

## 3 AN ALTERNATIVE APPROACH: THE UNFOLDING MODEL OF VOLUNTARY EMPLOYEE TURNOVER

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The model of employee turnover described in this paper applies constructs and concepts from decision making, statistics, and social psychology to facilitate understanding and to redirect theory development and empirical research. The process of employee turnover is modeled by four distinctive decision paths; each decision path involves distinctive foci, psychological processes, and external events. Further, five specific contributions of the model are suggested, and recommendations for empirical testing and future research are offered.

Over time, organizations invest substantial resources in their employees. The corresponding costs to the firm regarding employees' quitting the organization and the subsequent hiring of replacement employees can be significant in terms of personal, work-unit, and organizational readjustments (Cascio, 1991; Mobley, 1982). As a result, voluntary employee turnover has long been a salient managerial issue. For basic researchers, a central issue has been to understand the concepts that prompt employees to leave an organization voluntarily. On the one hand, concepts external to the employee, a pull theory, have been studied primarily by market-oriented researchers, in which work was focused on job alternatives and how such alternatives surface. In the industrial relations literature, for example, the supply and demand of labor have been extensively researched as antecedents to employee turnover. On the other hand, constructs internal to the employee, a push theory, have been studied primarily by psychologically oriented researchers, who focused on job-related perceptions and attitudes. In the organizational behavior literature, for example, several psychologically based theories attempt to explain the links among work-related perceptions, job attitudes, intention to quit, and actual turnover.

The empirical research resulting from these "pull-and-push" theories has certainly facilitated the understanding of voluntary employee turnover. Their different foci, however, may have directed the attention of

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researchers who had one particular orientation away from the alternative focus. For example, the labor-market studies have produced reasonably good predictive results for *aggregated* employee turnover rates, often explaining more than 50 percent of the variance. In contrast, the psychological studies of *individuals* typically have explained less than 15 percent of the variance in voluntary employee turnover. The results from the macro-labor market studies, however, are probably inflated due to some aggregation biases (Roberts, Hulin, & Rousseau, 1978), whereas the results from the individual-level studies are probably deflated due to some statistical artifacts like low base rates, low reliability of measurement, and nonnormal sample and sampling distributions (Hulin, 1991). Recognizing these methodological issues, Hulin, Roznowski, and Hachiya (1985) have suggested that the simultaneous consideration of push- and pull-oriented studies seem more likely to produce significant insights into the understanding of voluntary employee turnover than does a more narrow focus.

The purposes of this article are (a) to present a general theory of voluntary employee turnover based on some earlier ideas suggested by Lee and Mitchell (1991), (b) to discuss empirical issues (i.e., measurement and analytic procedures) when testing this fully specified model, and (c) to suggest additional directions for future research. A detailed theory, named the *unfolding model* of voluntary employee turnover, is presented. According to this theory, concepts and constructs from both market-pull and psychological-push approaches contribute to the decisions and behavior of people who voluntarily leave an organization. In addition, the theory describes certain conditions when neither a push nor pull approach is applicable as an explanation for employee turnover. Further, the unfolding model is presented as an explanation for four decision paths that may lead to voluntary turnover. Each of these paths involves psychological processes and external events. It is hoped that a review of the model and its component parts will lead to more integrated and valid empirical investigations of voluntary employee turnover.

## GENERAL BACKGROUND

### Theories of Voluntary Employee Turnover

Based on Barnard (1938) and Simon (1945), March and Simon (1958) identified the main antecedents to voluntary turnover. In particular, March and Simon proposed that employee turnover results from the individual's perceptions about the *desirability* and *ease* of movement. Over time, however, the perceived *desirability* of movement has been equated essentially with job satisfaction alone (Jackofsky & Peters, 1983), and the perceived *ease* of movement has been equated essentially with the number of perceived job alternatives. These two constructs, satisfaction and alternatives, serve as the major conceptual underpinning for much of the literature on employee turnover (Hulin et al., 1985).



Because the major antecedents had been identified, Mobley (1977) refined the immediate links between job satisfaction and eventual voluntary turnover. Specifically, Mobley theorized that job dissatisfaction leads (1) to thinking about quitting, which may in turn lead (2) to evaluations for the expected utility of searching for another job and costs associated with quitting the present job. From that evaluation, (3) an intention to search for alternative jobs may emerge, which in turn leads (4) to the actual search for alternatives and (5) to the evaluation of the acceptability of identified alternatives. This last evaluation results in (6) comparisons of these alternatives to the present job, which in turn can lead (7) to an intention to quit and eventual turnover. The Mobley model was not presented as a lock-step sequence that all employees experience identically, though researchers by necessity often empirically test the model as such. Rather, some employees may skip particular steps or experience an alternative ordering of steps. Nonetheless, the model's great values are its rich description of the psychological process between job dissatisfaction and turnover in a testable form and its elaboration of the satisfaction and alternative constructs.

The empirical support for the Mobley (1977) model has been mixed. Whereas the antecedents to turnover have related to one another as generally theorized, the prediction of actual turnover has been weak (i.e., 0–5% of explained variance; Hom & Griffeth, 1991; Hom, Griffeth, & Sel-laro, 1984; Lee, 1988). Although the empirical evidence indicates some support, substantial opportunity exists to improve the specification of the intermediate links between job satisfaction and employee turnover.

Two years after publication of the initial version, Mobley, Griffeth, Hand, and Meglino (1979) proposed an expansion to the earlier intermediate linkages model. A very large number of labor, organization, job, and person variables were identified as potentially relevant to the turnover process. The core of the expanded model involves anticipated job satisfaction and the expected utilities of the present and alternative jobs, which were theorized to combine in a multiplicative fashion to predict the intentions to search and to quit, which, in turn, predicted eventual turnover. Thus, the expanded model adds variables to the earlier version, and some of these additions focus on variables external to the person. Nonetheless, job satisfaction and job alternatives remain as key constructs.

Mobley (1982: 125) thought it unlikely that a single study could capture the entire complexity of his expanded model. Nonetheless, the expanded model has stimulated innovative hypothesizing and research. Youngblood, Mobley, and Meglino (1983), for instance, reported a longitudinal study that involved three waves of surveys and assessed the expanded model's major constructs. They found that those who left the organization early significantly differed from those who left later and those who stayed, in terms of job satisfaction, expected utility of the present job, and intention to leave; the expected utility of alternative jobs did not significantly differentiate among the groups.



Intended as a summary and an integration of prior research and theory, Steers and Mowday (1981) proposed the following general sequence leading to an employee's eventual staying or quitting. First, individual values and job expectations, conceptualized as met expectations, were said to influence the employee's affective responses to the job, which were specified as job satisfaction, organizational commitment, and job involvement. Second, affective responses were seen as influencing the employee's desire and intention to stay or quit, with the choice depending on a variety of nonwork influences. Finally, the intention to stay or quit was theorized to lead, ultimately, to the behavior of staying or quitting. As a noteworthy point, Steers and Mowday (1981) specified that this sequence is likely to differ across employees. For some, the intention to stay or quit directly predicts actual quitting; for others, the intention to stay or quit activates a search for alternatives, which, in turn, predicts eventual quitting. Steers and Mowday (1981) did not specify, however, a mechanism to identify those employees who leave directly from those who engage in search activities.

In the first comprehensive test of Steers and Mowday's (1981) model, Lee and Mowday (1987) reported partial support. Whereas most of the antecedents to turnover were related to one another as generally predicted by the model, the intention to leave explained 6 percent of the variance in employee turnover. Similar to much of the research on Mobley (1977), the antecedents to employee turnover appear to relate to one another in their theorized manner, but the prediction of actual turnover remains weak.

In a major conceptual advance from previous research directions, Hulin and colleagues (1985) recognized that job alternatives and satisfaction could have substantially different effects on employee turnover across various populations. For example, job alternatives but not job satisfaction might have a substantial and direct effect on turnover among marginal and temporary employees (often described as the secondary labor market). In contrast, both alternatives and satisfaction might have significant effects on turnover among permanent and full-time employees. Also, Hulin and his colleagues (1985) and Price and Mueller (1986) recognized that the cognitive processes leading to turnover actually may differ across these populations. That is, employees from different populations or varying personal or organizational circumstances may focus on different factors. In addition to alternatives and satisfaction, for instance, luck and inertia also can play a role in the turnover process. Although general hypotheses, which were called models, were proposed, Hulin and his colleagues (1985) did not clearly specify how labor markets, job alternatives, luck, inertia, differing foci, and employees' job attitudes combine to prompt employee turnover.

Thus far, there has been little direct research on the theory proposed by Hulin and his colleagues (1985). Some support can be inferred, however, from Peters, Jackofsky, and Salter (1981). They found that five vari-



ables drawn from Mobley (1977) (i.e., job satisfaction, thoughts of quitting, expectation of finding an alternative job, search behavior, and intention to quit) significantly predicted voluntary turnover among full- but not part-time employees. Moreover, Hulin (1991) developed his thinking further and has advocated that researchers should study employees' feelings about withdrawal in general and the impact of these feelings on a set of subsequent withdrawal behaviors (e.g., turnover, absenteeism, transfer). Although the early empirical evidence did not indicate strong relationships among various withdrawal behaviors, Hulin observed that much of the data involved skewed sample distributions, unreliability, and varying base rates. As a result, inferences on the strength of relationships among withdrawal behaviors simply cannot be made confidently. Hulin advised further that turnover should be conceptualized as only one of several behavioral correlates to an underlying adaptation/withdrawal construct. Recent research can be taken as additional, albeit indirect, support for Hulin's underlying construct. In a meta-analysis, for example, Mitra, Jenkins, and Gupta (1992) reported a weighted average uncorrected correlation between employee turnover and absenteeism of .23; when corrected for sampling and measurement error, the correlation rose to .33. Hom and Griffeth (1991) reported evidence of convergent and discriminant validity for a construct of general withdrawal cognitions, which may be similar to Hulin's notion. Although indirect, the empirical evidence may justify further study on a general adaptation/withdrawal construct.

