

# Competitive Sensemaking in Value Creation and Capture

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**Abstract.** We suggest that a systematic socio-cognitive approach to “competitive sensemaking” has been absent from theory and research on competitive strategy. We define competitive sensemaking as the social and cognitive processes that underlie how firms detect, define, and conceptualize their competitive relationships with other firms. Competitive sensemaking is a subset of the more general process of strategic sensemaking, which is the “making plausible sense” of the broad array of stimuli and circumstances that characterize complex market situations. Using the value-based view of value creation and capture as a conceptual base for our arguments, we unpack four cognitive underpinnings of competitive sensemaking: mental time travel, comparability, counterfactual reasoning, and stories. We then show how these four components were differentially involved in shaping competitive sensemaking in four actual market situations. In doing so, we illustrate how competitive sensemaking provides fundamental inputs into the value creation and value capture process. We conclude the paper by drawing out the implications of competitive sensemaking for strategy theory and research.

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**Keywords:** value creation and capture • sensemaking • competition • market relationships

## Introduction

In our contribution to the special issue, we ask “What makes a decision strategic?” by probing the sense-making processes that mediate between strategic actions, on the one hand, and strategic decisions, on the other. In line with the strategy literature (e.g., Thomas et al. 1993, Rouleau 2005, Rouleau and Balogun 2011, and Jalonen et al. 2018), we call this “strategic sense-making.” Strategic sensemaking occurs when market actors begin to ask questions like, “What is going on here and why?” or “Who or what are we?” or “What’s the story?” What the strategic sensemaking perspective contributes to the broader strategic management field is the recognition that answers to these “W” questions ultimately supply important cognitive inputs during the creation, development, and enactment of strategic decisions. Ghemawat (1991) argued that “strategy” enters decision making because firms must often make hard-to-reverse commitments at time  $t$  to take advantage of opportunities that they believe will be available at  $t+n$ . If market actors were infinitely flexible, Ghemawat noted, there would be no need for firms to “strategize” beyond the local transactions that are instantaneously presented to them by immediate market conditions. Time would be irrelevant. Given the necessity, and constraints, of ex ante commitments, however, strategists must project forward in time and conceive of the future opportunities those commitments

make possible. Ghemawat suggested that a key source of uncertainty in these future projections are the anticipated actions and reactions of “competitors” vying for the same opportunities. In this way, a strategist’s consideration of the competitive environment is what makes certain decisions “strategic” in nature.

It is thus not surprising that in his brief history of strategic management, Ghemawat (2002) emphasized how deeply the concept of competition has been interwoven with strategy scholarship and pedagogy over the discipline’s development. However, this development shows that the conceptualization of competition has evolved over time in at least two subtle ways. First, the field has moved from viewing competitive forces as uniform and exogenous constraints that are imposed on a firm’s strategic choices—for example, the S-C-P perspective and the positioning school (e.g., Bain 1951 and Porter 1980)—toward viewing such forces as at least partially endogenous to strategic choices and thus manipulable by the firms involved—for example, endogenous sunk costs in imperfect competition (e.g., Sutton 1991), agentic notions of the strategic “playing field” (e.g., Santos and Eisenhardt 2009 and Eisenhardt and Bingham 2017), and game theoretic perspectives championing the need for “changing the game” in markets (Brandenburger and Nalebuff 1996, Brandenburger and Stuart 2007). Second, the concept of “competition” itself has evolved, and strategy scholars now embrace a much

more nuanced and multiplex view of both competition (“rivalry” versus “competition,” “perfect” versus “imperfect” competition, “local” versus “diffuse” competition, etc.) and how it becomes intertwined with other types of market relationships (e.g., “coopetition,” “ecosystems,” “embedded ties,” etc.). These two developments are complementary. They jointly imply that strategists have at their disposal a menu of relationship types from which to draw in their agentic attempts to shape the future (e.g., Baden-Fuller and Stopford 1992 and Hamel and Prahalad 1996) and position their firms for profitability and growth.

In this paper, we argue that strategic sensemaking provides much of the cognitive material to understand these attempts. Building on Cattani et al. (2017), our focus in this paper is on what we call “competitive sensemaking” or the social and cognitive processes that underlie how firms detect, define, and conceptualize their competitive relationships with other firms. Competitive sensemaking is a subset of the more general process of strategic sensemaking, which is “making plausible sense” of the broad array of stimuli and circumstances that characterize complex market situations. As Figure 1 suggests, competitive sensemaking is a “waystation” of interpretations connecting cues generated by competitive actions with ongoing competitive decisions (Weick et al. 2005, p. 409). Sensemaking processes are often revealed explicitly when sense is interrupted by ambiguous events requiring active interpretation (e.g., Maitlis and Christianson 2014). These interruptions can be triggered by external events, as when rival firms change their strategies and tactics in unexpected ways, or by events generated within firms themselves via top management changes or changes in strategies that require at least some equivocality reduction to be meaningful and productive.

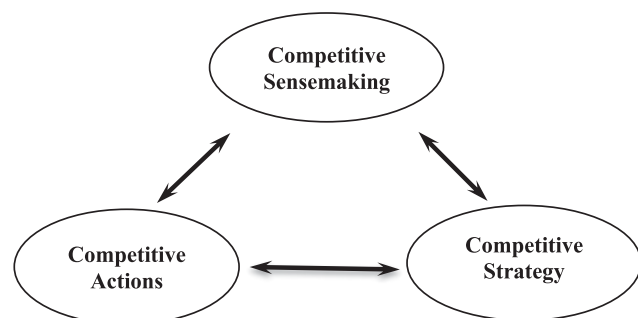
We conceive of competitive sensemaking broadly as the encoding of market cues and the interpretation of these cues using existing knowledge structures. In addition, our view of sensemaking is that it is driven by both retrospective (e.g., Weick 1995) and prospective (e.g., Gioia et al. 2002 and Kaplan and Orlikowski 2013)

cognitive processes. Competitive sensemaking occurs in an ongoing way among strategists within and across firms during the course of market behavior. Deciding to produce a new product generates inferences about what other products in the market are similar or different. Pricing one’s products is embedded in a matrix of beliefs about other firms producing and pricing similar products. Investments to enhance product quality necessarily are informed and justified by beliefs about how quality improvements will provide a firm an advantage compared with others. However, as in other domains of sensemaking, competitive sensemaking, as a socio-cognitive process shaping markets, is often overlooked in competitive strategy theory and research. As Weick et al. (2005, p. 409) observed, sensemaking “is ongoing, instrumental, subtle, swift, social, and easily taken for granted.” Our purpose in this paper is to draw out and elucidate how deeply sensemaking processes penetrate into competitive strategy.

Our key argument is that market relationships are inherently equivocal, and their essential qualities are thus established by interpretation and social construction. Competition is not “out there” impinging on firms, but instead exists among firms as they are interpreting their interactions with each other and acting accordingly. A key move for us is incorporating insights from relational sociology and distinguishing between market “transactions” and competitive “relationships” (e.g., White 1992, 2004; Tilly 2005; and 2008). The former are deals and agreements that create and capture value in markets; the latter are the actors’ understandings of the relational ties in which those deals and agreements are embedded. Transactions are real-time events that are limited in time and space. Relationships are usually intertemporal and trans-situational. Transactions are narrowly defined and proscribed; relationships are extensive and usually quite nuanced and multiplex. Drilling down into the socio-cognitive linkages between transactions and, in particular, competitive relationships, we identify four socio-cognitive components that form the basis for competitive sensemaking: (a) mental time travel across the past, present, and future; (b) comparisons and comparabilities; (c) counterfactual “what if” reasoning; and (d) the stories that connect these together into a coherent and plausible account of market relationships. In the end, our analysis is generalizable to any type of market relationship, or system of relationships (i.e., ecosystems), but in this paper we focus our attention on competitive relationships to narrow down the scope of our paper. We broaden this focus at various places in our discussion where appropriate.

Our paper is situated within the large body of research on the cognitive microfoundations of strategy that has appeared over the past two decades in the field of strategic management (for reviews, see Meindl et al.

**Figure 1.** Competitive Sensemaking as a Waystation Between Competitive Strategy and Competitive Actions



1994, Argote and Greve 2007, Kaplan 2011, Powell et al. 2011, Gavetti and Ocasio 2015, Augier et al. 2018, and Gavetti and Porac 2018). It also draws inspiration from the large literature on sensemaking processes in and around organizations (e.g., Weick et al. 2005, Maitlis and Sonenshein 2010, Cornelissen 2012, and Maitlis and Christianson 2014). At the same time, our paper builds on prior cognitive work to address what we believe to be a significant conceptual gap in the competitive strategy literature.

On the one hand, the dominant models of competitive analysis and strategy, largely inspired by industrial economics and game theory, have emphasized market structure in value creation and capture—that is, the sets of market relationships among firms, buyers, and suppliers that influence firm profitability (e.g., Brandenburger and Stuart 1996, Porter 1998, Oster 1999, and Besanko et al. 2009). The constructs of positioning, market power, and bargaining are central in these models, whereas the socio-cognitive embedding of market relationships is often pushed into the background or assumed away. And yet, there are hints throughout the competitive strategy literature that this socio-cognitive embedding both constrains and enhances creativity, heterogeneity, and agency among market actors (e.g., Brandenburger and Nalebuff 1995, 1996, Porac et al. 1995, Gavetti et al. 2005, Santos and Eisenhardt 2009, Siggelkow 2011, Gavetti 2012, Brandenburger 2017, and Eisenhardt and Bingham 2017).

On the other hand, the growing body of research elucidating the cognitive microfoundations of strategy has tended to push the economics of competitive strategy into the background by modeling cognition generically and abstracting away from the transactional and relational bases of markets. Good examples of such abstraction are “landscape” approaches to strategic cognition that model competitive strategy as a search through a space defined by all possible combinations of exogenously defined choices (e.g., Levinthal 1997, Gavetti and Levinthal 2000, and Winter et al. 2007). Each combination is associated with a payoff, and firms search these landscapes in isolation of each other, without interactions, relationships, bargaining, persuasion, and power asymmetries among other market actors who may enter and exit markets differentially over time. These models are generative on their own, but only have a loose connection to the processes of value creation and capture in real-time competitive market transactions. Similarly, the nascent literature on strategic sensemaking, as well as the sensemaking literature in general, has tended to conceptualize and study sensemaking triggered within organizations by various strategic changes or initiatives (e.g., Gioia and Chittipeddi 1991, Gioia and Thomas 1996, Balogun and Johnson 2005, Kaplan and Orlikowski 2013, and Balogun et al. 2015) and

thus has downplayed or ignored sensemaking within or about market relationships.

The challenge that we take up in this paper is to theorize and explore the socio-cognitive underpinnings of competitive markets by problematizing a standard model of value creation and capture and probing its cognitive microfoundations. We take inspiration from other recent attempts to bridge economics and cognition, such as the cognitive account of real options reasoning in factor market resource allocations by Leiblein et al. (2017) (see also Posen et al. 2018). To give substance to our own arguments in this regard, and to connect them to the literature on business strategy at large, we ground our paper in what has been called the “value-based view” of strategy (e.g., Brandenburger and Stuart 1996). The value-based view traces competitive advantage to value creation and capture within and among different coalitions of buyers, suppliers, and firms. Within the value-based view, competitive advantage is conceptualized as a firm’s marginal value within the coalition of firms that jointly create value from their participation. Recent efforts in this literature have begun to expand the approach to “value networks” of actors, each of whom contributes to network value creation (Gans and Ryall 2017). The value-based view has been called “a unifying framework for theorizing about firm heterogeneity and competition in competitive strategy research” (Chatain and Mindruta 2017, p. 1964).

We embrace this point of view, but also believe that the behavioral plausibility of the value-based framework can be enhanced by unpacking its socio-cognitive microfoundations. Although proponents of the value-based view acknowledge that actors are not anonymous and that the details of their relative identities matter, both the identities of the actors as well as the relationships that bind them together in value creation and capture are not considered problematic. Their stability is simply assumed. We supplement the value-based perspective by linking it to a social constructionist framework. Thus, our arguments embrace the equivocality of market coalitions and allow for competitive sensemaking to characterize market relationships within and between them. In doing so, we identify and develop the cognitive components of competitive sensemaking (i.e., mental time travel, comparabilities, counterfactual reasoning, and stories) that ultimately serve as a cognitive foundation from which we can understand how strategies of value creation and capture are even possible.

