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The Escalation Phenomenon Reconsidered: Decision Dilemmas or Decision Errors?

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Previous studies and theoretical work suggest that the "escalation phenomenon" represents a syndrome of decision errors which tend to lock decision makers into a course of action. This paper develops an alternative model which implies that earlier studies may have observed decisions to recommit resources resulting from difficult dilemmas rather than a behavioral tendency to "throw good money after bad."

Circumstances surrounding decisions to cease one activity in order to pursue another, or simply to quit a course of action, often pose dilemmas for decision makers. Emanating from the inherently uncertain nature of these situations, the dilemma becomes "what to do" (McCaskey, 1979). One kind of decision resulting from such circumstances is referred to in organizational behavior, strategic management, and psychology as the "escalation" phenomenon. Specifically, this refers to situations where decision makers recommit resources to a failed or failing course of action (Staw, 1976, 1981).

This paper counters the current literature on escalating commitment, a literature which argues that escalation decisions result from a series of errors. The proposed framework is based on the ideas that all feedback is to some extent equivocal (Weick, 1979) in "unstructured" or "nonprogrammable" (Simon, 1945) decision situations, and that decision makers will reallocate resources to a course of action only where there is some element of commitment (Kiesler, 1971; Salancik, 1977; Staw, 1982).

It is not the purpose of this paper to question the role of social psychological forces affecting the magnitude of resource reallocations, but rather to question whether those forces produce *decision errors* which are the bases for the escalation of resources to a truly failed course of action.

Past Research on Escalation

The psychological and organizational literatures on the escalation phenomenon have been well reviewed and summarized by Staw (1981, 1982). In general, the results of the studies reviewed by Staw demonstrate that once individuals commit some nontrivial amount of resources to a project within an investment simulation, they will tend to continue to invest beyond the point where benefits equal costs. Also, individual subjects, under certain conditions, will continue to allocate more resources to a project if they receive feedback that the project is failing than if they receive feedback that the project is succeeding. Table 1 lists key studies and shows the corresponding factors which influenced escalating commitment.

According to Staw (1981, 1982), the escalation effect involves the tendency to become overcommitted to a course of action; decision makers become locked into an ill-fated course of action through what Staw called a "syndrome of decision errors." Staw (1982) further suggested that

Table 1
Summary of Research on Escalation

Author(s)	Factors Found to Influence Escalating Commitment
Staw (1976); Staw & Fox (1977)	Personal responsibility for prior investment
Fox & Staw (1979); Caldwell & O'Reilly (1982)	Justification of past investments to others
Staw & Ross (1978)	Relevance of negative feedback to current decision; repetition of negative feedback
Staw & Fox (1977)	Perceived efficacy of further resource allocation
Staw & Ross (1980)	Cultural norms for consistency/ persistence to a course of action
Bazerman, Guiliano, & Appleman (1984)	Individual and group escalation a function of cognitive dissonance reduction processes
Conlon & Wolf (1980)	Problem solving strategy employed will moderate on subject's persistence, visibility, and involvement in the decision process

escalation situations possess certain common properties: (a) a series of behaviors linked into a course of action to achieve a goal-state; (b) feedback that the course of action is not achieving the goal-state; and (c) an opportunity to commit further energy or resources to achieving the goal-state.

In related research on "entrapping conflicts" or "entrapment" it is also argued that individuals will continue to wait, and thus become entrapped within a course of action, for a valued resource beyond the point where benefits equal costs (Brockner & Rubin, 1985). Such entrapping conflicts are "characterized by the tendency for individuals to make increasing commitments to some failing course of action in large part to justify the appropriateness of previous investments made in that situation" (Brockner, Nathanson, Friend, Harbeck, Samuelson, Houser, Bazerman & Rubin, 1984, p. 77). In contrast to escalation research, subjects in entrapment situations typically incur small continuous losses as they seek or wait to achieve a goal. The experimental manipulations of these incremental losses occur either as a simple function of the passage of time or as the result of active decisions to reinvest resources (Brockner et al., 1984; Brockner, Rubin, Fine, Hamilton, Thomas, & Turetsky, 1982; Brockner, Rubin, & Lang, 1981; Brockner, Shaw, & Rubin, 1979; Nathanson, Brockner, Brenner, & Samuelson, 1982; Rubin & Brockner, 1975; Rubin, Brockner, Small-Weil, & Nathanson, 1980).