### Comments on Current Approaches

At the moment, the research on voluntary employee turnover seems to be dominated by two general but contrasting orientations. Although a third orientation is proposed in this article, we do not advocate that current research directions should slow down or cease. Rather, we argue that our third orientation will produce additional debate, hypothesizing, and empirical research that, ultimately, will complement the current body of knowledge.

In the first orientation, Hom, Griffeth, and their associates (e.g., Hom, Caranikas-Walker, Prussia, & Griffeth, 1992; Hom & Griffeth, 1991; Hom et al., 1984) have advocated *improving* the research on the intermediate linkages between job satisfaction and employee turnover (i.e., the traditional models). In their research, for example, the major theorized antecedents to employee turnover have been measured with exceptional reliability and validity, assessed dynamically with multiple waves of survey data and analyzed with state-of-the-art structural equations; moreover, they have investigated moderators, such as unemployment rates, turnover base rates, length of measurement periods, and type of population. As a result, Hom and Griffeth have provided solid evidence that Mobley's (1977) intermediate linkages model can be reconfigured into



the Hom et al. (1992) version, along with hope that such reconfiguration will increase the prediction of voluntary employee turnover.

It is worth reiterating that, although the theorized antecedents can be predicted reasonably well, the research on the traditional models (e.g., Mobley, 1977; Steers & Mowday, 1981) has explained only a modest proportion of variance in actual employee turnover. For example, Hom and Griffith (1991: 361, Table 4) reported shared variances between employee turnover and Mobley's antecedent variables, which were measured at three points in time, that ranged from .00 (time 3 satisfaction) to .30 (time 3 withdrawal cognitions). In a meta-analysis of the research on these turnover models, Hom and his colleagues (1992: 897, Table 2) reported that the corrected mean correlations between employee turnover, and satisfaction (-.18), thoughts of quitting (.27), search intentions (.26), intention to quit (.36), and probability of alternatives (.14) were modest. In short, over 17 years of research on the traditional turnover models suggests that many employees may leave organizations in ways *not* specified by the traditional models. Thus, new theoretical directions seem timely.

In the second orientation, Hulin (1991) advocated *expanding* the current research from its narrow focus on satisfaction-turnover links to a broader grounding in the general theory and research on attitude-behavior consistency. He argued that research on his general adaptation/withdrawal construct might provide a greater general understanding of additional withdrawal behaviors (e.g., transfer, absenteeism, and sabotage, in addition to turnover); it also might offer an underlying psychological mechanism, as it could reconnect thinking and empirical efforts on employee turnover to more general psychological theories and systems.

As noted, the validity of a general adaptation/withdrawal construct remains an open theoretical and empirical issue. Nonetheless, there are reasons why the research on alternative withdrawal processes and behaviors have developed along separate lines from that of employee turnover. In part, a portion of the variance in these alternative forms of withdrawal is presumed to result from different underlying processes. For example, absenteeism is often theorized to result from an employee's attendance motivation and perceived ability to attend (Rhodes & Steers, 1990); it is an open theoretical issue as to how Hulin's adaptation/withdrawal construct integrates with Rhodes and Steers' constructs. The research on job transfer indicates that its relationship with job satisfaction varies by the particular operationalization of transfer and by the type of job involved (Lee & Johnson, *In press*); it is another open theoretical issue as to how an adaptation/withdrawal construct integrates with job transfer.

As a third orientation, we have developed a theory partly based upon some of the ideas presented by Mobley (1977), Steers and Mowday (1981), and Hulin and his associates (1985). In particular, there appear to be multiple types of turnover decisions, and each type requires different



levels of mental deliberations. For example, Mobley (1977) recognized "impulsive quitting," and Steers and Mowday (1981) identified dual turnover processes. Hom and Griffeth (1991) and Hom and colleagues (1992) also provided compelling evidence that some individuals follow a process akin to Mobley's intermediate linkages, but that many other employees move directly from withdrawal cognitions to quitting, without employing a job search. Moreover, the very nature of the mental deliberations involved with these turnover processes are likely to differ. Factors such as luck, habit, inertia, and labor-market pressures probably affect the level and type of these mental deliberations (Hulin et al., 1985). Further, it is not clear that dissatisfaction, search, alternatives, and evaluation of alternatives describe the turnover process for all employees or that a latent adaptation/withdrawal construct underlies all turnover decisions. As part of our third orientation, we specify the conditions under which the previously mentioned views might or might not apply. When these earlier views do not apply, additional turnover processes would seem needed.

## THE UNFOLDING MODEL OF VOLUNTARY EMPLOYEE TURNOVER

### Overview

**Image theory.** The unfolding model utilizes constructs from Beach's (1990) generic decision-making model, image theory, to understand the specific issue of employees' decisions to quit. Because both the early (Beach & Mitchell, 1987; Mitchell, Rediker, & Beach, 1986) and current work (Beach, 1990; Mitchell & Beach, 1990; Beach, 1993a,b) are readily available, only a summary of the theory's constructs is presented here. From the outset, readers must understand that image theory requires some general assumptions about the decision process that are contrary to much of the prevailing view of classical decision theory (Beach, 1993a,b, 1990). For example, Beach (1993a: 272) asserted that, in real decision processes, (a) "evaluation seldom is extensive," (b) "choice occurs relatively rarely," (c) "behavior largely is preprogrammed," (d) "decision makers possess a variety of different strategies for making choices, many of which have quite different aims than the maximization of expected utility," and (e) the field has "abandoned its single minded allegiance to the economic view of decision making." Beach and others (Keren & Wagenaar, 1987; Klein & Calderwood, 1993; Oden, 1987) provide support for his assertions.

In place of the traditional expected value type of conceptualization, image theory describes a substantially different process (Ilgen, Major, & Tower, *In press*). Beach (1993a) presented evidence that "screening" rather than choosing among options is the most important mechanism for understanding decisions. Screening is a mechanism that determines whether incoming information or potential changes in people's behavior actually become options in a decision process. Screening is a fairly rapid but



crude process that ascertains whether new information can be integrated easily into a set of three domain-specific images: value, trajectory, and strategic. The *value image* is described as the set of general values, standards, and individual principles that defines a person. The *trajectory image* is defined as the set of goals that energizes and directs an individual's behavior. The *strategic image* is defined as the set of behavioral tactics and strategies that an individual believes to be effective in attaining his or her goals.

According to image theory, people are constantly bombarded with information that could potentially lead to changes in behavior. For example, advertisements often suggest new purchases; articles and books commonly suggest ways to diet, to make millions, or to save a marriage; and friends and relatives frequently suggest ways to become better people. Most of the time, however, the status quo continues (Silver & Mitchell, 1990; Staw & Ross, 1987). For instance, a person's weight stays relatively constant; people stay at their jobs; and people's relationships remain stable. Thus, most of the information that suggests change is screened and rejected; it rarely forces people into a decision mode.

Screening, as described by Beach (1993a: 276), is "based exclusively on evaluation of a particular kind of dissimilarity (incompatibility) between the characteristics of an option and private . . . criteria." The compatibility test requires that information or decision options pass thresholds on relative (and private) criteria, and the three images, namely, value, trajectory and strategic, serve as these criteria. The screening process is based exclusively on violation of fit and is noncompensatory; good (or fitting) aspects do not compensate for incompatible aspects. Beach (1991) and others have presented reviews of the evidence that compatibility is a key process that helps to regulate important job choices (e.g., Caldwell & O'Reilly, 1990; Dauten, 1980; Edwards & Cooper, 1990; Schneider, 1987). In discussing compatibility and job satisfaction, for example, Edwards and Cooper (1990: 290) described fit "as a process in which the individual draws from his or her personal value structure to cognitively evaluate the surrounding job environment." Moreover, Potter and Beach (In press) and Van Zee, Paluchowski, and Beach (1992) have provided empirical support that screening is based on negative aspects and is noncompensatory.

Of course, some behavioral options are considered, and some decisions are made. That is, some options survive the screening process. Image theory suggests that (a) if an option survives the screening process, the most frequent decision mechanism is to compare the alternative to the status quo, and (b) in most cases, the status quo wins. In other words, people's images may be adjusted slightly over time, but their behavior typically stays the same. Only occasionally do individuals choose to venture from their well-worn paths, reject the status quo, and behave differently.

Even more unusual is the situation in which multiple options survive



the screening process, and people must make choices among alternatives. For these cases, Beach (1990) has presented evidence for a profitability test. The purpose of the profitability test is to choose the best of the options that survive the compatibility test (Beach, 1993a). The profitability test may involve a variety of different strategies, including variants of expected value and traditional decision models that employ a more rational, cost-benefit analysis.

A few additional comments about image theory are important to understanding its use in studying employee turnover. First, people have sets of images for different domains of their lives. The main images are work, family, friends, recreation, and ethics/spiritual (Mitchell & Beach, 1990). Second, images can be more clear or less clear, easy or hard to articulate, and strongly or weakly held; Beach (1990) suggested that decisions will be easier and quicker to the extent that the former conditions hold. Third, people seem to use images in the screening process in a sequential manner. That is, information or options initially are compared to the relevant content domain (e.g., work, recreation) and images (i.e., *Is this about my values, goals, or actions?*); then, comparisons are made with the other images, starting with the value image and followed by the trajectory and strategic images. Fourth, people may sometimes change an image instead of rejecting or accepting information or options. For example, a particular goal or tactic might be changed in order to accommodate information or an option. Although most people are more likely to reject information or an option, some individuals may change their images.

These details have implications for turnover-related decision processes. For example, information or events can cause conflict between life domains. A promotion may fit with images for the job, but it may also conflict with images for the family. Brown, Mitchell, and Beach (1987) have shown that conflicts among images can slow and render more deliberate the decision process. People may be more likely to change weakly held images rather than strongly held images. Strategic images tend to be easier to change than trajectory or value images. Studies by Mitchell and Beach (1990) and Rediker, Mitchell, Beach, and Beard (In press) have shown that ambiguous images can lengthen the screening process, which is then described as more difficult.

When taken together, the amount of cognitive effort during screening and choice processes may vary from very little to a substantial amount. On the one hand, a quick rejection of an alternative, which involved very little cognitive effort, may occur because of multiple violations of elements from the first evaluated image. On the other hand, considerable mental deliberations may be involved when multiple alternatives survive the screening process, which results in a profitability test. Thus, more information, loose images, multiple alternatives, and conflict among alternatives may lead to more cognitive activity.

