reduce rivalry intensity through mutual forbearance (Bernheim & Whinston, 1990; Bowers, Greve, Mitsuhashi, & Baum, 2013; Edwards, 1955; Golden & Ma, 2003; Yu, Subramaniam, & Cannella, 2009). That is, to the extent that the same firms compete in more than one market, they tend to compete less aggressively against each other because of the fear of cross-market retaliation.<sup>3</sup> In Quadrant III, when word responses are used to threaten the attacker, the strategic interdependence between the attacker and the responder may magnify the commitment value associated with the threat, making the word response more credible. For example, an attacker that competes across multiple markets with a responder is aware that the responder has the capacity to retaliate in the attacker's important markets. Therefore, we propose that high strategic interdependence between the attacker and the responder will increase the effectiveness of word responses in fending off major and simple attacks (Quadrant III).

<sup>3</sup> While recent multimarket competition studies suggest an inverted U-shaped relationship between multimarket contact and competitive aggressiveness, to simplify our arguments, we focus on the more traditional and prevalent effect of multimarket contact: a negative linear association with competitive aggressiveness.

Another important factor that may strengthen the rivalry-reduction effect of word responses is the level of organizational slack resources possessed by the responder. Organizational slack refers to the cushion of actual or potential resources allowing an organization to adapt to internal or external environmental changes (Bourgeois, 1981). It could be underutilized capacity, facilities, capital, or labor (Levinthal & March 1981). Research has shown that organizational slack can enhance an organization's adaptability to a changing environment and is an important predictor of competitive behaviors. For example, Young et al. (1996) showed that firms with more slack resources can conduct more search activities and mount action responses at faster speed. Ferrier (2001) found that the level of slack resources is positively associated with a firm's competitive aggressiveness. Similar to the role of strategic interdependence that we described above, we expect that higher organizational slack resources on the part of the responder will make the responder's verbal threat more credible and, hence, will strengthen the rivalry-reduction effect of the word response.

### MAJOR AND COMPLEX ATTACKS

In Quadrant IV, attacks are characterized by high magnitude and high complexity. Attacks in this quadrant send a clear signal of the attacker's true type ("toughness"), representing the attacker's strong desire to change its market position. Among the four quadrants, this type of attack carries the highest level of commitment and, thus, is considered to be the least reversible and to have the highest likelihood of escalating competition. For the responder, it takes time to clearly decode the full intent behind major and complex attacks. It is also challenging to allocate resources and coordinate activities across different departments so as to launch an effective action response. Finally, and perhaps most important, since a matching counterattack is likely to escalate the competition into a war, we expect that the responder will hesitate before using a tit-for-tat strategy. Therefore, we propose that major and complex attacks increase the likelihood of word responses because such attacks hinder all three driving conditions of action responses.

Consider the following exchange between British Airways (BA) and USAir. Beginning in 1993, BA had an agreement with USAir that BA would take a 24.6 percent stake in USAir and that USAir

would carry passengers to Pittsburgh to connect to BA's flights. However, in April and May of 1996, BA launched a series of major actions of different types, which seriously confused and challenged USAir. On April 6 BA announced that it would introduce new routes from Phoenix (USAir's home airport) to Europe on July 1, with its own equipment (Christman, 1996). On April 15 BA made an alliance with America West Airlines, including a code-sharing agreement connecting passengers from BA's London-Phoenix route (Whitcomb & Lampl, 1996). On May 21 BA announced that it would form an alliance with American Airlines (AA), which would let the two big carriers coordinate operations worldwide (Whitcomb & Lampl, 1996).

USAir did not retaliate immediately with the same types of actions. Instead, the company first used word responses to signal its discontent. On May 23 USAir chairman and CEO Stephen Wolf said, "There is nothing we are unwilling to consider," in responding to the attack (Cary, 1996). Although we will explain how the competitive engagement between BA and USAir evolved over time, in Proposition 4, building on the three driving forces of word responses, we predict that firms will use word responses when they are challenged by major and complex attacks.