While many examples have been used to illustrate the escalation effect, the United States' increased commitment of resources to the undeclared war in Vietnam during the 1960s has been often referred to as a classic case: The government of the United States (erroneously) continued to increase its commitment of resources to the war effort in spite of "negative feedback." Exactly how the war in Vietnam qualifies as a clear case of "escalation," however, seems problematic. Using Staw's criteria, for example, the Vietnam war situation certainly did involve a series of behaviors linked within a course of action and it did include the opportunity to commit further energy or resources to achieve the original goal-state. At issue is whether the increased commitment of resources to the war effort occurred in light of feedback that the course of action was failing. For an "escalation" explanation to be appropriate, decision makers must have had unequivocal feedback that their reinvestments in the war would fail to bring victory. A short series of questions focuses on this point. What did or would have constituted true failure feedback given the evolving and complex nature of the Vietnam conflict? Did the government's decision makers commit themselves to a set of perfectly reliable a priori criteria or standards against which to judge the outcome of the war? Is it possible to set such standards in unprecedented situations such as Vietnam (cf., Teger's 1980 discussion of limit setting)?

Toward an Alternative Conceptual Framework

The Nature of the Problem

Questions such as these, which challenge the use of the Vietnam war as an example of the escalation effect, suggest that clearly unequivocal negative feedback may not have been available to decision makers while resources were being committed to the war effort. Similar questions can be raised regarding the evidence that is supplied subjects in the existing research on the escalation phenomenon. Therefore, it is suggested that the escalation effect, as defined by Staw and others, has not yet been satisfactorily examined on two levels: (a) *interpretive*: prior escalation studies do not show clearly the manipulation of failure feedback. As such, subjects were asked to invest and/or reinvest in projects under equivocal circumstances; and (b) *theoretical*: prior escalation studies having not met the criteria for demonstrating the phenomenon, should be questioned regarding the theoretical value of the reported results. The findings of prior research may be vulnerable to alternative interpretations.

Interpretive problem. Escalation situations involve an ill-fated or failing course of action. Prior research has tended to leave both the concept of and manipulation of "negative feedback," which would indicate a losing or *failed* course of action, ill-defined (Northcraft & Wolf, 1984). According to Northcraft and Wolf this reflects psychologists' indifference about the "correctness" of further resource allocations. The focus of earlier studies, therefore, has been on whether previous investment(s) influence current decisions in the face of what those researchers consider negative feedback. One example from the literature, the keystone escalation study (Staw, 1976), illustrates this point.

Staw (1976) conducted an experiment where, within the context of a business decision case, undergraduate business students played the role of financial executives in a large technologically oriented firm. A subject's responsibility was to decide on the appropriate allocation of research and development funds (R&D) between the company's two corporate divisions. Subjects were told initially that all of the information they would need to make a good business decision was contained in the case, and that the firm's poor past performance was due to inadequate R&D funding of the two divisions. Half of the subjects were asked to allocate all of the available R&D funds to one of the two divisions, based on their estimation of where the funding would do the most good and the firm's recent financial performance (see Table 2: 1957 to 1967). After making this first investment, these subjects were given financial information indicating an improvement in the performance of one of the divisions and a decline in the sales and earnings of the other division (Table 2: 1968 to 1972). Then they were asked to reallocate R&D funding between the two divisions. In contrast, the remaining subjects initially were given the company's financial performance data for the years 1957 to 1972 and told that another financial officer in the company had made the first allocation of R&D funds in the year 1967. Their single investment was to reallocate R&D funds between the divisions in the year 1972. As Staw predicted, subjects invested a significantly greater amount when they were personally responsible for the negative outcomes produced by the first investment.

It was assumed in this study that subjects would interpret the manipulated continued decline in sales and profit as a failure of the initial investment. Several relevant issues could not have been clear to all subjects, however, because the reasonableness of continued or additional R&D funding in this case depended upon many factors, such as: (a) the presumed causal relationship between the increased R&D funding and sales and profitability. Since the reason(s) for the "failure" of the initial funding were not available, how would subjects have known how to interpret the feedback? Would subjects have invested differently if explicit reasons for the failure were given or if future prospects for ongoing R&D efforts were provided? Was a five-year

Table 2*
Financial Feedback from Staw (1976)[a]

	Consumer Products Div.[b]		Industrial Products Div.[b]	
Fiscal yr.	Sales	Earnings	Sales	Earnings
1957	624	14.42	670	15.31
1958	626	10.27	663	10.92
1959	649	8.65	689	11.06
1960	681	8.46	711	10.44
1961	674	4.19	724	9.04
1962	702	5.35	735	6.38
1963	717	3.92	748	5.42
1964	741	4.66	756	3.09
1965	765	2.48	784	3.26
1966	770	(.12)	788	(.81)
1967	769	(.63)	791	(.80)
	First R&D funding decision as of 1967			
	Manipulated improvement[b]		Manipulated decline[b]	
Fiscal yr.	Sales	Earnings	Sales	Earnings
1968	818	.02	771	(1.12)
1969	829	(.09)	774	(1.96)
1970	827	(.23)	762	(3.87)
1971	846	.06	778	(3.83)
1972 (est)	910	1.28	783	(4.16)
	Second R&D funding as of 1972			

