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**Spontaneous Behaviors as Interpenetration: An Application of  
Luhmann's Social System Theory to Organization Theory**

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# Spontaneous Behaviors as Interpenetration: An Application of Luhmann's Social Systems Theory to Organization Theory<sup>†</sup>

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## Abstract

This paper applies Luhmann's social systems theory to organization theory, aiming to bridge the gaps between them. Although many scholars have applied the system concept in organization theory, most of them have referred to classical system theories. Therefore, they have been unable to evaluate the new relationships between organization and members. In contrast, the current trends in social systems theory no longer consider organizations with as much interest as before. Thus, it is necessary to attempt to re-combine these two theories.

In specific terms, this paper examines spontaneous behaviors by employees in organizations. Whistleblowing, which attracts attention in terms of compliance management, can be considered as a typical spontaneous behavior. Whistleblowing inevitably increases the complexity of organization systems. Such increase in complexity can be often found in extremely spontaneous behaviors.

In organizations, and particularly business organizations, reducing the complexity introduced by the organization's members is an important management issue. However, in recent years, certain spontaneous behaviors such as internal whistleblowing are considered as eligible behaviors, from the management's viewpoint. It is paradoxical but possible that the increase in complexity caused by certain spontaneous behaviors can contribute to reducing complexity in the long run.

The concept of interpenetration in Luhmann's systems theory can be used to explore such dynamism. However, as Luhmann himself admitted, interpenetration is not a fully exploited concept. Therefore, this study suggests that the interpenetration concept be further discussed for its refinement.

Keywords: organization system, interpenetration, spontaneous behavior, whistleblowing, complexity

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## Introduction

It is widely accepted that organizations can be considered as typical social systems. In organization theory, many scholars have used the system concept to study organizations. However, most of them refer to classical system theories. For example, Scott (2002), which is one of the most influential textbooks on organization theory, adopts distinction between open/closed system views and insists on the predominance of the former over the latter. The majority of the researchers in organization theory, who adopt such a classical system viewpoint, seem to be inherently bounded in their capacity to understand organizations, particularly the relationships between organization and their members.

In contrast, current trends in social systems theory show less interest in organizations than was previously the case. For example, Luhmann, whose work is very influential in social systems theory, frequently considered organization systems in his early works. However, as his theory became progressively abstract, organizations no longer remained the central focus of his work<sup>1</sup>.

In such a discrete situation, it is necessary to attempt a re-combination of the two abovementioned theories. To this purpose, this paper applies Luhmann's social systems theory to organization theory, aiming to bridge the gaps between them. To be specific, this paper examines spontaneous behaviors in organizations.

With respect to organization theory, this study aims to provide a new perspective toward understanding the relations between organization and employees by considering the recent developments in social systems theory. This study also attempts to demonstrate the applicability of social systems theory to actual, contemporary problems.

## Attention to Spontaneity in Organizations

### **Organizational citizenship behavior as spontaneous behavior**

In recent years, organization managements have certain expectations regarding the initiatives taken or spontaneity<sup>2</sup> shown by employees (Ghoshal and Bartlett, 1997). Synchronously with such trends, many constructs have been proposed that focus on an employee's discretion, spontaneity, or initiative in organizational behavior, such as organizational citizenship behavior (Smith, Organ, and Near, 1983; Organ, 1988), prosocial organizational behavior (Brief and Motowidlo, 1986), organizational spontaneity (George and Brief, 1992), contextual performance (Bowman and Motowidlo, 1993), and extra-role behavior (Van Dyne, Cummings, and Parks, 1995). Organizational citizenship behavior (OCB) is regarded as the most comprehensive concept among these

constructs, and the other constructs mentioned above are frequently included in OCB research, in a broad sense. Hence, in this paper, the behaviors that are targeted by such constructs are comprehensively referred to as OCB.

Although the conceptualization of constructs and the relation between them becomes increasingly confusing as research on OCB evolves (Van Dyne et al., 1995; Podsakoff, MacKenzie, Paine, and Bachrach, 2000), objective behavior is common to most OCB researches. Behaviors that are dependent on the employees' discretion and can be identified as functional for organizations are mainly considered in OCB researches.

### **Another spontaneous behavior: Whistleblowing**

At present, compliance management and internal control are important topics in business administration. In this context, an employee's spontaneous behavior is likely to attract the management's interest. In specific terms, this statement can be considered in relation to the introduction of whistleblowing procedures (Lewis, 2002).

