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ANALYSIS OF CONTINGENCIES AND METACONTINGENCIES IN A PRIVATE SECTOR WORKPLACE

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ABSTRACT: This paper describes interlocking behavioral contingencies operating in the cultural practices of persons working in a retail dress shop over an 19-month period. The shop is viewed as a cultural unit whose survival was contingent on the outcome of the aggregate behavior of the persons participating in the cultural unit. The changes in the cultural outcomes (total monthly sales) for this unit are explained in a framework of competing contingencies. Likewise, the consequences of organizational culture on the maintenance of this cultural unit are detailed.

B. F. Skinner noted the efficacy of applying extant behavioral principles to explain contingencies of individual behavior maintained by a culture (1948, 1953). His writings influenced behavior analysts who were interested in explicating mechanisms by which cultures (Glenn, 1988) and organizations (Mawhinney, 1992) evolve. Synthesizing subject matter from behavior analysis and cultural materialism, Glenn (1988) organized a conceptual framework to extend scientific understanding of cultural development and evolution. Using Glenn's framework, this paper will examine the behavioral and cultural contingencies operating in a private sector organization.

Mawhinney (1992) analyzed the process by which organizational cultures evolve using the operant concept of selection by consequences. He noted that aggregate measures of success (profits) or failure (losses) in organizations ultimately reflected decisions and policies (behavior) of individuals and groups of individuals in the organizations. Investigations examining cultural contingencies in private organizations have received little notice in the behavioral literature (Allison, Silverstein, & Galante, 1992; Redmon & Agnew, 1991). In 1991, Redmon and Wilk noted the need for such study as the organizational behavior management (OBM) literature has, for the most

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part, focused on interventions at the level of the individual worker and the environmental contingencies that account for that worker's daily performance. Analysis of cultural contingencies, according to Thompson and Luthans (1990), should include a macro focus, enabling an examination of the relationship between the culture and the existing organizational structure.

Given the importance of developing a macro focus and the paucity of studies reflecting this focus, the purpose of this paper is to detail a description of such a relationship between employees and managers in a retail dress shop. A study, conducted over a 19-month period Oanuary, 1992, to July, 1993) is the basis for the events described in this account. Economic conditions apparently operating during the same period are reviewed.[1]

Behavioral and Cultural Contingencies

Glenn (1986) distinguished between behavioral and cultural contingencies. Behavioral contingencies, the unit of analysis at the behavioral level, are contingent relations between an individual and particular environmental events. At the cultural level of analysis, a *metacontingency* is a relationship between a cultural practice and the resultant outcome. The cultural outcome has the same kind of relationship to a particular set of interlocking behavioral contingencies as behavioral consequences have to operant units (Glenn, class lecture, 20 October, 1994); however, metacontingencies are not "behavioral contingencies writ large in the sense of more inclusive or more extended over time" (Glenn, 1991, p. 64).

A cultural practice includes *interlocking behavioral contingencies,* or complex interrelations between behavioral repertoires of individuals; interlocking behavioral contingencies and all of the variations enter into an aggregate outcome (Glenn, 1988). Glenn termed these interrelations interlocking contingencies to stress the dual functions of each person's behavior in social processes; each person's behavior functions as actions as well as a behavioral environment for the actions of others. Outcomes that "fit" prevailing environmental conditions contribute to the success of the cultural unit, not to the reinforcing behavioral contingencies of individual members.

'The first author, in partial fulfillment of her Master's thesis, conducted the study and observed some of the events depicted in this paper.

Corporate Background and Practices

In 1980, a family-owned property management corporation developed a luxury hotel in a major southwestern city in the United States. The hotel was located in a wholesale commercial district away from retail shopping centers and accessible only by automobile to nonhotel visitors. The property management corporation created a subsidiary organization, hereafter known as the company, to develop and operate retail space in the hotel. The organizational structure of the company included the president and her assistant, a corporate buyer, office manager, shop managers, and clerical and sales personnel.