* Adapted from Staw (1976) pp. 33–34.
[a] In millions of dollars.
[b] Parentheses denote net losses in earnings.

investment in R&D a long enough period to produce desired results?; (b) the size of the initial investment. Was it insufficient to produce desired results?; (c) the performance of firms competing in the same industry. Were there exogenous variables which influenced the firm's performance (e.g., a decline in demand for the industry's products or services, a general economic downturn)?; (d) the firm's definition of its problem as being R&D-related. The case states that "the directors of the company have agreed that one of the major reasons for the decline in earnings (and a deterioration in competitive position) lay in some aspect of the firm's research and development" (Staw, 1976, p. 31). Were other areas more important? Could the company have had marketing or sales problems? (e) the firm's definition of failure for its investments in R&D. Would subjects have invested differently if they had been given an explicit statement of the firm's long-standing policy for evaluating its investments in R&D (standards which the subject, as financial vice-president of the company, would either already hold and/or be required to uphold)? Is it possible that subjects may have interpreted the cause of the firm's poor financial performance to mean that they *should* reallocate more R&D funds to the divisions?; and, (f) the lack of other financial data. In the absence of data about the firm's overall financial condition, how would one

interpret the continuing declines in sales and profits, particularly since the firm had never (1957–1972) earned a profit of more than 2.3 percent of sales?

Consistent with the concerns expressed above, Northcraft and Wolf (1984) further argued that in cases where it is economically advisable to allocate additional resources, in spite of negative feedback, any psychological causal mechanism is superfluous because a simple economic explanation is equally predictive and more parsimonious. It is suggested here then that since earlier studies may not have given subjects definite negative feedback about the effects of their decisions, one might easily conclude that prior research on escalation makes it difficult to determine whether subjects reinvested in their experimental courses of action because of the psychological manipulations, or because they felt that they were making the economically prudent decision under equivocal circumstances. To address this issue more fully, however, a clear idea of what constitutes "negative feedback" is necessary.

Negative Feedback Defined

The classification of feedback,as either "positive" or "negative" is dependent upon two related factors: (a) the existence of some credible criterion(ia) or standard(s) against which to compare raw feedback data; *and*, (b) feedback must *predictably* indicate that future performance will meet, exceed, or not meet, the outcome standards in the future. Should the feedback either meet or exceed the credible outcome standards (if so defined), it can be considered positive. Should the feedback fail to meet those standards, it can be considered negative. Following from this, "equivocal" feedback, or feedback for which multiple (positive and/or negative) interpretations can be constructed (Weick, 1979), can occur in any one of three conditions: (a) the inability to establish credible criteria or standards against which to compare data. This situation is likely to occur in cognitively unstructured situations (Lewin, 1935), where individuals have either insufficient or no knowledge of "what leads to what"; (b) the ability to establish credible standards but the failure to do so; or, (c) the establishment of credible standards but the unavailability of sufficient data to either fully or satisfactorily compare against those standards.

Such standards would be expected to vary in importance to decision makers depending upon the degree of commitment (Kiesler, 1971; Salancik, 1977; Staw, 1982) to them. For example, it would be likely that individuals who are highly committed to a set of standards would enforce those standards when deciding either to continue or to change a course of action. On the other hand, it would be likely that individuals who have little or no commitment to a set of standards would either ignore those standards or change them in decision situations where it seems either appropriate or advantageous to do so. Within institutional settings, it might be likely that decision making agents for the organization would experience a higher level of commitment to standards in some cases than would independents or groups because of the more visible and external nature of assessment of decision outcomes and, perhaps, the standards themselves. Also, institutionalized standards may exist within an organization as "facts"; adhering to these standards would be necessary to be consistent with the persistence of the institution's "objective reality" (Zucker, 1977).

As argued above, there is no evidence that subjects in prior escalation or entrapment studies were given any such criteria upon which to base their decisions, nor is there any comparative data (e.g., industry norms, trends, etc.) with which subjects could have established credible decision standard(s) (e.g., the point where benefits equaled costs). In prior escalation research, subjects were placed in highly equivocal decision contexts where, *because* of the equivocality of the decision context, the economic rationality of reallocating resources to the experimental course of action falls on the side of recommitment rather than withdrawal. Simply providing subjects with data showing declining sales and profits, disregarding other contextual equivocalities, is not enough to convincingly demonstrate

escalation to a failed course of action. As Northcraft and Wolf (1984) have argued, it may be that only through examining decisions in situations where it is clearly economically irrational can the psychologist add to the explanatory power of simple economic explanations in resource reallocation decisions.