*Proposition 4: Following an action-based attack from a rival firm, a focal firm is more likely to initially respond with words when both the magnitude and the complexity of the attack are high.*

Chen and MacMillan (1992) noted that some actions are easier to change or reverse than others, since there are multiple sources of irreversibility: economic, institutional, organizational, psychological, and political. The irreversibility associated with a major and complex attack goes beyond simple economic investment (investment in capital, physical assets, managerial knowhow, etc.); it involves a significant degree of interdepartmental coordination and often is formally announced by senior management and, thus, is under close public scrutiny. As a result, the reversal cost of a major and complex attack is high, and such an attack increases a responding firm's chance of using a word response because it dampens the three driving forces of action response. Furthermore, we expect that in the word responses to such attacks, the responder will try to employ all possible means to lower the risk of rivalry escalation.

Considering the typical use of language in reducing information asymmetry and resolving conflicts of interest, we argue that the content of such word responses could include expressions of displeasure, threats of retaliation, or even appeals for cooperation.

The idea that verbal communication can promote cooperation is not new. As early as Aristotle, language has been considered to be a way of persuading others to perform activities. A word response can induce cooperation by highlighting common interests between the attacker and the responder and by promises of cooperation on the responder's part if the attacker cooperates. Take the previously mentioned BA-USAir exchange as an example. After USAir clearly expressed its discontent and threatened to retaliate, BA noticed the change of attitude from USAir. BA responded that it believed "the new alliance [with AA] would strengthen rather than threaten BA's alliance with USAir" (*Reuters News*, 1996a). Even though BA's explanation was far from convincing and the company showed no remorse about its defection, USAir did make another effort to facilitate cooperation. On June 11 USAir stated that even the proposed alliance between BA and AA "has the potential to provide USAir with the ability to pursue new and positive opportunities," but USAir still wanted BA to reconsider its entry into USAir's heartland (*Reuters News*, 1996b).

Compared with major and simple attacks, major and complex attacks are much harder to reverse because of the reasons we discussed above. As a result, we expect that word responses alone might not be sufficient to create a material impact on reducing the rivalry. Word responses can be used as a strategic tool to supplement a minor action response in order to reduce the committed resources to the action response. In this way, the combination of a word response and a minor action response sends out a signal of de-escalating rivalry. Such a minor action could be an action requiring less resource commitment or an action in the attacker's peripheral markets. The purpose of the minor action response following the word response is to demonstrate the responding firm's true type (toughness).

The BA-USAir case provides an illustration. After the word responses, USAir announced that it would begin services between Philadelphia and Madrid, in addition to its current European destinations (Paris, Frankfurt, Munich, and Germany). USAir wanted to show BA that it could be a major

trans-Atlantic carrier too—a fierce competitor of BA. Meanwhile, USAir did not want to escalate competition, so it steered clear of London, BA's main hub.

## DISCUSSION

This research aims to answer the question of how language matters in competitive dynamics. More specifically, we explore the conditions under which firms, when confronted with an action-based attack, are more likely to respond with actions, with words, or with both. Building on the three drivers of competitive responses in the CD literature (awareness, motivation, and capability), we suggest that a firm is more likely to respond with actions when the attack is of low magnitude and low complexity. In contrast, a firm is more likely to use a word response when the attack is of (1) low magnitude and high complexity, (2) high magnitude and low complexity, or (3) high magnitude and high complexity. For some scenarios, the responding firm may have to couple the word response with an action response to forestall more attacks. However, when it is used well, the word response can help the responding firm reduce rivalry (e.g., in the case of major and simple attacks). We have also explored the content of word responses, such as expressions of confusion or displeasure, threats of retaliation, or appeals for cooperation.

This article represents a first attempt to integrate CD research and research on language—two streams of research that have so far been largely separated. The assumption in the CD research to date has been that firms do nothing if they do not respond with actions. As a result, how firms engage in word responses has been ignored. To begin filling this gap, we contend that language matters in competitive settings. It conveys valuable information and serves important strategic purposes. Language can affect the total payoff of a game to the extent that it creates industry-wide publicity and sparks commitments from important stakeholders. By examining situations that may affect the likelihood of a word and/or action response, our framework refines CD research by highlighting the role of language—an important tool that rivals frequently employ in today's competitive landscape. Our study may change the interpretation of some of the empirical results because it is very likely that word responses have been treated as nonresponses.