Whistleblowing has been instrumental in exposing many corporate scandals. For example, it is well known that whistleblowing played an important role in revealing Enron's accounting fraud. External whistleblowing, which is an insider's disclosure of wrongdoing to the mass media and/or the ministries concerned, attracts attention because of its impact. However, internal whistleblowing, which involves reporting any wrongdoing to a concerned insider, is as important as external whistleblowing in compliance management. In this paper, we will discuss internal whistleblowing due to the following reasons.

Although whistleblowing appears to be an eccentric action, it is one of the most typical manifestations of spontaneity. Most whistleblowing procedures cannot force or oblige employees to report wrongdoing; they are merely mechanisms that facilitate the action of reporting. Whether or not to initiate internal whistleblowing largely depends on each employee's spontaneity.

OCB and bootlegging for technological innovation (Peters and Waterman, 1982) are often regarded as ordinary occurrences, but not internal whistleblowing. Hence, internal whistleblowing more clearly reveals the basic problems pertaining to spontaneous behaviors in organizations than OCB.

While external whistleblowing is obvious, internal whistleblowing is invisible to those on the outside. However, both are continuous with respect to spontaneity (Dworkin and Baucus, 1998). Internal whistleblowing can be regarded as part of organizational decisions, which are defined later, while external whistleblowing cannot be regarded as

such. Therefore, internal whistleblowing is similar to the other spontaneous behaviors in organizations like OCB. Therefore, this paper addresses the phenomenon of internal whistleblowing.

## Spontaneity and Complexity in Organizations

### **Differences between organizational citizenship behavior and internal whistleblowing**

OCB and internal whistleblowing are common in many aspects. Internal whistleblowing resembles OCB in that both depend on the employee's discretion; they are not governed by formal structures. Moreover, both these behaviors rarely contribute to the self-interest of the person concerned. However, the reactions these behaviors may elicit from other members are quite different. We will briefly investigate the reasons for this difference.

To begin with, the relevance of OCB and internal whistleblowing to task implementation is quite different. While OCB is relevant to core task performance, internal whistleblowing is not. OCB is not directed by formal structures; however, most organization members understand that they have some relevance in operational decisions that are taken using formal structures. OCB implies dealing with jobs that are not within anybody's roles. Therefore, OCB cover the defects in job descriptions, helping organizations to operate smoothly. Its implications are definitely seen in contextual performance, which is one of the constructs involved in OCB research. In contrast, such relevance is rarely found in internal whistleblowing.

Furthermore, according to the short-term perspective, internal whistleblowing is often thought to disturb smooth organizational operation. For example, if wrongful data manipulation has been routinely performed in one department and other departments have presupposed such manipulation, internal whistleblowing regarding malpractices could complicate the immediate task operations. Thus, although they have some common aspects, OCB and internal whistleblowing are quite distinctive.

### **Organization and complexity**

The differences between OCB and internal whistleblowing can be understood in terms of complexity. While most OCB contribute to reducing the complexity in organizations, whistleblowing inevitably results in increasing in complexity.

In organizations, particularly business organizations, reduction of complexity is a crucial administrative issue influencing the organization's survival. For organization systems, an organization member is not only an agent for reducing complexity but also a source of it, per se. Various mechanisms and techniques have been developed to

absorb the uncertainty caused by this complexity. Apart from the effectiveness of each mechanism and technique, it is presumed that complexity reduction, in itself, is always indispensable for the organization's survival.

If the complexity introduced by organization members had to be reduced, people's reaction to whistleblowing would become quite negative, as compared to their reaction to role behaviors and OCB. For example, psychological resistance to whistleblowing (DeGeorge, 1999; Alford, 2002) might partly result from the increase in complexity caused by the behavior.

However, the fact that organizations endeavor to activate internal whistleblowing shows that they expect complexity increase from organization members. Such a phenomenon was rarely encountered in the past, and most organization theories are unable to suitably appreciate it. While they do consider spontaneous behaviors like OCB, they lack the necessary framework to examine a different kind of spontaneity that won't reduce complexity in organizations.

A major reason for this failure lies in the system concepts underlying these theories. The premise that there is a constant need for complexity reduction corresponds with the input-output systems model for homeostasis. For example, Thompson (1967) conceptualized organizations as open systems and insisted that organizations should strive to establish rationality by maintaining their technical core free from uncertainty.

If we depend on such system concepts, on which most organization theories are based, we will not be able to deal with situations wherein complexity increase is expected, such as internal whistleblowing. Therefore, we need to revise the system concepts on which organization theories are based.

## Internal Whistleblowing as Reflective Communication

### **Structure and process in organization**

This paper adopts Luhmann's social systems theory because this theory has progressed considerably beyond the classical system view. According to Luhmann's social systems theory, organizations are defined as systems whose elements are decisions (Luhmann, 1988). Organizational decisions are produced from communications of their members. Therefore, organizations must specify their own elements in order to draw their boundaries.