Our use of image theory's concepts for understanding employee turn-



over suggests the following general processes. First, some sort of event, which we call a shock to the system, causes the person to pause and think about the meaning or implication of the event in relation to his or her job. Second, this process may (or may not) lead to the idea that leaving the job is an alternative to consider. If leaving becomes an alternative, there may (or may not) be other job alternatives to consider. These different possibilities constitute what are described in the following section as decision paths, that is, four general ways that employees may come to leave their jobs over time.

Figure 1 depicts these four specific decision paths; in it, each path is represented by a column. A decision path summarizes how employees interpret their work environments and how they identify decision options and enact responses. Most important, the foci fundamentally differ across the four paths. Before each decision path is described, however, the two key concepts of shocks to the system and decision frames are presented.

**Shock to the system and decision frames.** A shock to the system is theorized to be a very distinguishable event that jars employees toward deliberate judgments about their jobs and, perhaps, to voluntarily quit their job. A shock is an event that generates information or has meaning about a person's job. A shock must be interpreted and integrated into the person's system of beliefs and images. In this sense, it is sufficiently jarring that it cannot be ignored. Note that not all events are shocks. Unless an event produces job-related deliberations that involve the prospect of leaving the job (defined in various ways in Decision Paths #1, #2, and #3), it is not a shock.

Much like a disturbance in time-series analysis, a shock to the system need not surprise an employee; a shock can be any expected or unex-

FIGURE 1  
Characteristics of the Decision Paths  
Decision Paths

	1	2	3	4
Shock	yes	yes	yes	no
Sign of shock	+ 0 -	—	+ 0 -	na
Matching frame	yes	no	no	na
Evaluation of images	no	yes	yes	yes
		Fit judgment	Fit judgment	Fit judgment
Relative job dissatisfaction	no	yes	yes	yes
Search for job alternatives	no	no	yes	no
Evaluate job alternatives	no	no	yes	yes
			Fit judgment and rational analysis	Fit judgment and rational analysis
Quit decision	Automatic	Controlled	Controlled	Controlled



pected change to an ongoing social system that shakes an employee out of a steady state or challenges the status quo with respect to his or her thinking about the job. The jarring event (or the shock) implies attention getting and not necessarily a negative affect; the affect can be positive, neutral, or negative. For instance, some shocks can be entirely neutral. Others may involve some positive, neutral, and negative aspects, but when combined, however, their composite may be neutral. Thus, a shock can have a mean and variance. Moreover, the social and cognitive context that surrounds the experienced shock provides a frame of reference within which employees interpret the shock (i.e., a decision frame). A general interpretation is first provided by the organization's culture (Schneider, 1990). The shock is part of an ongoing context, and the examination of this context helps an employee to interpret the shock along some key dimensions (e.g., novelty, favorability, threat, or anticipation). A second process, one that is more personal, is whether the shock can be easily dealt with by some sort of response that is appropriate and easy to access. Of special interest is whether an obvious response comes to mind in the form of past actions or rules that a person has generated from observing others or from knowledge he or she has acquired in other ways. In the unfolding model, the experienced shock to the system and the general and personal decision frames prompt the onset of a specific decision path. Figure 2 shows a Fortran-style flow diagram that depicts Decision Paths #1, #2, and #4. Figure 3 depicts Decision Path #3.

#### **Decision Path #1: Shock to the System and a Memory Probe Resulting in a Match; A Script-Driven Decision (Figure 2)**

First, the shock to the system (Diamond a in Figure 2) jars the employee (e.g., the small, informal, West Coast software company where he or she works is purchased in a leveraged buyout by IBM) to interpret or construct a decision frame (Box b) for the experienced shock and its surrounding circumstances. The employee's immediate reactions are due, in part, to unique personal characteristics and experiences (e.g., low tolerance for authority or working in a large company). Moreover, these individual differences and experiences can become particularly influential, depending upon how the shock is interpreted. Second, the shock affects the employee so that he or she conducts a search of his or her memory (Box c) for prior decisions, rules, learned responses, and circumstances surrounding those prior shocks. Examples of rules could be, "I'll never leave the West Coast" or "I'll never be a suit for IBM." Most important, the memory probe also brings forth the recollection of whether the person's previous behavior (i.e., staying or quitting) was judged as appropriate. If the judgment is made that the experienced decision frame is virtually identical to prior decision frames and that an associated response of quitting was appropriate, or if a rule is in place that contains quitting as a response to such a shock, a match (Diamond d) occurs. Quitting (Box e), under these circumstances, is almost automatically enacted (i.e., requir-



**FIGURE 2**  
Decision Paths #1, #2, and #4

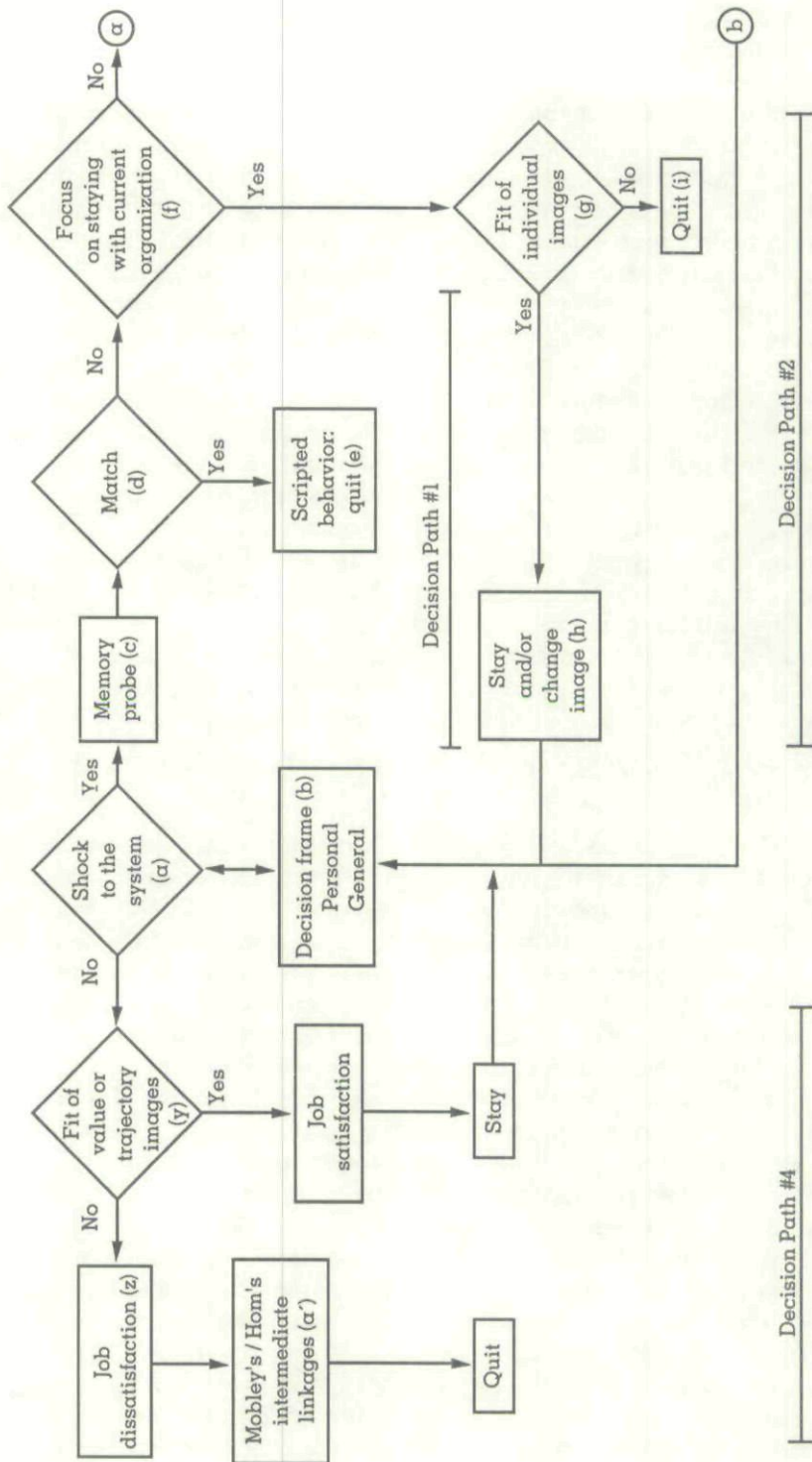
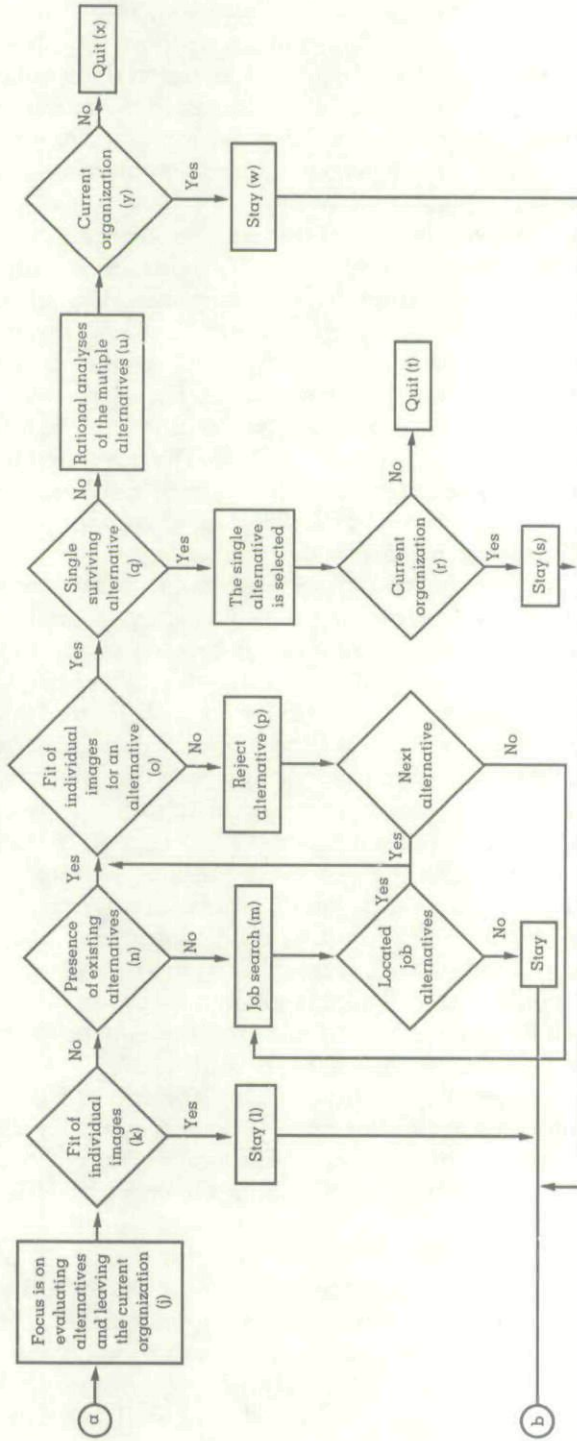




FIGURE 3  
Decision Path #3





ing little, though some, mental deliberation, reflection, or controlled information processing (e.g., "I don't want to work for a large company; I've left large companies before; I quit."). If a match does not occur, a different decision path is evoked. Thus, Decision Path #1 involves (a) a shock, (b) a match with a rule or with previous decision situations, and (c) a script-driven decision; it does not involve images, evaluation of job alternatives, or consideration of job dissatisfaction.