We call these components into relief by examining four actual cases of competitive sensemaking in action. Each case suggests questions that standard treatments of competition in the field leave systematically unanswered. With our Apple–Microsoft example, we examine how these longstanding and bitter rivals reframed their relationships in 1997 in a way that enabled the



rejuvenation of Apple's core business. The case demonstrates the loose cognitive coupling between transactions and relationships and how this loose coupling is a source of creativity in imagining new competitive possibilities. We further probe loose coupling by delving into the relationships between two New York City restaurants, Blue Poppy and Yellow Flower, whose obvious similarity strikes us as a defining feature of their competitive interdependence. And yet, their respective strategists have constructed alternative accounts of the market in which each restaurant occupies a distinct and nonoverlapping market position. This case shows that "comparability" is always open to judgment and interpretation. We elucidate the equivocality of market relationships further by next examining the case of Clark Foam, a long-time monopolist supplier of foam blanks to the U.S. surfboard industry that unexpectedly and decisively ceased operations in 2005, leaving surfboard makers to fend for themselves. The subsequent evolution of the industry illustrates that the key isolating mechanism protecting Clark's monopoly was not a lack of viable foam alternatives, but a failure to imagine and pursue these alternatives by existing and potential market participants. Finally, we end our case discussions by unpacking the case of the Shed at Dulwich, a fake U.K. restaurant that rose to the top position of TripAdvisor rankings of London restaurants in 2017. This case demonstrates that competitive sensemaking is not confined to the strategists of incumbent firms. Rather, market equivocality spawns an array of third-party sensemakers who play an equally pervasive and crucial role in shaping competitive relationships in an industry.

Our paper is organized as follows. We begin our analysis by unpacking a simple example of a market transaction, borrowed from Robinson (1933), that illustrates the inherent equivocality of competitive relationships within value networks. We use this example to derive the four cognitive processes that we argue underpin competitive sensemaking. These base cognitive processes provide an analytical framework for understanding how strategists recognize and manage the equivocality of market relationships, and we flesh out some of the details of these processes in the second section of the paper, using arguments and evidence from the value-based view to organize our presentation. In the third section, we concretize the details of these processes by applying them to our selected cases of market competition to show how they can account for certain strategic aspects of these cases that are not as easily explained by existing arguments in the competitive strategy literature. We conclude with a discussion section that draws out the implications of our approach to competition and markets and suggests future directions for strategy theory and research.

## From Transactions to Competitive Relationships: A Motivating Example

We situate our analysis of competitive sensemaking in the value-based view of strategy (e.g., Brandenburger and Stuart 1996, 2007; Makowski and Ostroy 2001; MacDonald and Ryall 2004; Chatain 2011; Chatain and Zemsky 2011; Stuart 2016; Chatain and Mindruta 2017; and Gans and Ryall 2017; Gans et al. 2018) for a number of reasons. First, although the value-based perspective has been quite generative in promoting formal models of market-based bargaining, it also provides a broad heuristic for understanding the general competitive process at the core of markets. Second, the value-based view provides a clear and specific definition of competitive advantage—that is, added value—that is rooted in comparisons to other firms (e.g., Brandenburger and Stuart 1996, 2007). Third, as Makowski and Ostroy (2001) noted, the value-based view embraces free form bargaining among nonanonymous, fully value appropriating, and creative market actors. In contrast to neo-classical conceptions of markets that ignore or downplay the complexities of actor identities in shaping value creation and capture, the free-form character of the value-based view can be leveraged to accommodate a more systematic treatment of actor identities and their sensemaking roots. Moreover, the free-form character of the value-based view embraces, but doesn't provide socio-cognitive mechanisms for, flexible definitions of relationships within the bargaining coalition (competitors, complementors, etc.), with suggestions in the literature that capitalizing on such flexibility is a core element in creative strategizing (e.g., Brandenburger and Nalebuff 1996). Finally, recent extensions of the framework to a network level of analysis (e.g., Ryall and Sorenson 2007 and Gans and Ryall 2017) suggest links between the value-based view and theories of embeddedness in social networks in general, opening up integrative possibilities that broaden and deepen the value-based view's transactional approach to value creation and capture.

We follow the basic framework set down by Brandenburger and Stuart (1996) and build out our arguments about competitive sensemaking by pushing deeper into the epistemic foundations of their approach. For Brandenburger and Stuart (1996), the existence of the roles of "Buyer," "Firm," and "Supplier" arrayed in a transactional chain are considered as conceptual givens. Such chains are commonly used as starting points for strategic analysis. A simple example is schematically summarized in Figure 2(a), consisting of transactions involving one firm (Alpha), one buyer, and one supplier. The total value created by this chain is equal to the Buyer's willingness to pay minus the Supplier's opportunity cost. The Buyer, Firm, and Supplier bargain freely over this total value by setting

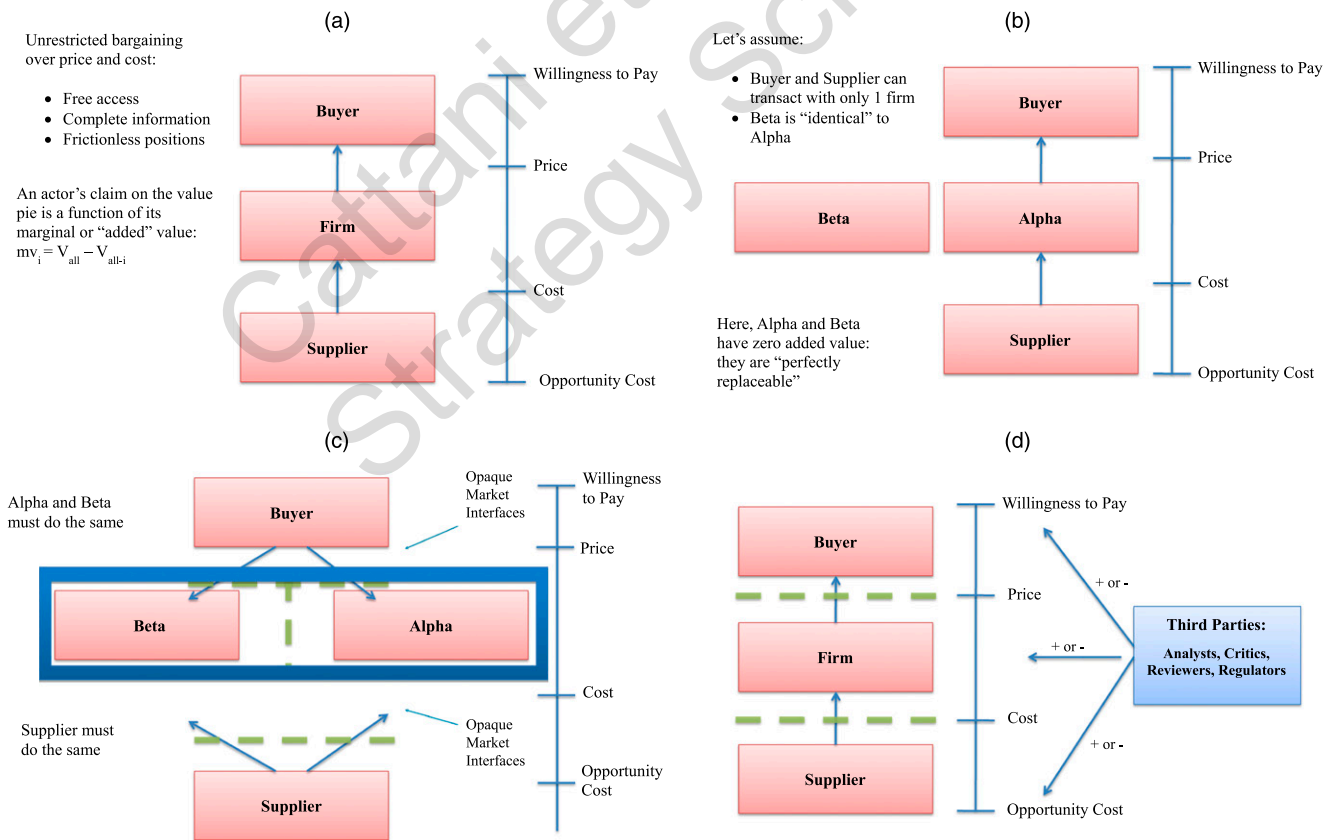
price and cost. Brandenburger and Stuart (1996) assumed unrestricted bargaining (free access to each other, complete information, and frictionless bargaining positions). Within this perspective, any actor(*i*)’s claim on value is a function of *i*’s marginal value in value creation, which is defined as the difference between the total value that is created when all actors are in the chain minus the value that is created when actor(*i*) is not in the chain. In this 1-1-1 chain, each actor’s marginal value is equal to the total value created because all three actors are necessary in order for value creation to occur. In this view, the solution to the value-capture problem is that each actor can capture anywhere from nothing to all of the value depending on the actor’s bargaining prowess.

Figure 2(b) complicates the basic 1-1-1 chain by adding another firm (Beta). Assume that the Buyer can only transact with one firm and that Alpha and Beta are “identical” in Buyer willingness to pay and supplier opportunity cost. Under such conditions, Alpha and Beta have zero added value in the market coalition because each is perfectly replaceable by the other. Thus, one would expect that the Buyer and Supplier would bargain hard to appropriate most of the value that is created. Within this framework, therefore, Alpha’s marginal value

is a function of whether a replacement is in the market. As Brandenburger and Stuart (1996, p. 15) noted, “for a firm to have a positive added value, it must be ‘different’ from its competitors.” The same is true for Buyers and Suppliers transacting with Firms. To generalize, an actor’s added value in the coalition is a function of the number of other similar actors at the same stage in the chain.

The value-based view probes the deeper transactional bases of markets and, in doing so, provides a theoretical foundation for well-known frameworks that model competition such as Five Forces Analysis (e.g., Porter 2008). However, it assumes away many of the socio-cognitive challenges facing strategists embedded in real-time market transactions. There is an even deeper socio-cognitive level of analysis in markets that a sensemaking approach suggests. First, for value-based reasoning to hold, each coalition actor must infer the identity and characteristics of at least some of the other actors. Makowski and Ostroy (2001, pp. 481–482) argued that market interfaces are equivocal because some actors know more about themselves (i.e., private knowledge) and what is being exchanged (i.e., delivery problems) than others. The equivocality of transactional interfaces has subsequently been theorized as

**Figure 2.** (Color online) Hypothetical Value Chains with and Without Opaque Transactional Interfaces



*Notes.* (a) Value creation and value capture à la Brandenburger and Stuart (1996): “1-1-1” value chain. (b) Value creation and value capture with another firm: “1-2-1” value chain. (c) Actor identity as a set of inferences embedded in opaque market interfaces. (d) Opaque market interfaces and third parties acting as sensemaking aides.

market frictions revealed in some actors being known and others not known (e.g., Chatain and Zemsky 2011). However, the equivocality rooted in transactions themselves has not been explicitly addressed since Makowski and Ostroy's (2001) efforts to use such equivocality as the basis for loosening the constraints of perfect competition. Basic roles such as buyer, supplier, and "rivals" are considered unproblematic, as are their characteristics and how these characteristics come to be known in the market. As White (1992, p. 8) observed, a rational choice model, "builds upon a myth of the person as some preexisting entity."

Second, although the value-based view provides a clear and specific definition of competitive advantage (i.e., added value) that recognizes comparisons to other comparable firms, the approach does not theorize comparability and how comparability is detected and defined among actors. There is a long history of research in cognitive science suggesting that perceived similarities and differences among multiattribute stimuli (e.g., firms) are not self-evident and, instead, are constructive outcomes of complex judgment processes. In their discussion of this research, for example, Murphy and Medin (1985, p. 292) argued that "any two entities can be arbitrarily similar or dissimilar by changing the criterion of what counts as a relevant attribute." Thus, the identities of market actors are embedded within a sense-making process in which available cues are interpreted, comparison attributes are selected, similarities and differences in these attributes are evaluated, and identities are constructed. Modeling and assessing added value rests on this sensemaking process being resolved.

Finally, as it has been conceptualized thus far, the value-based view is limited to a two-stage "biform" game (e.g., Brandenburger and Stuart 2007), where the first stage consists of reasoning about the structure of the game in the second stage. And yet, market transactions are situationally located in extended time and space. This means that transactions occurring in the present are embedded in a flow of transactions that expand both backward and forward in time. Transactions occur in real time, but the biform framework introduces the conceptual challenge of temporality in value creation and capture. Market actors must cognitively travel across time in bargaining a position, linking past and projected future transactions in the present. This temporality is recognized in the value-based view, but its mechanisms are not made explicit. A sensemaking perspective is useful here as well.

