

Logics of Identity, Contradiction, and Attraction in Change

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Abstract

How we manage and produce organization change is a function of the point of view we take regarding the phenomenon of change. But different points of view give us different understandings of the process. In this paper, three different points of views, or logics, are presented: formal logic, dialectics, and trialectics. Although each point of view is discussed, the intent of this paper is to expand our logics of change to include trialectics. The implications of trialectics for organization change are discussed.

The phenomenon of change is central to and pervades our thinking on organizations. The literatures on organization adaptation, strategic management, and strategic change, for example, emphasize the need for organizations to adapt to the changing threats and opportunities of their environments, but indicate that such change is not always forthcoming in either the degree or direction needed (e.g., Hannan & Freeman, 1977; Hedberg, Nystrom & Starbuck, 1976; Hinings & Greenwood, 1988; Lawrence & Dyer, 1983). Similarly, the capacity of an organization not only to respond to, but to generate change, is essential to learning organizations (e.g., Senge, 1990). Transformational leadership in particular (e.g., Bass, 1985; Tichy & Ulrich, 1984), and leadership in general (Kotter, 1990), is also reflective of the concern with change. And, change is an issue of interest to practitioners, as demonstrated by the popularity of books that focus on how to produce or manage change (e.g., Kanter, Stein, & Jick, 1993; Peters, 1987).

Because of this centrality, it is no surprise that change is and has been the subject of extensive writing and investigation (e.g., Goodman, 1982; Kanter et al., 1993; Pennings, 1985). But, in spite of this attention, Goodman and Kurke (1982) contend that we still do not have an adequate understanding of and theoretical framework for change. In part, the failure to establish such a theory may stem from the different foundational points of view, perspectives, or frames that we employ. If this is the case, then to develop an effective understanding and theory of change will require that we adopt different frames (March, 1981; Morgan, 1986; Quinn & Kimberly, 1984; Smith 1982, 1984; Watzlawick, Weakland, & Fisch, 1974).

These new frames are emerging. Observation of discontinuous, revolutionary, non-linear, non-incremental, and quantum jump-like changes in organizations, which imply that large and substantial outcomes can be obtained from small interventions, has prompted organizational scholars (e.g., Cheng & Van de Ven, 1993; Cottrell, 1993; Gersick, 1991; Wheatley, 1992) to look for new frames for thinking about, understanding, and explaining change. Models of punctuated equilibrium from biology (e.g., Gould, 1980), transformation from religion (e.g., Wilber, 1983), dissipative structures from chemistry (e.g., Prigogine & Stengers, 1984), and chaos theory from mathematics (e.g., Gleick, 1987) have been used as metaphors for understanding dynamic nonlinear change in organizations (e.g., Ford & Backoff, 1989; Gersick, 1991; Loye & Eisler, 1987). Since our research into and practice of change is a function of our assumptions and points of view (Gersick, 1991), such alternative models offer an opportunity for new insights and understandings regarding the dynamics of organization change, much as alternative models have informed our thinking about organizations in general (Morgan, 1986). These new insights are evidenced in Gersick's (1988, 1989) work on task groups, in which the application of a punctuated equilibrium model led to a different understanding of and pattern for group development.

The intent of this paper is to expand this growing body of alternative thinking on change to include trialectics. Developed by Ichazo (1976, 1982), and expanded upon by others (e.g., Ford & Backoff, 1989; Horn, 1983), trialectics offers a "new language" for change. Ichazo (1976, 1982) proposes that our current thinking about change is rooted in two different levels of reasoning or logics: formal logic, as originally developed by Aristotle, and dialectics as developed by Hegel. According to Ichazo, formal logic deals with identity as permanent, and cannot address the paradox of change. Hegel's dialectics resolves this paradox by making identity a unity of dynamic contradictions, in which change is caused by pressure between opposites. But, according to Ichazo, dialectics confines our thinking to change as a

never-ending process of conflict. In response, Ichazo proposes trialectics as a way of thinking about change which is based in attraction rather than conflict.

Following the lead of Ichazo, this paper will present each of the three "logics of change", with a special focus on the third logic, trialectics. Since our primary interest is in trialectics, the discussions on formal logic and dialectics will be brief; the intent in presenting them is not to provide a comprehensive review, but rather to provide enough discussion of their major axioms to allow a comparison between them and trialectics. It is assumed that juxtaposing these three perspectives will help to make the axioms of trialectics clearer, and will provide a foundation for discussion of the implications of using trialectics in the study and practice of change. This process of comparison has been used by others as a method for establishing differences and similarities among different perspectives (e.g., Burrell & Morgan, 1979; Gersick, 1991; Morgan, 1986).

LOGICS AS POINTS OF VIEW

As used here, logic, or point of view, refers to "the underlying assumptions, deeply held, often unexamined, which form a framework within which reasoning takes place" (Horn, 1983, 1). Logics, which are similar to paradigms (Kuhn, 1970), frames (Bartunek, 1989), interpretive schemes (Ranson, Hinings & Greenwood, 1980), world views (Lincoln, 1985; Schwartz & Ogilvy, 1979), and deep structures (Gersick, 1991), are something more than what one thinks or feels. They are also more than metaphors (Morgan, 1986; Ortony, 1979). They are fundamental and coherent sets of organizing principles which are unquestioned and unexamined assumptions about the nature of reality (Davis, 1982). They provide the lenses through which we view everything, telling us "what is real, what is true, what is beautiful, and what is the nature of things" (Lincoln, 1985, 29). When we are "operating in" a particular logic, we take its rules and boundaries for granted. It poses the problems we see, provides the language for explaining and understanding them, and determines their solutions. Logics gives us our "reality", our truth, the way things are.

Logics, then, can be seen as the context in which the content of thinking and feeling occur. It can be said that we do not think or feel our points of view, we think and feel *from* them. Until they are somehow revealed to us, points of view remain transparent and unrecognized, existing below our level of consciousness where they are neither examined nor understood (Levy & Merry, 1986; Lincoln, 1985). The result is that reality has certainty to it, i.e., things ARE "true" or "real", and we do not see that they are given us by a particular point of view.

Logics give us a way of thinking and talking about change. We make sense of what we see within a particular logic (Weick, 1979). This suggests that whenever we have several logics available to us, we also have alternate ways to make sense of what we see. In this case, logics may serve as tools. Indeed, it is sometimes considered evidence of creativity if one can "move between" different points of view when working on an issue or problem. But, when we are unaware that we are using a logic, or are "trapped" in only one, our point of view becomes an unwitting limitation to what might be seen or understood, restricting our observations and offering no really new alternatives.

According to Horn (1983), a trap is any common way that the organization of our thinking leads us astray, or into predictable error. Traps occur when our

application of a logical world view no longer works, resulting in frustration, inadequate explanations, and ineffective actions (e.g., Hedberg, Nystrom, and Starbuck, 1976). When a once-useful way of thinking becomes ineffective, or even counterproductive, it's continued application can get us "stuck" (Smith & Berg, 1987). In fact, continued application can exacerbate the problem and make it harder to extricate ourselves. As evidenced by the extensive research on escalation to a decision (e.g., Staw, 1981), we can get trapped by our logic and end up doing more of the same actions without producing the desired result.

The difficulty, of course, is that we don't always know that we are in a trap. Unlike a golf course, where traps are visible, traps in our ways of thinking are not always evident. But, by identifying our underlying logics, and making them "visible", we subject our ways of thinking to scrutiny, and thereby increase our chances of avoiding a trap, or at least increase our ability to recognize that we are caught. The possibility of getting into a trap can thus become a caution in our approach to change, just as a trap on a golf course cautions a golfer in how to approach the green. Similarly, recognizing that we are caught in a trap can become a signal to try some other perspective or way of thinking, thereby creating an opportunity for a new approach and a different course of action.