Because this path is very different from traditional turnover models, several issues merit comment. First, numerous examples exist where shocks can cause a Decision Path #1 response. Job-related shocks might include a company's taking on a client that pollutes the environment; being assigned a new sales territory; being asked to falsify financial data; or finding out that the company is fixing prices. Personal shocks could include marriage; a pregnancy; an inheritance; the last child leaving home; or the mortgage being paid off. The point is that a quit response is ready, available, and used with minimal deliberation, evaluation of the job, or other job alternatives. Whereas the matching process requires some thought, leaving is fairly automatic.

Second, numerous sources suggest such decisions occur. Dauten (1980) reports over 200 examples of quit decisions based on intensive interviews (many involving career or job-related quitting). Many of the decisions to quit aptly fit Decision Path #1. Furthermore, empirical data presented by Hom and Griffeth (1991) and additional data summarized by Hom and his colleagues (1992) show a significant direct effect from withdrawal cognitions to voluntary quitting, without an active consideration of alternatives. Also, Mobley's original theory posited that "impulsive behavior" may push a person out of the job search; that is, quitting sometimes precedes rational job-search processes. Moreover, our own anecdotal evidence suggests that people occasionally quit without reference to their job satisfaction or to other job alternatives.

Third, we should reiterate that Decision Path #1 takes some but very little mental deliberation. The initial memory probe and match process do involve active mental consideration. But, the enactment of the decision to quit is fairly automatic and script driven.

Finally, the secondary labor market, which is filled with marginal, temporary, short-term, and/or part-time employees seems more likely to have these types of quits. (Other descriptive terms for members of the secondary labor market include: contingent employee [Belous, 1989], hobo tendency [Ghiselli, 1974], peripherally employed [Hom, 1979], and marginal worker [Hulin et al., 1985]. See DiPrete, 1993, for a full discussion on the effects of a segmented labor market on job mobility.) Temporary or part-time employees, for example, often work until sufficient money is earned and then quit. The shock to the system might be the prespecified amount of earned money, with quitting representing an appropriate and almost automatic response. A student may wait on tables until he or she earned enough money to support him or her for the upcoming academic



year; the student may then quit without any comparisons, evaluations, or cognitive deliberations (e.g., Peters et al., 1981). Note that the shock can be positive (e.g., pregnancy), neutral (e.g., a grubstake attained), or negative (e.g., hostile takeover); the key issue is that a match occurs in the framing process resulting in scripted behavior.

### **Decision Path #2: Shock to the System, No Match, and No Specific Job Alternative; A Push Decision (Figure 2)**

A shock to the system (Diamond a) leads to the judgment that no nearly identical shock, with an appropriate associated response, or rule of action, has been recalled from memory (Box c). A leveraged buyout, for example, is carried out by a firm whose values the employee abhors (e.g., it invests in companies in South Africa). Unlike Decision Path #1, however, a match (Diamond d) has not occurred. No personal or situational experiences automatically call up a script that is enacted (Box e). Instead, the employee engages in additional mental deliberations and frames the shock, decisions to be made, and surrounding circumstances as the binary choice of staying with or quitting the current organization, with no specific job alternative in mind (Diamond f). It should be noted that the decision to stay also can lead to the subsequent changing of a person's image, a point that will be discussed in another section of this article. Nonetheless, the issue at hand for Decision Path #2 is a single judgment of staying with the current organization or quitting without a specific job alternative in mind.

Prompted by the shock, the employee is theorized to use the value, trajectory, and strategic images in order to reassess his or her basic attachment, or commitment, to the current organization (Diamond g). In particular, the employee's value image, or personal principles, prompts judgments about how well an individual can integrate his or her values with the shock. The employee's trajectory image, or personal goals, helps with judgments about whether he or she can attain these goals while staying with the current organization. The employee's strategic image, or goal-oriented plans, leads to judgments about whether the individual's current efforts and activities are, indeed, goal directed, given the shock. In the unfolding model, the employee is theorized to judge whether the shock to the system can be integrated into (i.e., fits) the value, trajectory, or strategic images and passes some acceptability threshold to indicate staying with the current organization. If the judgment with any single image is not a fit, the decision will be either to change the image (Box h) or to quit the company (Box i). If the judgment is a fit, the decision will be to stay. In image theory's terms, this "fit" judgment is called the *compatibility test* (Beach, 1990).

Note that for Decision Path #2, a person could be affected by the same shocks as for Decision Path #1; employees just do not have a ready response. A woman who becomes pregnant unexpectedly would try to decide whether working fits with her images of being a competent mother



(value), having a career (trajectory), or continuing in her sales position (strategy). Presuming that there is no image violation, she might decide to stay at the job. Alternatively, she may be confronted with sexual harassment on the job (the shock), may consider her value, trajectory, and strategic images, and may decide to quit. A vivid example, reported by Dauten (1980), describes how Bill Russell, while head coach of the Boston Celtics basketball team, found himself screaming at his players toward the end of a game to "go out there and kill them." Upon reflection, Russell found his engaging in such behavior as an adult so ridiculous that he quit the head coaching position without job alternatives.

Again, several points merit comment. Much of the same interview, empirical, and anecdotal data used to support Decision Path #1 are also relevant for Decision Path #2. In this case, however, a person clearly evaluates his or her job and his or her satisfaction before quitting. Using terminology from image theory, an individual makes a status quo decision; that is, he or she chooses to stay in his or her job (a status quo decision) or to leave the job. We should also note that, although positive and neutral shocks can serve as prompts, negative shocks are more likely to initiate Decision Path #2 because of this path's focus on leaving without a specific job alternative. Finally, if Decision Path #2 results in what the person believes to be a good (i.e., appropriate) quit, the entire experience may develop into the scripted behavior associated with Decision Path #1, the next time the same (or a similar) shock occurs.

### **Decision Path #3: Shock to the System, No Match and Presence of Specific Job Alternatives; A Pull Decision (Figure 3)**

Similar to Decision Path #2, a shock to the system elicits a memory probe, and a match between the experienced shock and the recollection of a nearly identical shock or an easily accessible rule does not occur. Also similar to Decision Path #2, the employee again constructs and applies a general and personal decision frame with which to interpret the shock. Unlike Decision Path #2, however, the shock, decisions to be made, and surrounding circumstances come to be framed as the choice between staying with the current company versus quitting for one or more specific job alternatives (Box j in Figure 3). In addition, note that the sign of the shock may be negative (missed promotion), neutral (a merger), or positive (an inquiry from another company about a person's mobility).

For Decision Path #3, the image comparisons typically are much more complex than for Decision Paths #1 and #2. Similar to Decision Path #2, the shock is judged for compatibility with the value, trajectory, and strategic images (Diamond k). A judgment of compatible does not prompt a search for alternatives, and the employee stays at his or her job (Box l). A judgment of "not compatible" produces either a change in image or some level of relative disaffection with the job, and this disaffection prompts a search for alternatives (Box m). If an individual is passed over for promotion (a shock), for example, the employee may change his or her



goal about promotion, or the individual may become disaffected with the job and consider leaving the company. For some, the enacted job search includes a highly involved, detailed, and systematic series of informational interviews and a blanket sending of resumes (Hom & Griffeth, 1991). For others, the enacted job search requires far less effort because these individuals may be highly recruited (e.g., hold standing job offers) or have chosen industries with strong employment opportunities (e.g., experienced systems engineers, experienced machinists, nuclear power plant operators; Hom et al., 1992). For still others, an unsolicited invitation to consider a job, which can constitute a shock to the system in this path, may periodically (or frequently) arrive. For these highly employable individuals (Diamond n), actual and perceived job opportunities can be very tightly linked. In short, a shock occurred; a match did not. If the images are not changed, these specific alternatives must be evaluated.

Given alternatives, the unfolding model holds that the value, trajectory, and strategic images are evoked again in order to evaluate these specific alternatives (Diamond o). Instead of focusing an employee to reassess the commitment to the current company (Decision Path #2), the three images refocus an employee to an assessment of whether a basic commitment *could form* with a specific alternative organization via two additional sets of judgments. In the first set, the judgments concern the deletion versus survival of specific alternatives. The employee judges whether the job alternative can be integrated into, or fits with, the value, trajectory, or strategic images and passes some acceptability threshold to suggest quitting the organization (Beach & Strom, 1989). If the judgment to any one of the three images is not a fit, the decision will be to drop the alternative (Box p). If the judgment is a fit, the alternative survives and is entered into the second set of decisions.