Thus, the deeper level of analysis that lies underneath value-based reasoning asks questions about identities, comparability, and temporality. To illustrate these questions, consider the following example taken from Robinson (1933, pp. 6–7) in her classic analysis of imperfect competition: "Imagine we are walking down the street and see two people, one of whom gives the other

a banana and takes a coin from him in return." How do we make sense of this exchange? Robinson suggested that this transaction is the prototype for what needs to be explained in a theory of exchange. She subdivided the problem into one of supply (why does one person give a banana for a coin?) and demand (why does one person give a coin for a banana?). However, note that this subdivision already assumes certain interpretations of the event. Robinson assumed that the holder of the coin was the buyer and the holder of the banana was the seller. There are other possibilities, however. The holder of the banana, for example, could be a coin collector coveting the coin held by the other party, convincing the hungry coin holder to part with the coin by exchanging the banana. Who is buyer and who is seller is thus a matter of interpretation, utilizing cues from the immediate situation as well as perhaps historical knowledge of the actors involved.

Now consider a complication of the above scenario. Let us now imagine a little farther down the street we see two other people, one of whom gives the other an apple and takes a coin in return. We now have witnessed two different exchanges with two different sets of actors and two different types of exchanged objects. What evidence must we have in hand to conclude that these transactions occur within a competitive market? In other words, are the transactions plausibly competitive? These questions are reasonable and seemingly intuitive in this particular situation: Bananas and apples are edible fruits, and their similarity along these dimensions allows for plausible accounts about how two geographically localized fruit vendors might compete with each other for customers. Then again, the concept of "fruit" is "infinitely dimensionable" (Cattani et al. 2017), and it is easy to define enough differences between apples and bananas to consider them different objects and plausibly not competing at all. Apples and bananas are different species, are cultivated in different circumstances and locales, and have different nutritional and taste profiles. Perhaps it is equally plausible to ask: Why would we even consider them competitors? McKenzie (2009, p. 26) takes this comparability problem in markets one step further. In his words,

Few economists would agree to add a banana, an apple, and an orange to get a statistically useful sum for scientific purposes. They are transparently three different fruit, and different "goods." However, the summing of apples could have the same inherent problem, given that different "apples" can also be different goods, used for substantially different purposes, and evaluated by their buyers in radically different ways for radically different ends, all with different quantitative and qualitative values.

And, the comparability question is not solely resolved by appealing to buyers, who may differ in their preferences and the cues (some of which are endogenous



to the alternatives available) they use to make comparisons. Comparability is equally an interpretive problem for them.

Let's complicate this situation even more. The two fruit holders are entrepreneurs who wish to build a stable and growing banana and apple business, respectively. They have to purchase additional fruit, whatever equipment they need to sell it, and find customers to buy what they are selling. In other words, they must make investments at time  $t$  to organize and complete  $Q$  unit sales at  $t + n$ . To be productive, these investments must be based on inferences about the future supply of bananas and apples, as well as the future demand. They also must be based on inferences about whether bananas and apples are preferred by the same buyers or not, as well as inferences about any new banana and apple sellers who may arrive on the scene if demand is high enough. These inferences are the sensemaking problem facing the entrepreneurs, and are constructed by interpreting cues in the situation, cues that are either recalled from the past or are available in the immediate situation. These inferences ground plausible expectations about value creation and value capture in these respective businesses.

Taken together, inferences about identities, comparability, and temporality give substance to White's (2004, p. 7) suggestion that a market "is a social construction hammered out amid the ongoing flow of business life," and that "One can trace this social construction to uncertainty facing alert actors seeking secure footing as well as continuing profitability in networks of flows." Similar to Makowski and Ostroy (2001), White conceptualized market interfaces as "opaque," arguing that commitment in the face of uncertainty created by this opacity is the central scholarly problem posed by markets. We depict this opacity heuristically in Figure 2(c) as the dotted green lines between market actors. The lines reflect White's claim that actors must make inferences about each other in the course of their attempts to exercise agency and gain some amount of control (i.e., added value) within the market coalition. These inferences are distinct from, and cut deeper than, frictions such as search and transaction costs and other barriers to trade (e.g., Chatain and Zemsky 2011). Even in frictionless bargaining, inference and social construction must still occur. In White's (2008, p. 83) words:

The term 'product,' whether light aircraft or frozen pizzas, has no independent reality as a technical or engineering matter. Its reality is induced only through the commitment of producing firms into being peers in a differentiated set which organizes terms of trade around an induced order of quality among the producers.

The production market must induce, at the same time as it renders comparable, distinctive flows from a

to-be-determined set of producers into the hands of an array of buyers becoming accustomed and committed here. This social process is what induces a definition of 'product' from the common properties of this flow.

Over time, and with regular and repeated interactions, these inferences may recede to the background as buyer-firm-supplier relationships stabilize and routinize. However, as Makowski and Ostroy (2001) argued, some degree of opacity is always present to provide interpretive "wiggle" room in markets, and ongoing social construction constitutes the socio-cognitive foundation that binds market coalitions together coherently.

One implication of market opacity is that one can distinguish between simple transactions and market relationships. As in the banana example, it is the market exchange (the transfer of a banana and coin into different hands) that is observed. The transaction itself is not a social construction. Beyond that observation, however, the meaning of the transfer, the "who" and "what" and "why" of the transaction, is inferred, and these inferences are the basis for constructing market relationships. As Tilly (2005, p. 7) argued, "Strictly speaking, we observe transactions, not relations. Transactions between social sites transfer energy from one to another, however microscopically. From a series of transactions, we infer a relation between the sites: a friendship, a rivalry, an alliance, or something else." Moreover, simply observing a single transaction does not help explain why other transactions did not occur instead. The meaning of any given transaction is at least partially determined by the transactions that occurred before it and after it in the yet-to-be-determined future. Discrete transactions occur in real time and space, whereas relationships are interpretations that abstract from discrete transactions across time and space.

A second implication of market opacity is that it opens up markets to the influence of third parties (e.g., critics, analysts, policymakers, regulators, etc.) who are not contractually involved in transactions themselves but who observe the transactions and contribute to sensemaking about them (see Figure 2(d)). The opacity of transactional interfaces makes the claims of market actors open to interpretation and contestation. Actors are "fully appropriating" and motivated to present themselves, their contributions, and their comparabilities with others in a way that is most favorable to them—that is, in a way that maximizes their perceived added value. If all relevant differences among actors—the desirability and quality of products, the reputation of the producer, product features and benefits, buyer preferences and tastes, supplier capabilities, etc.—were known with perfect reliability, firms, buyers, and suppliers could assess these claims and evaluate their plausibility on their own. The opacity of market interfaces, however, complicates the assessment of identities, comparabilities, and temporalities within the transactions themselves,

creating the opportunity for third parties external to transactions to provide independent assessments in the form of written reports, product reviews, producer rankings, and competitive categorizations of varying sorts (e.g., Cattani et al. 2017).

Most importantly for the overarching purpose of this paper, a third implication of market opaqueness is that it calls attention to the socio-cognitive micro-foundations of competitive strategizing and how strategists penetrate this opaqueness, make sense of market relationships, and create and capture value from those relationships. Our core argument is that mental time travel, comparability, counterfactual reasoning, and stories comprise the underpinnings of competitive sensemaking. They are jointly present to greater or lesser extent in any value network, at both an individual and collective level. Cattani et al. (2017) argued that individual strategists construct “industry models” of the competitive landscape that are essentially descriptions of the value nets in which their firms are embedded. Mental time travel, comparability, and counterfactual reasoning are the cognitive bases for such models, and stories connect these processes together into a coherent understanding of market relationships (see Figure 3). To the extent that individual industry models are discussed and shared among actors through stories within and between value networks, a collective understanding about key relationships within such networks can emerge. In the next section, we use our continuing example of banana and apple transactions to define each of these four components and show how together they support and embed value-based arguments within a behavioral perspective on value creation and capture.

### The Components of Competitive Sensemaking and Their Relation to Value Creation and Capture

#### Mental Time Travel in Biform Games

Brandenburger and Stuart’s (Brandenburger and Stuart 2007, Stuart 2007) notion of biform game recognizes the role of strategists’ agency in shaping competition by modeling strategic choices as a first-stage noncooperative game in which strategists choose alternative scenarios to be enacted in a second-stage cooperative game of value creation and capture. Strategists are actively attempting to manipulate the competitive situation to their own advantage in both stages, but the focus of each stage is different. In Brandenburger and Stuart’s (2007, p. 538) words:

We note that at the colloquial level, phrases such as “changing the game” or “choosing the game” are often used when conveying the idea of business strategy. The biform model fits with this language: In the first stage, the players are each trying to choose the best game for

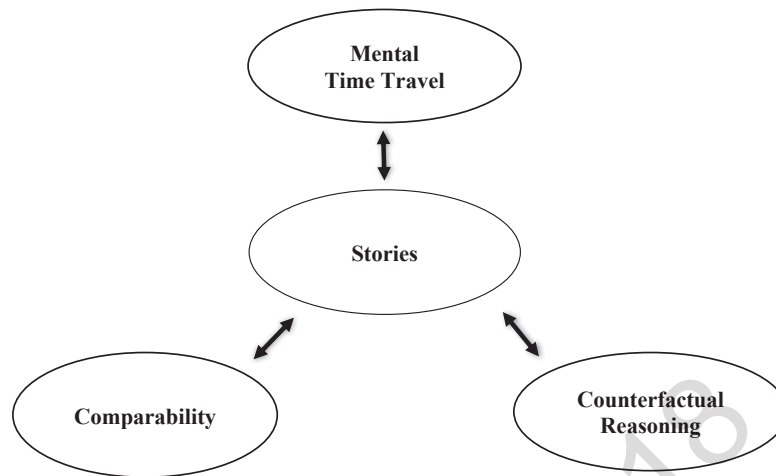
themselves, where by “game” is meant the subsequent (second-stage) game of value. Equally, they are trying to change the game, if we define one of the second-stage games as the status quo.

The biform conceptualization of competitive situations thus assumes a temporal connection between first and second stages, a connection that requires imaginative projections of future possible value games in the future. A key temporal connector in the model is the biform alpha parameter, or what Brandenburger and Stuart (2007, p. 541) called the “confidence index”—that is, how well each strategist anticipates doing in the second-stage value games they imagine as possible in their first-stage choices.

To illustrate the temporality that underlies the biform game, consider our single banana entrepreneur trying to capture value from the sale of her banana inventory to a set of  $Q$  buyers. Let’s assume she is the only vendor within a one-mile geographic radius. Stuart (2007) modeled such a situation as a biform monopoly game in which the key strategic variable is the inventory capacity of the sole seller. Stuart noted that in standard treatments of monopoly, our banana seller is considered to be a price-setter who charges a take-it-or-leave-it price for all buyers because of her monopoly power and undersupply. Stuart opened up this analysis, however, by suggesting that monopoly is a bilateral bargaining situation where residual bargaining over the core is sometimes possible. When viewed from the seller’s perspective, more value might be captured by being a price discriminator engaged in bilateral bargaining with each buyer individually rather than setting a uniform price for all. In Stuart’s (2007, p. 1012) formulation, “How the seller views this residual bargaining problem becomes central to the analysis.” If our banana seller is confident of her value capture in the second stage, Stuart would recommend that she sets her capacity to supply the whole market and that she negotiates different prices with different buyers. If she is not confident of the results of this bilateral bargaining, she should set her capacity below the market demand and charge a uniform price to all buyers.

But what are the socio-cognitive bases of the seller’s confidence in her ability to extract value in an imagined future game? The answer to this question is no doubt as complex as the seller herself (e.g., personality, values, experiences, resources, capabilities, etc.), but it at least partly involves what has come to be known as “mental time travel,” or the ability to project possibilities into an unknown future by reinterpreting the past from the present (e.g., Michaelian et al. 2016). Mental time travel subserves the “temporal work” (Kaplan and Orlikowski 2013) that is required when imagining future possibilities, or “prospection” (Baumeister et al. 2016), and has been discussed using various terms in the sensemaking (Gioia et al. 2002, Gephardt et al. 2010,



**Figure 3.** The Components of Competitive Sensemaking

*Notes.* Comparability: Constructions of similarities and differences among market actors form the basis for commitments, which in turn stabilize market transactions in a partially self-reinforcing order. Counterfactual reasoning: Constructing alternative cognitive representations to the status quo. Counterfactual reasoning responds to “what if” questions. Mental time travel: Projecting possibilities into a yet-to-be-determined future by interpreting past transactions from within the present situation. Stories: Mechanisms for socially aligning comparabilities, counterfactuals, and mental time travel in the course of value-creating transactions and bargaining by answering the question “What is going on here?” Transactions (or market ties) “are held together to constitute a network through the vehicle of stories, singly or in story sets” (White 1992, p. 17).