Theoretical problem. The theoretical value of the conclusions drawn from prior escalation studies may be questionable. For example, Staw (1976, 1982) referred to escalation decisions as resulting from some "syndrome of decision errors." Therefore, individuals err in escalation situations because negative outcomes are not attended to properly. Assuming that prior research has not given subjects definite negative feedback about the effects of their decisions, what Staw and others have interpreted as decision errors after-the-fact might be more appropriately described as decisions made in the face of very difficult dilemmas. Thus, it seems questionable to label those decisions, which might have led to either positive or negative outcomes, as *errors*, for in equivocal situations decision makers are often compelled to "play their cards and take their chances."

There is considerable support for this view of the role of uncertainty in decision situations. Simon (1945, 1957, 1973) wrote of "satisficing" behavior, bounded rationality, and the ubiquity of ill-structured decision situations. Others (e.g., Beyer, 1981; Mintzberg, Raisinghani, & Theoret, 1976; Thompson & Tuden, 1959; Ungson, Braunstein, & Hall, 1981; Vickers, 1965) agreed that strategic as well as many other decision situations within organizational settings are ill-structured because there is no systematic way to decide whether such decisions are acceptable *before* receiving feedback (see also Conrath, 1967; Davis, 1970; Newell, 1969; Reitmann, 1965). Therefore, if information is equivocal when a decision is necessary, a recommitment of resources to a course of action simply may offer an additional opportunity to permit a strategy to work, to demonstrate its inability to produce desired results, or to allow for the collection of additional data and the passage of time which might promote an increased understanding of the situation. This suggests that what Staw and others have observed in their research might reflect elements of reality testing rather than evidence of a syndrome of decision errors.

An extension of a simple open systems model of organizations (e.g., Nadler and Tushman's 1980 congruence model of organizations as transformation processes) illustrates this ill-structured nature of decision making in organizations and it offers some insight into how an equivocal context for decision making can provide a basis for an alternative framework for understanding escalation situations.

An Integrative View of Organizational Decision Making

Organizations, as decision making entities, have been described as complex multi-cephalous systems (Pondy & Mitroff, 1979), garbage cans (Cohen, March, & Olsen, 1972), action generators (Starbuck, 1983), and interpretation systems (Daft & Weick, 1984; Weick, 1979). Another view of organizations as learning systems is offered by Hedberg (1981) (see also Hedberg & Jönsson, 1977). In describing the interplay between myth, strategy, and reality within organizational activities, Hedberg suggested that the organization's ruling myth (dominant theory of action) generates strategies (hypotheses of action), which in turn generate actions to test the hypotheses and allow for the verification or falsification of the theory. Consistent with the literature on causal modeling (e.g., Abelson, 1976; Argyris & Schön, 1978; Bougon, Weick, & Binkhorst, 1977; Einhorn & Hogarth, 1982; Keisler & Sproull, 1982; Pliske, Gettys, & Engleman, 1983; Tversky & Kahneman, 1980), as well as power and sociopolitical influence (e.g., Cyert & March, 1963; Martin & Siehl, 1981; McCaskey, 1979; Pettigrew, 1973; Pfeffer & Salancik, 1978; Quinn, 1980), Hedberg described "myths" as partial mappings of past realities which grow obsolete over time due to their interaction with the harshness of reality. A ruling myth is challenged when it can no longer produce efficacious and/or convincing strategies; it also can be challenged by the arrival of a new myth,

from inside or outside of the organization, which promises more effective action. According to Hedberg, myths are thus integral frameworks for decision making, and sources of conflict, within organizations.

Figure 1 indicates that a number of interacting alternative myths may exist within an organization. Each myth is based upon a different enactment of reality, and each competes with the others for dominance within the organization (cf., Feldman & March, 1981; Kast & Rozenweig, 1970; Linstone, 1984). [The term "enactment" is used throughout this paper to refer to Weick's (1979) observation that people actively implant portions of the reality that they later perceive and then negotiate about perceiving.] From these myths, an interacting yet competing definition of particular problems or issues emerges, for which appropriate strategies are devised. The dominant strategy or "idea" (Normann, 1977), formulated and approved possibly as a compromise with alternative strategies, is implemented. Feedback channels (formal and informal) provide data for the evaluation and construction of outcomes.

Thus, the dominant myth controls an organization's strategic agenda, choice of strategy, and the construction of what may be called the "dominant outcome." This dominant outcome (the enactment of the results of organizational actions by the coalition holding the dominant myth) is, however, only one possible enactment of the organization's reality. Consequently, each individual and/or interest group (also, perhaps, outside observers) enacts an outcome as a basis for recommendations for future actions which may or may not conflict with that of the dominant coalition.

Organizational Commitment and Equivocality

In addition to "enactments of reality," "myths," and, therefore, the ultimate uncertainty facing decision makers in organizations, the importance and potential pitfalls of high levels of organizational commitment (Kiesler, 1971; Salancik, 1977; Staw, 1982) to courses of action are well known. In general, when commitments provide the impetus for the completion of a difficult or unpleasant task, then commitment could be considered important to the organization's best interests. This would not be the case when commitments lead to inflexibility in meeting challenges.

