Deutero-learning under inconsistent organizational conditions: 
A theoretical outline

Max Visser

Organizations differ in their ability to achieve consistency in norms and values, policies and routines on 
the one hand and employee behavior and attitudes on the other. Although inconsistency in organizational 
conditions negatively affects employee behavior, not much is known about the processes mediating be-
tween conditions and behavior. In this paper I develop the concepts of deutero-learning and double bind to 
account for these mediating processes and develop hypotheses for organizational theory and research.

An internationally operating chain of five star hotels adheres to a distinct service philosophy, 
based on the principles of ‘the spirit to serve our customer’ and ‘people first’. According to this 
philosophy, relationships between management and employees should be characterized by 
espoused values and instrumental policies like ‘guarantee of fair treatment’, ‘open door pol-
cy’, managers acting as ‘generals in the field’, ‘promotion from within’, ‘employee of the 
month’ celebrations, and ‘to go the extra mile’ to fulfill customer wishes. Through ‘15 minute 
sessions’ at the beginning of every work day these values and policies should constantly be 
propagated by management, while employees are encouraged to venture their opinions in 
‘let’s talk’ sessions with management.

In a European subsidiary of this chain of hotels a graduate student, under my guidance, has 
conducted a thesis research project on quality of leadership and employee satisfaction. During 
three months he actively participated in all activities and made careful observations in all parts 
of the hotel. He found a large difference between espoused values and policies and employee 
perceptions. Management was generally regarded as non-committed, unsupportive, and un-
communicative towards their employees, and directive instead of participative in its decision-
making. One employee summarized the situation: “This hotel is not working properly at the 
moment. The hotel philosophy is not being followed… ‘if you take care of your employees, 
they will take care of you’… maybe at the other side of the ocean, but not here.”

The extent to which organizations are able to achieve consistency in their espoused 
norms and values, instrumental policies, rules and routines and the actual behavior 
and attitudes of their employees has received increasing attention in the organization 
literature. Following a configurational approach (Meyer et al. 1993; Siggelkow 2002), 
researchers have attempted to establish the impact of ‘bundles’ of normative and in-
strumental conditions on employee behavior. In particular HRM-researchers have 
sought to determine how HRM-practices could be so aligned that they would uni-
formly direct employee behaviors in desired directions (e.g., Bowen & Ostroff 2004; 

From two other perspectives it seems questionable whether organizations will be able 
to align conditions and behavior in a consistent way. First, researchers in the tradition 
of the behavioral theory of the firm (Cyert & March 1963) have regarded organizations 
as adaptive political coalitions, confronting (but only partly solving) internal conflicts
of interest and endowed with only limited capacities for information search, storage and retrieval (e.g., Augier 2004; Augier & March 2002). Related influential conceptions of organizations are those of the political arena (Morgan 1997) and bureaucratic politics (Model III, Allison 1971). Second, other researchers have drawn attention to paradoxes and system contradictions in organizations. These expose employees to tensions, contradictions and oppositional tendencies, which they can only partially resolve and from which they may only partially escape (e.g., Argyris 1988; Ford & Backoff 1988; Lewis 2000; Putnam 1986).

Organizations thus seem to differ in their ability to align conditions and behavior in a consistent way. The question then arises what the effects of inconsistency of conditions are on employee behavior and attitudes. Recent research has shown that inconsistent conditions negatively affect innovative behavior (Lee et al. 2004), and negatively affect psychological safety (Edmondson 1999). More in general, inconsistent conditions may lead to symptoms of behavioral disturbance like anxiety, fear, rigidity, inhibition, and aggression (e.g., Mineka & Kihlstrom 1978; Staw et al. 1981).

Although the effects of inconsistent conditions are relatively well-known, much less is known about the actual processes mediating between inconsistent conditions and behavioral reactions to it. Most researchers have pointed at the mediating role of interaction and relations. For example, Lee et al. (2004) have found that the impact of inconsistent conditions on employee attitudes and behavior is mediated by evaluative pressure from proximal others, i.e. the degree to which employees are supervised in a more judging and controlling way or in a more helping and supportive way. Similarly, Leiter & Maslach (1988) have noted the importance of interaction between employees and management for the occurrence of burn-out and the degree of commitment in organizations.