Wiebe 2010), relational sociology (Emirbayer 1997, Emirbayer and Mische 1998, Mische 2009), neuroscience (Schacter et al. 2007; Suddendorf and Corballis 2007, 2008; Suddendorf et al. 2011), and strategy (Gavetti and Rivkin 2007, Benner and Tripsas 2012, Kaplan and Orlikowski 2013) research literatures. According to Suddendorf and Corballis (2007), mental time travel is embedded in cognitive processes that activate accumulated episodic memories built up over time in the service of projecting possibilities into the future. In the strategy literature, for example, Kaplan and Orlikowski (2013) mapped the mental time travel embedded in the strategy-making within a single fiber-optics company facing an uncertain industry crisis. They found that the managerial team settled on a consensual strategy for the future only by constructing and reconstructing the company’s history during their planning conversations. Of particular relevance to the biform situation is the suggestion by Baumeister et al. (2016, p. 11) that prospection is quite pragmatic in an action-oriented way and is less about predicting specific events and more about predicting “choice points and other instances in which multiple outcomes are possible (and they can influence which outcome is realized).” This is exactly the problem facing the strategist in the biform model.

There is nothing new in recognizing that strategists project possibilities into the future. However, the additional recognition that projections into the future require reconstructing memories about the past importantly implies that market actors carry their pasts with them into current and future transactions. The biform representation models transactions from the

perspective of a single strategist and embraces agency in value creation and capture. Work on mental time travel suggests that agency at least partially has its roots in a market actor’s idiosyncratic history. As Penrose (1959) recognized long ago, each actor faces a unique subjective opportunity structure conditioned upon its past history and current transactional position. In the extreme, each market actor, even in bilateral bargaining, could conceivably construct a unique biform representation of “the game” that they are playing. In the end, underlying a “value net” could be some large number of individually constructed biform representations, raising longstanding questions, going back to Robinson (1933) and Chamberlin (1933), about the boundaries of industries, markets, and, more generally, the unit of analysis in studying competition. We accept this heterogeneity as a baseline attribute of market transactions and will elaborate upon it with one of our examples later in the paper.

The heterogeneous distribution of biform representations is an interesting and important empirical problem in competitive analysis. However, such heterogeneity significantly complicates competitive analysis by raising questions about the value “pie” that is being created and distributed via bargaining among a set of market actors. It also complicates the notion of added value as an actor’s “marginal contribution” to value creation (i.e., marginal compared with whom?). It is possible, and in some cases perhaps even preferable, to conceive of value nets as sets of isolated bilateral transactions, implying that a value “network” is an analytical abstraction rather than a market structure. However, White’s (2008) argument that markets emerge from mutual

commitments and common understandings across a network of producers, suppliers, and buyers suggests that mental time travel is a necessary but not sufficient component in market sensemaking. In White's analysis, a second component in the sensemaking mix is actor comparability, a crucial element in identity and identity claims (as well as actor added value).

### Comparability and the Boundaries of the Game

Let's go back to our banana and apple example and assume that we again observe a banana exchange and an apple exchange for a coin. The question then is whether these two transactions occur in the same market and so the two vendors should be viewed as competitors. Addressing this question means establishing whether the two competitors are in fact comparable—namely, whether they are in the same game and from whose perspective, that is, their own, the buyers', the suppliers', or some combination. This is a fundamental question of comparability that is unlikely to be resolved by simply observing these two transactions in the absence of other contextual and temporal cues. These cues help actors to abstract away from instantaneous exchanges and generalize them into ongoing market relationships. This allows actors to arrive at some consensus about who is inside or outside the boundaries of these relationships. It is only when this collective understanding emerges that the contribution of each actor to value creation can be evaluated.

Determining who is and who is not in a market game is a fundamental issue that is often overlooked in game theoretic accounts of market competition. More often than not, this issue is pushed into the background by simply assuming that certain boundaries exist (e.g., monopoly, duopoly, oligopoly, etc.). In the value-based approach, differences among actors are reflected in their willingness to pay or the opportunity cost they face. Yet issues of comparability must be tied back to the identity of the producers and the products themselves because identity and meaning can shape firm choices related to product differentiation and competitive positioning (e.g., Anthony et al. 2016). Using the banana and apple example, even if the buyers of the banana and the apple have the same willingness to pay for each, it does not imply that the banana and the apple are competing in the same value game. In standard economic research, this issue would be resolved by computing the cross-elasticity of demand between the banana and the apple (e.g., Berry et al. 1995). However, as we noted elsewhere (Cattani et al. 2017), cross-elasticities are ambiguous because they leave unaddressed, for example, whether the vendors pay attention to each other, or price against each other, or try to capture each other's customers, or formulate their strategies based on what the other does, or whether, and how often, customers switch over, and

so on. All of these considerations must be addressed before cross-elasticities can be meaningfully evaluated. This point is illustrated by Navis and Glynn's (2010) analysis of coalition formation among producers of satellite radio. They observed that there was an early period when prospective producers were cooperating with each other to establish the coalition, and only after there was a consensus on who was in and who was out did competition for value capture emerge. This finding resonates with the key extension of the literature on dominant designs by Grodal et al. (2015) and Suarez et al. (2015) that some level of comparability must be established through the emergence of a consensual market category before value creation and value capture become meaningful constructs.

Hence, the boundaries of networks (i.e., games) are inherently a solution to a sense-making problem (White 2004, 2008). According to White, market actors are embedded in multiple networks of relationship with others, and, as a result, they are subjected to equivocal cues from many different sources. Establishing some level of comparability accomplishes two things. First, it decouples some actors from the bombardment of cues emanating from network relationships at large. Second, it affords actors some degree of predictability and control over market events and behavior. It is only with predictability and control that the temporal work subsumed in biform games can be executed and market relationships can be stabilized, labeled, tracked, analyzed, and regulated.

However, comparability between producers and their products is infinitely dimensionable (Cattani et al. 2017), and comparability is always established in one or more limited respects that become salient because of one's underlying theorizations about the market (e.g., Durand and Paoletta 2013) and/or one's theory of value (Felin and Zenger 2017). Comparability is itself a distillation that must be hammered out via market processes. For example, the minivan was initially a contested market with different vehicle configurations vying for acceptance. Eventually the category coalesced around front-wheel drivetrains, and only the producers manufacturing front-wheel drive minivans were left to capture value (Rosa et al. 1999, Engler 2015). The respects underlying comparability, however, can change, and therefore any stability in comparability is a settlement that may be more or less stable. This means, as White pointed out, that comparability is elusive and ongoing. Given the abundance of evidence highlighting the socio-cognitive processes that underlie comparability in markets, an interesting extension of the value-based approach would be to consider market coalitions with fuzzy, or graded, membership (Branzei et al. 2008). That market categories are fuzzy sets has been recognized, for example, by Hannan et al. (2007), among others. We draw out some of the implications of comparability and fuzziness in our discussion section.

### Counterfactual Reasoning and Added Value

Returning once again to our banana and apple example, let's assume that comparability between bananas and apples has been established and that we can attach the "fruit" label to the market coalition. The situation is similar to Figure 2(c), if Alpha and Beta are the two fruit vendors. But now let's extend the market by assuming multiple buyers—that is, consumers on the street—and a few different suppliers of fruit—that is, fruit wholesalers. The value-based view in this situation assumes that, over time, the buyers, fruit vendors, and fruit wholesalers will negotiate among themselves for the best possible deal. Taking the firm perspective, what can the vendors expect for their value creation and capture in the situation? Within the value-based view, the amount of value the vendors can capture is a function of their respective added value in the coalition assuming unrestricted bargaining among all actors (Brandenburger and Stuart 1996). Their added values are measured by subtracting the value that would be created if either vendor is not present from the total value created in the coalition when both vendors are selling. At the heart of the value-based view, then, is the construction of counterfactual transactions whereby actors in the coalition are present or imagined not to be present, with the value consequences of this absence being evaluated (Chatain and Mindruta 2017). In the extreme, computing "added value goes beyond the simple removal of transactions with a given agent, to include a complete assessment of the new collection of transactions that would actually arise in their place" (Gans and Ryall 2017, p. 20). The engine of competitive advantage in the value-based view is thus counterfactual reasoning.

Counterfactual reasoning is an active area of both cognitive (Roese 1997; Byrne 2005, 2007) and neuroscience (Van Hoeck et al. 2015) research. According to Byrne (2005, p. 3), "People create a counterfactual alternative to reality by mentally altering or 'undoing' some aspects of the facts in their mental representation of reality." As Roese (1997) pointed out, counterfactual reasoning can be oriented toward reconsidering the past or projecting alternatives to reality into the future. Van Hoeck et al. (2015, p. 2) suggested that, in order to afford plausible inferences, counterfactual reasoning adheres to a "nearest possible world constraint." This implies that a counterfactual is usually tied to "specific situational features and prior knowledge of the situation (i.e., it requires the fewest independent changes to the actual circumstances and be maximal coherent with prior history). This constraint differentiates counterfactual thought from less constrained fantasy or imagination ..." (Van Hoeck et al. 2015, p. 2). In this view, to be plausible, counterfactual reasoning should reflect small deviations from reality, and, in fact, it has been demonstrated that counterfactuals are often used to renormalize deviations from normality (Roese 1997).

This view is consistent with current operationalizations of counterfactual reasoning in the value-based literature. For example, Chatain and Mindruta (2017) tested the assumption—often stated in the value-based literature—that "no good deal goes undone" by examining value creation within relationships between law firms and corporate clients in the United Kingdom. They compared the value created by the allocation of specific tasks within existing firm–client relationships to the value created in counterfactually generated alternative allocations within the same relationships. They found that existing task allocations were superior to counterfactually generated allocations and suggested that there are strong constraints among law firms and their clients against pursuing deals outside current relationships, given the costs of creating new relationships with new partners. Within these constraints, their data suggest that law firms and their clients were able to settle on value-maximizing relationships. In our banana and apple example, Chatain and Mindruta's observations would imply that the vendors, their suppliers, and their buyers would work out among themselves the best possible value-creating deals and that each actor's respective added value would be evaluated within the context of these deals and the alternative deals that would be possible among the same set of actors.

Another more general view of counterfactual reasoning, however, is that it is the basis for imaginative thought (Byrne 2005), which includes opportunity recognition and creation (Gaglio 2004). Gaglio (2004, p. 539) argued, for example, that "counterfactual thinking quite simply means thinking in a way that is contrary to existing facts." In her view, counterfactual reasoning is the pathway taken by alert entrepreneurs who "are willing to abandon the existing means-ends framework" (Gaglio 2004, p. 535) to imagine profitable alternatives to the status quo. This view of counterfactual reasoning goes beyond the no-good-deal-goes-undone mandate to highlight the role of counterfactual reasoning in imagining new deals and new relationships that have yet to materialize. In the entrepreneurial mind, better deals can often be imagined. It is the deals "yet to be realized" that provide a future-oriented perspective on value creation. Indeed, in Brandenburger and Stuart's (2007) bifurcated conceptualization, these future-imagined counterfactuals to the status quo are the outputs of the first stage of the game. As Chatain and Mindruta (2017) noted, however, there are always costs in pursuing counterfactual deals that fall significantly outside the status quo of realized relationships. However, these costs are often manageable, and outside counterfactual opportunities can prove worthwhile given a particular time frame.

Returning to our example of the banana and apple vendors, the banana vendor could perhaps focus on one divergent respect of the status quo and generate a



nearest possible world counterfactual by imagining, for example, what adding organic bananas to her current product offering would mean for her value creation and capture. Or, she could choose to significantly depart from the status quo and reconceptualize her current business more fundamentally in an attempt to expand her opportunities beyond realized relationships by starting to sell both fruit and nonfruit products. If both vendors are engaging in such imaginative counterfactuals to the status quo, one can easily see how this simple duopoly of a banana and apple vendor can evolve over time into something dramatically different.