THREE LOGICS OF IDENTITY AND CHANGE

Change is a phenomenon of time. It is the way we talk about the event in which something appears to become, or turn into, something else, where the "something else" is seen as a result or outcome (Horn, 1983; Kanter, Stein, & Jick, 1993; Smith, 1984). From this perspective, change involves two interrelated elements. The first is identity, or what the something *is*. The second is the change process, which we observe as the movement of the original something from it's starting state or condition in time and space to another state or condition in time and space. The study of the logics of change is the study of the first something, S, the resulting something, R, and the relationship(s) between them, as shown in Figure 1.

[Insert Figure 1 Here]

As presented here, formal logic focuses exclusively on identity and does not address issues of change. Dialectics and trialectics, however, address both identity and change, and thus have been said to be more complete logics of change (Horn, 1993). The axioms of each logic, based on the work of Ichazo and others, provide the basis for the following discussion.

Formal Logic: A "Logic of Identity"

Formal logic, which is derived from Aristotle's system of reasoning and thinking (Ichazo, 1982), focuses on identity, i.e., the determination of what some thing "is" or "is not".

Axiom 1: Axiom of Contradiction: A thing can not be itself and something else.

The first element of identity is separateness, established when an observer isolates the entity from it's background or surroundings. This differentiation puts a border around the entity. A boundary is a digital rule about relations (Wilden, 1980) that specifies how figure and ground relate to each other (Bateson, 1979), but is not

itself an element of formal logic (i.e., boundaries are not themselves things)(Wilber, 1979). The boundary gives a "thing" separateness (Maturana and Varela, 1987), which makes it distinguishable from a background or environment.

Boundaries reside in the observer(s), not the observed. A boundary between an organization (A) and its environment (Not-A), for example, belongs neither to the organization nor the environment, but to the observer. Descriptions of organization boundaries, such as "rigid", or "permeable", or "loose", are "put there" by the observer or the method of observation and are not inherently a characteristic of some observable boundary to which one can point (Smith, 1984). Boundaries allow us to "bracket" or "punctuate" streams of information so that we can differentiate, classify, and categorize, thereby making sense of the world (Weick, 1979). When phenomena are punctuated by placing boundaries or brackets around them, they are objectified as "things", reifying them and giving the impression they are discrete unities. Since to differentiate between or among things is to say something is "A" and that something else is "Not-A", Smith (1984) contends that "Not" is the primary differentiation boundary.

Axiom 2: Axiom of Identity: A thing is equal to itself.

The second element of identity is continuity, persistence, stability, or permanence. A thing is itself. Formal logic treats identity as a fixed position that is permanent (Ichazo, 1976; Lebeck & Voorhees, 1984). This does not mean that there is absolutely no change, but that the "essence", or "deep structure" of the entity remains unchanged. Continuity, then, refers to the unchanging essence, which is the relatively fixed or permanent quality of an entity. This continuity is evidenced in the practice of defining, understanding, and recognizing individuals and organizations in terms of their relatively fixed patterns or characteristics, e.g., their personality, culture, or structure.

Axiom 3: Axiom of Excluded Middle: A thing is one of two mutually exclusive things.

Formal logic provides for the identification of things and the reduction or elimination of uncertainty through those identities; something is Either "A" Or "Not-A", but not both or something in between (Lebeck & Voorhees, 1984). Organizations, for example, are centralized or decentralized, structures are mechanistic or organic, and leaders are transformational or transactional. A modification of this axiom, which creates a continuum between "A" and "Not A", does not avoid the dichotomy problem (Ford & Backoff, 1989; Gharajedaghi, 1982). As an identity, an entity is itself exclusively, distinct from everything else, and it cannot be anything else.

Since change involves something "becoming" something else, formal logic does not really address change. There is no alteration in composition, form, or location that will allow "A" to become "Not-A". Indeed, the apparent existence of change contradicts the very roots of Aristotelian identity, since if there is change there is no permanence, and hence no identity (Ichazo, 1976). Change, therefore, is a paradox in formal logic. Hegel dealt with this apparent paradox with his dialectical reasoning.

Dialectics: A "Logic of Contradiction"

While formal logic emphasizes identity and permanence, dialectics emphasizes contradiction and change (Gharajedaghi, 1982; Horn, 1983; Lebeck & Voorhees, 1984; Voorhees, 1985).¹ The dialectician views change as the result of bipolar, oppositional struggles (Rychlak, 1976); change "comes out of" conflict, and conflict is necessary for change to occur. This perspective is evidenced in Boulding's (1981, 253) definition of dialectical processes as those which "involve conflict or struggle." If something S changes to a result R, the dialectician sees change as shown in Figure 2.

[Insert Figure 2 Here]

Axiom 1. The Axiom of Transformation: A qualitative shift occurs from a gradual increase or decrease in quantity.

Dialectics recognizes two interdependent types of change - quantitative and qualitative - where gradual, evolutionary increases or decreases in quantity are seen as leading to sudden, revolutionary leaps in quality, i.e., a new form. This new form is a result of a qualitative shift caused by changes in quantity, which in turn are caused by conflict, which advances continuously without limits (Horn, 1983; Lebeck & Voorhees, 1984).² This relationship between quantity and quality is evidenced in Greiner's (1972) discussion of organizational growth phases where gradual increases in size and age (quantity) bring about periodic revolutions in management structures and practices (quality), giving rise to new organizational forms, and in Tushman and Romanelli's (1985) metamorphosis model of organization evolution. This axiom is also similar to that found in other "punctuated equilibrium" models (e.g., Cheng & Van de Ven, 1993; Gersick, 1991).

Axiom 1 implies that doing more/less of something (change in quantity) will produce something else that is better (change in quality). For example, increases in the quantity of consumer goods will improve the quality of life, increases in military spending will bring increases in national and global security, spending more money on education will give us better educated students. In short, with enough pressure, attention, resources, effort, information, etc., something new can be made to happen.

One difficulty here is that there appears to be no limit to the increases in quantity that are required for a shift in quantity to occur. Consequently, the failure to obtain a desired qualitative outcome is understood as evidence of an insufficient increase in quantity, prompting a call for "more", rather than providing evidence of the inappropriateness of the underlying assumption that increases in quantity produce qualitative shifts. Dialectics says that *how* things change is through quantitative changes which will be applied until a new form occurs.

¹ It is recognized that there is no single view of dialectics, but rather several different views concerning ontology and epistemology (see for example Adler, 1952; Rychlak, 1968 and 1976). Common to these different views, however, is the proposition of opposition, bipolarity, or contradiction (Adler, 1952; Rychlak, 1976). For purposes of this paper, we are using that form of dialectics set forth by Hegel and discussed by Ichazo (1982), Horn (1983) and others (e.g., Lebeck & Voorhees, 1984; Morgan, 1986).

² Since dialecticians may vary on the emphasis they place on these axioms, these are prototypical.

Axiom 2. *The Axiom of Oppositional Struggle: Each entity is a unity of contradictory opposites.*

This axiom tells us *why* things change. The premise is that, since things change, they therefore have no permanent identity, and a thing is both A and Not-A at the same time. Axiom 2 says that the source of change is the tension generated by these *internal* contradictory or antagonistic opposites.

Phenomena are seen as contradictory when opposing processes and principles coexist and each taken separately would have an opposite effect (Ford & Backoff, 1989; Levins & Lewontin, 1985). In organizations, for example, new practices develop (e.g., delegation) which are incompatible with existing practices (e.g., centralized decision making), thereby threatening an organization's character and pushing it beyond its own limits into a new form. These practices, which precipitate conflicts between opposing or incompatible ways for conducting things, constitute internal contradictions (Benson, 1983).