Furthermore, our framework also adds to research on the strategic use of language. A word response can be a powerful tool for managers who seek to explore or exploit opportunities in the competitive environment. Communications between competitors are substantially different from communications within organizations or among stakeholders (more direct conflicts and less common interests), while less direct conflict and more common interests have been the main emphasis of the existing language literature.

### Implications for Research

As a first step in exploring the use of language in CD, this article offers several avenues of research. First, it opens the door for scholars to empirically study how rivals use language in competitive engagements with each other. Most of the factors in our theoretical framework are empirically observable, and we believe our propositions are generalizable across a variety of competitive settings. However, as we assumed, our theory of word responses fits better in oligopolistic markets, where the competitive interactions are more observable and the interdependence of rivals is high.

Second, future research could focus more on the boundary conditions of our theoretical arguments. For example, while here we have explored the antecedents of word responses and action responses, more research needs to be done to further examine the determinants of nonresponses and their relationship with action/word responses. As an important type of competitive response, nonresponse may serve the same purpose of de-escalating rivalry as word responses, but de-escalating rivalry is not the only reason firms choose not to respond. For instance, nonresponse could result from concerns about legitimating a small rival's actions or from top executives' hubris. Under certain conditions, nonresponse can be a preface to word responses. Thus, how a firm can strategically pair the use of nonresponse with other types of responses offers an interesting avenue for future research. Furthermore, the responder's reputation or credibility may affect both the likelihood and effectiveness of word responses. Also, in addition to CEO interviews and public press releases, word responses could come from "legitimate" sources (i.e., top executives) through various channels. Interesting research questions could be: What kind of top executives are more likely to use public statements to influence competition?

How do managerial characteristics influence the effectiveness of word responses? What is the impact of the communication channels chosen to deliver the language?

Third, although our study is built on the traditional action-response perspective in CD, it contributes to the competition literature beyond CD research. For instance, in studying the social construction of rivalry, it would be interesting to link theories and methodologies from organizational discourse (Phillips & Oswick, 2012), vocabulary (Loewenstein, Ocasio, & Jones, 2012), and labeling (Ashforth & Humphrey, 1997; Granqvist, Grodal, & Woolley, 2013) with competitive interactions. Future research can explore how firms label the attacks (e.g., threat versus opportunity; stupid move versus smart move) in public to socially construct the meaning of attacks at the institutional level. Competitors may compare their interpretations with those of powerful social references in order to gain legitimacy and put pressure on the attacker to withdraw its attack. Moreover, it would be exciting to study how incumbent firms use language to socially construct ambiguity in order to deter market entry, and how firms compete for meanings that suit their best interests in nascent markets, where there are often several competing definitions of new products or services. Scholars may also benefit from studying the change of language among competitors to understand the evolution of competitive intensity. We expect that viewing language as a tool used in social construction coupled with focusing on social context will be a very fruitful research approach.

Additionally, in the field of industrial organization economics, we hope our study will spur more research on competitive signaling. The competitive signaling perspective is different from the traditional signaling theory based on Spence's (1973) seminal work. The fundamental concern of the traditional signaling theory is reducing information asymmetry between a focal firm and its stakeholders (Connelly, Certo, Ireland, & Reutzel, 2011), while the central concern of the competitive signaling perspective is improving or defending a competitor's market position. The traditional signaling theory considers private talk as costless and cheap. In contrast, the competitive signaling perspective highlights the importance of verbal signals. For instance, Porter (1980) pointed out that verbal statements about expected competitive actions could effectively deter rivalry to the extent that they are credible. Despite the theory's merits,

there has been limited research into building on the competitive signaling perspective. Exploration of the antecedents and consequences of verbal signals that vary in credibility and commitment value would seem to be a viable first step.