### Stories and Market Relationships

Value-based theorists have focused on the conceptualization and consummation of transactions among market actors in and around value chains. Earlier, we cited Tilly's (2005) distinction between transactional ties and relationships, and this distinction is important for understanding the role of our fourth building block of competitive sensemaking: market stories. Stories are mechanisms for socially aligning mental time travel, comparability, and counterfactual reasoning in the course of value-creating transactions and bargaining by answering the question of "what is going on here?" (Fuhse 2009, p. 52). Stories are central to the sense-making perspective (e.g., Weick 1995), but, more generally, our emphasis on stories as integrative strategic constructs aligns with a broader narrative turn in the strategy and organizations literature (e.g., Barry and Elmes 1997, Hardy et al. 2000, Hendry 2000, Vaara et al. 2004, Jarzabkowski and Sillince 2007, Kaplan 2008, and Vaara 2010). Our emphasis on the importance of stories in market relationships is heavily influenced by White (1992, 2004, 2008) and relational sociology (Emirbayer 1997, Fuhse 2009). In this view, transactional ties are real-time juxtapositions of market actors that are not meaningful unless connected to cultural frameworks that plausibly explain: "What is going on here?" This connection happens through stories that embed the transactions within meanings that can be conveyed across time, space, and actors via conversations and other narrative forms (e.g., reports, transcripts, media articles, emails, tweets, etc.). As White (1992, pp. 67, 88) argued, "a tie becomes constituted with story" and "all ties are defined by, and induce and respond to, stories." In the case of repeated transactions, or single transactions extended across time, stories are the mechanism that encapsulates agreements and/or disagreements on comparabilities, interpretations of the past, expectations for the future, and any plausible counterfactuals that are being used within bargaining episodes (see Figure 3). Stories provide actors with rationales and justifications for their beliefs, expectations, and claims, and, in doing so,

create a "maneuvering space" for bargaining (Azarian 2005, p. 52). In White's (1992, p. 84) words, "stories are vital to maintaining as well as generating social spaces for continuing actions," and "social networks emerge only as ties mesh with stories" (White 2008, p. 27). One important implication of this perspective is that there is not a distinction between "competition" and "persuasion" as some have suggested in the value-based literature (e.g., Ryall 2013 and Gans and Ryall 2017). Relational stories penetrate into the very meaning of transactions themselves, and it is these stories that can be used strategically in the course of *both* value creation and capture.

Another important implication of this argument is that any given transaction can be embedded in multiple stories that reflect different types of agreements as well as different relationships with other parties in broader networks. Azarian (2005, p. 38) argued that "social ties obviously show an enormous variety. Depending on what is being transferred or exchanged in ties, these can reflect cooperation as well as competition, friendship as well as hostility, love as well as hatred, or conflicts as well as solidarity." Moreover, in many cases, a dyadic transaction is embedded in multiple relationships spanning a variety of domains comprising a broader network of networks, or "netdoms" (White 2008, p. 3). Each relationship is constituted by a different story, and thus multiple stories can be told about a single dyadic transaction. Although some in the value-based view (e.g., Gans and Ryall 2017) have suggested one force of competition (i.e., added value), a relational story-based view of transactions implies that competitive *relationships* are multifaceted and multiplex, with subtle shades of meaning differentiating among different relational stories. Any given set of transactions might elicit stories such as "two dogs and one bone," "gentlemanly competition," "cutthroat rivalry," or "playing within the rules," etc. Also, competition can shade into cooperation and vice versa, with market relationships being a mix of the two (e.g., Ingram and Roberts 2000 and Ingram and Yue 2008). Indeed, it is fundamental to the value-based view that market relationships mix cooperation and competition (Brandenburger and Nalebuff 1996). Our notion of story-based competitive sensemaking helps to flesh out the socio-cognitive underpinnings of this key insight. In the end, a story-based view of competitive relationships suggests that there may be as many types of market relationships as there are stories to tell about market transactions.

Returning once again to our banana and apple example, once comparability and counterfactuals have been worked out, the transactional ties binding the two vendors to each other and to their buyers and suppliers are settled and stabilized by the "talk" that occurs among all parties. The cues triggering these stories are many and are embedded in the actions taken

to consummate deals. Some cues are subtle; others are obvious. These include the quality of the fruit being offered, where the vendors locate relative to each other, their personal characteristics and those of their buyers and suppliers, the hours of operation, and standard metrics of competition such as prices and quantities. Cues are also generated by actions taken in other netdoms in which the actors might interact, such as clubs, churches, and schools. The stories that these cues afford enable the vendors to frame their relationship as being vicious rivals attempting to drive each other out, friendly competitors who recognize their complementarities, or individual sellers who have no relation to each other at all. Indeed, given the multiplexity of market transactions, more than one of these stories might be plausible (e.g., Sonenshein et al. 2017).

Grounding the value-based view in a sensemaking approach to relational networks is increasingly important given recent efforts to expand value-based thinking from simple value chains to more complex value networks (Ryall and Sorenson 2007, Ryall 2013, Gans and Ryall 2017). According to Gans and Ryall (2017, p. 18), a value network is “a collection of agents connected to one another via chains of transactions that, taken together, ultimately result in the production of economic value. The network includes all agents involved in the production of value, from the most upstream resource providers all the way down through the final consumer.” Yet another implication of our approach is that value networks are not out there as exogenous transactional landscapes, but, instead, are accomplishments that are talked into existence on an ongoing basis through stories that reflect comparabilities, counterfactuals, historical recollections, and expectations for the future. These stories are not merely descriptive. They *constitute* competition, in its many nuanced forms, as well as any number of other types of market (e.g., cooperation, complementing, etc.) and nonmarket (e.g., kinship, friendship, etc.) relationships in which value creation and capture are embedded.

By embedding transactions within story-based relational networks, a fourth implication of our arguments is that relational stories can be deployed as tools for managing and manipulating transactions. White (1992, p. 92), for example, argued that “to manage is to make use of ties,” and he identified three general classes of network maneuvers: interpretive ambiguity, social ambage, and decoupling. Interpretive ambiguity can be a strategic gambit given that any transaction can generate multiple stories and thus be embedded in multiple kinds of relationships. White (1992, p. 106) suggested that ambiguity is essentially the “spread in stories” that are used to make sense of any set of transactions. Our banana and apple vendors, for example, would be using interpretive ambiguity if they refuse to label their relationship as purely competition or

cooperation and admit to more nuanced multiplexity. Sometimes such ambiguity is to be avoided, but at other times, it is a source of opportunity and flexibility. With ambage, White recognized that indirect transactions can be used strategically to influence direct transactions. A good example of ambage in value networks is Brandenburger and Stuart’s (2007) branded ingredient game where a supplier who is not directly transacting with the end buyers in the chain attempts to increase his or her own value capture by raising the willingness to pay of these buyers through a branded ingredient deal. In our fruit vendor example, this would be illustrated by a famous organic farm supplying branded apples that allows the apple vendor to charge more for his or her fruit, thereby expanding the value pie for everyone. Finally, decoupling refers to the ways in which actors actively and consciously avoid connections and dependencies. Decoupling is the opposite of coupling. In White’s (2008, p. 36) words, “Coupling describes the way in which different parts of social structure are interlinked to work together, whereas decoupling designates the processes that lead each part to deal with some aspects of the ‘work’ and to ignore others.” In market contexts, by emphasizing certain respects of comparability and not others, market actors attempt to segment and isolate their transactions in order to create or capture more value. With our fruit vendors, decoupling would be evident if the two sellers continually claim uniqueness in efforts to isolate their respective transactions from each other. Alternatively, decoupling would also be evident if the two vendors cooperate in buffering their transactions from the large supermarket located 2 miles away by convincing buyers that their fruit is cheaper or better. Expanding the value-based view to networks of market relationships opens up the perspective to White’s (1992, p. 92) observation that “seeking, or observing, effective control thus requires making use of and understanding how networks operate, and how a network both is shaped and can be further shaped thorough the very actions on which it impacts.” In the next section, we animate and give substance to this insight with short cases exemplifying competitive sensemaking in real-world contexts.

### Grounding Competitive Sensemaking in Four Illustrative Cases

Figure 3 summarizes our conceptualization of competitive sensemaking schematically. Competitive sensemaking consists of reasoning about comparabilities; mental time travel between past, present, and future states-of-the-world; and counterfactual inferences that underlie the assessment of “better” or “worse” transactional possibilities. Relational stories bind these three socio-cognitive elements together and are the vehicle for extending these processes across market actors,

time, and space. As such, stories can both stabilize and institutionalize competitive relationships as well as disrupt and/or reconceptualize them, depending on the circumstances and the actors involved. In this section of our paper, we concretize this argument and illustrate competitive sensemaking with four cases from actual businesses and industries. Together, they provide a range of examples and conundrums that, we argue, are best understood as cases of competitive sensemaking in action. Table 1 summarizes these cases and the issues that they suggest.

**Creative Reframing of Competitive Relationships: Apple vs. Microsoft in 1997**

The longstanding relationship between Apple and Microsoft corporations illustrates all four components of competitive sensemaking and how they can contribute to creatively framing and reframing market relationships. For much of the 1980s and 1990s, Apple and Microsoft were the titans of the nascent personal computer industry. With the invention of the microprocessor early in the 1970s, computational devices could be made smaller and cheaper, and both companies took advantage of the paradigm shift to microcomputing in the industry. Microsoft was founded by Bill Gates and Paul Allen and got its start developing a BASIC interpreter for the MITS Altair microcomputer introduced in late 1974. Apple was founded by Steve Jobs and Steve Wozniak and shipped their first commercially successful microcomputer, the Apple II, in June 1977. Microsoft supplied a BASIC interpreter for the Apple II as well, marketed by Apple as Applesoft Basic. Over the next decade, Microsoft grew to be a major software supplier for Apple machines, and then later for IBM microcomputers. Apple’s Macintosh computer, the first successful device incorporating a graphical user interface (GUI), was bundled with several Microsoft products that helped to propel the Macintosh’s commercial impact. In a 2012 interview, Bill Gates reminisced about the early cooperation between

Apple and Microsoft in noting that, “We had periods, like the early Macintosh, when we had more people working on it than they did” (Riddell 2012). In 1988, however, Apple filed a patent infringement lawsuit against Microsoft, claiming that the company copied the core of the Macintosh’s GUI. After a final appeal, the Ninth Circuit Court ruled in favor of Microsoft (35 F.3d 1435, 1994), and by 1995, Microsoft’s Windows software had become the dominant microcomputing platform.

The resulting animosity and rivalry between the two companies, and their founders Gates and Jobs, escalated into bitter stories of each other’s failings. In 1995, Steve Jobs, who had been ousted from Apple a decade earlier, did not mince words when asked in an interview what he thought of Microsoft. He replied, “The only problem with Microsoft is they just have no taste. They have absolutely no taste. And I don’t mean that in a small way, I mean that in a big way, in the sense that they don’t think of original ideas, and they don’t bring much culture into their products” (PBS 1996). He stressed that, “I am saddened not by Microsoft’s success, I have no problem with their success, they have earned their success, for the most part. I have a problem with the fact that they just make really third-rate products.” Similar animosity was expressed in the reverse direction by Microsoft’s Gates. When then-Apple CEO Gil Amelio moved to acquire Jobs’ NeXT software in 1996 and bring Jobs back to Apple, Gates reportedly told Amelio, “I know his technology, it’s nothing but a warmed-over UNIX, and you’ll never be able to make it work on your machines. Don’t you understand that Steve doesn’t know anything about technology? He’s just a super salesman. I can’t believe you’re making such a stupid decision ... He doesn’t know anything about engineering, and 99% of what he says and thinks is wrong. What the hell are you buying that garbage for?” (Weinberger 2017).

