The Social (Re)construction of Price and Pricing:
Organizational Perspectives

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ABSTRACT

This paper describes an ethnographic field study of the pricing process in a manufacturing firm selling products to its distributors. In the study, we address the social construction processes by which organizational members make meaning of prices and pricing. Following the logic of the social construction of reality, we treat price and pricing as a "sector of reality," a specific part of everyday life in which organizational members make meaning of their world. We treat economic theory as a "province of meaning," a realm that provides specific circumscribed meanings to the price setting experiences. We show how economic theory generates contrasting views of the market for the firms' goods. In particular, we distinguish between the general views of pricing that emerge from economic theory and the specific views that emerge from direct experience with customers. We show how the different constructions of reality lead to tensions in organizational interpretation of and action about pricing. The resulting tensions have implications for the flow of information between sales and marketing, for the rules and routines in the pricing process, and ultimately for the ability of the firm to control the price of its products. We suggest that the social construction process also has implications for incentive systems. We discuss how organizational implications have direct effects on price, a central economic construct.
We can think of managerial tools as socially constructed technology. Managerial tools such as total quality management (TQM) (Zbaracki, 1998), business planning (Oakes, Townley, and Cooper, 1998), and management by objectives (Covaleski, et al., 1998) combine rhetorics and logics of rationality and efficiency with tools based to varying degrees in some technology. The combination of rhetorics and logics underlying these tools present a problem for both managers and organizational scholars. The organizational evidence suggests that the diffusion processes for such socially constructed technologies are something of a problem, in that fads apparently based in the logics of rationality can take over the diffusion processes (Abrahamson, 1991; Abrahamson, 1996). Research on the internal organizational processes underlying the diffusion of these socially constructed technologies suggests that diffusion leads to the distortion of the technology, as for instance, in the case of total quality management (Zbaracki, 1998). Such organizational evidence is consistent with the sociological evidence that suggests that organizations come to value socially constructed technologies more because they demonstrate that the organizations are legitimate, rather than for the technical benefits that gave rise to the practices originally (DiMaggio and Powell, 1983; Tolbert and Zucker, 1983). Following that recent work on the social construction of technology, here we explore the relationship between the technology of rational managerial tools and the processes by which organizational members socially construct that technology. We extend that work in three ways. First, we focus on the internal organizational dynamics as organizations construct and reconstruct the technologies behind these practices. Second, we address how organizational members understand the technologies and their implications in the activities of the organization. Third, we address the social structure of the organization, considering both
formal and informal structural dimensions as they affect how organizational members construct and reconstruct the technologies.

Our specific context is pricing. Given our interest in the social construction of technology, pricing defines an interesting realm to study social construction processes. Prices are at once both social real and socially constructed. Given how central prices are to economic behavior, pricing quite clearly fits a social realist view of the world. First, from the standpoint of economics and marketing, price is considered the “moment of truth,” the point at which an organization must accept its value in the very real terms of an exchange. Second, the organization cannot dictate those terms. The terms of exchange are set in relationship with other organizations by the market. An organization must accept its own market position and the market position of its competitors in setting prices. Moreover, the terms of the exchange are largely established by the institutional environment set in the marketplace. Third, the organization itself, in response, also publishes its own list prices and related terms of exchange (including various discounts, rebates, and related special pricing offers). These prices also become, as published terms of exchange, social facts. At the same time, organizations also treat prices as social constructions. Although market structures set the terms of exchange, both prices and pricing practices are themselves subject to social negotiation at the individual level, the market level, and the institutional level. At the individual level, published prices and the use of those prices are subject to negotiation. An individual seeking to negotiate prices at a department store (See, for example Salancik on field stimulations.) has reconstructed two social facts: the list price and the pricing practice of paying the list price. Alternatively, an individual firm might offer some form of discount in order to influence the agreement between a customer and the competitors. At the market level, organizations seek to influence the behavior of
competitors through their price setting. Pricing strategists argue that effective pricing involves understanding and predicting competitor behavior, and even sometimes controlling competitive behavior through pricing practices (Nagle, 1987: 103). List prices are more than simply social facts; they are tools by which organizations can construct perceptions of the firm in the marketplace, perhaps as a low price leader, perhaps as a premium producer. At the institutional level, organizations might seek to influence pricing behavior through law suits, thereby either using the institutional structure to define the competitive landscape (Nagle, 1987: 101) or even altering the institutional structure to redefine the competitive landscape. Prices, then, are socially real, in that they demand that an individual respond rationally to them as facts in the social environment, but also socially constructed, in that they mark agreements between several people about the position of the firm in the marketplace. Moreover, prices mark the centerpiece of market-based economic activity; they are not at the periphery of the legitimacy of a technical firm; they define and describe the legitimacy of the output of the firm. For a market-based organization, pricing is an inescapable reality of the institutional environment.

Following the recent example of research on total quality management (Zbaracki, 1998), we ground our observations on price and pricing in three dimensions of the social construction of reality (Berger & Luckman, 1966). The first dimension of social construction is the everyday reality that people construct as they engage in defining prices and pricing practices. We include in the everyday reality of pricing all of the various aspects of organizational life: the various roles, rules, and routines that people follow in their daily activities. The second dimension of social construction we consider consists of the various sectors of reality that make up the everyday life in which people live (Berger & Luckman, 1966: 24). These sectors of the reality of
everyday life define specific realms in which meanings might be routine—as, for instance, the role of salesperson or marketing analyst—and realms in which meanings are problematic—as, for instance, a sales role that has grown ambiguous because a new occupant has sought to redefine that role. The third dimension of social construction that we consider consists of the provinces of meaning that individuals might bring to bear on their everyday realities. Here we consider economic theory as a province of meaning that might be applied to pricing practices. Economics provides specific circumscribed meanings that shift an individual out of the everyday reality into a realm of theoretical constructs. For example, economists would expect that organizational members engaged in pricing of products would consider “price elasticities” (a ratio that relates the change in demand for a firm’s product, given a change in the price of that product). We use these three dimensions of the social construction of reality in order to understand how people make sense of their everyday life.