If only one alternative survives the prior judgments (Diamond q), the final set of decisions involves the direct comparison between the single surviving option and the expected benefits of staying with the current company (Diamond r). If the current organization provides greater expected benefits, the employee stays (Box s); if the surviving option provides greater expected benefits, the employee quits (Box t). If multiple options survive, the employee assesses the subjective expected utilities, or preference functions, for each surviving alternative, including the expected benefits of staying with the current company (Box u). The option that maximizes the preference function is then chosen by the employee. If the current organization maximizes the person's expected return, the decision will be to stay (Box w). If an alternative organization maximizes the person's expected return, the decision is to quit, and actual quitting soon follows (Box x). Note that this second set of comparisons is basically a subjective expected utility model. In terms of image theory, this second set of comparisons is called the *profitability test* (Beach, 1991).

On occasion, for example, an employee receives an unexpected and unsolicited invitation to consider a job. The shock to the system, the in-



vation, which is also a specific alternative, leads to the decision of whether the offer is worth seriously considering. For Decision Path #3, "worth seriously considering" constitutes the first set of "fit" judgments. If the offer is judged to be "worth seriously considering," a second set of fit judgments is enacted, which involves the person's examining and "pruning" a subset of alternatives for further scrutiny. The surviving alternatives (or more alternatives that might be pursued) are subjected to a more economically rational analysis, which constitutes the third set of judgments. The alternative that optimizes expected utility is predicted to become the enacted outcome. Note that a departing employee can be relatively satisfied with his or her current job or committed to the organization for Decision Path #3. That is, this individual might like the current situation, but he or she just might like an alternative better.

#### **Decision Path #4: No Shock to the System; Affect Initiated (Figure 2)**

Unlike prior decision paths, no singular event jars mental deliberations toward recognition of prior shocks (Decision Path #1), reassessment of an individual's basic commitment to the current organization (Decision Path #2), or assessment of the likelihood of commitment to an alternative organization (Decision Path #3). Rather, Decision Path #4 describes the perception of organizational life as an ongoing and evolving process with few distinguishing demarcations. The job, the work setting, and the current organization are seen as relatively stable. According to the unfolding model, some employees will, on occasion and over time, come to reassess their basic commitment to the current organization. This reassessment does not occur because of a jarring event (i.e., a shock). Rather, reassessment occurs more routinely, casually, or even randomly. Metaphorically, the employee conducts a periodic monitoring of the job's pulse.

This path may start in one of two ways. First, over time, either the employee or the organization can change, such that elements of the job no longer fit with the value or trajectory images (Diamond  $\gamma$ ; Figure 2). Lack of fit with either or both images can lead to judgments about the sufficiency or insufficiency of the individual's expected job satisfaction and likelihood for the duration of that expected job satisfaction. If a lack of fit continues, the image is either changed or job dissatisfaction results (Box  $z$ ). A second way to initiate Decision Path #4 is through the process described by Weiss, Nicholas, and Link (1992). These authors present data that show that a person's reaction to job events often bypasses cognitive, rational analysis and has a direct impact on affective responses to jobs. Thus, a person could come to be dissatisfied with his or her job without undergoing various comparisons of images.

As noted previously, the intermediate linkages between job dissatisfaction and voluntary turnover have received considerable theoretical and empirical attention. In general, theorists agree about the content and process of these intermediate links (Box  $\alpha'$ ). The unfolding model uses



that body of research for one part of Decision Path #4 (called 4B). In the absence of a shock to the system and the judgment of the "not fit" for the value or trajectory image, the unfolding model holds that job dissatisfaction leads, in sequence, to lower organizational commitment, more job-search activities, greater ease of movement, stronger intention to quit, and a higher probability of employee turnover. Thus, the current models of turnover are seen as accurately describing a part of Decision Path #4 and Decision Path #3 from the point of job dissatisfaction to the decision to quit.

It should be noted that Decision Path #4 diverges into two "subpaths" after the onset of relative job dissatisfaction. Some, perhaps most, people follow the well-described path laid out by the traditional models involving search, evaluation, intentions to quit, and so on (e.g., Mobley, 1977; Hom et al., 1984; Decision Path #4B); some other people will switch to a process that is similar to the last part of Decision Path #2 after dissatisfaction occurs (e.g., Steers & Mowday, 1981; Hom et al., 1992). More specifically, the ongoing evaluation and image-comparison processes or the accumulated direct negative affect result in so much dissatisfaction that a person leaves, without considering job alternatives (called Decision Path #4A). In other words, an employee simply leaves, upon realizing that he or she is unhappy.

### Summary

Four decision paths describe quite different psychological processes of employee turnover, with each path unfolding over time. Given the various characteristics of the decision paths (Figure 1) and interrelationships (Figures 2 & 3), a heuristic summary of the unfolding model may be elucidating. Table 1 depicts three levels of mental deliberation crossed by the presence or absence of a shock to the system. Each cell of the matrix shows a corresponding decision path. In particular, Decision Path #1 describes a fairly automatic, simple, and script-driven process; it involves minimal mental deliberations. Decision Paths #2 and #4A describe a more employee-controlled process that focuses on compatibility of images. In comparison to Decision Path #1, these decision paths entail a greater amount of mental deliberations. Further, Decision Paths #3 and #4B describe an even more extensive and employee-controlled process that involves image compatibility and assessment of alternatives. In comparison to the other paths, these decision paths require considerably more mental deliberations. Note that Decision Path #4A does not include consideration of alternatives, whereas Decision Path #4B does.

## FIVE UNIQUE CONTRIBUTIONS OF THE UNFOLDING MODEL

### A Theoretical Change

On occasion, particular theories dominate the academic landscape. As a result, the attention of scholars becomes too directed toward a single approach and away from alternatives. In particular, March and Simon's (1958) landmark chapter on the decision to participate may have overly



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**TABLE 1**  
**A Heuristic Summary of the Unfolding Model**

Mental Deliberations	Shock	
	Present	Absent
Minimal	Decision Path #1: Script driven	—
Moderate	Decision Path #2: A push decision	Decision Path #4A: Affect initiated
Extensive	Decision Path #3: A pull decision	Decision Path #4B: Affect initiated

influenced the subsequent conceptual models of employee turnover. Although a great deal was learned from the research on these subsequent models of turnover, significant advances in our understanding may now require alternative theoretical perspectives.

The unfolding model seeks to prompt the theory and, by inference, the empirical research, as well on employee turnover in new directions. In recent years, the theory and research on employee turnover has emphasized, to varying degrees, economically or intendedly rational decision making (Mobley et al., 1979) through subjective optimizing comparisons between the various forms of the perceived desirability and ease of movement (March & Simon, 1958). In contrast, the unfolding model limits these more rational decision-making processes to a portion of Decision Paths #3 and #4. As a result, alternatives to more rational or analytic decision making are highlighted in our model.

Furthermore, researchers often conceptualize a particular psychological process that leads to employee turnover. For example, researchers often interpret (by necessity) Mobley's (1977) model as suggesting a relatively fixed sequence of stages and have proceeded to test for such direct effects (e.g., Hom et al., 1984; Lee, 1988). In contrast, the unfolding model specifies four different and distinct sequences that lead to employee turnover. As a consequence, researchers are directed to think about employee turnover from at least four different ways, instead of testing for a single process. Although Steers and Mowday (1981) proposed a dual process leading to employee turnover, they did not identify a mechanism that predicted the onset of each process. In contrast, the unfolding model specifies the shock to the system and subsequent deliberation as the mechanisms that determine the onset of a particular decision path.

We should add that the unfolding model also differs from the approach suggested by Hulin (1991). Although compatible with portions of the unfolding model, Hulin's idea of an underlying withdrawal construct does not fit with other parts of our model. Decision Path #1, for example, is theorized to be script driven, and as such, a latent withdrawal construct does not determine the turnover process. For Decision Path #3, an employee can quit a satisfying job in favor of a more satisfying position. Again, there is no necessary dependence on an underlying withdrawal construct. Thus, the unfolding model significantly differs from the tradi-



tional approach based on job dissatisfaction and job alternatives and from Hulin's more recent approach based on a withdrawal construct.

In sum, the first contribution of the unfolding model is to propose an alternative theoretical approach to March and Simon's (1958) decision to participate model and to its intellectual descendants as a basis for understanding employee turnover. At the very least, some attention might be directed away from the dominant focus on the intendedly rational comparison between the perceived ease and desirability of movement, in all its various forms, to the less rational judgment processes of fit and compatibility (Beach, 1993b).

### **Habits, Scripts, and Schemas**

Habits, scripts, and schemas are not typically considered by turnover theorists and researchers. Yet, such psychological mechanisms that result in routinized behaviors constitute a significant portion of a person's nonwork and organizational life (Feldman, 1981; Gersick & Hackman, 1990; Ilgen et al., *In press*; Weiss & Ilgen, 1985). Perhaps because of a strong tradition in rational decision making, such routinized, nonanalytic driven behaviors are not easily integrated into the major models of employee turnover. Via Decision Path #1, the unfolding model explicitly incorporates such programmed behavior into the turnover process. Furthermore, Decision Path #1 may more accurately describe the process of quitting among a largely neglected portion of the workforce, namely, the secondary labor market (Belous, 1989; DiPrete, 1993; Ghiselli, 1974; Hom, 1979; Hulin et al., 1985). As such, the ecological validity may be greater for the unfolding model than the traditional turnover theories. In sum, a second contribution of the unfolding model is to incorporate habits, scripts, and schemas into the process of employee turnover through the notion of matching frames.

### **Shocks to the System**

Shocks to the system constitute a relatively new concept to the theory and research on employee turnover. Shocks provide a conceptual mechanism to bring the effects of unsolicited job offers, random events (a colleague dies in a car accident), unexpected circumstances (a spouse receives a job offer in another city), and luck (you win the lottery) into the quitting process. Furthermore, it identifies a conceptual means that can shake the employee out of states of inertia. Sometimes, for example, employees remain unaware of job opportunities because the constant and daily routine of work, home, and family demands shields that person from alternative possibilities. Frequently, people simply don't notice things until something forces them to; shocks to the system constitute the jarring event that forces people to notice readily available opportunities.