Dialectical change, then, is self-movement stemming from the "struggle" between internal opposing tendencies that start small and gradually build up until they can no longer be maintained in the existing unity and a new unity - the synthesis - is created (D'Andrade & Johnson, 1983). This does not mean that external factors do not contribute to the gradual buildup of contradictions, but that external factors do not themselves bring about the change. Rather, the contradiction contained within the unity is exacerbated or made apparent by external events (Wilden, 1980). Although external forces, such as changes in the environment, may appear to cause the change (e.g., an alteration in structure), it is the interplay of internal contradictions that bring about the change. In the absence of these internal contradictions, the same external forces would be of no consequence. This explains why some organizations respond to environmental shifts and others don't, and why there are differences in the responses observed.

Whereas formal logic has things be "either/or", this axiom of dialectics allows for things to be "both/and". Thus, for example, an organization's personnel can be both for and against a proposal, they can be both satisfied and dissatisfied, and they can be both motivated to change and motivated to resist change. This suggests that in any organization change effort, people may appear to switch sides, change their minds, or be inconsistent, applauding the change at one time and resisting it at another.

Axiom 3. *Axiom of Negation: Change occurs in the negation of the previous form.*

The third axiom of dialectics is the "engine" of change. In dialectics, a thing is a unity of contradictory opposites in which one opposite supersedes the other. When this happens, the superseding opposite negates its opponent, absorbs it, and changes itself into a third entity. This third thing is not simply a recombination of the previous two, but is itself is a new thing, i.e., something qualitatively different, that is conditioned and informed by what went before it (D'Andrade & Johnson, 1983, 84).

The first negation is of the unity itself, wherein the two contraries (thesis and anti-thesis) assume independent existence. For example, a worker who both owns

the tools and produces the product could be viewed as an owner-producer unity. When this unity is negated, it can split into owners/capital and employees/labor, creating a new form or synthesis, e.g., capitalism, where workers are separated from the means of production. A second negation occurs when the synthesis, in turn, is negated (i.e., negation of the negation), as when socialism negates capitalism and unites the worker with the means of production at a higher level of production and social interaction (D'Andrade & Johnson, 1983).

Negation does not mean simple destruction and replacement. Rather, whatever is negated will condition or inform the new form (i.e., the synthesis) that arises from the struggle, and some negated elements will be transformed and passed on (D'Andrade & Johnson, 1983). The synthesis is progressive in that it contains what went before, and in that it serves as the basis for the next stage (Wilber, 1986). Capitalism, for example, "contains" elements of the original owner-producer unity. Qualitative changes, therefore, are only advances, never regressions, i.e., there is no "going back".

Trialectics: A "Logic of Attraction"

Dialectics has been criticized for its apparent failure to place limits on qualitative change³, for assuming that conflict is the only generator of change, and for ignoring the possibility of regression (Horn, 1983). What appears to be conflict at the synchronic (same time) level, for example, may be cooperation at the diachronic (different time) level (Voorhees, 1983), and, as March (1981) suggests, changes may stem from causes other than conflict. Ichazo (1976, 1982) developed trialectics in response to these criticisms. This third logic attempts to harness the permanence of formal logic with the endless change of dialectics into a logic of attraction (Horn, 1983; Lebeck & Voorhees, 1984). Its intent is not to replace formal logic or dialectics, but to supplement and complement them.

Axiom 1. Axiom of Mutation: Change involves the jump of one Material Manifestation Point to another Material Manifestation Point

The Axiom of Mutation states that change is a discrete "jump" from one manifestation of energy to another. The axiom requires an understanding of the trialectician's terms: material manifestation point, equilibrium, change, and active and attractive forces. These ideas are discussed below, and Figure 3 shows how trialectical change occurs with these elements.

[Insert Figure 3 Here]

³ This is based on the assumption that there is a synthesis of the thesis and antithesis. As Rychlak (1976, 4) indicates, however, such a synthesis need not occur, thereby placing a limit on change: "There may be a history of one side over the other, or some synthesis which calls up yet another thesis. But not all dialectical theories demand a resolution of contradiction or that this confrontation process need come to an end. It is up to the theorist making use of dialectical conceptions".

Material Manifestation Points. According to trialectics, there are no "things" in the world other than change, movement, or process.⁴ Things, such as people, organizations, and ideas, are all names given to abstractions of what are identifiable and relatively constant patterns of movement extending over the whole universe (Bohm, 1980). These relatively stable patterns are not fixed or permanent, but are constantly in motion, what Prigogine (1980) calls "static" dynamics. So what appears to us as relatively static, fixed, or permanent entities, occurrences, or phenomena are understood in trialectics as an identifiable state of an ever-changing system at a particular time. In the language of trialectics, these identifiable states are termed *material manifestation points*, or MMPs.

MMPs are based in the idea that matter and energy (the "substance" of the cosmos) are convertible into each other, and that the material manifestations of energy are those observable phenomena we call things or events (Ichazo, 1982). MMPs are not just the things, but include also all of the thing's "interrelationships with the rest of the world" (Horn, 1983). These interrelationships with the world are the multitude of energetic processes which intersect and manifest as identifiable states of a system.

In its pure state, energy is understood to have no material manifestation (D'Andrade & Johnson, 1983). "Material", in this case, refers to any and all identifiable states, conditions, or occurrences (Horn, 1983), whether physical (e.g., rocks, water), cognitive (e.g., thoughts, ideas), emotive (e.g., moods, feelings), or behavioral (e.g., sitting, walking). All of these are considered *material manifestations* of energy, and the identifiable states themselves are considered the *points* at which the universal flow of energy is manifest.

MMPs are temporary "resting points" in which an equilibrium of energy is made manifest and it is this equilibrium that gives stability (D'Andrade & Johnson, 1983). They are relatively stable stopping places, lasting for certain durations, between mutations (Horn, 1983). Mutations occur when the equilibrium of an MMP is altered. MMPs are the "what" that changes (Horn, 1983), and rather than being the predominant elements in a universe of things, MMPs are the temporary points of equilibrium in a universe of change.

When looked at from this perspective, organizations are seen not as static things, but as interdependent networks of individual, group, and interorganizational dynamics and interactions (Nohria & Eccles, 1992; Wheatley, 1992). Similarly, departments, work groups, individuals, organization structures, cultures, meetings, etc., can be seen as material manifestation points comprised of many different dynamics and interactions. It is these interactions, primarily in the form of communication and information, that constitute and structure the different phenomena (Wilden, 1980) and are the basis for socially constructed realities (Berger & Luckmann, 1966).

Equilibrium. Our usual understanding of equilibrium is as a "balance" between two elements, weights, tendencies, or directions. In trialectics, equilibrium is an active function of balancing flows that can be seen metaphorically as an active

⁴ Process here refers to change, transition, movement, or motion. It is not some sequence of activities or actions that gets one from one place to another, but rather the "flow" of energy that is seen to constitute the cosmos.

circulation of energy, rather than a static state of balance (D'Andrade & Johnson, 1983). It is this circulation that maintains the stability of an MMP and when the circulation is disrupted, the MMP mutates (jumps) to another MMP. The equilibrium of an MMP is disturbed when energy either comes in to it or goes out from it.

The energy flows retained by an MMP, which is an energetically neutral temporary stable state of a system, will be disrupted by its interactions with other MMPs. This disruption of equilibrium causes mutation of the stable state. If it is imagined that energy traverses a pattern of MMPs (D'Andrade and Johnson, 1983), then identity is a temporary stability of something in relation to the MMPs around it, and change is an ongoing phenomenon of disrupted equilibrium. There are no internal struggles; instead there are shifting flows of energy between MMPs.