Last, when firms use word responses, their responses are (by our definition) delivered through public channels that are accessible to a large number of external audiences. Such a delivery and filtering process may create unique advantages and challenges for the responder (Rindova, Pollock, & Hayward, 2006; Zavyalova, Pfarrer, Reger, & Shapiro, 2012). For instance, although a responder intends to use a word response to seek information from the attacker, it may get more timely and complete answers from external audiences, such as popular press writers, governance watchdog groups, academics, investors, and financial analysts, who have the knowledge and are not constrained by regulative stipulations, such as antitrust laws. On the other hand, to a certain degree, external audiences are all biased by their cognitive structures and preferences, and they can also create noise, making it difficult to elicit accurate information from the attacker with a word response. Competitors or potential competitors who are not directly engaged in the competitive exchange may also send misleading messages, interfering with the communication between a responder and an attacker. In this article we only discussed how responders craft word responses directed at the initiator of the attack. In reality, a firm's word responses can be directed toward a variety of intended audiences, such as analysts, media, customers, and regulators. Some interesting questions include: How might the responder strategically manipulate the content of its word responses to guide external audiences into taking actions that will benefit the firm? How will the responder make sure that the words being delivered are not distorted when they are filtered through different audience communities? Both of these questions warrant more research attention.

### Implications for Managers

This article offers important managerial insights. We highlight that it is important for managers to take advantage of language as a powerful, cost-effective, and flexible tool in their competitive interactions, especially when they possess ample organizational slack and have a strategically

interdependent relationship with a rival or rivals. Our framework also implies that managers should not simply assume that language is cheap talk and use word responses recklessly, because there may be long-term consequences. The public statements could bond the speaker to the statement because of firm and managerial reputations. A false announcement might prove costly when information is verifiable or becomes verifiable (Farrell, 1987). Thus, it is important for managers to pay attention to not only how they can use language in competition but also how their language-based actions and responses will be interpreted by rivals and other important stakeholders.

### CONCLUSION

We set out to develop a first look at the role of language in competitive engagement, selecting to emphasize word responses to rivals' action attacks. By building on the traditional action-response perspective and proposing a typology of attack characteristics, we were able to extend the well-known action-response perspective to further understand the role of language in competitive engagements. We hope that future researchers will build on the ideas we developed here.

### REFERENCES

- Aldrich, H. E., & Fiol, C. M. 1994. Fools rush in? The institutional context of industry creation. *Academy of Management Review*, 19: 645–670.
- Alvesson, M., & Kärreman, D. 2000. Taking the linguistic turn in organizational research: Challenges, responses, consequences. *Journal of Applied Behavioral Science*, 36: 136–158.
- Apple. 2012. *A letter from Tim Cook on Maps*. September 28: <http://www.apple.com/ca/letter-from-tim-cook-on-maps/>.
- Aragón-Correa, J. A., Alberto, J., & Sharma, S. 2003. A contingent resource-based view of proactive corporate environmental strategy. *Academy of Management Review*, 28: 71–88.
- Ashforth, B. E., & Humphrey, R. H. 1997. The ubiquity and potency of labeling in organizations. *Organization Science*, 8: 43–58.
- Atkinson, J. W. 1964. *An introduction to motivation*. Princeton, NJ: Van Nostrand.
- Axelrod, R. M. 1984. *The evolution of cooperation*. New York: Basic Books.
- Barnard, C. I. 1938. *Functions of the executive*. Cambridge, MA: Harvard University Press.
- Barney, J. B. 1986. Strategic factor markets: Expectations, luck, and business strategy. *Management Science*, 32: 1231–1241.