As we address pricing, in addition to addressing the construction of the technology of pricing, we also address the structural dimensions of the organization. We treat pricing as a battle for control. Pricing serves as a means by which a firm can establish its position in the marketplace. That view sets the organization against its environment, seeking to use price as a means of controlling its role in that environment. Price is therefore a strategic tool (Nagle, 1987; Dolan and Simon, 1996). In the concrete reality of pricing setting, however, that battle for control also reverberates through the organization. Various players participate in the pricing process. Those players take on different views of what the price should be, how the price should be set, and what the pricing process means. That specialization introduces another complexity, the problem of coordination. We are interested in that coordination problem, especially in how that problem of coordination relates to the introduction of specialized, but shared, knowledge in the
organization. Our perspective on pricing, then, brings together social construction processes, theories of agency, and structural theories (White, 1992) in order to consider how people seek to construct an understanding of price and pricing.

METHODS

Given our specific interest in developing a model of how organizations construct their prices, we chose to use qualitative, inductive field methods. Our methods are not unprecedented for such a question, even for economists. Blinder, et al., (1998) in a rare excursion by economists into organizations, found a wealth of evidence that organizational and sociological variables mattered. In that study, however, both the methods and the theories remained grounded in macroeconomic models. Our research follows that approach, but is grounded in the tradition of qualitative, organizational research (Eisenhardt; 1989; Miles and Huberman; 1984). In addition, given our focus on the cost of pricing, we supplemented our methods with industrial engineering methods aimed at defining organizational processes and times (time study book).

Data sources

Our study involved an intensive analysis of the pricing practices of a moderate-sized industrial firm that produces a variety of components used to help maintain machinery. The firm sells its products to a combination of other firms, either directly to the original equipment manufacturers of the machinery or to various warehouse distributors who stock the components and in turn sell the components to the end users. We chose the site for both theoretical and logistical reasons. Our theoretical reasons for choosing the site were grounded in both economic and organizational theory. From the perspective of economic theory, the research reported here is part of a broader research design aimed at defining the implications
of pricing practices. We wanted a site where the customer was not always an end user, so that we could see how firms considered the effects of their prices and price changes on other firms. We also wanted a site that would provide a diverse perspective on the cost of pricing. Previous research on the cost of pricing (Levy, et al.) had studied grocery stores. In order to broaden the settings for the cost of pricing, we sought a very different setting for this study. From the perspective of organizational theory, the research reported here sought to understand how organizations use pricing in their efforts to respond to the technical and institutional environment. In particular, we wanted to develop models of social construction processes in largely unregulated markets, a setting with a strong technical environment and a relatively weaker institutional environment. Our logistical reasons for choosing the site were based largely in the sensitivity of our subject: price and pricing. Given that prices and price structures are absolutely critical to the competitive position of the firm, we knew that we needed a setting where the organizational members could trust us with the information they revealed. We gained access to the organization through the invitation of a student in a course on pricing taught by one of the members of the research team. In the midst of his course, our team member had commented that scholars studying pricing know very little about how pricing is done, but that it appeared to be a complicated process. The student who served as our contact in the organization said “You don’t know the half of it; you should come study our organization.” The study reported here is a part of our effort to learn what we don’t know about that complicated process.

Our study covers two cycles of the “pricing season,” the fall period during which the organization sets prices, that makes up the core of the pricing process in the organization. We designed our research to proceed in two phases. In phase one, we planned to develop
retrospective accounts of the pricing process in the organization. In phase two, we use those retrospective accounts to study a current pricing season. We began phase one of our study by interviewing participants in the pricing process. Because our larger research project focused primarily on the cost of setting prices, our initial focus was the formal process of establishing list prices in the organization. We quickly discovered that pricing was a far more complicated process than that formal process: a significant part of the pricing was an ongoing activity that occurred outside the pricing season and pricing included ongoing debates about the process of setting prices. In response to these discoveries, we expanded the scope of our study, especially during phase one. During phase one we continued to gather retrospective accounts, but we made three major changes: we went further back into the history of pricing to incorporate the history of pricing as far back as the memory of any participants allowed, we added customers and former employees to the study, and we observed the ongoing pricing practices that took place outside the formal “pricing season” during which the firm set list prices. Phase two continued largely as originally intended. We observed the process during the pricing season and we concentrated on identifying features of the pricing process that were different than described by the participants. We identified participants that the retrospective accounts had missed. We gathered a variety of documents that went into the price setting process. We also identified ways in which the pricing process evolved from year to year.