In fact, flow is all. Change, for the trialectician, is an ongoing energy of equilibrium, in which "a moving change reaches a point where a specific manifestation is inevitable" (D'Andrade and Johnson, 1983). Instead of the dialectical perspective that "everything changes all the time", we have a perspective in which everything *is* change, and in which the flow that is change is capable of manifestation as identifiable states, objects, or events.

Mutation. The jump of MMPs from one point to another is quantum-like. There is not, as in dialectics, a gradual, continuous increase in some quantity, up to some nodal point, before a qualitative shift occurs. Rather, all change is discontinuous; "even though the process may appear continuous, it is in fact discontinuous. There are precise moments of change which are not the result of quantity becoming quality, as would be asserted by dialectical theoreticians, but which are instead pre-established points where change occurs" (Ichazo, 1982, 27) as in the case of where water "jumps" to steam when the boiling point is reached.

The concept of "pre-established points where change occurs" does not mean that all future potential states of a thing or condition are already known, knowable, or even predictable with certain probabilities. The example that water becomes ice at 0 degrees centigrade and it becomes steam at 100 degrees centigrade may suggest that all points of change can be known in advance. Rather, since MMPs are temporary stabilities, any future states will also be MMPs, and only some of the multitude of existing and potential MMPs in the universe will be "lawful" outcomes of the original MMP. An organizational development project may produce a culture shift in an organization, or a highly trained workforce (both future recognizable states), but it will not produce seashells.

The idea of quantum jumps is not new; it is found in all models of revolutionary change (e.g., Gersick, 1991). What is different here is that for the trialectician, there is no continuous change, only discontinuous change. Any movement from one MMP to another, no matter how similar they may appear to be in time, space, or form, occurs in a jump. In this respect, all changes are qualitatively different from each other and there is no continuity of identity. In fact, since an MMP is defined as "an identifiable state", any identification of an object or event is an assignment of identity that differentiates it from what existed before.

The discontinuity of change means that what is here now is absolutely different from what was here before, even if it is only at a microscopic level. From this perspective, continuity can be seen as a function of the framing used (Bartunek, 1989). At a macro level, there may appear to be no change, but at a micro level

there may be considerable change. Thus, for example, IBM may appear to continue as a corporation, but its internal dynamics and composition may be so unlike any previous version of IBM that it is a different organization. In this respect, every time the MMP called IBM jumps to another MMP, the prior MMP "dies" or "disappears" and a new one is "born" or "appears". It will be possible for those who are focusing their attention on the similarities between the two MMPs to say that this is the "same" organization, when, according to trialecticians, it is a different organization altogether.

Actives & Attractives. The coming and going of energy into an MMP is based on the idea that any instance of change (i.e., a jump from one MMP to another) can be understood as involving two interdependent components, attractives and actives (Caswell, 1983; Horn, 1983). Attractives are like magnets in that they attract, draw, or pull things toward them. We have all had the experience of being drawn or attracted to something or someone, e.g., food, another person, a vision, etc. They were attractive.

But attractives are only attractive to things that are "active", i.e., that are looking for, listening for, or open to what is being offered, made available, or given off by the attractive. An MMP is considered active in that it "acts on", is receptive to, or is susceptible to the attractive MMP. Food is not attractive to someone who has just eaten, but it is to someone who is hungry; hunger is active, food is attractive. Things are attractive to us because we are "active" with respect to them; there is no attractive without an active.

In the large pattern of MMPs - the existing MMPs that constitute an entity and the possible potential MMP future states - the relationships that link the MMPs together are comprised of actives and attractives. When these active-attractives are in equilibrium, e.g., an idea for restructuring the company is presented to a management team that has just completed a restructuring effort, there will be no change to a new state. But when the same proposal is made to the managers of an organization in decline (actively looking for solutions), with sufficient promise of turnaround potential (very attractive), the change may be made from "organization in decline" to "organization in structural change".

The relationship between MMPs has many names for a trialectician: active-attractive (forces), function, and process. When this relationship is a balanced flow of active-attractives, the function or process which relates the MMPs is in equilibrium. A relationship in which the active-attractive forces become unbalanced will have the MMP jump to a new state, a new MMP. The man who has finished Thanksgiving dinner is not actively looking for food. His digestive system, the function or process that balances his food-empty (active) and food-full (attractive) forces, is a relationship between his former hungry MMP and his now satisfied MMP that is in equilibrium for the moment.

In trialectics, the roles of active and attractive are not fixed (no thing *is* active or attractive) and one does not dominate or negate the other. Rather, whether something is active or attractive is a matter of choice (Horn, 1983). Active and attractive, therefore, are assignments made by an observer, and the assignments will be different depending on the observers. One challenge in the application of trialectics is this identification - or creation - of the actives and attractives that relate the present MMP to a future intended result. One approach is to "solve" for what is unknown: identify candidate actives and attractives, and specify the intended result, then design a function that uses the active-attractive forces in a way that links

present MMPs to intended MMPs. This makes it possible for change agents to create and test different arrangements of processes for effecting a change.

The active-attractive relationship can be observed in organization change situations where people see things differently and are drawn to different courses of action. A manager may believe that employees want money (active) and that they will go along with a change (intended result) if sufficient money is offered (attractive) in a well defined reward system (a process or function that makes the outcome's attractive forces relevant to the employees' active forces). Accordingly, the manager may propose the planned change along with the financial incentives. Employees, however, may prefer leisure time to money. Since the money force is not active, they may see time off as more attractive, and desire a new flex-time work schedule (function or process linking current-MMP actives to future-MMP attractives) to engage themselves seriously in the change (result). From the manager's (dialectical?) standpoint, this difference might be interpreted as "resistance" on the part of the employees, but from a trialectical standpoint, it simply reflects differences in what is active in the current MMP and what is attractive in a desired future MMP. If the manager is committed to producing the change (the new MMP), then it will be necessary to work with the employees to identify the actives and attractives that relate them to the intended future.

Axiom 2: Axiom of Circulation: Equilibrium is the circulation of energy between apparent opposites.

The Axiom of Circulation asserts that the dynamic tension in the world of things, ideas, and events is not a function of internal contradictions, but the cyclical flow of energy between things (MMPs). Since an MMP is never an isolated object or circumstance, but includes relationships with all the other objects and circumstances relevant to its existence, the dynamic that gives it its identity is not an internal struggle between itself and not-itself but rather its external relationships with its many environmental MMPs. The Axiom of Circulation says that identity is a temporary equilibrium in a network of relationships. This appears analogous to the idea that particles can be understood as points of intersections in fields of energy (Wheatley, 1992).

The circulation axiom of trialectics relies on interdependence rather than on contradiction. In dialectics, opposites are antagonistic or contradictory mutual negations fighting for predominance. But Ichazo sees contradictions occurring only in our thinking, not in nature, where interdependence is the rule. Contradictory opposites are seen as the constructions of dialectical minds, not an inherent characteristic of nature. For this reason, trialecticians use the term "apparent opposites", to clarify that entities only *appear* to be oppositional from the perspective of an observer, when in fact they are a part of a larger whole which relates them. The predator and prey, or competitor and competition, are two roles in a larger whole system of relationships.

MMPs are regarded as complementary and interdependent, not contradictory. The activity of one is different from, not antithetical to, yet still related to the activity of another (Bateson, 1979) and operate by mutual specification (Goguen & Varela, 1979). Other examples of apparent opposites are loose/tight, quality/cost, autonomy/discipline, stability/change, differentiation/integration, collective/individual (e.g., Peters & Waterman, 1982).