Staw (1982), building from Kiesler and Salancik, described commitment as an active counterforce to change (through the binding of individuals to some behavioral acts) and a variable that can have direct effects on attitude and behavior. According to the assumption that commitment is "built by actions in which one is responsible for large consequences" (Staw, 1982, p. 103), Staw argued that there are four separate contributors to commitment: (a) salience of the action; (b) consequences of the action; (c) responsibility for the action; and, (d) responsibility for the consequences of the action. All of these factors create internal and/or external bonds to a behavior.

Staw's commitment paradigm and Figure 1 suggest that strategic decisions within organizations are often highly committing. That is, to the extent that a decision to allocate resources in an organization is salient, has important consequences, creates some responsibility for both the action and its consequences, and is perhaps doing public political battle with alternative strategic recommendation(s) (or the threat of alternatives), one might expect decision makers to be highly committed to a chosen course of action. Further, because equivocal decision situations often lack generally acceptable decision criteria, and because of the nature of enactments in organizations, choice of strategy depends upon personal myth, definition of the problem (including decision criteria, and the perception of the number and quality of alternatives), as well as the outcome(s) of prior strategies (if any). It is not surprising, therefore, that decision makers will continue to invest in courses of action beyond the point where others, having enacted a different reality with possibly different decision standards, believe prudent. It is also understandable that resources may be reinvested in a course of action, assuming some degree of commitment to that course of action, because of the equivocality inherent in the situation and not because of an overcommitment to a failed investment.

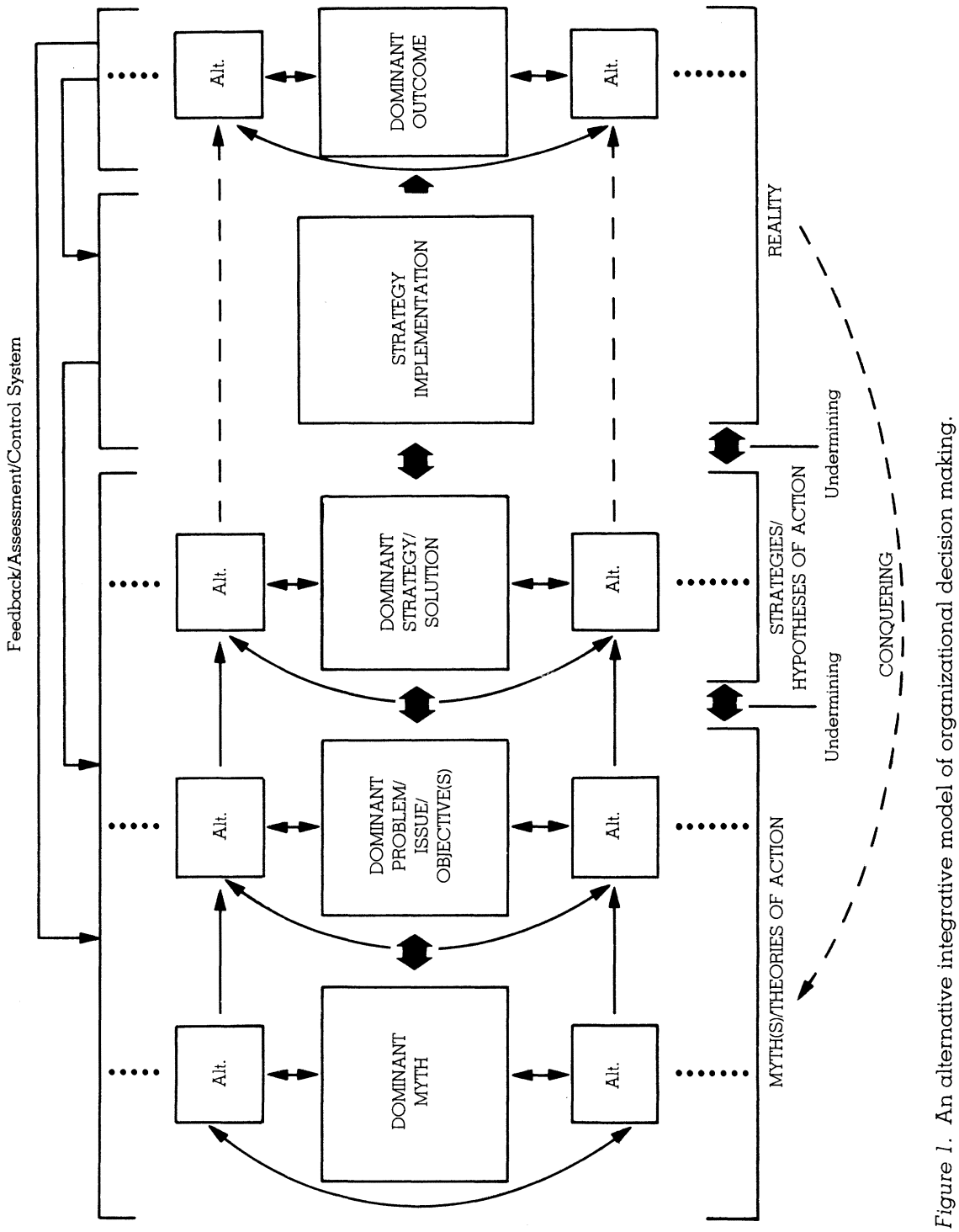

Figure 1. An alternative integrative model of organizational decision making.