By 1986, the company owned and operated eight retail shops. Each of the shops offered unique merchandise (e.g., designer women's apparel, Southwestern gifts, western jewelry, etc.) and varied in sales strategy. All shared three commonalties in addition to location: 1) high-priced merchandise, 2) the vast majority of customers patronizing the shops were hotel guests rather than local residents, and 3) at least one friend of the president employed in each shop.

Although the dress shop and its seven counterparts were not critical hotel components, they were important as guest conveniences and, as such, were subject to the policies of the organizational culture. The policies of interest are personnel and merchandising.

Personnel Practices

The company hired managers and salespersons for each shop based on personal referrals. Therefore, during the period covered by this study, many of the shop personnel were friends and acquaintances of the president. Generally, sales persons and shop managers had little or no prior experience selling retail merchandise.

Shop managers were salaried and eligible for annual bonuses, whereas sales persons received hourly wages. The company offered no sales incentives to sales persons before the period covered by the study. Duties of shop managers included, but were not limited to: selling merchandise, receiving and arranging incoming merchandise, and scheduling and supervising salespersons.

Merchandising Practices

For 13 years before the period covered in this paper, hotel guests were primarily individuals with large discretionary incomes. The company stocked shops with merchandise designed to appeal to these hotel guests-the primary customers of the shops. Although the corporate buyer was responsible for selecting merchandise for all of the shops, final merchandising decisions for all the shops were subject to the president's approval. The exception to this policy was purchases made for the dress shop. In this case, the president and her assistant personally selected merchandise apparel and accessories.

Initially, the company's merchandising strategy resulted in growing sales. In August, 1991, two unrelated but important issues made possible a variation in the merchandising policy. First, the company was expanding its retail operations in other cities. These projects required the time and attention of the president and her management staff. Second, dress shop sales were 15% below annual anticipated goals. Time constraints and declining sales forced the president to hire an experienced buyer/manager in the dress shop-one who would, without oversight, select merchandise as well as supervise daily operations. She was the only manager in the company with these responsibilities

The Dress Shop

During her 19-month tenure, the buyer/manager increased sales by 26%.[2] Based on her performance, the buyer/manager requested an increase in her base salary. The president of the company refused to negotiate, indicating displeasure with the merchandise currently stocked in the shop as it no longer reRected her company's "high end" image. In fact, during this period economic conditions had changed as had the hotel customer profile. The buyer/manager, dissatisfied with not receiving an increase in pay after increasing sales by 26%, resigned. Reverting to previous merchandising policy, the president replaced the buyer/manager with a manager who had no input into buying decisions. During her employment, shop sales declined 25%, mirroring levels reported in August, 1991.

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2 Percentage increase is based on gross annual sales.

Interlocking Behavioral Contingencies

During the study period, the company employed two dress shop managers. Each manager engaged in behavior whose aggregate outcome (sales) was designed to maintain the shop or *permaclone.* According to Glenn (1988), a permaclone is a cultural unit composed of individuals engaging in repeated instances of interlocking contingencies of reinforcement or cultural practices. A *permaclonic system* is an entity comprising several permaclones

Cultural practices in a permaclone may remain stable while individuals in the group come and go. New members may contribute individual "style" to the cultural practices in the group. If the group adjusts to new members or other changes in the environment, and if the practices selected in the process of evolving render continued success of the unit, then the group is said to evolve. The dress shop is conceptually defined as a permaclone. Cultural practices contributing to sales produce an outcome that ensures survival of the unit. Theoretically, each permaclone contributes to the survival of a permaclonic system, which in this case includes the company and the property management corporation.