This concept of apparent opposites is a significant departure from dialectics because it proposes that any opposite is a function of the frame (Bartunek, 1989) being applied rather than an inherent characteristic of the phenomena involved. Opposition is an interpretation put there by an observer rather than the "true" state of the world. This being the case, shifting the frame of reference can resolve or dissipate apparent contradictions (Levy & Merry, 1986), thereby resolving apparent paradoxes and allowing for forward movement (Smith & Berg, 1987; Watzlawick et al., 1974).

As discussed with Axiom 1, MMPs are relatively stable intersections of processes linking them to other MMPs, and they exist as manifestations because they are, temporarily, in equilibrium. Equilibrium, as treated in trialectics, is not a balance of two or more forces pushing on each other (cf., force field analysis). Rather, it is a dynamically balanced circulation of energy within MMPs (since a MMP is composed of a thing and its relations with the world) and between them (since there are other MMPs not in the present composition of the initial MMP to which it could be attracted). Dynamic balance means that the processes that relate MMPs will maintain equilibrium while energy is constantly flowing (Briggs & Peat, 1984).

Circulation requires that a circuit of energy must exist, and relationships, including apparent opposites, constitute the polarities that mark the limits of these circuits. This does not mean a "thing" is itself and its opposite, as in dialectics, but that it exists by virtue of its necessary relation to others (Smith, 1984). Predator exists by virtue of its relation to prey, and "predator-prey" can be viewed as one interactive thing (an MMP), not two separate contradictory entities. One would not exist without the other, yet one is not the contradiction of the other. Management does not exist without labor, and management is not the contradiction of labor. Relationships, even contentious ones, constitute the poles around which circulation is possible. It is these poles and the circulation (equilibrium) between them that constitute an MMP (Horn, 1983).

The axiom of circulation can be demonstrated in the exchange of information within an organization. Information comes in a variety of forms, but it is the circulation of this information (this circulation is often referred to as communication) which constitutes and maintains a given equilibrium. Should the circulation increase, such as when information that has been withheld is shared, a state of increased cooperation and openness may arise or a state of overload, confusion, and decision paralysis. Similarly, a decrease in circulation, such as when access to once readily available information is restricted, may precipitate a crisis or lead to less gossiping, complaining, and undermining. Whether the resulting MMP produces positive or negative outcomes, it is changes in circulation which constitute changes in equilibrium, and it is these changes in equilibrium that give rise to jumps to different MMPs. As long as the circulation continues, a given MMP will maintain itself.

This idea of jumps between MMPs stemming from changes in circulation suggests that it does not necessarily take much energy to produce a change. It is a principle of chaos theory (e.g., Gleick, 1987) that relatively small changes can produce phenomenal shifts in the state of a system. Known as the "butterfly effect", these small, apparently insignificant changes in energy in one part of a system can produce major and substantial changes in another part in very short periods of time. This suggests that changes in organizations do not have to be long drawn out events

marked by resistance and opposition (e.g., Biggart, 1977), but may be produced relatively quickly.

Axiom 3. *The Axiom of Attraction: All Material Manifestation Points are attracted "up" or "down" to other Material Manifestation Points.*

What disrupts the equilibrium of one MMP, thereby giving rise to a different MMP? According to the third axiom of trialectics, this change is produced by "attraction". This term carries connotations of bringing forth, drawing out, or eliciting the state change of an MMP. Since an MMP is an equilibrium state, subject to disruptions by the dynamics of active and attractive forces, it can jump to another state (positive or negative) when the attraction of that other is sufficient to break the equilibrium. Further, an MMP cannot jump to just any other MMP: a piglet can manifest as a pig, but not as a daisy. Attraction, then, is akin to an unfolding of inherent likelihoods (Bohm, 1980), in which an MMP will have multiple potential futures at any moment, and will be "attracted" to jumping to one or another of them by the changing energy relations between itself and its futures.

Attraction is possible because of an assumption that material manifestation points are pre-established, i.e., there are limits to what can occur (the piglet cannot become a daisy), and that these points can be attractive (the "pig" MMP is said to attract the "piglet" MMP). Trialectics proposes that energy does not manifest itself anywhere, but only at specific points, and that these points are established or determined by the laws of the cosmos (Horn, 1983; Ichazo, 1982). MMPs are not "free" to jump from any MMP to any other MMP, but can only jump consistent with the laws which govern the universe. A kitten can not become a dog, a rock can not become a tree, an idea can not become a person.

What is possible at any moment, therefore, is understood to be established or governed by the laws of the universe and recent MMPs. At any particular moment, there are many possibilities (all of which can be seen as attractive MMPs), but not everything is possible. There are limits. With each new MMP, what is possible at one moment is different than what was possible before, but there is still a limit to what is possible.⁵ Leonardo Da Vinci could not build his helicopter and Jules Verne could not rocket to the moon.

Although the idea of jumps to pre-established points has come under criticism for its failure to allow for the emergence of genuine novelty (Bahm, 1984), it is consistent with developmental frames such as that proposed by Wilber (1986). According to developmental theories, there are natural stages, e.g., from "lower" to "higher", through which systems evolve. By stages is meant that "certain classes of behaviors stably emerge only after certain other classes" (Wilber, Engler & Brown, 1986, 9), not that there are a necessarily fixed number of discrete classes. The "discovery" or invention of new stages between existing stages does not alter the fact that one stage is prior to another. Nor, for that matter, does the elimination or consolidation of stages (e.g., Gersick, 1991). The idea of stages simply implies that

⁵ This issue is difficult to deal with as we frequently want there to be no limits to what can occur or be done, e.g., miracles. But in the context of trialectics, not everything and anything can happen given the laws of the universe and recent MMPs, unless we assume (1) there are no laws, or (2) the laws themselves change. A basic tenet of trialectics is that the laws of the universe do not change.

one can not mutate (jump) to anywhere from anywhere. Miller and Friesen (1984, 2) appear to support the notion of attraction to some form of pre-established arrangements or tendencies when they note that "organizations will gravitate overwhelming to particular quantum states that we call configurations."

In trialectics, the jumps from one MMP to another are also seen as either ascendant or descendent, i.e., from a MMP of lower complexity to one of higher complexity or from higher to lower. The piglet that becomes a pig is said to have had an ascendant change, while a piglet that dies and decomposes has had a descendent change. Higher and lower are not moral assessments intended to imply superiority or inferiority, but to differentiate MMPs in terms of the restrictions attached to them. Higher MMPs have fewer restrictions, are more harmonious, and have greater integrity (wholeness and coherence) and unity than lower MMPs (D'Andrade & Johnson, 1983; Horn, 1983). For example, as individuals ascend, and become more integrated with and aware of the workings of their own internal processes and experiences, there is an increased freedom in that they can choose to continue to operate according to these processes, or they can operate in a different relationship to them and invent new ways of operating. In this respect, ascendance is similar to development and transformation (e.g., Wilber, 1986).

It should not be concluded from this that a higher MMP means a better or more positive outcome or for that matter that attraction is always to a better MMP. Poor intercity youths, for example, may be attracted to education or to crime and violence as a way for improving their lives. Similarly, people may be attracted to revenge and war to address historical transgressions or to forgiving and peaceful coexistence. Attraction, therefore, can be to positive and negative states and jumps from one MMP to another can have both negative and positive consequences.

"Change, in trialectics, is not assumed to be the occurrence of the new, but the appearance of what has already been established. Negation is not necessary for this kind of change" (D'Andrade & Johnson, 1983, 111). Rather than the plant negating the seed, as in the dialectical interpretation, energy is transferred from the seed to the plant. The energy is attracted either toward growth into a plant or toward decomposition and recycling (D'Andrade & Johnson, 1983). Change, therefore, can be ascendant or descendant and need not negate what went before.