Our data sources included three major sources of information. One data source was a series of interviews that we conducted interviews with 24 informants, including organizational members at the firm we studied, as well as organizational members at the customers—both the warehouse distributors and the manufacturers who put the product in their equipment. The interviews followed a semi-structured format aimed at developing a comprehensive and
detailed description of the pricing process. The interviews varied in length from one hour to over seven hours. Many of the informants we interviewed more than once; we returned as many times as necessary to elicit all the details of the pricing work the individuals did. We taped and transcribed all but two of the interviews. At those two, the informants preferred not to be taped, so there one of the team members took detailed notes while the other conducted the interview. A second data source consisted of various documents we collected at the organization we studied. The documents include the price lists constructed by the organization, product information, spread sheets used to determine prices, flow charts of the pricing activities, the documents detailing the special pricing arrangements for several years of the organization’s history, calendars and time sheets for participants in the pricing process, estimates and quotes for pricing services, meeting minutes, meeting notes, email messages, presentation handouts, and a variety of miscellaneous documents constructed during the pricing processes. The documents alone provided a fairly comprehensive history of pricing at the organization. Third, we engaged in non-participant observation of pricing at the organization. We sat in on pricing meetings, including meetings in which the organizational members defined their list prices during the pricing season and meetings in which organizational members discussed special pricing arrangements (for example, for international pricing). In our time at the organization, we observed any number of the various pricing interactions conducted by organizational members. We had organizational members demonstrate the various pricing tools they used to calculate prices.

**Data Analysis**

We began our analysis by focusing focusing on two important themes. First, we focused on the variation in descriptions of price and pricing that we observed as we interviewed the various
informants. Two things impressed us in our interviews. First, we were surprised by the amount of variation that we encountered in those descriptions. Qualitative, inductive methods call for continuing to sample informants until the point of “saturation” (Eisenhardt, 1989?), the point at which one begins to hear the same stories over and over again. Even as we approached the point of saturation in the population—the point at which we had interviewed all the informants who participate in pricing—we still hadn’t reached theoretical saturation. We continued to hear different stories. It soon became clear that pricing was a far more complicated task than we had expected. Second, we were surprised by how persuasive various points of view on pricing could be. It didn’t surprise us that different informants had very different ideas about how prices should be set; we expected that. It did surprise us, however, that these different ideas could be completely contradictory and yet sound equally persuasive, even to us as outsiders with perhaps a more encompassing and a less biased view of the organization. These initial observations about the variation in the descriptions we encountered reminded us very much of the behavioral theory of the firm (Cyert and March, 1963), in that we observed conflicting goals and an associated sequential attention to goals. The second theme, however, suggested that the behavioral theory of the firm couldn’t entirely capture the difficulty of the pricing process. Our second theme focused us on the pricing process at the firm. As another part of our overall research project, we sought to measure the cost of setting prices (Zbaracki, et al., 1998). To develop an accurate model of the pricing process, we began to build flowcharts that described the pricing process. We found that the behavioral theory of the firm accurately acknowledged the conflicting preferences that we observed, but could not capture the ongoing negotiations over the process of pricing that we also observed. We found that the pricing process included efforts to influence how the organization set prices. Moreover, the sequential attention to goals set the behavioral model of the firm in direct conflict to the
kinds of pricing process advocated in marketing approaches to pricing (Nagle, 1987; Dolan and Simon, 1996), which demand a more unified organizational approach to price setting. In short, models of managerial rationality appeared at odds with organizational theory.

We concluded that we needed to consider how the organizational processes affected the prices and the price setting processes in the organization. We took two approaches to this process. One approach focused on managerial rationality, as defined by the marketing literature that treats pricing as a rational managerial practice. We sought the foundational elements of pricing as they might apply to the firm we studied. We used these definitions to ground our study in a definition of pricing that might serve as a “province of meaning.” A second approach treated pricing as an emergent process grounded more in organizational processes and quite probably divergent from the rational practice as defined by the marketing literature. We began by reviewing all the transcripts in order to define the various perspectives on pricing. We sought all references to various pricing practices as described by the informants. We began to build a comprehensive picture of pricing as described by organizational members. We sought to define the relationship between perspectives on pricing amongst the various organizational members. From these relationships, we developed the following model of pricing.

A SOCIAL CONSTRUCTIONIST APPROACH TO PRICING

Following the logic of the social construction of reality (Berger and Luckmann), we treat price as a social construction. We treat the pricing activity as a part of the everyday reality of the various organizational members. That everyday reality consists of the various experiences, relationships, and issues they encounter on a daily basis. Some of the everyday reality relates to pricing; much of it does not. As organizational members focus specifically on price-setting,
they evoke several specific sectors of reality—particular features of their everyday reality that become problematic. They evoke the products that the firm produces and related issues of customer and market perception of those products. They evoke the various roles of organizational members. They evoke the tasks that follow from (or organizational members believe should follow from) those roles. In short, pricing evokes a variety of conflicting goals, preferences, ideas and understandings.

From an organizational perspective, such battles for control are not particularly surprising. The issues recall two theories: the behavioral theory of the firm (Cyert and March, 1963), which predicts that organizations resolve such differences through sequential attention to goals, and theories of agency and control (White) which treat such issues as occasions for battles over control. From a perspective that treats pricing practices as rational tools, however, these organizational and social dynamics present something of a problem. Theories of pricing act as “provinces of meaning,” providing specific circumscribed meanings to the price setting process. These theories are much like mental models, except that they have very specific implications. They reorder understandings of price, pricing, and the related sectors of reality, and they demand that managers reorder the organization to match the circumscribed meanings they offer. Rational managerial tools for setting price therefore link battles over internal control of the pricing process, roles, and tasks, with battles over external control of the firm in the marketplace.

A social constructionist view suggests two different ways of viewing pricing. One way focuses on pricing as evoked from people addressing the everyday realities—a pricing form as evolved from the tasks required by the pricing process. A second way follows from the managerial
tools that aim to more “rationally” construct price—a pricing form as dictated by rational managerial tools as a province of meaning applied to the sectors of reality evoked by pricing. Here we consider each of these in turn, then address the implications of the rational managerial tools as applied to pricing.