- Bayus, B. L., Jain, S., & Rao, A. G. 2001. Truth or consequences: An analysis of vaporware and new product announcements. *Journal of Marketing Research*, 38: 3–13.
- Bernheim, B. D., & Whinston, M. D. 1990. Multimarket contact and collusive behavior. *RAND Journal of Economics*, 21: 1–26.
- Bourgeois, L. J., III. 1981. On the measurement of organizational slack. *Academy of Management Review*, 6: 29–39.
- Bowers, A., Greve, H., Mitsuhashi, H., & Baum, J. 2013. Competitive parity, status disparity, and mutual forbearance: Securities analysts' competition for investor attention. *Academy of Management Journal*, 57: 38–62.
- Burke, K. 1969. *A rhetoric of motives*. Berkeley: University of California Press.
- Business Wire**. 1996. Western Pacific's "Winter Wonderfares" extended. January 31: [https://www.google.com/?gws\\_rd=ssl#q=business+wire](https://www.google.com/?gws_rd=ssl#q=business+wire).
- Cary, S. 1996. USAir's chief says airline is studying all options. *Wall Street Journal*, May 23: <http://www.wsj.com/articles/SB83278723471463500>.
- Chappell, L. 1996. Saturn plays role of rebel in Japan. *Automotive News*, November 25: <http://www.autonews.com/article/19961125/ANA/611250792/saturn-plays-role-of-rebel-in-japan>.
- Chaudhry, R. 1989. McDonald's widens pizza test: Pizza operators gird for assault. *Nation's Restaurant News*, July 31: <https://business.highbeam.com/409700/article-1G1-7834069/mcpizza-mcdonald-widens-pizza-test-pizza-operators>.
- Chen, M.-J. 1996. Competitor analysis and interfirm rivalry: Toward a theoretical integration. *Academy of Management Review*, 21: 100–134.
- Chen, M.-J., & MacMillan, I. C. 1992. Nonresponse and delayed response to competitive moves: The roles of competitor dependence and action irreversibility. *Academy of Management Journal*, 35: 539–570.
- Chen, M.-J., & Miller, D. 1994. Competitive attack, retaliation and performance: An expectancy-valence framework. *Strategic Management Journal*, 15: 85–102.
- Chen, M.-J., & Miller, D. 2012. Competitive dynamics: Themes, trends, and a prospective research platform. *Academy of Management Annals*, 6: 135–210.
- Chen, M.-J., Smith, K. G., & Grimm, C. M. 1992. Action characteristics as predictors of competitive responses. *Management Science*, 38: 439–455.
- Chen, M.-J., Su, K.-H., & Tsai, W. 2007. Competitive tension: The awareness-motivation-capability perspective. *Academy of Management Journal*, 50: 101–118.
- Christman, B. 1996. British Airways to begin Phoenix-to-London flights. *Arizona Daily Star*, April 6.
- Colorado Springs Gazette Telegraph**. 1996. United Airlines chief: WestPac's a "nuisance." January 10: D1.
- Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. 2011. Signaling theory: A review and assessment. *Journal of Management*, 37: 39–67.
- Cornelissen, J. P., & Clarke, J. S. 2010. Imagining and rationalizing opportunities: Inductive reasoning and the creation and justification of new ventures. *Academy of Management Review*, 35: 539–557.
- Crawford, V. P., & Sobel, J. 1982. Strategic information transmission. *Econometrica*, 50: 1431–1451.
- D'Aveni, R. A. 1994. *Hypercompetition: Managing the dynamics of strategic maneuvering*. New York: Free Press.
- Denver Post**. 1996. United to battle WestPac with bigger jets. March 7.
- Dierickx, I., & Cool, K. 1989. Asset stock accumulation and sustainability of competitive advantage. *Management Science*, 35: 1504–1511.
- Dow Jones News Service**. 1996. TWA sets companion fares on routes competing with Southwest. April 12.
- Edwards, C. D. 1955. Conglomerate bigness as a source of power. In *Business concentration and price policy*: 331–352. NBER conference report. Princeton, NJ: Princeton University Press.
- Elsbach, K. D. 1994. Managing organizational legitimacy in the California cattle industry: The construction and effectiveness of verbal accounts. *Administrative Science Quarterly*, 39: 57–88.
- Elsbach, K. D., & Sutton, R. I. 1992. Acquiring organizational legitimacy through illegitimate actions: A marriage of institutional and impression management theories. *Academy of Management Journal*, 35: 699–738.
- Farrell, J. 1987. Cheap talk, coordination, and entry. *RAND Journal of Economics*, 18: 34–39.
- Farrell, J., & Rabin, M. 1996. Cheap talk. *Journal of Economic Perspectives*, 10(3): 103–118.
- Ferrier, W. J. 1997. Tough talk and market leaders: The role of overt signaling and reputation building behaviors in sustaining industry dominance. *Corporate Reputation Review*, 1: 98–102.
- Ferrier, W. J. 2001. Navigating the competitive landscape: The drivers and consequences of competitive aggressiveness. *Academy of Management Journal*, 44: 858–877.
- Ferrier, W. J., Fhionnlaoich, C. M., Smith, K. G., & Grimm, C. M. 2002. The impact of performance distress on aggressive competitive behavior: A reconciliation of conflicting views. *Managerial and Decision Economics*, 23: 301–316.
- Ferrier, W. J., & Lyon, D. W. 2004. Competitive repertoire simplicity and firm performance: The moderating role of TMT heterogeneity. *Managerial and Decision Economics*, 25: 317–327.
- Ferrier, W. J., Smith, K. G., & Grimm, C. M. 1999. The role of competitive action in market share erosion and industry dethronement: A study of industry leaders and challengers. *Academy of Management Journal*, 42: 372–388.
- Ghemawat, P. 1991. *Commitment: The dynamic of strategy*. New York: Free Press.
- Gimeno, J., & Woo, C. Y. 1996. Economic multiplexity: The structural embeddedness of cooperation in multiple relations of interdependence. *Advances in Strategic Management*, 13: 323–361.
- Golden, B. R., & Ma, H. 2003. Mutual forbearance: The role of intra-firm integration and rewards. *Academy of Management Review*, 28: 480–495.