In a broader sense, shocks to the system increase an individual's dependence on understanding the organizational environment. Recently, Cappelli and Sherer (1991) argued that the effects of the external environ-

ment on individual decisions to quit are often conceptualized as filtered through the individual's perceptions. As a result, direct influences from the objective environment on turnover decisions hold less important and often secondary functions in the theories of turnover. Business cycles, labor markets, and public and business policies, for example, are largely omitted from theories of turnover. At some level, certainly, shocks to the system must be filtered through individual perceptions. However, in Decision Paths #1, #2, and #3 of the unfolding model, shocks are conceptualized as very closely tied to the objective context. In other words, the nature of shocks to the system is seen as forcing the theorist or empiricist to stay tightly linked to the objective context.

Although related, shocks to the system can be differentiated from several concepts in the literature. Rosse and Miller (1984) introduced the concept of the "stimulus event" in their model of the adaptation cycle (Rosse & Miller, 1984: 208-209). The stimulus event's two distinguishing characteristics are (a) "the person notices it" and (b) "it induces him or her to realize that he or she could be 'better off' in a subjective utility sense." On the one hand, the stimulus event and shocks are similar in that both must be noticed by an employee before the respective next steps can be engaged (i.e., relative dissatisfaction for the adaptation cycle and a decision path for the unfolding model). On the other hand, the magnitude of the stimulus event is variable (e.g., ranging from just noticeable to a jarring event), whereas the magnitude of the shock to the system is more specific (i.e., a jarring, an undeniable, or a clear and present entity). Furthermore, the stimulus event is theorized to activate relative job dissatisfaction, which is defined as the realization that one "could be better off than in the current situation. The current situation . . . [is] suboptimal in the person's view" (Rosse & Miller, 1984: 209). In contrast, shocks to the system are theorized to prompt matching (e.g., Decision Path #1) and judgments of images (e.g., Decision Paths #2 & #3). Whereas the mental deliberations following the stimulus event are entirely "in a subjective utility sense" (Rosse & Miller, 1984: 209) the mental deliberations following the shock that involve subjective expected utilities are limited to a portion of Decision Path #3. Most of the mental deliberation after a shock to the system involves image judgments. Thus, a shock is a construct that is clearly different from the stimulus event.

Similarly, Porter and Steers (1973) introduced the "unmet expectations" concept to the withdrawal literature. In particular, "when an individual's expectations . . . are not substantially met, his propensity to withdrawal would increase" (Porter & Steers, 1973: 152). Although generally considered in Mobley and colleagues' (1979) and Steers and Mowday's (1981) turnover models, unmet expectations has been most influential in the research on newcomer socialization (e.g., Lee, Ashford, Walsh, & Mowday, 1992; Wanous, 1992). Furthermore, Louis (1980) has suggested that when newcomers experience over- or under-met expectations, sur-



prise often occurs, which can trigger sense making in the new organization.

Unmet expectations as conceptualized in the research on newcomer socialization can be differentiated from shocks as conceptualized here. Unmet expectations commonly involve (a) newcomers, (b) turnover during the early employment period, and (c) job-related events, whereas shocks involve (d) all employees, (e) turnover during the entire employment period, and (f) both job and nonwork events. Whereas unmet expectations include an accumulation of discrepancies from a defined standard, shocks entail a single event with no necessarily defined standard. Finally, whereas unmet expectations imply actions (i.e., Porter & Steers' quitting or Louis's surprise and sense making), and whereas met expectations imply no actions, shocks can be expected or unexpected and can lead directly to extensive or minimal mental deliberations. Thus, shocks are conceptualized to be both different and broader than unmet expectations among newcomers to an organization.

Two other constructs merit brief mention. First, Mobley (1977: 239) used the term *impulsive behavior* to describe the quitting of some employees who do not follow his intermediate linkages model. On the surface, this label might appear similar to all of Decision Paths #1 or #2 (not just shocks). However, Mobley (1977) provided minimal substantive elaboration on the meaning of impulsive behavior or why it occurs. Second, Dauten (1980: 19) used the term *realization* to mean the "recognition of an experience as a major turning point." However, realization is only used in situations when quitting occurs; in contrast, shocks can result in either a person's staying or quitting. Moreover, Dauten did not provide any theoretical rationale for the circumstances under which a realization leads to quitting.

In sum, a third contribution of the unfolding model is to propose a conceptual mechanism that allows for various external, unexpected, or random events to enter into the turnover process. Moreover, the unfolding model allows a greater and more direct role of objective environments in the turnover process than do current models. In comparison to the stimulus event and unmet expectations, shocks appear to be more precise and encompassing in their theoretical role.

### **Multiple Sequences Leading to Employee Turnover**

Based on March and Simon's (1958) decision to participate, Mobley's (1977) intermediate linkages, Mobley and colleagues' (1979) expanded theory, or Price and Mueller's (1986) model, most researchers typically have investigated a single process leading to turnover. In contrast, the unfolding model applies shocks to the system, memory probes, and judgments of "match" versus "not match" to predict the onset of one of four relatively distinct quitting processes. Indeed, evidence clearly suggests the likelihood of multiple turnover processes (e.g., Hom & Griffeth, 1991; Hom et

al., 1992). Thus, the fourth contribution of the unfolding model is its greater explanatory power and detailed specification.

### Differing Psychological Foci

In the major turnover models, the employee's attention focuses on staying or leaving the current company. For example, March and Simon's (1958) decision to participate involves the perceived ease and desirability of movement from the present company. Mobley's intermediate linkages model (1977) essentially begins with some degree of dissatisfaction with the current job. Likewise, Steers and Mowday's (1981) model involves perceptions, expectations, job attitudes, and intentions primarily centered on the current organization. In contrast, the unfolding model theorizes different foci across the four decision paths. In other words, the main stimulus, object of attention, or event that the employee makes judgments about differs across decision paths, which, in turn, prompts different sets of associated judgments. Thus, different psychological processes are posited to occur for the four decision paths.

Decision Path #1 involves experiencing a shock within a specific decision frame and matching it with an appropriate response recalled from memory. The object of the individual's attention is the shock itself and its surrounding decision frame, which then prompts judgments about sufficient similarity with the content recalled from memory. Decision Path #2 also involves reacting to a shock, having no specific alternatives in mind, and evoking three images. The object of an employee's attention is staying with the current company, which, in turn, prompts judgments about that person's sufficient commitment and satisfaction (i.e., the fit of the images) to justify staying with the current work situation. Decision Path #3 also involves reacting to a shock, having specific alternatives in mind, and again evoking three images. The object of the person's attention is, however, going to an alternative organization, which then prompts judgments about the viability of the alternative organization. Decision Path #4 involves no shock and the random onset of a feeling of job dissatisfaction. The object of an employee's attention is the current company itself, without a necessary focus on staying or leaving, and it may or may not lead to a search and an evaluation of job alternatives. In sum, the fifth contribution of the unfolding model is the explicit recognition and delineation of different psychological foci and processes that can lead to employee turnover.

### SPECULATIVE ISSUES FOR FUTURE RESEARCH

Parts of our ideas are grounded in the theory and research from decision making (e.g., Beach, 1990) or turnover (e.g., Hulin, 1991; Hulin et al., 1985; Mobley et al., 1979; Steers & Mowday, 1981) research. Other portions are new (e.g., shocks to the system). Still other parts involve integration with other ideas (e.g., scripted behavior). While we developed the unfold-



ing model, at least four topics emerged that merit additional speculative discussion. Moreover, these topics suggest a number of future research issues.

### **Types of Shocks**

As noted previously, shocks can be positive, neutral, or negative events that prompt cognitive deliberations about a person's job. Furthermore, it may be useful to researchers' understanding of shocks, as well as the larger unfolding model, if shocks could be coherently categorized. As potentially useful categories, we suggest the following: (a) personal events that are external to the job, (b) personal events that are job- or work-role related, and (c) organizational events. The first category could include winning the lottery, having a spouse transferred, being elected a church officer, losing a loved one, or adopting an infant. The second category could include missing a promotion, receiving a job offer/inquiry, having an argument with the boss, becoming vested, or earning a large bonus. The final category could include corporate takeovers, scandals, diversification, or downsizing. Note again, all three of these categories can be positive, neutral, or negative.

Shocks to the system can also be expected or unexpected. There may be systematic differences in actions prompted by unexpected (e.g., announcement of a reduction in the work force for next year) versus expected (e.g., receiving a legally mandated warning, as opposed to layoff, letter after a previously announced reduction in the work force) shocks. Would, for example, Decision Paths #1 or #2 occur more often than Decision Path #3 after an unexpected shock? Might there be systematic differences in paths prompted by expected shocks that are caused by recurring events (e.g., size of the earned yearly performance bonus) versus single-occurrence events (e.g., tenure decisions in universities)? Would, for instance, Decision Path #1 or #2 occur more often than Decision Path #3 after an annual event-based expected shock?

From our perspective, the interesting point is that these different types of shocks likely occur with differing frequency and varying effects on the specific decision path that is followed and the eventual decision that is made. As a research direction, investigators might seek to document the types of shocks people actually report and whether these shocks can be meaningfully classified into our, or some other, organizing system.

### **Images and Fit**

Although Beach (1990) has made substantial advances in the general understanding of images and fit, specific conceptual and empirical methods for describing and measuring images and fit in the particular context of employee turnover also need development. Goal and control theories may offer the conceptual tools needed for such development (Locke & Latham, 1990; Lord & Maier, 1990). Articles by Klein (1991) and Wood and

Locke (1990), for instance, have suggested that intentions can be described in terms of an objective (or goal) and action plan (or strategy). Moreover, work regarding goal and control theories suggests that employees hold hierarchies of goals that vary from general principles (e.g., I want to be honest; my goal is to be a successful artist) to more specific distal goals (e.g., I want to get my MBA in two years; I plan to be married with two children by age 35) to specific proximal goals (e.g., I'm striving for an A in this class; I'll finish this Saturday's 10K race in under 40 minutes).

When considered together, the ideas from goal and control theories suggest that images might be defined in terms of goal hierarchies. In particular, broad and general intentions might define the value image; distal but more specific intentions may reflect the trajectory image; proximal intentions could constitute the strategic image. As such, images might be conceptualized as specific profiles of attributes that represent various values (e.g., honesty, wealth, beauty), distal goals (e.g., educational attainment, status, family's economic condition), and proximal goals (e.g., grade point average, monthly income). Conceptualizing images in terms of goal hierarchies should be helpful in at least two ways. First, shocks can be more easily understood as facilitating or hindering goal attainment and the adoption of new goals. Second, job alternatives can be readily understood as to whether they fit with existing goals. These constructs constitute key portions of the unfolding model.