In this paper I develop a theory of communication and learning to account for the interaction processes, mediating between inconsistent organizational conditions and employee behavior and attitudes. In this theory, based on the work of the so-called Palo Alto schools in communication and psychotherapy (e.g., Bateson 1972; Haley 1963; Watzlawick et al. 1967), context and relationship are regarded as the central units of analysis. I will conceive of adaptive behavior in organizational relations as deutero-learning, regarding signs of maladaptive behavior in relations as pathological deutero-learning or double binds.

This paper proceeds as follows. In the next section I will provide an outline of the main concepts. Next, I will use these concepts to develop hypotheses about the processes mediating between organizational conditions and employee behavior. The paper ends with discussion and conclusions. The five star hotel case will be used as an example.

Deutero-learning and double binds

In one department of the five star hotel employees seemed particularly unhappy with their situation. When interviewed by the researcher, the employees in this department complained about their manager, Y. They experienced a constant threat of being fired or being punished otherwise, should they incur the dissatisfaction of Y. The ‘let’s talk’ sessions that Y organized
to facilitate communication with his employees were only slightly attended and thoroughly
distrusted by most of them. About his management and communication style the employees
remarked: “There is a general feeling here that you should not be too critical, in spite of the
‘open door policy’”; “Off the record, Y only shows his face when VIP’s come to visit the hotel”;
“Y is not really popular… it is the tone in which he says things”; “When people go to visit Y,
they are very prepared, because they don’t trust him.” Also, it proved to be very difficult to get
past Y. Some employees once had a conflict with Y and appealed their case to Y’s superior, di-
rector B. But B did not really consider their arguments seriously and referred the case back to
Y. As a result of all these experiences, the employees in this department generally felt helpless
and considered it useless to discuss problems or utter frustrations.

To account theoretically for the experiences of the hotel employees, I propose an ana-
lytical distinction between three levels of learning:

The first level is zero-learning. This involves the receipt of a signal, not subject to cor-
rection by earlier experience. Employees simply become aware of their colleagues and
physical objects through their senses. As such, the occurrence of zero-order learning
alone is very rare. It would amount to perceptions for which no explanation from past
experience or present context is available, producing a world of uncontrollable and
unpredictable events and objects that would be quite anxiety-producing (Mineka &

The second level is proto-learning. Employees learn to respond to environmental con-
tingencies of reinforcement, i.e. to adapt their behavior to instances of conditioning.
Employees not only become aware of their colleagues and physical objects, they also
come to perceive the relationship of colleagues and objects to the occurrence of rein-
forcement and punishment, and thus their importance for their organizational sur-
vival.

The third level is deutero-learning. In their interactions with colleagues and physical
objects, employees experience numerous reinforcing or punishing consequences in the
course of a working day. Deutero-learning implies that they learn about the context in
which these consequences are formed, maintained and altered. Through their repeated
experience with contingencies of reinforcement, employees learn to discern characteris-
tic patterns of conditioning in the various relationships between themselves and some-
one or something else in the organization and they learn to adjust their behavior in re-
response to those patterns (Bateson 1972; Visser 2003a; Watzlawick et al. 1967).

From the Palo Alto perspective, deutero-learning in organizational relations is con-
tinuous, behavioral-communicative and largely unconscious. Relations have no ‘thing’
quality in themselves, but emanate from and are constituted by the exchange of mes-
sages. Messages provide context in two ways. First, a message, sent by one person, sets
the context for a certain class of response by the other person. Second, nonverbal signs
(tone of voice, facial expression, gestures and bodily posture) function as a context
marker of the verbal message, therefore as a ‘context of context’ for the other person.
This setting of contexts is inevitable, since in interpersonal exchange the categories
stimulus, response and reinforcement are never ‘empty’. All behavior (verbal and non-
verbal) occurring between persons who are conscious of each other’s presence has be-
havioral effects, whether intended or not. Such effects have interpersonal message
value, and thus are communicative in nature. Since it is impossible for humans not to
behave in one way or another, it follows that in interaction it is impossible not to communicate (Bateson 1972; Haley 1963; Watzlawick et al. 1967).