- Granqvist, N., Grodal, S., & Woolley, J. L. 2013. Hedging your bets: Explaining executives' market labeling strategies in nanotechnology. *Organization Science*, 24: 395–413.
- Haan, M. A. 2003. Vaporware as a means of entry deterrence. *Journal of Industrial Economics*, 51: 345–358.
- Hambrick, D. C., Cho, T. S., & Chen, M.-J. 1996. The influence of top management team heterogeneity on firms' competitive moves. *Administrative Science Quarterly*, 41: 659–684.
- Heil, O., & Robertson, T. S. 1991. Toward a theory of competitive market signaling: A research agenda. *Strategic Management Journal*, 12: 403–418.
- Kim, J.-Y. 1996. Cheap talk and reputation in repeated pretrial negotiation. *RAND Journal of Economics*, 27: 787–802.
- Krolicki, K. 2012. Google says Maps not waiting in wings for iPhone 5. *Reuters*, September 25: <http://www.reuters.com/article/us-google-iphone-idUSBRE88O07U20120925>.
- Kurylko, D. T., & Catterall, M. 2000. Humbled Japan now sets sight on Europe. *Automotive News*, January 17: <http://www.autonews.com/article/20000117/ANA/1170707/humbled-japan-now-sets-sight-on-europe>.
- Levinthal, D., & March, J. G. 1981. A model of adaptive organizational search. *Journal of Economic Behavior & Organization*, 2: 307–333.
- Livengood, R. S., & Reger, R. K. 2010. That's our turf! Identity domains and competitive dynamics. *Academy of Management Review*, 35: 48–66.
- Loewenstein, J., Ocasio, W., & Jones, C. 2012. Vocabularies and vocabulary structure: A new approach linking categories, practices, and institutions. *Academy of Management Annals*, 6: 41–86.
- Lounsbury, M., & Glynn, M. A. 2001. Cultural entrepreneurship: Stories, legitimacy, and the acquisition of resources. *Strategic Management Journal*, 22: 545–564.
- MacMillan, I. C., McCaffery, M. L., & Van Wijk, G. 1985. Competitors' responses to easily imitated new products: Exploring commercial banking product introductions. *Strategic Management Journal*, 6: 75–86.
- Marcel, J. J., Barr, P. S., & Duhaime, I. M. 2011. The influence of executive cognition on competitive dynamics. *Strategic Management Journal*, 32: 115–138.
- March, J. G., & Simon, H. A. 1958. *Organizations*. New York: Wiley.
- Marcus, A. A., & Goodman, R. S. 1991. Victims and shareholders: The dilemmas of presenting corporate policy during a crisis. *Academy of Management Journal*, 34: 281–305.
- Martens, M. L., Jennings, J. E., & Jennings, P. D. 2007. Do the stories they tell get them the money they need? The role of entrepreneurial narratives in resource acquisition. *Academy of Management Journal*, 50: 1107–1132.
- Miller, D., & Chen, M.-J. 1996. The simplicity of competitive repertoires: An empirical analysis. *Strategic Management Journal*, 17: 419–439.
- Mintzberg, H. 1973. *The nature of managerial work*. New York: Harper & Row.