**Pricing in practice: Logistics**

The pricing process at the firm incorporates three major dimensions: price level, negotiated price, and pricing form. The first dimension of the pricing process, price level, is considered the responsibility of the corporate headquarters staff. Two elements make up the price levels. The first element, list price, is set annually for the organization in a period of several months each fall, known in the firm as “pricing season.” The second element, a standard discount, is an expected component of the price. The firm almost never sells to its distributors at list price. Instead, it establishes ground rules that allow a discount that varies with the power of the distributor, generally based on the size of its business with the firm. The second dimension of the pricing process at the firm, negotiated price, is generally considered the responsibility of the sales force. The negotiated price begins with the list price and the discount structure set by the headquarters staff. The sales force takes the list price to the independent resellers, known as “warehouse distributors” who ultimately sell the product to the end customer. Using the guidelines established by the headquarters staff, a sales representative negotiates a discount off of the list price with each of the various distributors in their his or her territory. The discount varies by product category. Depending on the particular distributor, the sales force can also offer a rebate to a distributor. The rebate might cover a variety of special circumstances. For instance, the distributor might want to strike a deal with a particular end customer. The distributor and the sales representative will consider the situation and, to help the distributor
strike the deal with the end customer, may implement a rebate in order to provide a more attractive price that will gain the business of the particular end customer for the firm. Under the terms of the rebate structure, the firm will send a rebate check to the distributor based on the volume of parts the distributor sells to the particular end customer. The rebate allows the firm to maintain the discount structure with the distributor, but also to make exceptions to that discount structure in order to capture a particular piece of business. The third dimension of pricing, pricing form, is established by the headquarters staff subject to the agreement of the sales force. The pricing form consists of the various pricing practices that make up the pricing process at the firm. For instance, the firm used to provide only one discount for its entire product line. That product line, however, includes three distinct categories of products. One of those product categories consists mostly of products designed exclusively for the end customers of the firm. Because those exclusive products have few competitors, the firm could choose to offer smaller discounts off of its list price. With only one discount for all three major categories, however, the sales people offered the same discount for products with a great deal of competition as it did for products with very little competition. The marketing staff at headquarters felt that on account of the single discount for all three major product categories, the firm had been “leaving money on the table,” that is, not capturing all the profits it could on a part of its product line. In response, the marketing staff sought to change the form of pricing by establishing a separate discount for each major product category. Ultimately, the marketing staff prevailed, but that change provoked a major battle during a recent pricing season.

Clearly the price setting process involves more work than any one individual can do. As a result, the process requires delegation of tasks as well as the coordination of action and information. Each of the various dimensions of price setting—list price, negotiated price, and
pricing form—brings together different sets of actors, depending on the particular dimension under scrutiny. The list prices are generally seen as a headquarters task, but the task brings together a broad group of participants (figure 1). The marketing director coordinates the annual pricing season during which the firm sets list prices. Participants in the process vary, but include, at various times, the vice-president for the product line, the chief financial officer (CFO), the financial analyst assigned to the product line, the pricing manager and the pricing coordinator reporting to that manager, and representatives from the sales force. The various exercises and the related meetings during the pricing season serve both practical and strategic purposes. From a practical standpoint, setting list prices is primarily a logistical task requiring the coordination of a great many actors. The pricing coordinator therefore takes a lead role in the process. Following the practical concerns, the pricing coordinator serves as a clearinghouse for information, working to bring together the immense amounts of data about competitors and customers needed in order to set list prices. (Historically, price-setting at the firm focused primarily on these logistical tasks; the firm simply tried to match its competitors’ actions.) From a strategic standpoint, the list prices serve a different role. In setting the list price, the participants engage in three primary strategic tasks. First, they consider their own perception of the firm in the marketplace. Second, they try to determine how they would like to position the firm in the marketplace. Third, they try to define actions that will influence perceptions of the firm in the marketplace consistent with that desired position. (There’s quite possibly a link here to the literature on organizational identity.) Following the strategic concerns, the meetings focus primarily on what actions can best serve to establish the desired position in the marketplace. The participants generally agree on existing position and desired position; the sticking point involves how to get from the existing position to the desired position in the marketplace. (And there’s precious little discussion about the possibility that the firm can’t
substantially alter its existing position.) Negotiated prices are generally delegated to the sales force. (See figure 2 for a sociogram describing the participants in that process.) There are two parts to the negotiated prices. One part is the discount off of the list and the second is the rebate. (Both are discussed above.) Both discounts and rebates are negotiated by the territory manager with the warehouse distributor, subject to the approval of an area manager and, if necessary, the marketing director. Negotiations with warehouse distributors generally take place without any involvement from headquarters. Employees from headquarters get involved in one of three ways. First, the pricing coordinator processes rebate forms. That involvement only includes routine processing of documents, however. Second, for larger accounts, the marketing director may participate in the negotiations. In general, however, such participation is limited to special situations—for instance, when a major customer seeks an unusually low price. Third, in some cases, if the price offered by the sales force and the marketing director still seems too high, customers who know the vice president in charge of the product line will turn to that individual seeking a better deal. Pricing negotiations, then, turn out to involve only a subset of the participants who participated in the process for setting the list price. Price form is a far more complicated matter. In general, the organization has established routines (Nelson and Winter, 1982) for setting prices. Changing the form of pricing requires changing those routines. Potential alternative forms abound. Often those alternative forms incorporate theories of how prices should be set, theories of how to position the firm in the market, and especially theories of individual agency and control in the organization.

