Playing at Learning: Why Knowledge Creation Needs Fun

John R. Landry
Metropolitan State College of Denver, School of Business
Campus Box 13, P.O. Box 173362, Denver CO 80217-3362
Office: 303-556-4437                  E-mail: landryj@mscd.edu

Abstract

Nonaka and Takeuchi [21] assert their theory of knowledge creation blends both Western and Japanese philosophy. Although they incorporate several major tenets of rational philosophy, they overlook important criticisms that impact their model. This paper explores one element of their theory — the "enabling condition" of intention — and suggests some limitations to their approach that can be overcome by recognizing play as an enabler of (the Japanese word) "ba" and consequently an enabler for knowledge creation.

1.0 Introduction

In a dynamic, global, competitive, complex, and uncertain world it has become a truism that organizations cannot survive without becoming learning organizations and knowledge creators. To overcome what Nonaka and his colleagues [21] see as limitations to several extant approaches [9] to organizational learning, they propose a theory of organizational knowledge creation that attempts to address the conversion of tacit knowledge into organizational knowledge.

The purpose of this paper is to suggest that Nonaka's [21] model of knowledge creation is missing an important factor — playfulness. The paper begins with a brief review of Nonaka's theory and, especially, the enabling conditions they posit necessary for effective knowledge creation processes. Next, I will discuss the limitation of intention, one of the enabling conditions. In the remaining sections of the paper, I will introduce various elements of the concept of play and discuss its implication for organizational knowledge systems.

2.0 Creating organizational knowledge

Knowledge creation, according to Nonaka's theory [21], occurs in two dimensions through a knowledge conversion process operating within a supporting organizational context. The epistemological dimension reflects a flow between tacit and explicit knowledge; the ontological dimension reflects flows between one entity and another (e.g., individual to group, group to organization, etc.). The knowledge conversion process, or SECI model, occurs along the epistemological dimension and yields four flow patterns: socialization (S) - tacit to tacit, externalization (E) - tacit to explicit, combination (C) - explicit to explicit, and internalization (I) - explicit to tacit.

Each stage of the SECI model is associated with a form of "ba," a Japanese word that is a notion of providing a "place" that supports sharing and relationship building [20:41].

To participate in a ba means to get involved and transcend one's own limited perspective or boundary. This exploration is necessary in order to profit from the "magic synthesis" of rationality and intuition that produces creativity.(2) Within an organization, then, one can both experience transcendence in ba and yet remain analytically rational, achieving the best of both worlds.

Ba can be a physical place, a mental place, a virtual place, or some combination of places. Originating ba supports the socialization (S) process through interpersonal and physical relationships. Interacting ba supports externalization (E) through conversation and dialog rich in metaphors. Cyber ba supports combination (C) deriving from a virtual world. Internalization (I) is built through exercising ba.

To support knowledge creation, Nonaka and Takeuchi [21:73] assert five "enabling conditions" must be present within the organizational context.

- **Intention** [21:74-75] is "an organization's aspiration to its goals" and "provides the most important criterion for judging truthfulness of a given piece of knowledge." Intention is "often expressed by organizational standards or visions that can be used to evaluate and justify the created knowledge." The organization's "knowledge vision," intentions, and
strategies are developed by top management. The expression of intent can be vague and ambiguous.

- **Autonomy** [21:75-78] "increases the chance of introducing unexpected opportunities" and increases self-motivation while working within teams.

- **Fluctuation and creative chaos** [21:78-80] "stimulate the interaction between the organization and the external environment," a condition that can occur because of external factors or be created intentionally.

- **Redundancy** [21:80-82] "refers to the intentional overlapping of information" that "promotes the sharing of tacit knowledge, because individuals can sense what others are trying to articulate." Also redundancy "speeds up the knowledge creation process" and provides the organization with a "self-control mechanism to keep it heading in a certain direction."

- **Requisite variety** [21:82-83] provides the opportunity for "organizational members to cope with many contingencies."

The five enablers and ba provide the conditions and places for the two dimensional knowledge creation process that may be conceptualized as a spiral through two dimensional space.

### 3.0 Organizations, individuals and intention

Of these five enablers, this paper's primary concern is intention and the limitation that intention plays in the learning process. This section draws heavily on the work of March and his colleagues [14][15][16] and, specifically, his criticism of rational models of decision making although his is not the only criticism of rational models (e.g., see Peters and Waterman [24] and Morgan [19] for various perspectives).

The notion of intention, purpose, goals, and vision is well established in Western philosophy and fundamental to rational models of individual and organizational decision making; the rational model remains relatively unquestioned [19][30]. Although the strong form of rationality is neither found in practice nor espoused in contemporary organizational theory, the ideal of rationality is nevertheless widely embraced and is often a cultural imperative [30].