Deutero-learning also implies that persons improve their ability to deal with contexts of conditioning. In the hotel case, employees are exposed to an organizational context in which signs of future punishments or reinforcements can be detected, but nothing can be done to influence their actual occurrence. In mental terms, these employees develop attitudes of fatalism and helplessness. Their deutero-learning, reflecting experience with earlier patterns of contingencies of reinforcement by management, leads to a largely unconscious habit of acting as if future contexts exhibit the same pattern. This habit tends to become self-validating, and hence self-fulfilling, by promoting certain behaviors and by discouraging others. The helpless employees come to expect an un-touchable organizational world and behave in passive and cautious ways, thus permitting or even inviting management to adopt a dominating stance towards them (Bateson 1958; 1963).

As the hotel case illustrates, deutero-learning does not necessarily lead to organizational or individual improvement. Organizational employees adapt to contexts of conditioning as they are presented to them, and such adaptation may range from healthy to pathological. Pathological deutero-learning occurs in a double bind situation, which has four interdependent and jointly operative characteristics (Bateson 1972; 1979; Visser 2003a):

1. Two or more communicants are involved in an intense relationship with a high (physical or psychological) survival value for at least one of them. For example, in the hotel case employees are critically dependent on manager Y for their job security and working conditions.
2. In this relationship incongruent messages are regularly given that at one level assert something, but at another other level negate or conflict with this assertion. The first message often takes the form of a negative injunction, threatening some behavior with punishment. The second message conflicts with the first at one or more points and is also enforced by punishments or signals that threaten survival. For example, in the hotel case employees sense the threatening atmosphere that Y conveys by ‘the tone in which he says things’ and the incongruence between his formal invitations of ‘let’s talk’ and ‘open door’ and employees’ experiences with what happens when they really ‘talk’ to Y or enter his ‘open door’.
3. In this relation the receiver of the incongruent messages is prevented from withdrawing from the situation or commenting on it. The receiver may be prohibited from escaping the field or (s)he may not have learned on which level of communication to respond. For example, in the hotel case employees are rebuffed when they attempt to go over Y’s head to director B.
4. Double binding in this sense is a long lasting characteristic of the situation, which, once established, tends toward self-perpetuation. For example, in the hotel case the repeated experiences with manager Y and director B lead to an attitude of helplessness among employees that will further strengthen Y’s autocratic behavior and B’s laissez-faire attitude in dealing with complaints about Y.

A rather substantial body of clinical material (e.g., Bateson 1972; Haley 1963; Sluzki & Veron 1971; Watzlawick et al. 1967), experimental results (e.g., Bowers & Sanders 1974;
Bugenthal et al. 1971; Dush & Brodsky 1981; Graves & Robinson 1976; Kuiken & Hill 1985; Leathers 1979; Smith 1976) and organizational research evidence (Dopson & Neumann 1998; Tracy 2004) suggests that exposure to double binding communication patterns negatively affects behavior and attitudes, leading to stress, anxiety, and other symptoms of behavioral, affective and cognitive disturbances.

Organizational conditions and employee behavior

The concepts of deutero-learning and double binds enable theorizing about the ways in which inconsistency in norms and values, policies and rules at the organizational level affects employees’ behavior and attitudes.

This theorizing starts with the role of management. Managers are charged with the tasks of implementing organizational policies and rules and espousing organizational norms and values. In performing these tasks, they occupy a relative powerful position vis-à-vis their employees. This makes their communication relatively significant in the organizational context. As a rule, employees pay close attention to the verbal and non-verbal behavior of their managers (Konst et al. 1999).

Hypothesis 1: In relationships in organizations communication by management is relatively more influential than communication by employees

Inconsistency in organizational conditions is likely to be reflected in incongruence in management communication. To cover all possible inconsistent consequences, managers may consciously or unconsciously send ambiguous messages, in two ways. First, they may send messages that are verbally incongruent. Examples are: “You are running the show, however…”; “You make the decisions, but clear with…”; “That’s an interesting idea, but be careful…” (Argyris 1988). Second, managers may send messages that are verbally and nonverbally incongruent. Their nonverbal behavior seems to convey a different message than their verbal utterances. An example is a manager praising the work of an employee with a cynical tone of voice (Visser 2003b).