Structure is indispensable in identifying the elements of systems. In Luhmann's terminology, structure is defined as expectations that serve to preselect the possibility

for choice; structure “consists in *how permissible relations are constrained within the system*” (Luhmann, 1995: p.283). Typical structures in organizations include formal structures such as hierarchy of authority, rules, and procedures. Although informal structures, which are not necessarily related to membership, function ordinarily, this paper mainly discusses formal structures.

Process is another form that helps arrange selections. Processes “result from the fact that concrete selective events build upon one another temporally, connect with one another, and thus build previous selections or predictable selections into individual selections as premises for selection” (Luhmann, 1995: pp.44–5). Processes “are composed of irreversible events” (Luhmann, 1995: p.44). Thus, organizational decisions are produced on the basis of process. Organizations identify their elements or produce their decisions through two forms that are used to amplify selectivity.

Under normal circumstances, these two forms function without a clear distinction. Although organizational formal structures constitute the basis for forming and identifying organizational decisions, not all organizational decisions can be strictly attributed to such structures. It would be impractical to validate all communications by referring to formalized rules and regulations. When decisions are produced sequentially, organization members are often conscious of consistency with structures. For example, at critical junctures, the compatibility of such decisions with existing rules and procedures is confirmed. Thus, structure and process in organizations are commonly combined for complexity reduction.

### **Effects of whistleblowing on organizations**

In internal whistleblowing, however, the combination of structure and process is split. Institutional whistleblowing procedures are formal structures. On this basis, each action of internal whistleblowing can be identified as an element of the organization system that can trigger off a series of organizational decisions like inspection. Thus, internal whistleblowing is treated as an organizational decision or quasi-organizational decision. Every occurrence of internal whistleblowing necessarily denies certain processes of organizational decisions, partially or totally. Moreover, internal whistleblowing is likely to dispute the legitimacy of the concerned decisions and processes followed .

Furthermore, it is possible to consider the decoupling of the decision process and whistleblowing from another perspective. Common role behaviors and most OCB are accepted as organizational decisions because of their nexus with proximate decisions. In contrast, internal whistleblowing frequently lacks such a nexus. In other words, it is regarded that internal whistleblowing is not supported by antecedent organizational

decisions or events.

Nevertheless, internal whistleblowing becomes the starting point of new organizational decisions. Therefore, employees observe that whistleblowing is suddenly incorporated in the network of organizational decisions. Whistleblowing procedures, however, which confirm the legitimacy of such a behavior in organizations, do not generate such actions. Therefore, as we will discuss later, personal reasons of whistleblowers are regarded as a motive for internal whistleblowing.

Internal whistleblowing implies intervening in the process. For example, when many operations in an organization proceed along some wrong bid collusions, internal whistleblowing regarding such wrongdoing claims to re-examine the validity of the processes on which the operations are based. Such intervention, which OCB rarely entails, necessarily increases complexity in organizations. This is because it splits the combination of structure and process and thereby raises questions regarding the selection of system elements. Thus, internal whistleblowing involves reflecting on system elements. In other words, internal whistleblowing is a kind of reflective communication that disputes most fundamental operations of boundary setting.

It is paradoxical but possible that the complexity increase caused by the reflection involved in whistleblowing contributes to complexity reduction in the long run. In fact, from the short-term perspective, internal whistleblowing may render organizations unstable. However, since organizations may incur critical damages by neglecting wrongdoing, complexity introduction by means of internal whistleblowing could also have positive effects on organizations. In the wrongful data manipulation case illustrated above, internal whistleblowing would be instrumental in mitigating serious damages in advance, which could otherwise occur due to accidental detection of the manipulation.

Formal internal inspection mechanisms are functionally equivalent to internal whistleblowing procedures, in terms of producing reflective communication. Both are formal apparatuses based on structures that effect interventions in the process.

Although the construction of an internal control system, including an internal inspection system, is an imperative problem at present, the costs of strict inspection mechanisms are increasing with the increasing specialization of tasks. Furthermore, designing an inspection process to monitor the increasingly complicated inspection is itself a problematic task. As Luhmann indicated, one can “observe in security-obsessed structural formations like bureaucracies and legal orders how uncertainty multiplies when bureaucratization and regulations increase” (Luhmann, 1995: p.288). Thus, sole



reliance on formal structures like internal inspection mechanisms has its own limitations. Therefore, institutionalization of whistleblowing procedures to promote reflective communication carries some actual significance.