By 1997, Jobs had replaced Amelio as the CEO of Apple and was confronted with a company that by all

**Table 1.** Four Examples of Competitive Sensemaking in Action

Case	Key sensemaking components	Insights regarding value creation and capture
Apple vs. Microsoft	Mental time travel, comparability, counterfactuals, and stories in the creative reframing of the relationships between the two companies.	Transactions are embedded in relationships. Relationships are multiplex and evolving. Biform representations are endogenous.
Blue Poppy vs. Yellow Flower	Discerning comparability (or its absence) among seemingly homogenous competitors.	The elusiveness of comparability and competition with infinitely dimensional firms.
Clark Foam	Credible stories championing the status quo inhibit counterfactual imagination.	The subtlety of added value and its contestability. Some good, and near-neighbor, deals go undone. Monopoly as a failure of counterfactual imagination. Socio-cognitive entry barriers can be powerful.
The Shed at Dulwich	Third parties pumping stories into value nets supplying historical cues, comparabilities, and counterfactuals.	Third parties play an important role in value creation and capture by reducing transactional opacity. Reducing opacity primes transactions and relationships.



accounts was 60 days from bankruptcy. On August 6th of that year, Jobs stood before the Apple faithful (e.g., developers, journalists, and customers) at the annual Macworld conference and proclaimed (see Dernbach 2008):

Apple lives in an ecosystem and it needs help from other partners, it needs to help other partners. And, relationships that are destructive don't help anybody in this industry as it is today. So during the last several weeks we've been looking at some of the relationships, and one has stood out as a relationship that hasn't been going so well, but has the potential, I think, to be great for both companies. And I'd like to announce one of our first partnerships today, a very meaningful one, and that is one with Microsoft.

Jobs went on to announce cross-licensing deals with Microsoft as well as Microsoft's agreement to purchase \$150 million of nonvoting shares of Apple stock. Jobs was roundly booed by the audience, as Bill Gates, who was also booed, looked on in a video conference. One journalist who attended the session described the moment as "surreal" and went on to write that "Even in cyberspace it is odd for one company to bail out its only rival in a key area of business" (*New York Times* 1997). Despite the negative reaction, Jobs' deal with Gates was wildly successful and helped to pave the way for Apple's singular turnaround over the next decade.

In 2007, both men were interviewed together on stage at a conference, and Jobs was asked to explain his logic for the 1997 deal with Microsoft in the face of their especially contentious rivalry and stakeholders who criticized the cross-licensing agreements. He replied (see Israelson 2007):

Well, a lot of people's heads were in that place at Apple and even in the customer base because, you know, Apple had invented a lot of this stuff and Microsoft was being successful and Apple wasn't and there was jealousy and this and that. There was just a lot of reasons for it that don't matter but the net result of it was, there were too many people at Apple and in the Apple ecosystem playing the game of, for Apple to win, Microsoft has to lose. And it was clear that you didn't have to play that game because Apple wasn't going to beat Microsoft. Apple didn't have to beat Microsoft. Apple had to remember who Apple was because they'd forgotten who Apple was. So to me it was pretty essential to break that paradigm, and it was also important, you know, that Microsoft was the biggest software developer outside of Apple developing for the Mac ... So I called Bill up and tried to patch things up.

The evolving interactions between Apple and Microsoft over the years illustrate the multiplexity of market relationships, as well as the ongoing sense-making challenges this multiplexity creates. The stories told by and about these companies, and their CEOs, cycled through a variety of meanings and labels from

intense rivalry, even animosity, to friendly competition, to the recognition that they were not competing so much as cooperating. Many reasons for the 1997 agreements have been offered up by pundits and industry experts, but we take Jobs at his word in explaining his reasoning when asked to do so in 2007. The story that he told about the relationship between the two companies integrates all three of the other sensemaking components. Through mental time travel, he framed the animosity by embedding it within an historical context and essentially argued that history no longer mattered when evaluating the relationship in the present and projecting it into the future. He constructed a key counterfactual by arguing that the zero-sum game in the minds of many Apple employees was not the only way of thinking about the relationship and, indeed, was no longer productive. Finally, in arguing that "Apple didn't have to beat Microsoft" and only needed to return to its roots, Jobs was implicitly decoupling the old rivalry and recoupling the two companies in a different relational frame by emphasizing different respects of their existing comparabilities that were being downplayed or ignored altogether—that is, that Microsoft was still a major software supplier for Apple, as it had been for many years.

One could analyze this situation using the biform framework and consider Jobs' reasoning as the first-stage framing of the game between the two companies, with their subsequent interactions being the second-stage cooperative game. However, it is clear from this case that such a biform analysis is limited to a snapshot in time and that it is an abstraction from a longstanding and quite multiplex and evolving relationship between the two companies. It is difficult to account for Jobs' reasoning without understanding the history and nuances of this relationship, making any static biform representation endogenous to the relationship itself. This endogeneity is one reason why a distinction between competition and persuasion (e.g., Gans and Ryall 2017) often breaks down. In this case, the persuasive element was most pronounced in Jobs attempting to convince others, both within and outside the company, that his creative reframing of Apple's and Microsoft's relationship was plausible, which he eventually did. The subsequent bargaining over the resulting pie was not contentious.

This case also complicates one of the key assumptions of the biform framework that "no good deal goes undone" (Stuart 2016, Chatain and Mindruta 2017). In our sensemaking framework, "deals" are the outcome of counterfactual reasoning, and thus the distinction between realized and unobserved deals is a matter of competitive sensemaking rather than something inherent in the situation itself. A good deal within a rivalry frame might be quite different than a good deal within a cooperative frame, and thus no good deal goes

undone is contingent on a particular definition of a market relationship and the counterfactual reasoning it triggers.

### Comparability, Infinite Dimensionality, and The Elusiveness of Competition

The Apple–Microsoft case demonstrates that opaque market interfaces and the competitive sensemaking they induce are sources of market creativity supported by various stories promoting different conceptions of value creation and capture at different times based on different relational frames. The Apple–Microsoft deal was consummated because the CEOs of both companies, who had known and worked with each other for many years, settled on a common relational frame that allowed them to “see” new possibilities in the future. Such joint story-telling and settlement in markets, however, is not inevitable because different market participants can interpret the many equivocal cues from transactions in different ways using different nuances of meaning depending on their unique histories. As White (1992, p. 37) noted, “There will be many distinct perceptions, many stories about particular ties and interconnections of ties.” As we noted before, this heterogeneity adds another layer of complexity to market interactions because heterogeneous framings of relationships can lead to asymmetric understandings of actor comparabilities, and hence the boundary of the market coalition, as well as non-reciprocated market relationships within the coalition (i.e., when actors construct different bifurcated representations of the situation).

We have encountered these complexities in our ongoing field research exploring competitive relationships among New York City restaurants (e.g., Sands et al. 2018). New York City is home to about 20,000 restaurants across the five boroughs, and the food and beverage industry is one of the top five employers in the city. Standard metrics that are used by strategy scholars to measure the intensity of competition in a market would suggest that New York City is one of the most competitive restaurant markets in the world, and one of the most sophisticated. This said, one of the clearest conclusions that we have reached from more than 2 years of interviewing restaurant owners and managers is the multiplexity of relationship configurations in the industry and how much restaurateurs struggle to frame their relationships in competitive terms. To illustrate these complexities, consider two sampled restaurants that we, as researchers, have spent quite a bit of time analyzing: Blue Poppy and Yellow Flower (all restaurant names that appear in this section are pseudonyms). These two Manhattan restaurants are located next door to each other on a busy street. In fact, they are so proximal to each other that it is easy to enter one of them even when intending to have dinner at the

other. Both restaurants serve only vegetarian fare with vegan options; they share similar classifications on key third-party review websites such as Yelp!, OpenTable, and TripAdvisor; and they are rated similarly in their consumer evaluations. Their menus overlap substantially, with both restaurants offering soups, salads, sandwiches, burgers, dumplings, wings, fake-meat main dishes, and barbecue, as well as juices, bottled water, and desserts. Their average menu prices are within a few dollars of each other. In essence, these restaurants appear to be almost identical, and it was this similarity that caught our attention given our interest in comparability and competition. We initially believed that these restaurants represented a good base case of unproblematic comparability. Our scholarly assessment of their comparability, however, was not confirmed by the restaurant owners themselves in our interviews.

Although both restaurateurs agreed with third-party websites that categorized them as “vegetarian” and “vegan,” subtle, but critical, differences were evident in how the owners described their businesses and their relationships with each other. Blue Poppy’s owner emphasized the restaurant’s signature “mock” or “fake” meat dishes. In her words, Blue Poppy is, “Strictly vegetarian/vegan cuisine. It is basically we have everyday meals but with mock meat. It is either made with soy, wheat, or tofu, nothing is real.” She went on to observe, “[We serve] comfort food for vegetarians. The reason why people eat at Blue Poppy is because it is not real meat. So they miss a hamburger or they miss steak so we have things that have texture, they look and taste like the actual thing but it is not.” Yellow Flower’s restaurateur offered a subtly different take on her restaurant: “We are a vegan and vegetarian restaurant that is a traditional Chinese restaurant. We’re like a Chinese-fusion restaurant. We’re about a sense of healthy eating while being about to eat without doing any harm to other beings. People come for the atmosphere and service and food even if they eat meat or not. People bring their families. We are Kosher certified so we have a lot of Jewish students come here.” Despite being vegetarian and vegan restaurants, with overlapping menus and similar prices, the two restaurateurs thus emphasized different respects of their restaurants: fake meat comfort food for Blue Poppy, and harm-free, certified-Kosher Chinese cuisine for Yellow Flower.

These nuanced differences in the stories told by the two restaurateurs were also reflected in asymmetries in their understanding about whether they were competitively interdependent and bargaining against each other vis-à-vis the same customers. Blue Poppy emphasized this point:

When my restaurant is packed they have the option but they don’t go [to Yellow Flower]. So they are definitely

not a competition. ...What I do is tell the customer: ‘Hey guys, this is our routine. Let me take your name and number. You can walk around the park and I will give you a call in 45 minutes.’ People are so happy with that. If they don’t want to wait I tell them they can do a takeout. Give me ten minutes and you can eat in the park. Give these people options [of going to an alternative restaurant] and they will still buy your food.

Yellow Flower’s view of the situation was different. About Blue Poppy, Yellow Flower’s manager noted that “they are long standing and have a following in the area.” And since they are right next door, their customers would consider them to be similar enough where “if [Blue Poppy] get really busy then people come here. Like backdraft.” This asymmetry was also reflected in the comments of customers who evaluated Yellow Flower on third-party review websites. Some of the customers explicitly compared Yellow Flower to Blue Poppy, but this comparison was made in only a very small percentage of Yellow Flower reviews. More interestingly, no Blue Poppy reviewers even made mention of Yellow Flower in their comments. Lastly, Blue Poppy and Yellow Flower enumerated completely different and nonoverlapping sets of restaurants as competitors. Even in these relational constructions, however, important asymmetries were evident. For example, Yellow Flower highlighted Samantha’s “comfort food classic American but vegetarian” cuisine in describing Samantha’s as a competitor. At the same time, Blue Poppy, who described its menu as “comfort food for vegetarians,” completely ignored Samantha’s.

We noted earlier that establishing comparability from the flow of market cues is one important element in competitive sensemaking. Agreements about who is in the game and who is out of the game are the bases for decoupling a market space from the broader value network. In an effort to provide additional clarity on the relevant competitive structure between Blue Poppy and Yellow Flower, we constructed what we believed to be plausible counterfactual rivals based on archival data at our disposal (Sands et al. 2018). Our set of counterfactuals did not overlap much with the set of competitors enumerated by Blue Poppy and Yellow Flower. It is clear from our analysis that because organizations are infinitely dimensionable, market actors can construct their market relationships based on relatively idiosyncratic accounts of similarity and difference. As a result, comparability is contestable and subject to flux and change. The effect of this flux is to trigger even more sensemaking efforts to establish a common story.

Generalizing from restaurants, these conclusions make it unsurprising that competitive substitution effects across seemingly homogenous firms are often small and difficult to detect. For example, Syverson (2004) studied local ready-mix concrete markets in the United States, expecting that competition would be

localized within 35-mile geographic radii, given the high transport costs involved in shipping concrete to buyers. Within a geographic area, he expected vigorous competition among concrete producers given that their outputs are physically homogenous. Syverson (2004, p. 1219) found that a higher density of producers within geographies was, indeed, associated with increased efficiency (lower costs), but he also found that this competitive effect was dwarfed by other unaccounted for sources of producer heterogeneity. Syverson concluded that, “the results above suggest a significant role for unmeasured (and, in many cases, unmeasurable) product differentiation—subtle variations in product attributes, subjective product differentiation like brand effects, and dissimilarities in bundled goods—in explaining why we see such stark efficiency differences across plants.” Syverson (2008, p. 225) later suggested that an important source of differentiation in this market were the “personal relationships” among concrete producers and their customers. Similar results were reported on the pricing side of profitability by Kirman and Vriend (2001) in their study of the Marseille fish market. These authors observed price heterogeneity among seemingly homogenous fish mongers, which they also attributed to nuances in the personal relationships between the sellers and their buyers. In commenting on Kirman and Vriend’s results, Casella (2001, p. 203) observed that, “the terms of the transaction differ depending on the identities of the buyer and the seller. This is not the anonymous world of competitive market exchanges.”