Elements in an Alternative Escalation Model

The following simple set of variables, necessary to an alternative model of escalating commitment, can be drawn from the previous discussion and the model presented as Figure 1: (a) decision makers, subject to inertial pressures or barriers (Hannan & Freeman, 1975; Porter, 1980; Tushman & Romanelli, 1985) which may limit their abilities to do so, will only recommit resources to courses of action to which they have some degree of commitment; and, (b) enacted feedback on the outcomes of organizational actions can be positive, negative, or uncertain in any situation, and, therefore, can be interpreted as either equivocal or unequivocal by different individuals or interest groups. The interplay of these two variables allows for the generation of testable hypotheses about the escalation of resources to a course of action. Figure 2 is a model defining the context for escalation situations from the perspective of the dominant coalition.

Relationships in an Alternative Model

Figure 2 suggests that the reallocation of resources to a course of action can occur only under two conditions: (a) when enacted feedback is unequivocal and positive; or, (b) when the decision maker has some degree of commitment to the course of action, and, when the enacted feedback on the outcomes of prior organizational action is to some extent equivocal. The reallocation of resources to a course of action should not occur when either: (a) commitment to the course

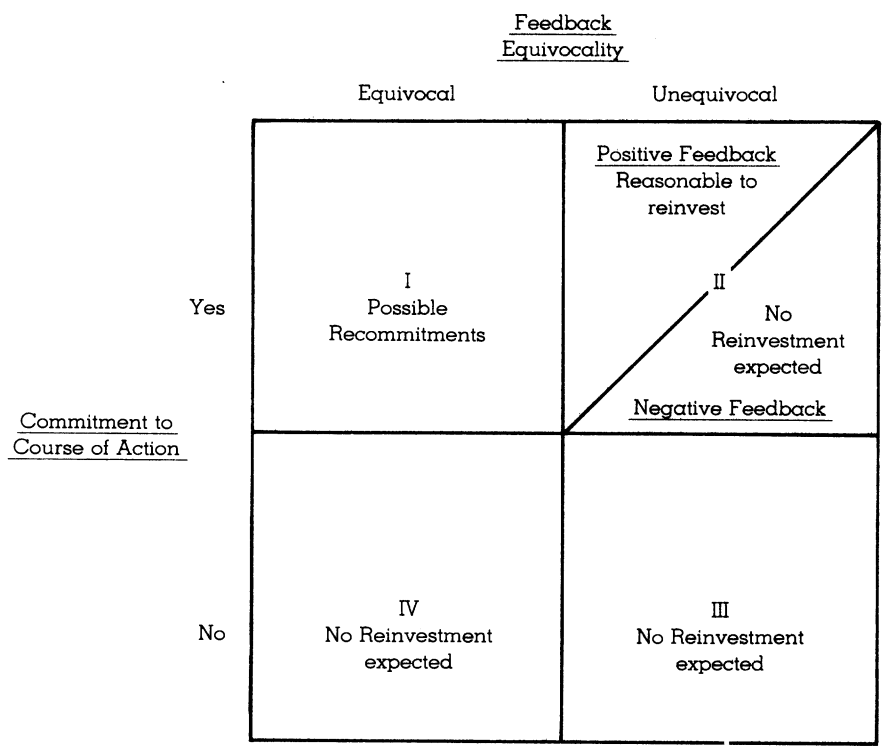

Figure 2. Alternative escalation model.

of action does not exist; that is, none of the elements of commitment are present (the action is not important, has unimportant or irrelevant consequences, and holds no responsibility for either its choice or consequences), regardless of the interpretations of the quality of feedback; or, (b) the enactment of feedback is unequivocal and negative, and, therefore, sufficiently convincing that to continue in a course of action would be "throwing good money after bad," regardless of the strength of the decision maker's commitment to that strategy.

The division of the horizontal axis of Figure 2 does not imply, however, the abandonment of the belief that ultimately *all* feedback is to some extent equivocal in ill-structured decision situations. Rather, the distinction between unequivocal and equivocal feedback distinguishes between situations where the decision maker(s) have or are able to construct and commit themselves to credible criteria which can be fully and satisfactorily compared to available data, versus situations where the decision maker(s) do not have or are unable to create such criteria or do not have sufficient data to fully compare against the standards.