Pricing in theory: Price elasticity of demand

Consider, then, the application of rational managerial tools to the price setting process—specifically, the price elasticity of demand, which provides a specific, circumscribed meaning to
the sectors of reality evoked by the price setting process. That circumscribed meaning asks organizational members to reorder their social world to follow the implications of the specific theory. From a marketing perspective, setting the price involves defining what the market will bear. If you increase price, demand will surely drop, but if the increase in price more than makes up for the drop in demand, demand is said to be inelastic with respect to price. A price increase would be a good choice. Based in economics, price elasticities provide the organization a way of shifting the thought about a sector of reality, prices, out of the everyday reality of the specific level of price into a “province of meaning,” a way of making sense of how customers view price. Elasticities offer a more general view of the consequences of a price increase. In theory, elasticities address certain primitives—the responses of a population of customers. Moreover, empirical evidence supports the theory: elasticities clearly describe consumer behavior in a variety of markets (Nagle, 1987; Dolan and Simon, 1996). As the price-setting process occurs, however, elasticities as a way of shifting out of everyday reality are neither equally available to, equally applied by, nor consistently used by all members of the organization (an issue related to the rhetoric/reality discussion). Marketing sees the market generally; indeed, that general view is exactly the reason why elasticities are an important tool. The marketing uncertainty concerns the role of the company in the marketplace. Measurements of the price elasticity of demand allow the marketing group to measure the effects of changes in list prices and discount structures. If the firm raises price, how much does demand drop? If the firm lowers price, how much does demand rise? Suppose the firm increases the discounts it allows: How does that help business? These questions bring with them an uncertainty, and elasticities provide a means to resolve that uncertainty. By treating the population of customers as a whole, the marketing group can set list prices and discount structures such that it can extract the greatest revenue from the population of customers as a whole. The sales group,
however, sees only the specific customers and defines action in terms of customers. For the 
sales person, the critical question address how to secure the business of a specific customer.
What actions can I take to get the business? How can I make the terms of the exchange look 
more attractive to my customer? How can I make price changes less troublesome?

Another way of looking at these distinctions is as a gamble. When individuals setting price try 
to address such primitives as price elasticities in setting prices, they set up a sort of two part 
gamble. One part of the gamble comes in setting the list price and the associated possible 
adjustments to list price; these elements establish the terms of the gamble. The marketing 
group, however, only defines the terms of the gamble. The sales force makes the actual bets. In 
making these bets, though, the sales force sees the market in much more specific terms. That 
leads to two very different ways of making meaning of the price change. If, for example, the 
marketing group decides to gamble by raising prices, the territory manager encounters each 
individual customer and the reactions of that customer to that price increase. A marketing 
individual presumes that most customers will accept the price increase and hence ignores all 
the instances where a customer drops the firm’s product. A sales person sees all the different 
reactions, including the reactions of the individuals who drop the product. These two different 
ways of making meaning echo throughout the price setting process in the organization.

**Price elasticity in practice: Organizational implications**

**Tasks and roles** In setting list prices, the critical uncertainty lies in determining the position of 
the firm in the marketplace. For the marketing group, then, list prices are an important signal: 
they communicate to the marketplace the intent of the organization. The firm we studied faced 
considerable and continual price pressure. That meant that the firm needed to reduce prices in
competitive arenas in order to signal its intent to be competitive. At the same time, the marketing group needed to be careful to make sure that the price changes would eat into profits as little as possible. A marketer will therefore want to use the list prices per the expected elasticity effects. That means lowering prices carefully, limiting reductions to areas in which the decreased prices will increase demand. Conversely, it means increasing prices in selected areas in order to make up lost revenue. For instance, in the firm we studied, some of the products were exclusively designed and sold by the firm. The firm therefore had few competitors and could raise prices without any substantial loss of market share. Other products were extremely competitive, and the firm would want to lower prices in order to signal its competitiveness, expecting that the market share would rise at a commensurate level. For the sales person, the list price serves as an important tool. The salesperson uses the list price as a negotiating position. A higher list price provides an apparently more powerful initial bargaining position. With the higher list price, the salesperson can offer a greater discount and yet still arrive at the same price as compared to a lower list price. A lower list price constrains the action of the salesperson. The bargaining zone available to the salesperson is smaller and so the possible action is more limited.

Consider second the task of negotiating the price. The price negotiations turn the problem around. For the marketing group, price negotiations can threaten the actions in setting the list price. The marketing group uses the list price to establish a market position, then creates a discount structure to accommodate different distributors and their competitive position, and allows rebates in special circumstances. The latter it sees at best as a necessary evil, at worst an extraordinarily costly program to administer. In looking at the overall market, the marketing group has set the broad parameters of the gamble and then asks the salesperson to make a bet
in accord with those parameters. From the perspective of the sales force, the critical uncertainty addresses the question of getting the business. The sales task involves prudently using various means to secure the business of a distributor. The parameters simply identify some of the key tools with which to work. List price serves as a negotiating position, a basis by which to compare action. For instance, a very high list price can be used as a basis for comparing the size of the firm’s discount as compared to a competitor. (It is unclear how effective that tactic is; presumably a smart distributor would compare a competitor’s bottom line price. Nevertheless, many sales people refer to it. There’s an issue of “folk wisdom” here that perhaps should be explored in future pricing studies.) Regardless, a high list price permits the salesperson more range to offer discounts. Moreover, even after negotiating a discount structure for the three product lines, the sales force has rebates to use to secure specific accounts.

Consider third the roles of the various actors. The differing tasks necessitate very different roles in the organization and thereby different perceptions of the group. These different roles are very clearly delineated and evident even in the way that the two groups talk about each other. As indicated in Figure 2, when the territory managers and area managers sell to the distributors, they see their task as primarily confined to the immediate actors. The remaining portion of the organization gets categorized as “headquarters.” The sales force consistently refers to the marketing group and other actors as “those folks in Bedford Park” or simply “Bedford Park” as in, “Bedford Park wants to increase the list price. (The actual name of the city in which the headquarters is located has been altered in order to preserve the anonymity of the firm.) Conversely, the various employees located at the headquarters frequently questioned the allegiance of the sales force. Various informants in the headquarters commented that “we
frequently joke that that the territory managers [the sales force] works for the distributors more than for us.”