### **In Search of Counterfactuals: Monopoly as a Failure of Imagination**

The above examples illustrate the sensemaking challenges that comparability creates and some of the solutions to these challenges constructed by market players. The case of Clark Foam and the U.S. surfboard industry illustrates the challenges presented by the demands of counterfactual reasoning. Surfing ocean waves on buoyant boards originated in Hawaii in the 19th century. By the 1950s, it had made its way to California and became a recognizable part of the American experience. The original surfboards were made of balsa wood that was light and relatively waterproof, but balsa was scarce and expensive. Two surfers, Hobie Alter and Gordon “Grubby” Clark, began experimenting in their garage with polyurethane as a substitute material, and in 1961, they created a process to mass-produce foam blanks that could then be sold to specialist surfboard makers, who would shape and “glass” these blanks into functioning surfboards. Three years later, Clark spun off on his own to revolutionize surfboards using new materials (e.g., polyurethane foam, polyester resin, and fiberglass) to redesign the shape of the board and shrink its size from



10 to 6 feet. Clark also invented his own machines and processes to produce what became the industry's most desired foam blanks. Clark blanks were reliable, relatively inexpensive, and of impeccable quality, and the business grew along with the U.S. surfing industry. By 2005, Clark Foam was producing an estimated 90% (or more) of the foam blanks used by U.S. shapers, and the company had become synonymous with surfboards in the country. In 2002, *Surfer* magazine listed Clark as the second most powerful person in the surfing industry (Carpio 2015).

Despite their importance in industrial economic theory and regulatory affairs, monopolies are rare. Yet, by all accounts, this was the situation with Clark Foam. Thus, the company presents an interesting case to examine with our four components of competitive sensemaking. From a value-based perspective, explaining Clark Foam's power in the industry is a straightforward extension of Gans and Ryall's (2017) account of value networks. The structure of the value network encompassing Clark Foam could be characterized as a many-to-one-to-many chain in which Clark purchased commodity chemicals from major chemical producers, mixed a proprietary polyurethane foam formula, and pressed the foam into blanks sold to many small "mom and pop" shapers who worked with surfers to shape and glass the board to their specifications. Because Clark Foam blanks were considered "so damn good," the company was stably profitable, while shapers entered and exited the industry with razor-thin margins (Finnegan 2006).

Explaining Clark Foam's added value, however, is a different story, and the events that transpired within the company and the industry in 2005 and beyond make this story useful for our purposes. On Monday, December 5, 2005—known in the industry as "Blank Monday"—Clark Foam abruptly and without warning ceased production, with employees instructed to destroy all molds and equipment. Panic spread throughout the shops, shapers, and customers comprising the surfboard industry. Surf historian Matt Warshaw remarked at the time, "it's the equivalent of removing lumber from the housing industry" (Etling 2005). Prices for boards skyrocketed, sales were rationed, and smaller-scale blank manufacturers, who collectively had less than 10% industry capacity, were overwhelmed with orders they couldn't possibly fill (Marcus 2005). Many shapers and board shops went out of business. The industry outlook was bleak. As one San Diego shaper remarked, "Gordon's had a diverse, excellent product line, his customer service was great and that's gonna be a very tough act to follow" (Finnegan 2006). And, Ryan Sakal, of Sakal Surfboards, admitted, "I've never used anything other than Clark Foam," he said. "I don't have any backup or any contacts on how to get anything else" (Sanders 2005).

The panic and price shocks were short-lived, however. As Clark Foam's production unexpectedly stopped, boards made from alternative materials like expanded polyurethane (EPS) were suddenly considered viable options. As the number of EPS blank producers grew, shapers also became more accustomed to working with the material, and quality and prices of EPS blanks improved. Other exotic materials were also introduced, and even NASA got involved with material development. New polyurethane producers also appeared, including a company started by former Clark employees. "We have better blanks than before," Oahu shaper John Carper told *Surfing Magazine* a few years later. "Boards are stronger and lighter" (Housman 2015). Finally, cheap blanks by low-wage Asian producers started to flood the U.S. market, encouraging shapers to offer lower-priced boards that appealed to nonsurfers and novices on the periphery of the surfing community. This expanded the market at the low end. The surfboard industry evolved into a two-tiered market, with shops supplementing their custom locally made, high-end boards with relatively inexpensive low-price boards made in Asia. Costco began selling a surfboard for under \$200 that attracted a cult following. The variety of boards of all types quickly reached an all-time high, and both the number of surfers and aggregate sales in the industry increased. As one industry participant observed, "I can't believe how proud I am right now to be a part of this and to see this coming together in every coastal town in the country. It's absolutely inspirational" (*Surfing Magazine* 2005). Given these value-creating subsequent developments, of interest to us is the question raised by a surfer journalist (Finnegan 2006) in the aftermath: "How could an entire industry have relied on a single supplier?" If so many nascent opportunities existed in the industry, why did they go unrealized, and why did industry participants wait for Gordon Clark to take *himself* out of the industry before they exploited them?

A cursory reading of the case may engender a standard strategy interpretation that centers on high "entry barriers" keeping alternative foam suppliers at bay. These barriers might include the fact that Grubby Clark was an early mover and a surfer "brand" himself, that he leveraged his proprietary knowledge and patents, kept this knowledge within the company via an obsessive secrecy, built a loyal customer base by giving shapers what they wanted, and developed a reputation as a tough competitor who undercut prices and expanded quality and service quickly in the face of competitive threats. But our sensemaking perspective affords us the lens to cut a little deeper by probing the sensemaking that supports accounts of *socio-cognitive* entry barriers. Chatain and Mindruta (2017) pointed out that supplier relationships outside the sets of realized deals are oftentimes unattractive, given the costs

of establishing trustworthy relationships with new suppliers. The standard argument here is that building new relationships will only happen if the expected value creation and capture from the new relationships are greater than the value garnered from the status quo net of any costs of establishing the new relationships. However, before this inequality can be established, the counterfactual value possibilities from new relationships must be imagined. Imagination is the mediating variable here. Theoretically, the costs could be zero, and if the counterfactual possibilities are not imagined, no outside deal will be struck. Conversely, the costs can be quite high, but if the alternatives are imagined to be valuable enough to outweigh the costs, outside deals will be explored. The core of the surfboard industry has always been surfers and shapers experimenting with new possibilities in their garages and small workshops. This was how Clark himself got his start. What makes the Clark Foam case interesting for our purposes was the imaginative disconnect between the value network supporting Clark's monopoly and the many valuable opportunities that were just a few months away if they had only been imagined by the shapers, surf shops, and surfers themselves back in their garages. So what prevented these value-creating opportunities from being imagined?

By piecing together several postmortem accounts of Clark Foam, our analysis suggests that this failure of imagination was partially induced and nurtured through the stories and missives that Grubby Clark regularly sent around to his customers. Here, the persuasive tactics of the "almost" fully appropriating Clark not only facilitated his own value capture, but fundamentally structured the entire value network. Years after Clark's sudden exit, Gary Larsen of Hobie Surfboards remarked on what struck him as most impressive about Grubby Clark over the course of his many dealings with him (Engelking 2016). He commented:

He often sent out lengthy newsletters. He would send them out every-so-often, and the way that they were written, you could see that every sentence was well-thought out. Everything was supported with evidence, everything was clear....it was just "This is what I'm saying. This is what I mean. These are the facts why I'm saying what I'm saying." Every newsletter was like, "This is the current state of the industry." Or: "These are the new blanks I'm releasing and why." "This is the new foam I'm coming up with. Why it's lighter or why it's denser." What market was it filling and why we are making it, why we are changing it. . . . Very, very clear on everything he sent out. They never left room for anyone to question what he was doing. Not until the end when he said, "I'm out." All of a sudden there were these questions, because he was always so clear spoken before that. A very transparent person. Then he was just gone.

And what was it about Clark's newsletters that was so relevant and persuasive? In our framework, his newsletters were stages for Clark's stories revealing his own mental time travel, comparabilities, and counterfactuals that, self-servingly, reinforced the traditions of the U.S. surfboard industry and the importance of preserving the status quo. In 2004, after returning from a trip to China, he wrote about the threat posed by cheap Asian imports and how "the 'backyard' quality of American board building would be highlighted, humiliatingly, by the innovations of low-salaried engineers" (Finnegan 2006). When top shapers started to experiment with more automated equipment, Clark decried these developments by arguing that they threatened the craft-based authenticity of the industry, as he also did when new board designs using alternative foams started to enter the industry at its fringes. As long as they were able to make money with his foam blanks, shapers bought into Clark's version of reality, and his longstanding history in the industry gave him the credibility to keep believing in him. And, when "defectors" did emerge, he made them pay by either cutting them off from his blanks or delaying their shipments (Finnegan 2006). The net result of his stories and muscle tactics over time was to decouple the surfboard industry from alternative value networks by spinning a consensual and self-reinforcing storyline championing the status quo.

### Creating Value with a Ghost Restaurant: Third Parties as Story Pumps

Value networks are most often conceptualized as encompassing only those actors who are directly transacting with each other (e.g., Brandenburger and Stuart 1996, 2007; and Gans and Ryall 2017). However, all markets are surrounded by "third parties" of varying types who represent what White (1992, p. 69) called "onlookers," who observe, comment on, and even influence network relationships. So far, the value-based literature has not incorporated these third parties into the value creation and capture framework, but the case of the Shed at Dulwich (Butler 2017) demonstrates how deeply into value creation and capture these third parties penetrate. Oobah Butler is a London-based journalist who once made a living by writing fake reviews for restaurants that paid him 10 British pounds for each review. He decided to take fake reviews several steps further on his own by having friends write fake reviews of a nonexistent restaurant in London—The Shed at Dulwich—that he created with the goal, successfully achieved, of making it the highest-rated restaurant on the third-party website TripAdvisor. Jeacle and Carter (2011) argued that TripAdvisor evaluations constitute a form of social trust, which allows them to become useful sources of information about available offerings. Top-rated

restaurants thus garner a lot of attention, but even more so when it comes to light that the restaurant never even existed.

Butler set out to create his ghost restaurant by first completing TripAdvisor's formal application. He then built a "Shed at Dulwich" website with photographs of imagined dishes, listed an untraceable phone number for the Shed, and had friends post five-star reviews of the restaurant online. Butler (2017) reflected on the process:

Now, I need to list an address—but doing so makes easy work for any skeptical fact-checkers. Plus, I don't technically have a door. Instead, I just list the road and call The Shed an "appointment-only restaurant." Onto my online presence: I buy a domain and build a website. Hot spots are all about quirks, so to cut through the noise, I need a concept silly enough to infuriate your dad—a concept like naming all of our dishes after moods.

The Shed at Dulwich "opened" in May 2017 as TripAdvisor's lowest-rated London restaurant (no. 18,149). Six months later, however, after some 104 TripAdvisor reviews (98 "excellent" and 5 "very good"), Butler's vision for the restaurant was fulfilled. It had become TripAdvisor's top-rated London restaurant. In Butler's (2017) words:

... Then, one night, I get an email from *TripAdvisor*. Title: 'Information Request.' ... the game is up. I've been rumbled. My fingers tremble as I open it: 89,000 views in search results in the past day, dozens of customers asking for information. ... Why? Well, on November 1, 2017, six months after listing The Shed at Dulwich online, it's London's top-rated restaurant. A restaurant that doesn't exist is currently the highest ranked in one of the world's biggest cities, on perhaps the internet's most trusted reviews site.

According to Butler (2017), The Shed's high rating on TripAdvisor primed the restaurant's value network by helping to recruit both buyers and suppliers. Customer demand for meals at The Shed increased dramatically, owing not to underlying product quality (because no actual product existed), but rather to reviewer stories on TripAdvisor reminiscing about their imaginary experiences at the restaurant and encouraging consumption by others. Butler (2017) noted, for example, that his phone started ringing constantly, with interested diners calling and saying things like, "I've heard so much about your restaurant... I know it's a long shot, as you get booked up so quickly, but I don't suppose you have a table tonight?" Butler (2017) also described receiving emails requesting reservations (which he called "appointments") and even encountering people on the street asking him for directions to the elusive Shed at Dulwich. On the other side of The Shed's value

network, upstream suppliers were also enticed by the positive TripAdvisor reviews. Butler (2017) noted:

First, companies start using the estimated location of The Shed on Google Maps to get their free samples to me. Then people who want to work at The Shed get in touch, in significant numbers. Then I get an email from the council, which wants to relocate us to a site in Bromley it's developing. Then an Australian production company gets in touch, saying it wants to exhibit us across the world in an aircraft company's in-flight videos.