One might think of the concepts equivocality and unequivocality as describing contexts within which decisions are made (Weick, 1979). Within decision contexts, however, one might also imagine the effects of changes in uncertainty as movement along a continuum from complete equivocality (i.e., the total absence of criteria and/or lack of data to compare against existing criteria) to a determination that the feedback is either positive or negative (i.e., unequivocal). Such movement could occur as additional data is collected that can be compared against existing decision standards or as decision criteria evolve. Therefore, Cell I of Figure 2, which represents conditions of varying degrees of equivocality and commitment, is of special interest to the discussion of escalating commitment.

Four types of equivocal feedback can exist within Cell I: (a) completely equivocal feedback (type 1); (b) preliminary feedback which either meets or exceeds a portion of the existing decision criteria (type 2); (c) preliminary feedback which does not meet a portion of the existing decision criteria (type 3); and, (d) volatile feedback (e.g., fluctuates unpredictably above and below the standard) which provides potentially inconclusive evidence that future investments will produce outcomes which meet or exceed the decision standards (type 4).

Of the above types, preliminary feedback which either meets or exceeds a portion of the existing decision criteria, though possessing some degree of equivocality, would be likely to reinforce the prior investment decision. In such cases, one would expect investment to proceed in the amounts deemed necessary to meet current or developing criteria. Given this scenario, such "type 2" feedback will be ignored in the following discussion.

Figure 3 represents types 1, 3, and 4 feedback within Cell I of Figure 2. For purposes of this theoretical discussion, each axis is labeled as a continuum: the horizontal axis ranging from *higher* to *lower* equivocality of enacted feedback; the vertical axis ranging from *high* to *low* commitment to the course of action. Since this is essentially a model of subjective rationality operating within specified decision-making contexts, it is logical, and consistent with the results of prior research in this area, to predict probabilities of resource recommitment (escalation) decisions as: (a) the condition of high equivocality and high commitment to a course of action should be the situation most likely to produce escalating commitment because of the decision maker(s)' strong degree of attachment to the course of action and the existence of the greatest probability of multiple enactments of the information or feedback received; (b) the condition of lower equivocality and high commitment also should produce escalating commitment, although it is less likely to do so than in the higher-high condition. The logic for the remaining conditions follows: (c) the higher equivocality and low commitment condition should produce less frequent escalation decisions than the prior two (above)

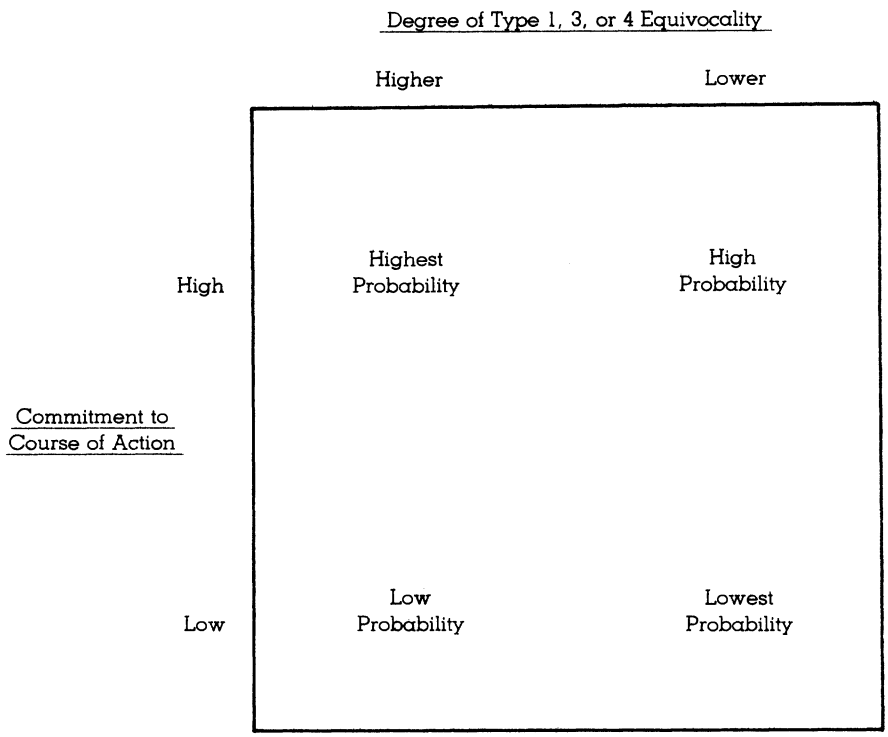

Figure 3. Predictions of resource recommitments under conditions of uncertainty.

conditions; while, (d) the least probability for the occurrence of escalation decisions is predicted for the lower equivocality and low commitment to a course of action condition.