These distinctions around roles go beyond simple categorizations of actors, however. Two other dimensions are important. First, in the task of setting the list price, all actors participate in one form or another. That means that at the pricing meetings, participants must delicately manage the dual identities. For instance, one of the territory managers, Fred Franklin (a pseudonym) shared the same last name as the former marketing manager. The former marketing manager had struggled to work with the entire group and so there existed some animosity between the group at the pricing meetings and that marketing manager. The territory manager used that animosity as part of a tertius gaudens strategy (Burt, 1992), joking about his “twin brother, the other Franklin” in the organization, thereby setting himself up as in accord with the rest of the headquarters staff against the former marketing director. These sorts of dynamics were consistently evident in the various meetings; there existed a truce with a vague sense of unease between the sales force and the headquarters staff. Second, these different roles become stronger elements in the task of negotiating price. As shown in Figure 3, the task of selling the product involves only a subset of those involved in pricing overall. Included in that subset are all those who have some approval power: the area manager over the territory manager, the marketing manager over the area manager, and the vice president for marketing over the marketing manager. The line excludes all the analysts who possess the information about the pricing parameters: the pricing coordinator, the manager of that coordinator, and the financial analyst, and the chief financial officer. Those with technical expertise are absent from the critical negotiation decisions. That absence creates a problem, as we will see below.
**Structure of knowledge** As described above, the pricing process in theory involves identifying certain primitives—for example, the price elasticity of demand—and defining a pricing practice consistent with those primitives. The primitives should define expected consumer behavior for the marketplace as a whole. Within the parameters defined, the firm then negotiates a price. The entire pricing process thereby follows a sort of dialectic between the parameters set for the marketplace as a whole—in a sense, the broad terms of a gamble—and individual actions with respect to each customer—individual bets based on the terms of a gamble. That dialectic, however, also sets up a different structure of knowledge depending on whether one encounters the market as a whole or whether one encounters a specific customer from that market. The structure of knowledge varies across two dimensions: general versus specific and close versus remote. The general versus specific distinction follows—or perhaps leads—the marketing and sales split. From the perspective of the marketing group, pricing involves setting price in accord with the broadly defined actions of the firm’s customers. It thereby affords a general view of customers. For example, the price elasticity of demand addresses one primitive that describes the action of the customer base. If the demand is inelastic with respect to price, for example, a price increase is likely a good action. As a managerial tool, then, any means by which to measure a primitive such as the price elasticity of demand would prove important in setting prices—but only prices as regards the customer in general. From the perspective of the sales force, pricing involves negotiating the specific price. The structure of knowledge, then, addresses the specific: each individual customers. As a primitive, the price elasticity of demand is a problem. It suggests that price increases may involve the loss of at least some individual customers. Such a loss, however, is inconsistent with the task of selling: a sales person is likely to be loathe to lose a relationship with a specific customer. (It isn’t clear that incentive schemes
will necessarily overcome this problem. Here there are important issues of how a salesperson views the sales job. There are likely issues here counter to agency theory.) The structure of knowledge, then, reverts to the specific dimensions of the sale and the efforts of the sales person to sell to that customer. Second, even if economic theory is available as part of the stock of knowledge used in both sales and marketing, different aspects of the pricing reality are either closer or more remote, depending on where an individual sits in the organization. From the perspective of the marketing group, these are strategic actions with only remote implications. The effect may differ from the intent, but that simply would demand adjustments the next year. From the perspective of the salesperson, these actions have very vivid, concrete implications. Raising prices made sales calls a challenge for a sales person. With major customers, the salesperson must spend a good deal of time explaining the new price, and even after making the case for the higher price, risks losing business. Even lowering prices, however, posed problems for a sales person. When faced with unusual lowered prices, salespeople also encountered difficulty explaining the logic of the pricing action. Here the everyday realities conflicted. For both marketing and sales, everyday realities include customers and price data. From the standpoint of marketing, however, individual customers as a sector in their everyday reality are remote, while the data aggregating the customer base as a whole are close. Conversely, from the standpoint of sales, individual customers are close while data is remote. Moreover, for each of the two groups, bringing the more remote sector of reality closer has different implications. For marketing, when an individual customer become close rather than remote element in the everyday reality, the customer provides a vivid contrast to the data. Such vividness heightens the availability of the customer as a sector of reality. For sales, however, data, even if it comes closer, is less likely to provide a vivid lesson. And even if it offers powerful insight, that insight demands that the sales person shift out of his or her
everyday reality into a theoretical realm, a province of meaning, in order to make sense of the data. That is a much more difficult shift.

**Price elasticity in practice: Implications for price**

The various roles and tasks that the pricing process defines recall distinctions in the behavioral theory of the firm (Cyert and March, 1963), wherein actors have different preferences and goals, depending on where they sit in the organization structure. Consistent with that perspective, there is evidence at the firm of sequential attention to goals in setting price. For example, aside from the split between marketing and sales in roles, tasks, and the structure of knowledge, the differing goals of the marketing group and the sales force do get dealt with sequenitally. The sales force has the last say. Moreover, in negotiating price, the salesperson’s goal of getting the business may undermine the marketing efforts in raising price. Given that raising the price may involve the loss of a customer, the salesperson may make the timid choice (Kahneman and Lovallo) of negotiating away the price increases for each specific customer.