First Buyer/Manager

Sales behavior of the buyer/manager. Overall, the first dress shop buyer/manager modeled on-task, productive work behavior. She engaged in behavior that entered into the cultural practice of sales as she promptly greeted and talked with customers about shop merchandise. She sold merchandise to customers and assisted shop employees with sales. When employees completed difficult and/or large sales, she reinforced their work with smiles, praise, and "high fives." When the customer was ready to buy, she rang up sales and bagged the merchandise. Each morning before the shop opened, she briefly met with employees to assign special projects, review sales goals, and answer questions. Additionally, the buyer/manager offered sales incentives, paying bonuses to employees who completed a single sale of $250 or more. Although the buyer/manager paid these incentives weekly, she bridged the interval with praise, attention, and posted notes soon after the sale.

Interlocking contingencies of the buyer/manager. The behaviors entering into the interlocking contingencies described above were all oriented toward one cultural outcome: dollar sales. For example, when the buyer/manager bagged customer purchases, her behavior made possible more

sales, because shop staff were available to approach other customers, sell more merchandise, and earn more bonuses. When she assisted employees with sales, she increased the likelihood of the sale and frequently offered suggestions that increased the dollar amount of the sale as well. Moreover, as she helped with sales, she modeled cooperative behavior for employees who later imitated her by helping each other with sales. Finally, when she modeled positive selling behavior (prompt greetings and focus on the merchandise) for employees, she provided the only training these salespersons received.

The buyer/manager interacted with customers not only to sell merchandise, but also to assess customer reactions to merchandise. Overall, interactions with the customers provided her with invaluable information for future buying decisions. Furthermore, the buyer/manager maintained detailed accounts of merchandise purchased and sold with a computerized spreadsheet developed from her home. She used the information on the spreadsheet on buying trips. With these up-to-date merchandising practices, the buyer manager selected merchandise she felt confident would sell in the future.

Behavior of shop employees. Some of the employees participating in the study worked in the shop before the company hired the buyer/manager. Under the buyer/manager, these employees imitated her on-task, selling behavior. For example, instead of talking to each other, employees helped customers select items and suggested accessories, thus demonstrating behavior they had seen the buyer/manager model. At times when customers were waiting, the buyer/manager rang up and bagged customer purchases for employees. In turn, employees used the time to assist customers or to help each other complete sales. Employees talked about earned bonuses and congratulated each other on large sales.

Cultural outcome. All of the aforementioned interlocking behavioral contingencies entered into the cultural practice of selling merchandise, the outcome of which was increased sales. In fact, sales in the dress shop increased 26% over the 19-month period. By modeling on-task selling behavior and reinforcing the behavior of others when they imitated her behavior, the buyer/manager produced outcomes (sales) that contributed to the survival of the group. On-task selling behaviors continued even when the buyer/manager was absent from the sales floor. Overall, behavior entering into cultural practices changed over a short period of time, demonstrating the potency of modeling and imitation in cultural evolution (Skinner, 1984).

Second Shop Manager

Sales behavior of the second manager. The second manager, previously the assistant manager in the shop, experienced the interlocking behavioral contingencies established by the buyer/manager. However, this manager engaged in more social, off-task behavior than had her predecessor. Overall, she modeled practices that contributed to social activities. Instead of promptly greeting customers, she talked on the telephone for extended periods. When customers were in the shop, the manager continued conversations with employees begun when the shop was empty. Therefore, customers often entered and exited without being greeted or attended by shop employees.

Whereas the first buyer/manager maintained high levels of customer contact for selling and buying purposes, the second manager did not consistently interact with customers or solicit their opinions about merchandise preferences. In fact, she frequently absented herself from the sales floor to a back room for long periods of time, which took her off the selling floor and left the employees unsupervised. The second manager held only one shop meeting during her employment. Although sales had been declining for three months, she discussed only cleaning activities during her meeting. There was no mention of sales. Instead, she promised staff a hotel "happy hour" if they completed the cleaning checklist for 30 days. Employees cleaned the shop daily and completed checklists, but the promised social event did not occur. Ultimately, the manager had to assume the primary responsibility for cleaning the shop.

During this same period, the bonus system changed: A group incentive replaced the individual system for the first four months of 1993. Initially, salespersons supported the incentive system; confident they could meet the weekly goals set by the company. After several months of lackluster sales, however, their confidence waned. As sales continued to plummet, the individual system was reinstated. A return to the individual incentive did little to change the sales practices in the shop or the amount of merchandise sold in the remaining months of the second manager's tenure.