Hypothesis 2: The more inconsistent organizational conditions, the higher the probability of incongruent communication by managers

Verbal and verbal-nonverbal incongruence in managerial communication is equivalent to the first part of the second characteristic of the double bind situation (‘messages that at one level assert something, but at another other level negate or conflict with this assertion’). The hotel case seems to imply that incongruent managerial communication has a negative effect on employee behavior and attitudes. However, experimental evidence suggests that incongruent communication by itself does not lead to stress and anxiety. Experimental subjects who were exposed to verbal-nonverbal incongruence generally resolved it to the non-verbal level, after some initial puzzlement and hesitation (e.g., Domangue 1978; Iwamitsu et al. 2001; Mehrabian & Wiener 1967; Newman 1977; Yogo et al. 2000).
Hypothesis 3: incongruent communication by managers in itself will not negatively affect employees’ behavior and attitudes

Given the interdependent and jointly operative nature of the characteristics of the double bind situation, it may be supposed that incongruent managerial communication will negatively affect employee behavior and attitudes when these other characteristics are present, as follows:

The first part of the first characteristic of the double bind situation, the ‘intensity of the relationship’, may be related to the degree of identification employees feel toward their organizations and work. When employees feel psychologically attached, they experience a close relationship to their organizations and work that makes it difficult for them to deal with incongruent management communication (Tracy 2004).

Hypothesis 4: The more employees feel psychologically attached to their organization and work, the higher the probability that incongruent communication by managers will negatively affect employees’ behavior and attitudes

The second part of the first characteristic, ‘survival value of the relationship’, may be related to power and authority differences, and hence to dependency, in organizations. When employees perceive a large power distance between themselves and management, they come to feel more dependent on management for their job security and working conditions, and hence for their organizational survival (Dopson & Neumann 1998; Steier 1995).

Hypothesis 5: The more dependent employees feel upon management, the higher the probability that incongruent communication by managers will negatively affect employees’ behavior and attitudes

The second part of the second characteristic, ‘the threat of punishment’, may be related to the degree to which the atmosphere in an organization may be characterized as supportive or punitive. In psychological experiments in which subjects have been exposed to incongruent communication and threats of punishment, a significant amount of stress and anxiety has been measured in those subjects. The stress and anxiety occurred in spite of the relatively short period, the transient nature of the subjects’ relation to the experimenter and the relatively lenient nature of the punishments involved (e.g., Bowers & Sanders 1974; Dush & Brodsky 1981; Kuiken & Hill 1985; Smith 1976). It may be supposed that in organizations, in which employees are generally more involved and in which more is at stake for them, a punitive atmosphere will have even more impact than in the experiments mentioned.

Hypothesis 6: The more employees experience a punitive atmosphere in their organization, the higher the probability that incongruent communication by managers will negatively affect employees’ behavior and attitudes
The first part of the third characteristic, being ‘prevented from withdrawing from the situation’, may be related to the personal and financial status and benefits employees receive from their organizations and to their beliefs that other organizations will not provide equal status and benefits, or worse, to beliefs that being fired and unemployment are imminent possibilities. Especially late career employees or employees with relatively obsolete skills and qualifications may come to feel ‘trapped’ in their organizations (Dopson & Neumann 1998).

Hypothesis 7: The more employees perceive a negative difference between current status and benefits and possible future status and benefits, the higher the probability that incongruent communication by managers will negatively affect employees’ behavior and attitudes.

The second part of the third characteristic, being ‘prevented from commenting on the situation’, may be related to the ‘total institution’ atmosphere of organizations that deal with life-death emergencies and emotionally intense problems. According to Goffman (1961: xiii), a total institution is “a place of residence and work where a large number of like-situated individuals cut off from the wider society for an appreciable period of time, together lead an enclosed formally administered round of life.” Examples are jails, prisons, correctional facilities, police, armed forces, hospitals, mental institutions and fire departments. The large differences in emotional intensity between life inside and outside such organizations, the necessity of strong unit cohesion and clear leadership in recurrent emergency situations, and the classified nature of some activities all limit the possibilities of meta-communication inside and outside these organizations (Tracy 2004).

Hypothesis 8: The more employees perceive a ‘total institution’ atmosphere in their organization, the higher the probability that incongruent communication by management will negatively affect employees’ behavior and attitudes.

The fourth characteristic may be related to the amount of time employees are exposed to a double bind situation.