DISCUSSION

Trialectics offers a perspective on change that is supportive of the thinking that is found in other dynamic, nonlinear models of change (e.g., Gersick, 1991; Gleick, 1987; Gould, 1980; Prigogine & Stengers, 1984) and in the applications of quantum mechanics to organizations (e.g., Wheatley, 1992). When applied to the literature on organization change, it also has some implications for how we can understand and work with the process of change, resistance, and the language of change. Each of these is discussed below.

The Change Process

Since formal logic focuses on identity and does not provide a convenient and consistent way for considering change, Ford & Backoff (1989) propose that it fosters a perspective of "change-through-replacement" in which one entity sequentially takes the place of or substitutes for a second. The first identity does not *become* the second, but is substituted for it. For example, if an organization that is organized on

a functional basis ("A") changes to a product structure ("Not-A"), the formal logical interpretation is not that a functional structure *becomes* a product structure (i.e., "A" becoming "Not-A"), as it is that a product structure *replaces* a functional structure. With change-through-replacement, one entity is removed or destroyed *before* the second entity is installed or constructed, thereby maintaining the separate identities of both (see Figure 4a).

[Insert Figure 4 Here]

Change-through-replacement is consistent with the framing of issues as either/ors (Ford & Backoff, 1989). This framing fosters the injunction that the prevention of "A" can only be accomplished through the application of a reciprocal, opposite, or some form of counterbalance, i.e., a "Not-A" (Watzlawick, Weakland, & Fisch, 1974). To counterbalance a loss of control ("A"), for example, formalization ("Not-A") may be employed. And, as more control is lost, as evidenced by more rules being violated, more formalization may be applied, producing an escalation in both a loss of control and formalization (e.g., March & Simon, 1958). This escalation becomes a vicious circle in which the more things change, the more they stay the same.

Under formal logic ("change-through-replacement"), the change process becomes a sequence of events in which one (1) determines or defines what currently exists (what is "A"), (2) determines or defines its replacement ("Not-A"), (3) engages in action to remove what is currently there, and (4) implants its replacement.

Dialectics proposes that things change when there is a sufficient increase in quantity to produce a shift in quality. This shift in quality constitutes a jump in which the first quality *becomes* a second quality that is distinct from, but informed by the first quality. The idea of becoming is possible because dialectics assumes that entities are unities of contradictions (thesis & anti-thesis) that continue to "work at each other" until one dominates and there is a synthesis of them (see Figure 4b). In a synthesis, one entity does not replace another as with formal logic, but rather the thesis and anti-thesis become something altogether different. A synthesis is distinct from both the thesis and anti-thesis, but includes them both, so that neither the thesis nor the anti-thesis continues to exist as a separate entity.

The key in getting to this synthesis is an increase in some quantity. The quantity may be deprivation, frustration, dissatisfaction, information, understanding, knowledge, affluence, affinity, relatedness, etc. Once a sufficient level of quantity has been reached, the forces for change (thesis) will be greater than those against (anti-thesis), and change (synthesis) will occur. Until that point is reached, the forces for and against change are balanced and there is no change (Lewin, 1951).

Under dialectics, the change process looks something like a series of events in which one (1) determines or defines the forces for and against change (the thesis and anti-thesis), (2) determines what quantity(ies) must be increased or decreased to produce a shift, and (3) increases or decreases the quantity(ies) until a shift (synthesis) occurs. There is a reliance on and presupposition of confrontation, opposition, and conflict. This means that any change can be seen as one position addressing another in which each position is in opposition to the other. Under these conditions, the way one gets the change implemented is to somehow "overcome" the other position.

Trialectics proposes that change occurs through attraction. According to this perspective, changes from one state to another occur not because of some internal struggle, conflict, dissatisfaction, or opposition with what currently exists, but by virtue of one's attraction to other possible points (see Figure 4c). This is very similar to the idea that people will work toward the accomplishment of a vision by which they are inspired (i.e., find attractive) (Kouzes & Posner, 1988; Pascarella & Frohman, 1989; Senge, 1990). Changes, therefore, do not result from something being "pushed", pressured, or opposed, as in dialectics, but from being "pulled", drawn toward, or attracted to different possibilities.

The idea that change can occur through attraction is well based in the literature on organizations. Expectancy theories of motivation, for example, are based in the idea that people will work toward valent (valued or attractive) outcomes. Recent writings on the role of vision in organizations is simply that it is not necessary to create dissatisfaction with the present, only to provide a possible future that is attractive and enrolling (Kouzes & Posner, 1988; Senge, 1990). The research on goal setting (Locke & Latham, 1990) also seems consistent with a logic of attraction. A careful examination of other theories may also reveal that trialectics provides a viable explanation for what is observed (e.g., Caswell, 1983; Voorhees, 1983).

With trialectics, the change process involves establishing (1) the result desired, (2) the active and attractive forces, and (3) the function or process that can engage both the active and attractive forces to produce the desired result. This is a creative process: since the ways in which we consider or analyze every change depends on our purpose or perspective, we can designate any variety of phenomena as results. There is no *the* result that must be considered or is the only one to consider. For example, the result "a decrease in absenteeism" can also be seen as the result "an increase in attendance" or an "increased ease of access to the organization".

Similarly, there is no *the* function which relates the result to what is active and what is attractive. In the case of absenteeism, there are many things that may be active (leisure, young kids, weather, resignation, cynicism, etc.) and attractive (staying home, family well-being, going away, hanging out with friends, etc.). Depending on which active and attractive are chosen (e.g., young kids and family well-being vs resignation and hanging out with friends) a different change, (e.g., a company day care center vs company sponsored community action programs such as Habitat for Humanity) will be proposed.

In trialectics, we, as observers or change agents, are free to create and alter the result, what is active and attractive, and what function will relate them to each other, thereby making a variety of changes possible. In this respect, trialectics makes it possible for us to create different possibilities and relationships and to explore their implications rather than getting others to somehow accept our views. What limits us is not the inherent structure of things (a dialectical and formal logic view), but our ability to create and generate.

Resistance

One of the central concepts in the conduct of change is resistance. Resistance is based in the idea that there is opposition to, or forces against change.

In formal logic, this opposition can be said to exist between two separate identities trying to occupy the same place at the same time. Since this is not possible, one of them will have to be displaced with the other. In dialectics, resistance is inherent in the unity of opposites. Since contradictions oppose each other, resistance is "built into" the system. If someone does not go along with or agree to the change, they are seen as resistant. The recommended strategy is to try and overcome the resistance through some form of resistance reducing mechanism (e.g., Kotter & Schlesinger, 1979).

From a trialectical standpoint, there *is* no resistance. Resistance is an interpretation given by an observer to a particular event or circumstance and is not, therefore, some "thing" to be overcome. Rather, the failure of someone to support a change would seem to indicate that there is nothing active/attractive in the change or that a function which relates what is active and attractive to the desired result is missing. It is not that people are resisting, they simply are not "enrolled" in the proposed change (Senge, 1990) and are instead acting in ways that are consistent with what they *do* see as attractive. To say that they are resisting would be to say that something is unattractive and that it is being avoided. Clearly there are times when this occurs, but the trialectic interpretation is that they are attracted by another future state, that they are not avoiding anything, and that the intended result is not sufficiently engaging.

The strategy for dealing with those who are not engaged in a change may be to create, *with them*, a possible future to which they *are* attracted and that can relate them to (i.e., get them active toward) the desired result. It may also be possible to create a function which relates what they are already attracted to the desired result. Such an approach has been found to be effective in producing breakthrough changes (e.g., Scherr, 1989). Since attraction is a function of what is active, it is not possible for a change agent to give someone something that is inherently attractive. Adding more inducements, giving more explanations, threatening more retributions will not make something more or less attractive. Rather, something will be attractive only when there is an active counterpart in the individual. It is the occurrence of the active, not the inducements, which makes something attractive. In other words, organization change occurs only when people are active (ready?) for the change, and change agents can not make a change attractive.