The evidence from the case studies is consistent with that action. For example, one of the territory managers described how they dealt with a 3.2% price increase at a distributor:

> In past years when [a price increase] has happened, I looked at the price sheet in 94 and new one in 95 and there was a 3.2 percent difference. We would walk in and sell them at list price [less] 23.2% and I would change the [warehouse distributor] rebate to 3.2 so it was a very simple price change.

The functional differences certainly affect the preferences and goals of the actors in the organization. Indeed, the former marketing manager and many other informants indicated that the firm could not tell the price at which their product sold. Quite clearly, what the behavioral
theory of the firm (Cyert and March) would call the sequential attention to goals affects pricing behavior.

It is important, however, to understand these preferences and goals as a consequence of the task as well. Consider, for instance, the example of a pricing negotiation with a large customer. A large customer provides an important point of intersection between the general marketing model of price and the specific sales task of securing the business of a customer. Absent other specific reasons, however, a large customer will continually negotiate price down. Here, primitives such as price elasticity of demands imply that larger (and presumably more loyal) customers should be more likely to accept price increases. Loyalty thereby implies smaller discounts. Yet larger customers imply large discounts: because they do more business, it seems more reasonable to offer larger discounts. Moreover, larger customers are more likely to demand larger discounts. Such dynamics put a salesperson in something of a quandary. Marketing actions aimed at raising the price compete with the sales task of lowering the price. Here it would appear that the marketing group would be at odds with the sales force. Instead, the evidence suggests that the marketing structure of knowledge is at odds with the sales task. Indeed, when a large distributor cannot get a satisfactory price from the sales force, its managers will often go to the vice president, with whom they have existing relationships. When the customer goes from being a general concept, a remote and distant construct, to being a specific and vivid individual, it turns out that the vice president will make deals that the sales force might turn down. These dynamics suggest that it is not simply a matter of goals varying with the group. Goals or, more precisely, prudent action will vary with the task. At the marketing level, primitives such as price elasticities will give an indication of how the customers as a whole will respond. At the sales level, however, the structure of knowledge
makes it very difficult to identify the primitives for an individual customer. Regardless of actor—be it a territory manager or the vice president—decisions about price come down to making a prudent choice, and prudent choice is not the same as a gamble: a prudent choice implies that an individual can influence the outcome (March and Shapira). A prudent choice, moreover, turns out to be the same for a salesperson or a vice president. And the sales force, it would appear, does its best to make choices consonant with the firm’s interests.

The organizational task, then, lies in bringing together the actors, the specific socially constructed technology, and the relevant information at the point of decision about price. Left to its own devices—that is, absent management attention—the organization may resort to either sequential attention to goals (Cyert and March, 1963) or garbage can processes (Cohen, March, and Olsen, 1974). As the example illustrates, however, sequential attention to goals, short circuits the necessary attention to primitives such as price elasticity. Similarly, garbage can processes describe organized anarchies—contexts without managerial intervention. Managerial intervention implies appropriate coordination of attention, through both the socially constructed technologies of pricing (the mental models brought to bear on the task) and the relevant information supporting those models. In the case of the pricing demands of the large distributor, the marketing manager found a way to intervene and resolve the price pressures. She brought together the vice president, the financial analyst, the territory manager, and herself and found information demonstrating that the rebates the firm had given the distributor had not helped expand the firm’s presence in the distributor’s product line. Only with such additional (specific) information could the organization escape the price pressures brought by the distributor.
SOME IMPLICATIONS

This study describes the internal organizational implications of using a socially constructed technology, in this case, pricing primitives such as the price elasticity of demand, on the price setting practice of a moderate sized industrial firm. In contrast to existing research on social construction processes, which focused more on the social psychological dimensions of socially constructed technology (Zbaracki, 1998) our research focuses on the relationship between the organizational structure and the social construction process. The findings of the study confirm, at least in broad outline, some fundamental elements of the behavioral theory of the firm. Goals and preferences do vary throughout the firm; the firm does not always unify these goals and preferences, and quite often lets them resolve themselves only by attending to differing goals and preferences sequentially. Moreover, the findings of the firm (not surprisingly) confirm that economic models of pricing behavior are more prescriptive than economists might sometimes argue. Indeed, as demonstrated above, the firm cannot tell at what price its products sell. The study suggests (perhaps more surprisingly) that price, a foundational economic measure, is unavailable to the firm. Yet all signs indicated that the firm was well managed, sustained a solid competitive position in the marketplace, had strong customer relationships with leading firms that used its products, and even led the marketplace across certain product lines.