The case of The Shed illustrates the fundamental role that third-party onlookers play in markets with opaque transactional interfaces by "pumping" stories of varying kinds into the value network. Cattani et al. (2017, p. 84) suggested that such stories have both "attentional" and "bargaining" effects. Third parties have an attentional effect on value networks by increasing or decreasing the salience and legitimacy of particular market actors. A pure attentional effect, for example, was reported by Tung (2015), a Yelp! engineer, who provided data suggesting that simply listing a business on Yelp! doubles the number of reader "click-throughs" to that business's website. The bargaining effect of third parties comes into play as these actors enter into competitive sensemaking within the market. Third parties can influence value creation by raising or lowering buyer willingness to pay or supplier opportunity costs, by increasing or decreasing the salience of respects that underlie comparisons and comparabilities, by highlighting and evaluating the plausibility of counterfactual transactional relationships, and by cueing historical recollections, descriptions of the present, or projections of imagined futures.

In the case of The Shed, the TripAdvisor platform pumped stories into the London restaurant market through two channels. Evocative individual reviews alerted buyers and suppliers to a new player in London's restaurant scene about which they knew very little, but were now enticed to know more. Unlike typical reviews on TripAdvisor, The Shed's reviews focused mainly on describing experiences at the restaurant and the difficulties of getting an "appointment" there. Oftentimes, however, individual reviews are treasure troves of comparisons and counterfactuals that pump comparative information into the market sense-making system (Blank 2006). In The Shed's case, relevant comparisons and counterfactuals were principally supplied through a second channel, TripAdvisor's ranking system. According to TripAdvisor (2018), the site's ranking system "compares businesses and other places of interest to travelers based on their popularity, as measured by the quality, quantity, and recency of their content on TripAdvisor." These rankings are essentially a panorama of an entire local market that juxtaposes firms against each other in a quality ordering



that cuts through the infinite dimensionality of firms by inducing comparisons on a limited set of consensually acceptable respects. Given the consensual nature of these respects, The Shed's rise to the top of TripAdvisor's London ratings was a story that communicated to a wide array of potential buyers and suppliers that there was a new and desirable trading partner in town. This story "primed" The Shed's value-creating and -capturing potential, and one can easily see how this priming effect would have privileged the restaurant's profitability if it had, indeed, actually existed.

## Discussion and Conclusions

As scholars interested in market relationships, we have interviewed many strategists about how they construe the relationships between their firms and others in their markets. Although there is a long history in the social sciences of trying to box in these relationships with seemingly unidimensional terms such as competition, rivalry, cooperation, etc., a recurring conversation that we have had among ourselves is our frustration at our inability to characterize what we hear from strategists with such simple and unitary labels. As we saw with Blue Poppy and Yellow Flower, two firms that appear to be almost identical don't agree that each other are competitors. Strategists often appear confused when we ask them about their competitors and, in fact, sometimes admit to not even thinking about their competitors. Other strategists freely discuss their competition but only by qualifying this label and recounting the many nuances of what it means and how their relationships with their rivals are so much more complex than our question implies. It is tempting as scholars to dismiss these constructions as misplaced, biased, incomplete, or in some sense "wrong." But, as we have noted elsewhere (Cattani et al. 2017), if one looks for clarity in the academic literature measuring competition in markets, one is left even more frustrated. Cross-elasticity measures of competition are time constrained and imperfect; industry classifications based on similarities and differences among firms fail to capture market relationships fully and usually account for only some of the variance in firm behavior and performance; and even antitrust courts are venues for vigorously debating and contesting market relationships. Rather than building on and extending attempts to crystallize market relationships in unidimensional terms, which means rejecting as simplistic the beliefs of strategists who comprise markets, our paper embraces relationship complexity and probes deeper into its socio-cognitive roots to account for it. We have argued that these roots are composed of four cognitive processes, and we have advanced the notion of competitive sensemaking as a critical mediating component in the competitive decision-competitive feedback nexus. This mediating role ensures

that competitive sensemaking is at least partially involved in making decisions strategic in nature.

Each of these cognitive processes has been studied by others in the strategy and cognition literature. Kaplan and Orlikowski (2013) highlighted the role of "temporal work" in strategic change, and we have generalized this notion by connecting it to the growing cognitive science literature on mental time travel and its important role in prospection (e.g., Baumeister et al. 2016 and Suddendorf and Corballis 2007). The problem of comparability is central in much cognitive research on strategy, including work on analogical reasoning (e.g., Gavetti et al. 2005), imitation (e.g., Rivkin 2000), cognitive strategic groups (e.g., Peteraf and Shanley 1997), categories and competition (e.g., Cattani et al. 2017), and strategic categorization (e.g., Rhee 2015 and Pontikes and Kim 2017). Counterfactual thinking and related reasoning processes have been implicated in entrepreneurial opportunity creation (Gaglio 2004) and strategic option generation (e.g., Garbuio et al. 2015). Finally, both sensemaking (e.g., Rouleau and Balogun 2011 and Balogun et al. 2014) and narrative (e.g., Barry and Elmes 1997) approaches to strategy and organization have called attention to the criticality of stories in strategy formulation and implementation. Our sensemaking framework contributes to the strategy literature in two ways. First, it builds upon these earlier efforts and pulls them together into a coherent socio-cognitive approach to competition and markets. Second, it fleshes out the heretofore-unexamined behavioral underpinnings of the value-based view of value creation and capture within market coalitions.

A key implication of our sensemaking viewpoint is that market relationships are constructions by the actors themselves rather than being out there as part of the general environment. The fundamental insight here comes from White (1992, 2008) that transactions are different from relationships, and the coupling between the two is equivocal and subject to interpretation. Ooba Butler took this insight even further with The Shed at Dulwich by realizing that he could prime market relationships without any transactions even occurring. As he put it, "If I can transform my garden into London's best restaurant, literally anything is possible" (Butler 2017). The "maneuvering space" (Azarian 2005) created between transactions and relationships justifies recent efforts to unpack the cognitive origins of strategy and strategic innovation (e.g., Gavetti and Rivkin 2007, Santos and Eisenhardt 2009, Martins et al. 2015, Brandenburger 2017, Eisenhardt and Bingham 2017). This space is messy, but, as the Apple–Microsoft case illustrates, this messiness at times allows strategists to change the game and reimagine value networks by drawing from or ignoring the past, rethinking comparabilities (e.g., analogies, recombinations, contrasts, narrowing or broadening market definitions, etc.),

imagining valuable alternatives to already realized transactions, and telling compelling stories that neutralize potential opposition by key stakeholders.

On the other hand, the Clark Foam case shows that market relationships can become constraining when market actors consensually define a very limited transactional space for themselves and their transactional partners. The failure of imagination that supported Clark Foam's monopoly is a case where better deals never got done because surfers, shapers, and material suppliers became embedded in a self-reinforcing "social molecule" of relationships that was decoupled from potentially valuable "outside" transactions. Folding these outside transactions into the industry required cognitive work to imagine and bargain alternatives to the status quo, and apparently, only the duress of the foam shortage caused by Clark's exit, motivated suppliers, shapers, and surfers to do so. There is a well-developed literature in strategic management exploring various inertial forces constraining and channeling strategy formulation and implementation. These forces include technological paradigms (e.g., Dosi 1982), lock-in by dominant designs (e.g., Abernathy and Utterback 1978), buyer preferences (e.g., Christensen and Bower 1996), the economics of irreversible commitments (e.g., Ghemawat, 1991), myopic learning (e.g., Levinthal and March 1993), categorical imperatives (e.g., Zuckerman 1999), and associative inertia (Gavetti, 2012). Our sensemaking analysis of the Clark case reinforces Gavetti's (2012) argument that strategic inertia is two-sided. One side is the difficulty of imagining distant alternatives to the status quo; the other side is persuading others that these alternatives actually are plausible and value-creating. Our Clark analysis, however, generalizes this insight and situates it within a relational context. Grubby Clark's commitment to the status quo prompted him to construct and disseminate compelling stories that denigrated departures from it. This monopolist's persuasiveness, on the other hand, stunted buyers' and suppliers' imagined alternatives to surfboard composition, even potentially valuable "near-neighbor" alternatives.

Gavetti's (2012) notion of persuadability dovetails nicely with value-based models of strategy in the sense that persuasiveness and bargaining ability have been recognized as important determinants of value capture within the core (e.g., Grennan 2014 and Gans and Ryall 2017). Our sensemaking analysis of the Clark Foam case suggests, however, that the core itself is a subjective construction at any given point in time and that the role of persuadability is not confined to bargaining *in* the core. Grubby Clark's genius was to be persuasive in bargaining *about* the core—who is in the game and who is not, what counterfactual deals and actors are plausible, and which are implausible and can be ignored. Explicating the socio-cognitive foundations of

value creation and capture thus endogenizes competitive relationships and persuasion; they are two sides of the same relational coin.

We believe that our analysis of the four socio-cognitive components of competitive sensemaking provides a good foundation for extending and refining the value-based literature and, more broadly, the literature on competitive strategy. Gans and Ryall (2017) called for more empirical research testing the value-based view's core premises and arguments. Our paper's emphasis on the behavioral and sensemaking foundations of value-based models suggests a few directions for future research. The first is developing a more socio-cognitive account of "added value" as a subjective construct influencing value creation and capture. In our analysis, added value is an outcome of all four of our sensemaking components. Although added value has been modeled abstractly in the value-based literature, we see much potential in empirically fleshing out how added value emerges from and is embedded in market sensemaking processes. Second, competitive sensemaking is ongoing and subtle, and value-based models tend to assume a stable and clearly defined value network in which many of the sensemaking issues (e.g., who is and who is not in the network) that we have explicated in this paper have been resolved in a consensually acceptable way. This assumption may be reasonable in many contexts for a defined period of time, reinforcing the empirical fidelity of value-based models vis-à-vis the phenomena they are meant to describe. Even in such situations, however, the research challenge is to unpack how "normal" competitive sensemaking is supporting competition as usual. Moreover, prior work on strategic sensemaking has shown that ongoing sensemaking processes are sometimes disrupted and made more explicit by equivocality generated by various "triggers," such as performance declines, strategic or top management team changes, acquisitions and divestitures, and the like (e.g., Thomas et al. 1993, Rouleau 2005, Rouleau and Balogun 2011, Kaplan and Orlikowski 2013, and Jalonen et al. 2018). This prior work raises interesting questions about the triggers for competitive sensemaking, both endogenous (e.g., Clark's persuasive stories and tactics to discredit counterfactuals) and exogenous (e.g., TripAdvisor's reviews of The Shed at Dulwich) to an existing market coalition. Indeed, The Shed at Dulwich case suggests a third line of investigation exploring the role of third parties in value creation and capture, something that is completely unaccounted for in current competitive strategy research but seems fundamental to the way markets operate (e.g., Cattani et al. 2017).

Finally, in addition to these research directions, our approach to competitive sensemaking also has implications for strategy pedagogy. Anyone who has taught

strategy using value-based concepts recognizes their power to crystallize strategic thinking in the minds of students. The concepts of willingness to pay and opportunity cost as a definition of value; added value in value capture; free-form unrestricted bargaining among buyers, firms, and suppliers; and the “profitability test” (Stuart 2016) are compelling pedagogical tools for analyzing competition and markets. Equally clear in value-based pedagogy, however, are the many sense-making challenges inherent in applied value-based reasoning, challenges that enter the classroom at various predictable points in case discussions. For example, asking students to construct an explicit representation of a “value chain” elicits a variety of perplexing questions about comparability, temporality, and market identities. The questions become even more pressing if students are asked to depict a value network. Similarly, using the biform framework to show students how to reconceptualize bargaining situations often elicits a variety of questions about how to generate creative counterfactuals and whether such counterfactuals are plausible and persuasive. Without fleshing out and considering the sensemaking infrastructure of value-based reasoning, answers to these questions trend toward being unsystematic, idiosyncratic, or even ignored. We believe that our framework lays the socio-cognitive foundation for much more coherent and behaviorally plausible value-based pedagogy.

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