- Moore, M. C. J. 1992. Signals and choices in a competitive interaction: The role of moves and messages. *Management Science*, 38: 483–500.
- Morrison, S., & Winston, C. 1996. *The evolution of the airline industry*. Washington, DC: Brookings Institution.
- Newby, D. 1989. McDonald's tries taking piece of pizza pie. *Associated Press*, August 27: <https://news.google.com/newspapers?nid=1356&dat=19890828&id=pa5PAAAIBAJ&sjid=4AYEAAAIBAJ&pg=4815,4553290&hl=en>.
- Pennings, J. M. 1981. Strategically interdependent organizations. In P. C. Nystrom & W. H. Starbuck (Eds.), *Handbook of organizational design*, vol. 1: 433–455. New York: Oxford University Press.
- Peteraf, M. A. 1993. The cornerstones of competitive advantage: A resource-based view. *Strategic Management Journal*, 14: 179–191.
- Petri, A. 2012. Google Maps is back on the iPhone and will fix everything that is wrong with your life. *Washington Post*, December 13: [https://www.washingtonpost.com/blogs/compost/wp/2012/12/13/google-maps-is-back-on-the-iphone-and-will-fix-everything-that-is-wrong-with-your-life/?utm\\_term=.b743e563d4bc](https://www.washingtonpost.com/blogs/compost/wp/2012/12/13/google-maps-is-back-on-the-iphone-and-will-fix-everything-that-is-wrong-with-your-life/?utm_term=.b743e563d4bc).
- Phillips, D., & Swoboda, F. 1996. ValuJet adds routes to cities where USAir dominates. *Washington Post*, January 25: <https://www.washingtonpost.com/archive/business/1996/01/25/valujet-adds-routes-to-cities-where-usair-dominates/52835687-cb31-41ed-8c20-70c9d0824445>.
- Phillips, N., & Oswick, C. 2012. Organizational discourse: Domains, debates, and directions. *Academy of Management Annals*, 6: 435–481.
- Porter, M. E. 1980. *Competitive strategy: Techniques for analyzing industry and competitors*. New York: Harper & Row.
- Porter, M. E. 1985. *Competitive advantage: Creating and sustaining superior performance*. New York: Free Press.
- Reuters News*. 1996a. BA, AA plan to move closer to USAir. June 11.
- Reuters News*. 1996b. USAir sees opportunity in BA/AMR alliance. June 11.
- Rindova, V. P., Becerra, M., & Contardo, I. 2004. Enacting competitive wars: Competitive activity, language games, and market consequences. *Academy of Management Review*, 29: 870–886.
- Rindova, V. P., Pollock, T. G., & Hayward, M. L. A. 2006. Celebrity firms: The social construction of market popularity. *Academy of Management Review*, 31: 50–71.
- Schelling, T. C. 1960. *A strategy of conflict*. Boston: Harvard University Press.
- Schumpeter, J. A. 1934. *The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle*. Cambridge, MA: Harvard University Press.
- Sengul, M., Gimeno, J., & Dial, J. 2012. Strategic delegation: A review, theoretical integration, and research agenda. *Journal of Management*, 38: 375–414.
- Shannon, C. E., & Weaver, W. 1949. *The mathematical theory of communication*. Urbana: University of Illinois Press.