As a related research issue, investigators might study the conditions leading employees to change their images, rather than to leave the organization, as a result of incompatibility. After a decision to stay, for example, an employee might change the value image (e.g., It's okay to engage in mergers and acquisitions because everyone's doing it), trajectory image (e.g., I'll get the promotion eventually), or strategic image (e.g., I'll stay, but I'll use all of my "sick" time, rather than bank it). In other words, employees may adjust their images to incorporate and make sense of the shock to the system and subsequent feelings of disaffection. Those who stay and those who leave may have similar shocks in Decision Paths #2 and #3, but they resolve the subsequent dilemmas differently.

### **Multiple and Recurring Shocks**

Of course, a somewhat simplified snapshot picture of shocks, deliberations, and decisions has been presented. It seems very likely that multiple shocks can occur at a given time or while an individual's mental deliberations are in process. To the extent that our proposed model unfolds over time, sequences of shocks seem very likely to occur and should be considered. As such, we speculate that most employees will continue their assessments (i.e., mental deliberations) in the face of new information (e.g., subsequent shocks) but will revise various factors in the model (e.g., images or satisfaction). In some cases, a new shock may cause an employee to shift paths. For example, an engineer may miss a promotion



to chief engineer and may begin Decision Path #2, wondering whether engineering is a good profession for him or her. In the following week, another company may offer this engineer a job as chief engineer. The engineer may then move from Decision Path #2 to Decision Path #3 and consider the new alternative. Movement between decision paths does not invalidate the unfolding model; rather, such movement simply renders empirical testing more difficult and descriptions more complex. Indeed, the model's enhanced explanatory power may, in fact, imply greater ecological validity.

In a related fashion, a second way for multiple shocks to occur is after a decision path has been completed. Suppose, for example, a person has just completed Decision Path #4 and decides to stay on the job. Is that employee less (or more) likely to react to an unsolicited job offer by quitting than if he or she had not completed the deliberations of Decision Path #4? This type of iterative process merits study.

Also, the unfolding model clearly implies that employees interpret situations and events, and subsequent changes in the likelihood of staying or leaving are thought to follow systematically. Some people, however, create situations that allow shocks to occur; that is, they are proactive in shock production. For example, an employee can demand a promotion, buy lottery tickets, or encourage his or her spouse to apply for another job. Note that such complexity again renders empirical testing more difficult. Because these hypothetical situations and corresponding complexities do occur in actual organizations, the researcher needs to be aware of their implications for empirical testing.

### **Factors Affecting the Onset of Decision Paths**

Several dispositional and situational variables might influence the particular decision path taken by specific individuals. Although speculative, the following discussion does suggest additional ways to test the unfolding model.

**The self-concept.** Broadly conceived, a variety of dimensions involving the self-concept (e.g., self-esteem, task-specific self-efficacy, general self-efficacy, locus of control and affectivity) may be applicable to the unfolding model. For our speculations, however, the self-concept is seen as a global construct involving a summary judgment and feeling about an individual's personal characteristics and situation (e.g., how well a person evaluates or feels about his or her knowledge, skills, abilities, aptitudes, and life and work situations). Taken as a whole, individuals with stronger self-concepts would seem more likely to hold preconceived notions about who they are (a value image), what they want (a trajectory image), and how to attain these images (a strategic image) than people with weaker self-concepts. Moreover, the individuals with stronger self-concepts would seem likely to hold many preconceived ideas about what ought to happen under many hypothetical conditions. In other words, individuals with stronger self-concepts likely hold more preplanned



courses of actions (i.e., scripted behavior) that address many "what if" situations than people with weaker self-concepts. As a result, the likelihood of match decisions would seem enhanced. Two predictions are offered. First, a positive association between the strength of the self-concept and onset of Decision Path #1 is predicted because of the enhanced likelihood for a match decision. Second, if a not-match decision occurs nonetheless, the speed with which Decision Paths #2-4 are enacted is predicted to be greater for those persons with stronger rather than weaker self-concepts, because of the greater clarity of images.

**Commitment propensity.** Conceived as a broad summary construct, commitment propensity aggregates specific personal characteristics and experiences, which individuals bring to the organization, such that a stable attachment to the organization more likely develops (Lee et al., 1992). In other words, people who enter organizations with greater commitment propensity should develop stronger subsequent commitment to the organization than those who enter with lower commitment propensity. You will recall that in Decision Path #2, a shock prompts an individual to focus on staying with the current organization and the reassessment of that person's commitment to that organization. Because of the greater likelihood for subsequent commitment to the organization, those individuals who enter with higher commitment propensity should be more likely to engage in Decision Path #2 processes than people who enter with lower commitment propensity. You also will recall that for Decision Path #3, a shock prompts an individual to focus on whether he or she could form a stable attachment with another company. Also, because of the greater likelihood for commitment to the current organization, those individuals who enter with higher commitment propensity should be less likely to engage in Decision Path #3 processes than people who enter with lower commitment propensity.

**Work history.** Individuals who have voluntarily left many jobs would likely experience and explain voluntary turnover differently than persons who have had fewer voluntary departures. For example, some professors voluntarily move from university to university every few years as a means to increase their salary more rapidly; other professors choose to remain in one university for many years, knowing that salary increases likely come more slowly. Whereas the first set of professors might view their voluntary turnover as routine career events, the other set might view voluntary turnover as unusual and unnecessary. Further, the first set of professors might experience such turnover as scripted events (e.g., "Three years and five publications while at one school signals that I should move to another institution"), whereas the second set might experience turnover less systematically. As such, individuals with a history of voluntarily leaving many organizations might be more likely to hold preexisting scripts about when to leave than people with a history of staying with organizations. Thus, work history is predicted to be positively associated with the onset of Decision Path #1.



**Strong versus weak situations.** Work situations often contain cues that signal the appropriate behaviors to be enacted by employees (Monson, Hesley, & Chernick, 1982). Where cues are more compelling and uniformly interpreted, the situation is called stronger; where cues are less compelling and uniformly interpreted, the situation is called weaker. The likelihood of scripted behaviors seems greater in stronger than in weaker situations. Moreover, the likelihood of Decision Path #1 may be higher in stronger than in weaker situations as well. Thus, a positive association between the onset of Decision Path #1 and situational strength is predicted.

### EMPIRICAL ISSUES

In this section, methods of data collection are considered. Although specific methods are discussed, it should be recognized that these methods are complementary, rather than mutually exclusive. Indeed, multiple methods of data collection may be essential when making comparisons between decision paths, and single methods may be adequate only when testing within a decision path. After our comments on data collection, a discussion on data analysis is presented. Because the current turnover models focus on Decision Path #4 and because the research methods on these models have been evaluated elsewhere (e.g., Peters & Sheridan, 1988), the following discussion will not specifically address Decision Path #4.

#### Data Collection

Decision paths are theorized to unfold over time. Ideally, a researcher should collect data on meaningful variables before, during, and after the occurrence of one or more decision paths. Meaningful data would necessarily be time related and may include such attributes as occurrence (e.g., when decision paths occur), duration (e.g., how long decision paths last), and potential for an actual or a statistical adjustment to common start and end points (e.g., Is it reasonable for a researcher to act as if an entire sample of employees begin decision paths at the same time?).

Appropriate methods with which to collect data on decision paths might be *retrospective*, *simulated*, and *prospective* in nature. Retrospective approaches ask individuals to recall and describe the onset and evolution of a decision path. For example, in-depth interviews might be conducted with people who leave a company and those who decide to stay, and their subordinates, peers, superiors, nonwork friends, and family, with the obtained data clinically interpreted. Over time, these individual case studies might be aggregated into a convenience sample and statistically analyzed. In addition, simulated approaches would be used to ask employees about their behavioral intentions. For example, protocol analysis would ask employees to verbalize their interpretations, analyses, and judgments about a hypothetical decision path (or paths). Alter-



natively, employees could be given a written scenario describing a shock to the system and one or more decision paths. They might then be asked what they would do. It should be noted that simulated approaches can suffer from memory biases and low external validity. Prospective approaches are used to collect data that map the decision path as it actually evolves. For example, (a) participant-observers in organizational settings, (b) systematic and periodic interviews that can target before, during, and after a decision path occurs, and (c) multiple surveys with brief telephone interviews as follow-ups may effectively capture a dynamic decision path.

The utility of one or more of these approaches partly depends on the attributes of the particular decision path. Perhaps the two most important attributes are the length of time involved in making a decision and the elaborateness of the associated cognitive activity. For example, Decision Path #1 occurs quickly and involves few mental deliberations. Retrospective approaches, where different observers are asked to reconstruct the turnover event, might result in meaningful data, but asking individuals to conduct a protocol analysis may be inappropriate. Similarly, prospective approaches might miss the entire turnover process because the onset (and duration as well) may be difficult to anticipate in part due to the quickness of Decision Path #1.

Decision Path #2 requires more mental deliberations than Decision Path #1. An experienced shock must first be evaluated; in turn, the shock might then (a) be integrated with the existing images, (b) be rejected and the employee subsequently leaves the organization, or (c) lead to an image change. Although indeterminate, we suggest that Decision Path #2 requires a longer time duration than Decision Path #1 but a shorter time duration than Decision Path #3. As such, retrospective approaches may be appropriate when the time duration for Decision Path #2 is relatively short. If the time duration is longer, however, various memory biases may begin to operate, especially if a person begins a job search or begins an actual job since leaving the prior organization. If Decision Path #2 unfolds slowly and deliberately, prospective approaches are likely to become more effective. With slower deliberations, the anticipation of the onset, duration, and end of Decision Path #2 would be easier; researchers should be able to measure effectively Decision Path #2 as it naturally and actually occurs. For example, participant-observers would have a better opportunity to observe (or experience) meaningful shocks and to record their field notes more accurately if Decision Path #2 unfolds slowly and deliberately. Moreover, survey researchers could more readily administer waves of questionnaires that would more likely bracket around and through Decision Path #2; telephone follow-ups could then serve as validity checks to ensure such bracketing.