Hypothesis 9: The longer employees are exposed to a double bind situation, the more negatively this situation will affect employees’ behavior and attitudes.

Discussion and conclusions

Organizations differ in their ability to achieve consistency in espoused norms and values, instrumental policies, rules and routines and the actual behavior and attitudes of their employees. Empirical evidence suggests that inconsistency in organizational conditions negatively affects employees’ behavior and attitudes. Not much is known about the actual processes mediating between organizational conditions and employees’ reactions, most researchers pointing at the role of interaction. In this paper I propose interpersonal relationships in organizations as the principal mediating factor. Relationships provide contexts for deutero-learning, the learning of characteristic pat-
terns of conditioning. Depending upon the intensity of a relationship, the degree of congruence of managerial communication, the possibility of withdrawal or commenting on a situation, such deutero-learning may be more or less pathological or double binding, and thus more or less negatively affecting the behavior and attitudes of the persons involved.

The concepts and hypotheses, developed in this paper, are relevant for three areas of organizational theory and research. First, they provide a theoretical background for research on self-fulfilling prophecies in organizations. Following experiments in schools showing evidence of a so-called Pygmalion-effect (Rosenthal & Jacobson 1968), Eden et al. found in a series of field experiments in the Israeli army that raising manager expectations improves employee productivity. Superiors who are told that their subordinates are especially able and qualified behave more supportively, more task-oriented and more confidently towards them than superiors not having this ‘information’, even though the ‘able’ subordinates are in fact picked at random from the enrollment lists. In their turn, subordinates receiving the more supportive management approach show higher performance rates and more job satisfaction than subordinates receiving the standard treatment (e.g., Dvir et al. 2002; Eden 1984; 1990). In terms of deutero-learning, self-fulfilling prophecies describe how superiors and subordinates deal with contexts of conditioning in their relationships and how they adapt their communicative behavior in response to them.

Second, they provide a twofold theoretical extension to existing conceptualizations of interpersonal interaction. Current theories of interaction tend to ‘chunk’ interaction into discrete units, called event cycles (Morgeson & Hoffmann 1999) or double interacts (Weick 1979). The first extension pertains to the role of non-verbal communication in interaction. Most human communication occurs through non-verbal means, largely acting at sub- and unconscious levels of awareness. This means that double interacts and event cycles involve various layers of communication, which are not necessarily congruent. Incongruent, double bind communication patterns may give rise to pathological sense-making, leaving the organization and its employees increasingly maladjusted to environmental developments. The second extension pertains to the ‘impossibility of not communicating’, the continuous verbal and nonverbal communication between persons who are aware of each others’ presence. In such an ongoing stream of communication, it may be theoretically fruitful to distinguish more encompassing patterns of contingencies than double interacts or event cycles, and to analyze these patterns in terms of deutero-learning and double binds.

Third, they provide a theoretical background for a number of disjointed and sometimes casually formulated theories of double binds in organizations (e.g., Argyris & Schön 1978; 1996; Hennestad 1990; Lewis 2000; Putnam 1986; Wagner 1978), by placing the concept of double bind in a coherent theory of communication and learning in relationships in organizations, and by linking the occurrence of double binds to inconsistent conditions at the organizational level.

Finally, the concept of deutero-learning, as developed in this paper, differs from current notions of organizational learning in two respects. First, it differs from the work of Argyris and Schön, who brought the term deutero-learning in good currency (Argyris & Schön 1978; 1996; Argyris 2003; Schön 1975). A theoretical analysis of their work suggests, among other things, a considerable overlap between their conceptualizations
of deutero-learning and double-loop learning, which makes an alternative conceptualization of deutero-learning necessary (Visser 2006).

Second, the concept differs from the mainstream of organizational learning concepts and theories. Most theorists conceive of organizational learning as based on individual learning, active and voluntary, amenable to managerial steering and planning, and directed at organizational improvement (Huysman 2000). Deutero-learning in this paper, however, is based on learning in relationships, largely unconscious and continuous, mostly eluding managerial steering and planning, and not necessarily directed at organizational improvement, especially in its pathological, double-binding form. Given these characteristics, the concept of deutero-learning cannot meaningfully be applied at the organizational level. It is a form of learning that occurs in organizations, but not by organizations.

Note

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References


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