Interlocking contingencies of the second manager. Behavior modeled by the first buyer/manager did not carry over to the second manager. When the second manager was on the sales floor, she focused on social contingencies, such as talking with employees about social activities rather than strategies for selling shop merchandise. Planning for and engaging in social activities competed with selling behavior, and, in effect, she modeled and reinforced

leisure behavior. Behavior entering into the interlocking contingencies, unlike with the first buyer/manager, did not contribute to the dollar sales in the shop. Whereas the first buyer/manager interacted with customers to sell merchandise and gain information, the second manager directed her verbal interactions toward shop staff and persons on the telephone. When employees completed sales or duties, the second manager responded with nods or fleeting smiles. As monthly sales worsened, the second manager complained and blamed lack of sales on merchandise stocked in the shop and the spending patterns of hotel guests.

Behavior of shop employees. During the first buyer/manager's tenure, the staff engaged in sequences of behavior that produced outcomes resulting in sales: 1) working with customers, 2) arranging merchandise, 3) reporting on what items had sold and customer's comments about merchandise. Overall, these behaviors required considerable effort. Behavior, primarily verbal, modeled by the second manager required less energy and produced consistent social reinforcers. Talking on the telephone and to each other soon replaced on-task selling behavior. Employees accustomed to regular meetings no longer had a format in which to exchange information about customer preferences or sales. Imitating the second manager, employees complained about shop merchandise and the lack of customers willing to make purchases.

Cultural outcome. The cultural outcome associated with the interlocking behavioral contingencies of the second manager and salespersons was a decrement in sales and the resignation of the second manager. During this period, there was no clear focus on selling merchandise. The interlocking contingencies maintained social connections but no longer contributed to sales and the long-term survival of the unit.

In fact, lack of sales was partially affected by other variables as well. One of these was the merchandise stocked in the shop. During this period of time, the president and corporate buyer selected merchandise that was apparently incongruent with the buying patterns of the hotel customer. For the most part, shop merchandise sold only when prices were reduced well below wholesale cost.

Economic Metacontingencies

During the 19 months of this study, economic conditions changed. By the time the first buyer/manager resigned (December, 1992), consumer spending had begun to shift in unanticipated directions (Agins, 1993; Duff, 1993;

Patterson, 1993). In fact, during the first and second quarters of 1993, national economic trends indicated consumers were worrying about job security ("Consumer worries," 1993; Van Order & Reese, 1993). Wages and salaries stagnated (Mandel & Farrell, 1993), and "discounters" had captured a significant share of the mainstay apparel market at the expense of specialty stores (Germeroth-Hodges, 1993).

Buying patterns of hotel guests during the first half of 1993 reflected the prevailing economic conditions and coincided with the second manager's tenure. During this time hotel management reported the room occupancy rate was 50% higher than predicted. At the same time, catering sales and guest spending in restaurants and bars was *50% below* expected rates. For its survival, the hotel discounted rooms to meet competitors' rates, which accounted for the higher-than-expected occupancy rate. But guests attracted to "cheaper rooms" were apparently less likely to pay luxury prices for hotel services as well as to purchase high-priced merchandise available in hotel shops (personal communication with food and beverage manager in the hotel, September 21, 1993).

Annual sales goals for the shops were based on hotel occupancy projections as well as annual sales records. Despite threatening forecasts and sluggish hotel sales, the property management corporation's top management and the company president increased sales goals for all the retail shops. This decision, based on past successes and lack of relevant data on consumer spending patterns, illustrated Glenn's (1991) point that cultural practices exist in their current form because they fit the environment of a *previous* time.