Decision Path #3 is fairly complex and likely to occur slowly and deliberately. More specifically, both the compatibility and profitability tests take time; an employee must gather data and evaluate the informa-



tion with a prescribed set of comparisons. As such, the assessment of Decision Path #3, while it occurs, should be more testable than Decision Paths #1 or #2, though not necessarily easier. On the one hand, prospective approaches to data collection seem the preferred methods because these seek to bracket around and through decision paths. Indeed, Hom and Griffeth (1991), Lee and colleagues (1992), and Youngblood and colleagues (1983) have reported such longitudinal studies that included three or more waves of surveys. On the other hand, the complexity of Decision Path #3 may render prospective approaches very expensive and time consuming to apply. Consequently, retrospective and simulated approaches may be acceptable and adequate methods of data collection. For example, Decision Path #3 suggests a specific pattern of behavioral intentions. Protocol analysis could be an efficient and effective method to collect data on these intentions. Short scenarios could be written to describe the shocks to the system typically associated with Decision Path #3. Current employees could then be asked to talk through what mental deliberations might follow if the hypothetical shock actually occurred. The resulting pattern of behavioral intentions could then be analyzed for its corroboration of Decision Path #3. Although a single intention may not be an adequate surrogate for an actual work behavior (e.g., intention to quit in place of actual quitting), demonstrating a pattern of theoretically specific intentions may constitute meaningful corroboration.

It is worth reiterating that every method of data collection has its strengths and weaknesses. Rather than relying on a single method, researchers are encouraged to collect data on the unfolding model with multiple methods. Through complementing methods, various weaknesses might be minimized, and various strengths may be maximized.

### Initial Research Design and Measurement

Because the model involves some new constructs and processes to the turnover research, the precision of measurement and sophistication of initial research questions would likely not be as strong as that which should be expected for more established turnover models. Furthermore, early tests of the unfolding model would likely entail the empirical estimation of the (a) existence and (b) frequency of the decision paths. Although well-validated psychological measures would certainly be preferable, the initial empirical demonstrations for existence and frequency would likely involve more exploratory measures with unknown reliability and validity and utilize varying research designs (e.g., semistructured interviews).

For example, the following questions might be appropriate for initial tests of the unfolding model if one were to use semistructured interviews and to focus on the empirical estimation of existence and frequency of decision paths. To assess shocks and volition, which also provide information to distinguish Decision Path #4 from the others, the researcher might ask, "Can you describe the circumstances surrounding the time



you first began to feel or think you should leave your job? Was there a particular event that caused you to think about leaving?" To assess the speed and complexity of mental deliberations, which also provide information to distinguish between Decision Paths #2 and #3, one might ask, "How soon after you began thinking about leaving did you make up your mind to leave? Did you consider other job alternatives or options in making your decision? Did you search for other jobs before or after you left your job?" To assess images, one might ask, "How would you rate the compatibility between your personal values and those of the organization? Was your career progressing the way you expected it to? Were your personal goals progressing the way you expected them to?" To assess Decision Path #1, one might ask, "Have you ever been in a similar set of circumstances before, in terms of leaving your job? What did you do? Were you satisfied with the actions you took?" These types of questions could help to estimate the frequency of decision paths and to identify relevant constructs.

Another approach might be to interview people immediately after a major event, which could be a shock for many people (e.g., layoff announcement, merger announcement, relocation of the home office to another state). A researcher could probe for the event's effect on people who immediately quit (e.g., Decision Path #1) or decided to stay. That is, questions could delineate how people interpreted the event and the nature of corresponding mental deliberations. For example, questions might include: "How do you feel about this event? Has it made you consider leaving? Was the event compatible with your values and goals? Did the event change your goals? Did the event change your plans on how to reach your goals? Have you begun searching for another job?" This approach allows for comparisons between stayers and leavers, as well as predictions on who might quit.

Although much of what is suggested involves new constructs and measures, it is important to make salient that the unfolding model is testable and falsifiable. Certainly, our suggestions are labor intensive. They may be no more labor intensive, however, than recent turnover studies that involved multiple waves of survey data, archival searches, and follow-up interviews.

### Data Analysis

Turnover researchers have been advised to adopt alternative analytical tools to the commonly reported ordinary least squares regression and analysis of variance (Huselid & Day, 1991; Morita, Lee, & Mowday, 1989, *In press*; Peters & Sheridan, 1988). Because many of their suggestions involve time and because the unfolding model explicitly seeks to strengthen the dynamic elements in the turnover research, these alternative applications offer additional direction for future research.

**Decision Path #1.** After a shock to the system, two defining characteristics of Decision Path #1 are the match between the current and re-



called decision frames and a short time duration between the shock (or onset of Decision Path #1) and the behavior to leave (or stay). As such, life table analysis, which is explained by Peters and Sheridan (1988), may be a simple and nearly optimal analytical strategy for Decision Path #1. A sample of employees might be grouped by the presence or absence of a match judgment that followed a shock to the system. The dependent variable would be a hazard function that models both the probability of quitting and the duration between the shock and quitting behavior. Corroboration of Decision Path #1 would occur if the hazard function for the "match" group indicated significantly lower survival likelihoods and earlier quitting than the "not-match" group.

**Decision Path #2.** After a shock to the system, two defining characteristics of Decision Path #2 are the focus on staying with the current organization and the fit of images. Because of variable duration periods, life table analysis would be difficult to apply; however, logistic, which is explained by Huselid and Day (1991), or probit regression may be an efficient analytical strategy. The independent variables might be focused on staying, scored continuously or dichotomously, and fit of images, scored dichotomously. The dependent variable would be the binary outcome of quitting or staying. Corroboration of Decision Path #2 would occur if both regression coefficients were significant. Parenthetically, the logistic model should be adopted if the researcher theorizes Decision Path #2 to involve a true categorical outcome variable, as we do; alternatively, the probit model should be adopted if the researcher theorizes the outcome as artificially categorized.

**Decision Path #3.** Because of its complexity, Decision Path #3 has many possible specific and testable deductions. The following is offered as only one of many possible examples that applies logistic regression. Three characteristics of Decision Path #3 are (a) the focus on leaving the current organization, (b) the fit of images, and (c) whether some form of subjective expected utilities are calculated for acceptable alternatives. The independent variables might be focused on leaving, scored continuously or dichotomously, and fit of images, scored dichotomously. Rather than staying or leaving, the dependent variable would be the binary outcome of whether subjective expected utilities are calculated. Corroboration of Decision Path #3 would occur if both logistic regression coefficients were significant.

Although life table analysis and logistic regression seem destined to become common tools, management researchers should not overlook other methods to test the unfolding model. Catastrophe theory, for example, is a family of seven discontinuous functions that models divergent phenomena as multimodal probabilities (Thom, 1975; Zeeman, 1976). Because turnover can be viewed as a discontinuous and divergent event, Sheridan (1985) and Sheridan and Abelson (1983) applied the cusp-catastrophe function to model the probability of turnover as a (discontinuous) function of two "control parameters" (i.e., explanatory variables or



dimensions). Because of the unfolding model's complexity, however, the other catastrophe functions which allow more than two control parameters may be needed. In addition to the cusp, then, researchers might consider the swallowtail function, which allows turnover probabilities to be modeled as a discontinuous function of three control parameters (e.g., quitting as a function of the value, trajectory, and strategic images), or the butterfly function, which allows turnover probabilities to be modeled as a discontinuous function of four control dimensions (e.g., the three images and shocks).

Finally, research on the unfolding model can facilitate the understanding of employee turnover beyond simple postdictive explanations. First, for example, distributions of decision paths could be generated and related to types of shocks, occupations, or individual differences. Certain decision paths might occur more frequently after events like promotions, annual bonuses, or layoffs. We might then be able to predict whether certain people were more likely to quit after particular types of shocks. Similarly, occupations that are thought to involve the secondary labor market may have unique distributions. The state of the economy may suggest that Decision Paths #1 and #2 occur more often during good rather than bad economic times. Thus, knowing the distribution of decision paths across occupations, shocks, economic conditions, and types of people might aid in the prediction and control of turnover.

Second, much of the research has implicitly focused on reducing employee turnover (i.e., how to lower it). In addition to reduction or prevention, it may be better in some cases to focus on understanding a firm's turnover. That is, knowledge of how, why, and when employees leave and which decision path might be engaged may help managers predict and plan for turnover at the aggregate level. Even if shocks are uncontrollable, understanding them might still help reduce the negative consequences to employees' leaving the organization. Thus, research on the unfolding model might generate practical information as well.

### CONCLUSION

Our discussion of the unfolding model portrays employee turnover as a complex process whereby individuals assess their feelings, personal situation, and work environment and, over time, make decisions about staying or leaving an organization. From our discussion, several general propositions can be inferred and are listed below.

1. The existing models of employee turnover are too simple; leaving an organization can take place in many different ways.
2. One of the major precipitating events for employee turnover is the shock to the system—an event that prompts an individual to evaluate his or her current and perhaps other jobs.
3. Shocks are not just negative job-related factors; positive and neutral events that are both job and nonjob related can prompt mental deliberations about leaving.



4. In some cases, employees simply leave because the shock results in scripted behavior, where no extensive cognitive deliberations that evaluate the current or alternative jobs take place.

5. Some employees leave organizations without considering alternatives; their central choice is to stay or leave their present company—not to quit for another organization.

6. In most cases, employees make decisions about staying with or leaving an organization based on a fit or compatibility criterion, rather than on maximizing their subjective expected utilities.

7. Employee turnover occurs over time; only by developing methods that assess how the process evolves will researchers and managers understand why individuals chose to leave.

The purpose of the present paper involves more than just presenting a new perspective on employee turnover. Several research ideas were suggested for images, categories of shocks, sequencing of shocks, and methods of empirical testing. We recognize that many of our ideas represent uncharted waters. Yet, researchers and managers can't predict much better than chance whether a particular employee is going to quit, even after 30 years of rigorous research effort. Turnover research badly needs some new theory. Our ideas on turnover are well grounded in existing theory as well as personal experience. As such, we believe that these new ideas merit empirical testing. We hope that this paper and subsequent research will enable researchers and managers to better understand and predict employee turnover.

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