### Interpenetration between Organization and Their Members

Unlike formal inspection mechanisms, internal whistleblowing is often considered to be prompted by personal motives. Consequently, internal whistleblowing focuses on the introduction of complexity by organization members. As discussed above, organizations previously sought to avoid such an introduction of complexity. For example, organizations are concerned about political behaviors that reflect personal interests in organizational decisions (Mintzberg, 1983). However, when the management implements a policy for the activation of internal whistleblowing, it means that organizations expect certain introductions of complexity from their members.

The interpenetration concept in Luhmann's theory can be used to understand the relationship between organization and employees as well as the concept of complexity reduction through complexity increase. Luhmann regards the relationship between social systems and human beings as an intersystem relation. Moreover, he insists that interpenetration exists "when both systems enable each other by introducing their own already-constituted complexity into each other" (Luhmann, 1995: p.213)<sup>3</sup>. From such a frame of reference, internal whistleblowing can be interpreted as a typical example of interpenetration between organization and psychic systems.

Despite this, as Luhmann himself admitted, interpenetration is not a fully exploited concept. Therefore, further discussion is necessary for its refinement. As a tentative alternative, we can adopt the unique distinction between interpenetration and structural coupling that has been proposed by Ishido (2003).

While many studies on Luhmann's theory regard interpenetration as a special case of structural coupling (e.g., Kneer and Nassehi, 1993), Ishido (2003) provides a contrast between both concepts. "Structural coupling is a mechanism wherein two mutually depending systems, which restrict each other, bind the other system's self-reproduction. On the other hand, 'interpenetration' is the concept that two systems mutually complicate themselves by linking with each other" (Ishido, 2003: pp.122-3).

While this understanding is not an orthodox reading of Luhmann's work, the above distinction between interpenetration and structural coupling might be useful in understanding the relationship between organization systems and their members. In the past, organizations endeavored to reinforce structural coupling so as to absorb the uncertainty in producing organizational decisions. In other words, organizations tended

to confine the communications presented by their employees. While it is true that complexity increase could lead to an unstable state in organizations, organizations can no longer subsist by merely seeking stability. “Complex systems require a high degree of instability to enable the on-going reaction to themselves and their environment, and they must continually reproduce this instability” (Luhmann, 1995: p.367).

For example, developing innovations that draw on individual originality is definitely an activity that tries to reduce complexity with increased complexity. Unlike internal whistleblowing, innovation development is regarded as a part of the usual tasks. However, it is often largely dependent on the members’ spontaneity. In such a case, the employees’ spontaneity is exactly a complexity presented by psychic systems. The more extraordinary the spontaneity manifested, the more is the denial regarding the efficient operation of processes. Therefore, innovation development has similar properties as internal whistleblowing in that it leads to an increased complexity.

Through interpenetration, complexity increase occurs in both organization systems and psychic systems. Accordingly, the possibility of constructing a spontaneous organizational decision not only broadens the employees’ range of choice in organizations but also compels employees to cope up with a higher degree of complexity. Since the increased complexity reverts back to the organization systems, both systems increase in complexity.

It is possible that increasing the chances of obtaining rich complexity from employees will become an important management issue. The introduction of internal whistleblowing procedures, therefore, is one opportunity for appreciating the significance of interpenetration.

## Conclusion

This paper reveals the limitations of organization theory, which is based on the input-output systems perspective, by focusing on spontaneous behaviors in organizations, particularly internal whistleblowing. Furthermore, with reference to Luhmann’s social systems theory, this study indicates that internal whistleblowing, which increases complexity in organizations, is one kind of reflective communication that re-draws the organizations’ boundaries. In addition, this paper suggests that the interpenetration concept in Luhmann’s theory can be used to understand the relationship between organization and employees behaving spontaneously.

The social systems theory has become increasingly abstract in the process of its elaboration; however, this abstraction appears to be excessive. Therefore, it is necessary to examine its abstract theoretical concepts by relating them to contemporary social

problems. It is quite possible that organization studies will yield many problems that would be appropriate for its application.

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### Notes

- 1 Luhmann (2000) is one of the exceptional works. However, it is edited posthumously.
- 2 "Although the term 'spontaneous' is sometimes used to refer to impulsive acts, consistent with George and Brief (1992) and Katz (1964), our use of the term here does not imply that behavior is impulsive" (George and Jones, 1997: p.154). This paper adopts same usage as George and Jones (1997).
- 3 "We speak of 'penetration' if a system *makes* its own *complexity* (and with it indeterminacy, contingency, and the pressure to select) *available for constructing another system*" (Luhmann 1995: p.213).

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