This idea of active-attractive suggests that one reason the use of different inducements and interventions are effective in getting people to change is because something is offered that corresponds to what is active, making the inducement attractive, or because a function is established that relates what is active and attractive to the desired result. For example, if "concern for reputation" is active, "looking good on the job" is attractive, and the desired result (change) is "improved quality", the function which relates them could be a special quality training program. Under this combination, someone would not support the change, no matter how much the importance of quality and customer service are stressed, until training was offered. Only then might they see that they could maintain their reputation and look good under new work arrangements.

The occurrence of what appears as resistance, therefore, is different depending on the logic employed. In dialectical thinking, resistance is the opposing of one force with another. However, in trialectics, it is not that one force is opposed by another, but that things are pulled in different directions and are related through

different functions. Jantsch (1975), for example, uses being in a stream and being pulled toward the two banks as a metaphor for this phenomena and Fritz (1986) uses the metaphor of giant rubber bands. In both cases, however, one is seen as being attracted to different possibilities rather than as being opposed to one side or the other.

The active-attractive relation also offers a different explanation for why organizations appear to be resistant to environmental events (Hinings & Greenwood, 1988). From a dialectic perspective, organizations are seen as dealing with environmental pressures that they must counterbalance (inertia) or to which they must yield (change). If the pressure is greater than inertia, the organization undergoes a change. From a trialectic standpoint, organizations pay attention to those dimensions of their environments that are attractive, and ignore the others, i.e., they "see" and engage an altogether different world. It is not that the organization is resisting environmental pressures, it's just that there is nothing that is active toward some environmental event(s). Under these conditions, it would be inappropriate to say that all organizations confront the same environment and that some chose not to adapt or are resistant. Rather, it would be more appropriate to say that different things are active, thus making different events in the environment attractive. This type of reasoning is similar to Weick's (1979) concept of enactment.

The Language of Change

There is a language or vocabulary of change, and that vocabulary is different depending on the point of view one takes. Formal logic gives us things and certainty. It is not that we observe or see things in a particular way, but rather that we constitute ourselves in language such that things really *are* that way. Dialectics' reliance on struggle and confrontation as a necessary preliminary to change (D'Andrade & Johnson, 1983) gives us a rich vocabulary of "power" metaphors, e.g., force, compete, convince, overcome, impose, etc., in the conduct of change. And, as a logic based in conflict, struggle, and tension, opposition is at the source of our assumption that people must be sufficiently dissatisfied before change can occur (Beer, 1980). Trialectics offers a vocabulary of relationship and possibility. Things occur by virtue of the relationship (function) between them, and there are many things which are possible (attractive).

To help illustrate this difference in language, we have selected some terms and phrases from Biggart's (1977) report on the reorganization of the U.S. Postal Service. This particular article was selected for several reasons. First, it is a published article available to others. Second, it was written and reviewed by academics, thereby offering some assurance that the language used is an acceptable way for talking about the dynamics of change. Third, the scope of the change was revolutionary, not evolutionary, thereby encompassing the type of change discussed here. And finally, "the processes of change found in this [organization] demonstrate what can be found generally throughout organizations" (Biggart, 1977, 411).

Our selection of terms and phrases (shown in Table 1) is not meant to be a systematic content analysis, but rather illustrative of the language used to describe the reorganization of the U.S. Postal service. Phrases which referred to a sequential, change-through-replacement were assigned to formal logic and phrases that referred to conflict and opposition were assigned to dialectics. Since trialectics, as a point of view, was unavailable to Biggart, we have added what might be said from a trialectic perspective.

[Insert Table 1 Here]

One of the things apparent in Table 1 is that both the formal logic and dialectics point of view are represented as logics for this particular change. We propose that this is true of most discussions of organization change, i.e., researchers use both logics in discussing, describing, and explaining change. What is also apparent is the extensive use of conflict and opposition referents. One is left with the impression that the restructuring of the USPS was a war. Sides were chosen with what appears to be the "if they're not for you, they must be against you" perspective of dialectics. Management's job was to suppress, destroy, conquer, quell, etc. the other side to be sure that their position was established. It is not surprising, therefore, that the change was a struggle, difficult, and problematic. If one enacts that point of view, then the evidence collected and the explanations offered will be consistent with it (Weick, 1979).

Trialectics suggests a different language. It is a language of attraction and relationship. It recognizes that the USPS is an MMP and that it is attracted to other forms and that it will move toward those as the current set of relationships shift (energy comes in or goes out). It would also propose that the attraction to any particular future is simply one possibility, not the only one, and that other possibilities are attractive to different people. The challenge, therefore, is to create a future point that is attractive to people, and to explore ways in which they can contribute (functions) to the fulfillment of that future. In this way, commitment, as compared to compliance, becomes the basis for participation (Evered & Selman, 1989). But this was not done in this case. Rather, non acceptance was seen as opposition to be destroyed and there was no apparent effort to work with people to explore ways in which they could contribute.

Trialectics does not start with an assumption of conflict and opposition, but from an assumption of possibility, relatedness, and attraction. The work to be done for an effective organization change is to engage people in the possibility of a new, attractive, intended future (rather than trying to convince them of its merits), and then to relate their actions as contributions to its accomplishment. In this way, a proposed change is not an invalidation of something people have done or are doing, which would leave them defending the past, but rather it is an invitation to create a future full of promise (attractive), with an opportunity to be active in to its fulfillment.

CONCLUSION

Organization change theorists, like other theorists, approach their work with a world view, schema, or paradigm, giving a set of preconceptions which provides a frame for their understanding and analysis of the world (Levins & Lewontin, 1985). Among these are the three logics presented here. Not only does each of the logics present different insights, but also different limitations or traps (Horn, 1983). Depending on which of these logics is deployed, understandings and explanations for organizational change will vary. For this reason, it would be inappropriate to assume that any one of them is the "correct" logic. It will be more useful to observe when the different logics are being deployed, and to note whether the resulting successes and failures of an organization change project call for a logic that will be more powerful and appropriate to that effort.

All three logics have value and can contribute to our understanding of change. Formal logic requires us to make some determination of what something is, dialectics focuses on conflict and competition, and trialectics focuses on attraction, unification, and integrity (wholeness and completeness). No single logic is THE logic (a formal logic view). But it is our assertion that the addition of trialectics to our logics of organization change will provide a valuable opportunity to expand our understanding and management of change. Clearly additional research and thinking will have to be done to determine the contribution of trialectics to the understanding of change in organizations. This paper is only a first step.