- Smart, C., & Vertinsky, I. 1984. Strategy and the environment: A study of corporate responses to crises. *Strategic Management Journal*, 5: 199–213.
- Smith, K. G., Ferrier, W. J., & Ndofor, H. A. 2001. Competitive dynamics research: Critique and future directions. In M. A. Hitt, E. R. Freeman, & J. R. Harrison (Eds.), *Blackwell handbook of strategic management*: 315–361. Oxford: Blackwell.
- Smith, K. G., Grimm, C. M., & Gannon, M. J. 1992. *Dynamics of competitive strategy*. Newbury Park, CA: Sage.
- Smith, K. G., Grimm, C. M., Gannon, M. J., & Chen, M.-J. 1991. Organizational information processing, competitive responses, and performance in the U.S. domestic airline industry. *Academy of Management Journal*, 34: 60–85.
- Spence, A. M. 1973. Job market signaling. *Quarterly Journal of Economics*, 87: 355–357.
- Stocken, P. C. 2000. Credibility of voluntary disclosure. *RAND Journal of Economics*, 31: 359–374.
- The Times*. 1996. BA takes on Virgin adverts. January 3.
- Tzu, S. 1963. *The art of war*. (Translated by S. B. Griffith.) Oxford: Oxford University Press.
- Vogrin, B. 1996a. WestPac downplays DIA/Visit to Denver "no big deal," says airline official. *Colorado Springs Gazette Telegraph*, February 2: D1.
- Vogrin, B. 1996b. WestPac to spread wings. *Colorado Springs Gazette Telegraph*, January 9: D1.
- Westphal, J. D., & Zajac, E. J. 1994. Substance and symbolism in CEO's long-term incentive plans. *Administrative Science Quarterly*, 39: 367–390.
- Westphal, J. D., & Zajac, E. J. 1998. The symbolic management of stockholders: Corporate governance reform and shareholder reactions. *Administrative Science Quarterly*, 43: 127–153.
- Westphal, J. D., & Zajac, E. J. 2001. Decoupling policy from practice: The case of stock repurchase programs. *Administrative Science Quarterly*, 46: 202–228.
- Whitcomb, G., & Lampl, J. 1996. America West Airlines and British Airways establish codeshare and frequent fyer alliance. *PRNewswire*, April 15: <http://www.thefreelibrary.com/AMERICA+WEST+AIRLINES+AND+BRITISH+AIRWAYS+ESTABLISH+CODESHARE+AND...-a018192419>.
- Young, G., Smith, K. G., & Grimm, C. M. 1996. "Austrian" and industrial organization perspectives on firm-level competitive activity and performance. *Organization Science*, 7: 243–254.
- Yu, T., & Cannella, A. A., Jr. 2007. Rivalry between multinational enterprises: An event history approach. *Academy of Management Journal*, 50: 663–684.
- Yu, T., Subramaniam, M., & Cannella, A. A., Jr. 2009. Rivalry deterrence in international markets: Contingencies governing the mutual forbearance hypothesis. *Academy of Management Journal*, 52: 127–147.
- Zajac, E. J., & Westphal, J. D. 1995. Accounting for the explanations of CEO compensation: Substance and symbolism. *Administrative Science Quarterly*, 40: 283–308.
- Zajac, E. J., & Westphal, J. D. 2004. The social construction of market value: Institutionalization and learning perspectives on stock market reactions. *American Sociological Review*, 69: 433–457.
- Zavyalova, A., Pfarrer, M. D., Reger, R. K., & Shapiro, D. L. 2012. Managing the message: The effects of firm actions and industry spillovers on media coverage following wrongdoing. *Academy of Management Journal*, 55: 1079–1101.

**He Gao** (gaohe1@broad.msu.edu) is an assistant professor in management at Michigan State University. She received her Ph.D. from Arizona State University. Her research interests are centered on how firms/top executives use language to engage competitors and stakeholders.

**Tieying Yu** (yuti@bc.edu) is an associate professor at Boston College. She received her Ph.D. from Texas A&M University. Her research interests focus on global strategy and competition, competitive dynamics, and competitor analysis.

**Albert A. Cannella, Jr.** (acannella@mays.tamu.edu) is the Blue Bell Creameries Chair at the Mays School of Business, Texas A&M University. He received his Ph.D. from Columbia University. His research interests include upper-echelons theory, competitive dynamics, entrepreneurship, and family business.

Copyright of Academy of Management Review is the property of Academy of Management and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.