Discussion and Implications

According to this view of organizational decision making, there are times when decisions to recommit resources are clearly reasonable, times when they are clearly irrational, and times when one simply cannot prejudge the future effectiveness of continuing or discontinuing any particular course of action. Research is necessary to focus more directly on the interplay between equivocality and commitment in resource allocation decision making in both individual and institutional settings. Also, understanding enactment processes within organizations assumes primary importance for both managers and researchers. Research which examines both the extent to which and how formal decision criteria are developed (both a priori and over time), adhered to, adjusted, and enforced within organizations is called for. For managers, care must be taken to focus either on the decision criteria, or the difficulties created by a lack of decision criteria, in any situation.

As suggested, adherence to decision criteria might vary depending upon the particular individual or institutional context. The extent to which and under what circumstances organizations protect themselves from "undesirable enactments," by structuring essentially unstructurable decision situations, also becomes a critical research issue. If organizations have either formal or normative criteria by which to evaluate projects a priori, for example, does escalation occur?

Research on escalation suggested by Northcraft and Wolf (1984) which would focus on situations where the recommitment of resources is clearly economically irrational would center directly on this issue. In addition, research investigating the precipitation of the changing of goals/objectives, which are a form of decision criteria, within escalation situations is indicated. From this perspective, the classic escalation situation referred to earlier, the Vietnam war, alternatively might be understood as a complex series of decision situations where the eventual deescalation of U.S. involvement coincided with a change in goal. The apparent "failure" of the original goal of the "peace action," to prevent the proliferation of communism in S.E. Asia, necessitated the formulation of a new goal, peace with honor, so that the war could be satisfactorily brought to its end.

It is necessary to reemphasize that decisions to recommit resources often occur within a larger organizational context. As such, these decisions are subject to other important research considerations which would affect the valuation of the object of the decision within the organization. For example, as contributors to the inertial pressures within the organization, a project's strategic position in the firm's business portfolio, the strength of a project's linkages to other investments in the organization, a project's percentage of the firm's revenues or expenses, and the number, perceived quality, and perhaps even greater preimplementation uncertainties surrounding any feasible alternative(s), all might be expected to influence decisions to recommit resources.

Another research issue involves the degree of decentralization of decision authority in organizations. The question is what effect does the degree of decentralization on decision making have on potential escalation situations? Since this varies both qualitatively and quantitatively over time, across, and within organizations (Fredrickson, 1984; Heller, 1971; Vancil, 1979), it would be expected that sociopolitical factors would vary in importance as decision makers attempted to resolve uncertain decision situations. Again the implication for future research is that careful attention must be paid to the context of the decision under study.

One last point is crucial to this entire discussion. The central argument of this paper is that recommitments of resources to a course of action often might be better understood as instances of decision making under conditions of commitment and equivocality. This statement leads to the conclusion that Staw (1981), although he rejected the idea in the same paper, was correct to suggest that the escalation phenomenon might merely represent a post-hoc reconstruction of events by observers. Further, reasoning that escalation situations do not denote a syndrome of decision errors which tend to lock decision makers into a course of action suggests that the post-hoc practice of labeling certain decisions as "errors" may be misleading in some cases. The perspective in this paper is that one "technically" cannot err in ill-structured decision situations. This is because an objective and/or certain assessment of the value of a decision *before* it is implemented is impossible.

Indeed, one attempt to deal with this difficult issue (Rumelt, 1979) has proposed that strategies must pass four context-free tests before implementation: (a) *Goal Consistency*. The strategy should be consistent with the overall goal(s) of the organization; (b) *Frame*. The strategy should address the critical issues within the organization's domain of activities; (c) *Competence*. The strategy must create solvable subproblems; and, (d) *Workability*. The proposed policies and actions must work together to produce the desired results. Rumelt concluded, however, that in spite of these tests preimplementation strategy evaluation is still an art. In light of this conclusion, labeling the outcomes of uncertain choices as either "successes" or "errors" may be the simplest way to evaluate the performance of decision makers. However, the assessments that result from this labeling certainly confuse the obviously larger and muddy issues of preimplementation strategic soundness and cause-effect that represent fertile ground for research and theory development, and, also provide great challenges for managers as they decide "what to do."

Conclusions

Research on the escalation phenomenon to date has arguably failed to demonstrate the phenomenon. This is because those studies have observed subjects under equivocal conditions where, consistent with the experimental results, it would be reasonable to reinvest more heavily in projects which uncertainly appear headed downhill. By referring to such judgments as decision errors, the ill-structured nature of such strategic decisions is ignored and the misleading impression is created that decision makers will knowingly "throw good money after bad." A model of resource recommitment is offered which argues that recommitment can result from a dilemma caused by the interplay between the degree of commitment to a course of action and the amount of equivocality perceived in feedback on prior investments and in expectations for the future.

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