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Figure 1
The Basic Understanding of Change

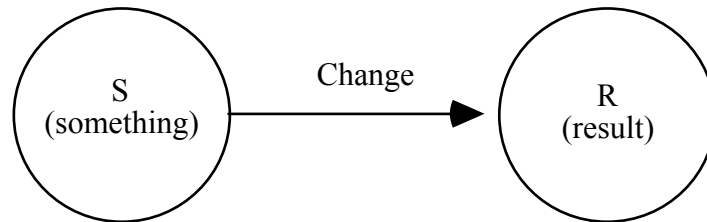


Figure 2
Dialectical Change

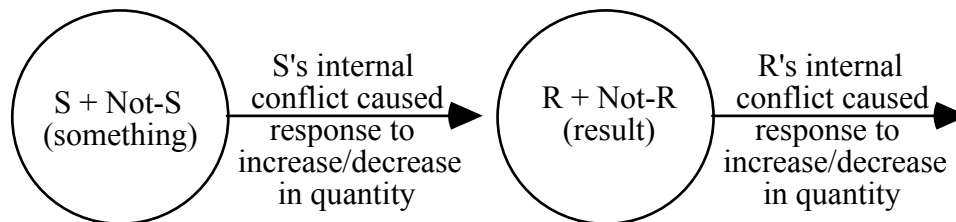
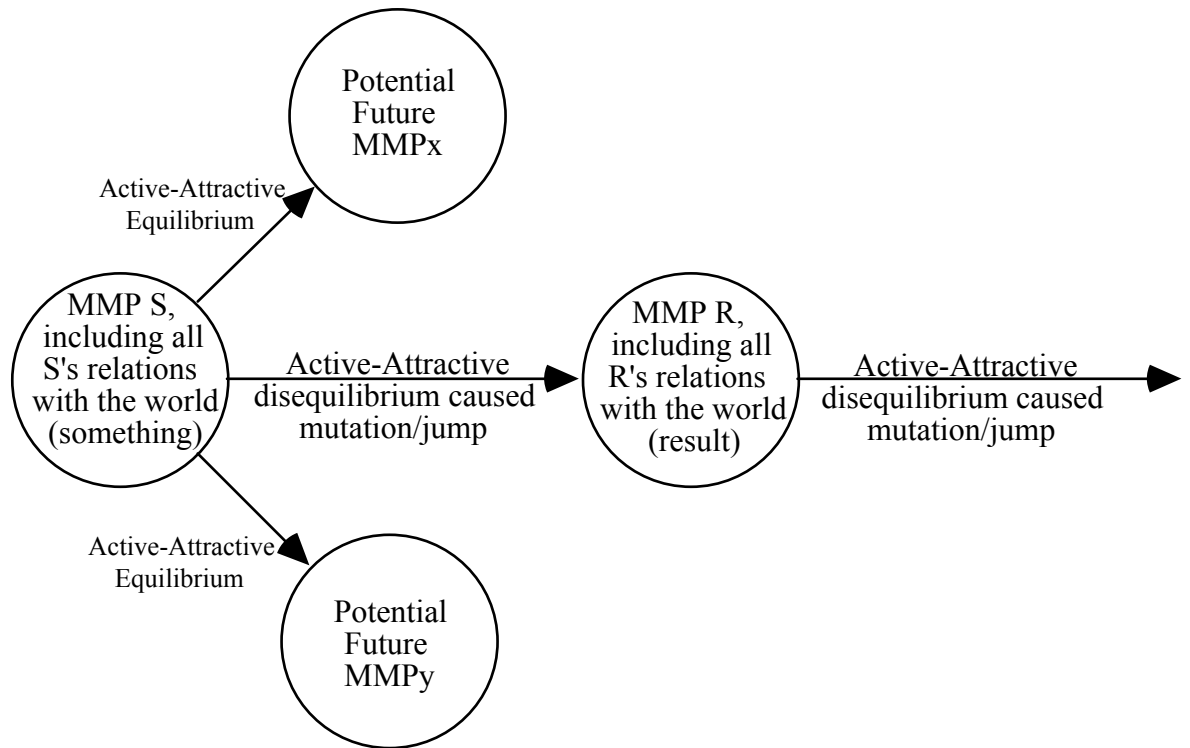


Figure 3
Trialectic Change

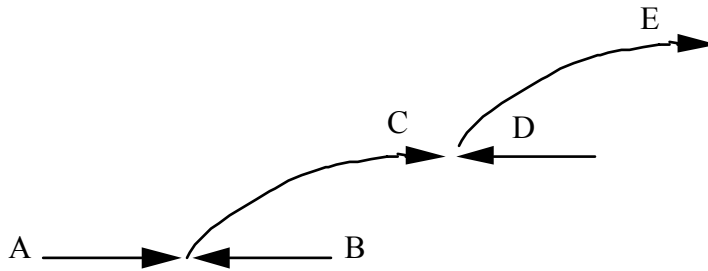


A) Formal Logic: Change Through Replacement



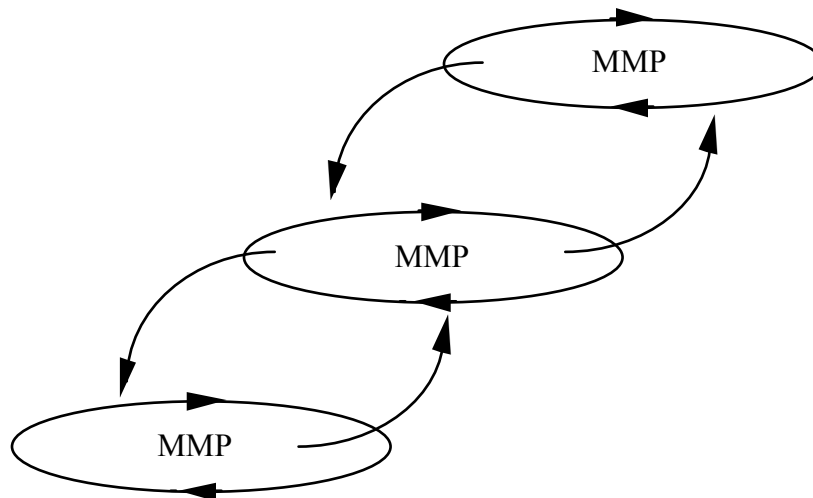
1. Remove A
2. Replace/S

B) Dialectics: Change Through Contradiction



1. Contradictions A and B
2. Synthesis C and its contradiction D
3. Synthesis E and its contradiction F

C) Trialectics: Change Through Attraction



1. Energy of MMPs attracted "up" or "down" to other MMPs and potential MMPs

Figure 4
The Dynamics of Change

Table 1
The Language of Change

Formal Logic	Dialectics	Trialectics
change is an act of destruction as much as creation (410)	change as inherently problematic (410)	change is the natural state of the world
destructive processes must either precede...	...or exist simultaneously with creative [ones] (410)	there are no destructive processes; there are only processes; where people are attracted to a future, they will work for its fulfillment, leaving what is not needed or useful behind
organization must systematically destroy former, competing structures before it can successfully implant the new (410)		to move from one structure to another, alter the first's circulation by creating an active, an attractive, and a function that will relate them to the new structure
unlearning old habits of relating to work...and relearning new businesslike orientation (421)	destruction was complete by law after considerable struggle (417)	the new law creates a new possibility for the USPS, a possibility that has yet to be fulfilled and which will require the commitment and contribution of everyone
destroy much of the former leadership, replace some of it with [some] people (422)	unwilling subordinates have little choice but to accept the change. In retaliation, they erode its effects (417)	subordinates who do not see an opportunity in what is proposed will not work to support the change; people moved to a lower MMP in which survival is now active and the "higher ideals" of the new structure are not attractive, or the new structure does not relate what is active in them to what is attractive (keeping their jobs?)
dismantle the former management recruitment system (422)	group of adversaries; potentially powerful enemies (417)	group of people attracted to a different possibility and willing to work for it
remove and replace (425)	unless challenged and destroyed (418)	when a new opportunity is presented that is attractive to them, and people can see how to contribute to its fulfillment, they will work for it

	the fight over the reform legislation (419)	there can be conversations and discourse to create a future that will be attractive to all involved; a future in which each can see something that is attractive to them and that they were willing to work toward
	aimed at dividing supervisors from any opposition to USPS and neutralizing their associations in Washington (420)	find out what is active and attractive and what relates people to the intended results; determine what changes can be made in the active/attractive functions to have them support the new possibility for USPS
	battle to impose their will; groups struggle to protect (424)	groups work to engage each other in a new possibility for the future