Nevertheless, a focus on socially constructed technology (sometimes discussed as mental models) suggests important lessons for how to view organizational action. The cognitive dimensions of the technology are embedded in the social structure of the organization, and the social structure of the organization is embedded in the cognitive dimensions of the technology. The distribution of knowledge—a variant of the “cognition in the wild” (Hutchins, 1996) addressed in cognitive anthropology—has a substantial affect on organizational action. First, a
focus on socially constructed technology suggests that the behavioral theory of the firm, in
attending to the sequential attention to goals, misses an important dimension of the
relationship between organizational members. Although the goals clearly differ across
functional areas, the focus on price elasticities as a social construction of a primitive in
understanding behavior suggest a dialectic exists between marketing and sales. That dialectic
asks actors to shift from a general, remote, and abstract marketing view of the customer to a
specific, close, and concrete sales view of the customer, depending on the task. Underlying that
shift lies a consistent social construction of demand as it relates to price. If we wish to address
the relationship between functional areas—as, for example, in the differing goals and
preferences—we need also to attend to the various cognitive constructions that cross those
functional areas. Second, though the study does not address the third pricing task, forms of
price, specifically, it suggests that the dialectic between marketing and sales could lead to very
different perceptions about forms of price, or pricing routines. If the organization is left alone,
pricing routines will—must—emerge. As the findings demonstrate, the organization has
developed pricing routines, largely built around tasks that must be done and perceptions of
prudent action given those tasks. Whether those routines match the best interests of the
organization is less clear. Third, the diffusion of knowledge issues suggest lessons for the
literature on fairness (citations?). Students of negotiation suggest that negotiators are very
attentive to fairness in bargaining situations. If a party clearly demonstrates that a particular
settlement is unfair, the other party is much more likely to cede. The evidence from the case
studies here is consistent with that view, but suggests it is important to consider the cost of
getting information to demonstrate fairness. In the organization we studied, in one single
negotiation the managers had to go to great expense in order to coordinate the information that
would demonstrate fairness concerns. Fairness might be under-used in negotiation simply
because it is too expensive to demonstrate. Fourth, the results suggest that our focus on social networks should accommodate the socially constructed technologies as well. One might easily measure social ties based on such dimensions as trust, frequency of interaction, and friendship. Such measures, however, may not fully capture the dynamics of interaction across the marketing and sales group. For instance, one could easily imagine that two friends with very different views of pricing could have a very hard time reconciling pricing actions across the marketing and sales tasks. Our social network measures, then, might also address networks of logics, technologies, and ideologies, in order to see how ideas diffuse through a population.

The findings in the study here also has an important implication for economic theories of agency. It is very tempting for an economist to treat the relationship between marketing and sales as an agency problem (pick your citation ...). From the standpoint of agency theory, the problem looks simple: marketing as the principle would want to establish the parameters for pricing—for example, by setting a list price, a discount structure, and rules for negotiating discounts and rebates—and then delegate the task of securing the business to the sales force. With a properly constructed incentive scheme, the sales force should follow the wishes of marketing. The findings from the case study, however, suggest that agency theory inadequately captures the dynamics of the situation. Clearly there are elements of an agency problem here. But agency theory miss three important issues. First, agency theory suggests that principles need to establish incentives in order to encourage agents to act in the best interests of the firm. The evidence from the case studies, however, suggest that the agents act precisely as a principle would act, as, for instance, when the vice president seemed more willing to negotiate a lower price than did the sales force. The problem is about more than incentives; it is about how individuals understand the task; it is about their social constructions
of the task and the technology underlying the task. Second, such instances suggest that agency theory misses the important questions of coordination of knowledge that run through the pricing task here. The problems of setting price had less to do with having proper incentives than with knowing the right action. Marketing models, based on primitives such as elasticities, can only define right action for the market as a whole. They leave largely undefined the important task of bringing information to the specific task of negotiating a contract with a customer. Here lies the dialectic between the marketing activity and the sales activity. In that shift, the appropriate action can go from completely clear to extremely uncertain. Both the principle and the agent may be uncertain about the right action. Accompanying an agency model, there should exist some mechanism for helping an agent identify the action consistent with the organization’s (and not necessarily the principle’s) best interests. Given that the principle may not know that action, it seems inappropriate to label the problem one of agency. Third, the findings from the study suggest important dynamics of power and knowledge in defining (and motivating) action. For instance, the marketing group can clearly establish an agency relationship with sales, but the dynamics of the task suggest that there is a great deal more going on here. The problem recalls a problem in manufacturing settings, where engineers design a production process and then expect the operators to run that process. When variation in the production process occurs, the operators may not know the appropriate action. The task then becomes one of studying the production system carefully in order to identify the cause. While the problem can be treated as one of agency, it is, more likely, one of coordinating information and technology in a manner that helps define and resolve the problem.

The findings here also have important implications for the managerial tasks in setting price. Again, the “cognition in the wild” dimensions of the problem imply organizational dimensions
to unifying the action of the organizational members here. Given the split that the pricing task creates between marketing and sales, and given in particular that the split emerges from the differing views of the activities, the critical managerial task is to use that social construction to sustain a conversation between the two diverging views. That task highlights the importance of managerial rhetoric as one means of sustaining a conversation between groups. It suggests another task that is more important still: identifying the logics underlying the managerial rhetoric. Underlying the focus on primitives such as elasticities, for example, lies a logic that says we can predict the behavior of a population of customers. The empirical evidence supports such a claim (Nagle, 1987; Dolan and Simon, 1996), but coordinating action consistent with that logic proves a more difficult task. The problem is more systemic. A manager must understand the logics underlying the pricing activity, must also understand the coordination problem that the logics evoke, and must then find ways to coordinate action. Our study suggests that the managerial work involves the hard work of improving the understanding of the logics—the socially constructed technology—but also the hard work of improving the ties across the organization, especially with respect to the technologies, and the hard work of coordinating information systems to bring appropriate information to bear on the tasks of setting price.

From the standpoint of the organizational theorists, these are all important tasks. The logic of economics, as defined in, for example, price elasticities, suggest an important technical insight: demand varies with price. Such an insight has a compelling technical force. Nevertheless, the case study suggests that we cannot cede the implications of that logic to economists. If, for example, we allow economists to dress up the managerial task evoked by the logic in agency theory, we do managers a disservice. The problem is far richer and far more complicated.
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Figure 1: Sociogram for setting the list price
Figure 2: Sociogram for negotiating prices
Figure 3: Sociogram for appealed negotiations

CFO

Financial analyst

VP Marketing

Marketing manager

Territory manager

Pricing coordinator

Pricing manager

Area manager