Discussion

During the 19-month study, expansion projects and declining sales in the dress shop set the occasion for the selection of a buyer/manager. During her tenure she consistently engaged in on-task selling behavior and selected merchandise attuned to the buying practices of shop customers. As employees imitated the behavior of the buyer/manager, the interlocking behavioral contingencies entering into the cultural practices evolved. The cultural outcome was dramatically improved sales. However, as cultural practices in the dress shop evolved, metacontingencies apparent in the permaclonic system remained static-the president did not extend buying privileges to, or solicit input from, managers in the seven remaining shops.

Despite increased sales in the dress shop, the president opted to gain

control of the "shop's image," rather than retain the buyer/manager and grant an increase in her salary. Following the resignation of the buyer/manager, the president hired a shop manager with no buying privileges, reverting to a former cultural practice successful under previous economic conditions and demonstrating an adherence to what Glenn (1986) described as "ceremonial control." Such control is not only resistant to possibilities for constructive change, but also "impede[s] and preclude[s] change of any kind, even when current contingencies produce serious problems" (p. 3).

During the second manager's employment, the president resumed buying for the luxury guest customer of the dress shop and continued stocking luxury items in the remaining seven shops. The result was shops stocked with merchandise that no longer matched the needs or incomes of hotel guests. Lacking contact with customers and ignoring economic metacontingencies, the president and corporate buyer attributed sales declines to personnel issues. Overall, the president's decision to retain control of the merchandising practices threatened the survival of not only the dress shop (permaclone) but also the entire permaclonic system (the company and property management corporation).

By maintaining practices independent of the external environment, the company characterized what Pennypacker (1992) described as a *Type S(tatic)* organization. Behavior within such an organization is "shaped and maintained by contingencies that promote the organization's survival sometimes without regard for the impact on surrounding culture" (p. 13). In his description of British Rail [Britain's nationalized transportation organization], Bates (1990) detailed a *Type S* company with a culture that was slow to change, resistant to new ideas, and indifferent to needs of customers. Based on our analysis of hiring and merchandising practices, we have identified the company as a *Type* S organization.

Having said that, we must explain that following the 19-month period described in this study, the president, forced by declining sales, hired another buyer/manager for the dress shop.3 Unlike her predecessor, the second buyer/manager had only limited buying capabilities; that is, items she selected were subject to the president's approval. In the face of persistent declining sales in the remaining seven shops, the company recruited and hired experienced salespersons and stocked the shops with merchandise congruent with buying

The tenure of the second buyer/manager began after the study was complered. Details of shop sales and interlocking behavioral contingencies during her tenure are unknown.

patterns of hotel guests. Overall, after incurring long-term economic losses and endangering the survival of the organization (permaclonic system), the metacontingencies apparent in both the company and the property management corporation slowly evolved.

In the coming years, behavior analysts will face ever more complex challenges. By focusing analytical methods beyond individual behavior, behavior analysts may be able to answer questions relative to what members of an organization should be doing and how actions of members contribute to the survival of the organization (Redmon & Wilk, 1991). Behavior analysts likely to survive in the marketplace should be those able to predict the long-term impact of shifts in both economic factors and cultural metacontingencies and include them in approaches. But, we may not have considered the value to be gained by considering cultural-level contingencies maintaining organizational cultures. Nordstrom, Hall, Lorenzi, and Delquandri (1988) noted the importance of a molar approach and provided a rule for this type of intervention, "Short-term programs can be successful, but they must be integrated with *ongoing and long-term policy and structural considerations* [italics added] to increase the likelihood of enduring success" (p. 111). Likewise, Balcazar, Shupert, Daniels, Hopkins and Mawhinney (1989) noted that behavior analysts have not investigated large-scale interventions in which behavioral principles are employed to change the *"cultural foundations of an organization"* [italics added] (p. 36).

As designers and implementers of behavioral technology, it is important that we examine how behavioral contingencies are associated with short-term and long-term outcomes in organizational cultures. Of equal importance to our discipline and our practitioners is the recognition of the importance of suggesting changes in behavioral contingencies whose value is measured in terms of cultural outcomes. It is to these ends that this study was presented.

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