March [14:70] observes: "An organization is often defined in terms of its purpose. ... Action within an organization is justified (or criticized) in terms of purpose. Individuals explain their own behavior, as well as the behavior of others, in terms of a set of value premises that are presumed to be antecedent to the behavior." "Normative theories of choice" [14:70] assume that decision makers and, consequently, the organizations they lead have extant values and priorities, means-end chains, and specified outcomes.

Also built into the notion of intention is evaluation or justification [14]. Since visions, intentions, purposes, or goals are usually assumed to occur before outcomes, they can serve as criteria to explain and judge behavior. Some individuals and organizations take actions, such a information collection and post-hoc documentation of decision rationales, to provide evidence to others that decision making is rational relative to stated goals [19].

Nonaka and Takeuchi [21] extend evaluation to include truthfulness. They propose that the value of a given piece of knowledge is dependent upon its contribution to reaching the organization's intention. In Nonaka's model, a concept is considered "true" when it "worthwhile" for both the organization and society [21:86]. Truth [21:86] is a "justified true belief" that relies on criteria established by top management and articulated as a strategy or vision. This is similar to Weick's [32] notion of "consensual validation."

The central issue with intention arises when the temporal aspects of knowledge creation are considered. Since a choice made with current values often can not parsimoniously accommodate future changes in values and technologies, choices guided by current intentions are problematic. The concern is not with the well-established motivational aspects of goals, intentions, and expectations; it is with their efficacy over time for knowledge creation processes.

Establishing criteria for evaluation of intermediate or final outcomes, and particularly for two stakeholders, the organization and society as Nonaka's model advocates [21], becomes difficult because of interactions within the organization and between the organization and others in the environment. The passage of time from the current time into the future makes means-ends chains ambiguous and priorities uncertain [16]. Also, new and novel outcomes inhibit learning because the history of the event is unique and meanings-ends chains ambiguous [16].

One plausible counter argument to the concern about intention is that specifying goals and methodologies in sufficiently vague and ambiguous terms enhances the probability of buy-in and provides the necessary vagueness to accommodate change. Metaphors and analogies offer, according to Nonaka [21] and others (e.g., Morgan [19]), a technique to overcome these limitations. However, as a practical matter, ambiguity can generate unintended defensive reactions that inhibit individual and organizational learning [3].

Another counter to my expressed concern is that intentions change over time as organizations adapt to their environment. Consequently, it is plausible that their vision, mission, goals, and objectives would change to meet new challenges. While this is possible, a priori goals and criteria may not open an organization to the benefits of serendipity or "luck" [16].

Finally, Nonaka's model suggests top management has idiosyncratic knowledge about preferences and the future
or, at a minimum, top management has superior information processing capabilities. While top managers may have more information available to them, it is questionable whether or not they possess superior information processing skills and "crystal ball" skills in light of the bounded rationality of the human species [28].

Despite arguments to the contrary, it is for the reasons given earlier in this section that establishing a priori intentions are problematic. Consequently, I posit that Nonaka and Takeuchi's [21] requirement to establish intentions, even ambiguous intentions, becomes difficult in a dynamic and uncertain organizational milieu. This begs the question "If it is not possible to specify intentions, what mechanisms are available to guide our knowledge creation process?"

4.0 Discovering intentions

March [14:72] proposes that "human choice behavior is as at least as much a process for discovering goals as for acting on them" since any "description that assumes goals come first and action comes later is frequently radically wrong." From this perspective, action is essential to learning about one's preferences and goals.

In practice, organizations embrace the notion of action-based discovery although they may not explicitly state it. For example, Peters and Waterman [24:119] found that excellent organizations had a "bias for action" that the authors illustrate with a quote from a Cadbury's executive — "Ready. Fire. Aim." Or, [24:134] "do it, fix it, try it," and "don't just stand there, do something." "Management by walking around," as practiced in clan forms of organizations [23], is another way to learn about the organization and loosen the constraints imposed by unduly analytical (and rational) approaches to management [24].

To introduce opportunities for discovery, March [14:75] calls for a "technology of foolishness" to accomplish things when "no good reason" exists. He [14:77] suggests that organizations need to be playful "to explore the possibilities of alternative rules. ... [to] challenge the necessity of consistency. ... [and to allow] experimentation." Play allows "us to act ' unintelligently' or 'irrationally', or 'foolishly' to explore alternative ideas of possible purposes and alternative concepts of behavioral consistency" [14:77].

In the organizational memory literature, March's [14:79] admonition to "treat memory as an enemy" and Weick's [32:221] variant of the notion to "treat memory as a pest," are often cited to illustrate some concerns or limitations of organizational memory applications (e.g., [31]). March's [14:78-79] admonition about "the enemy" was one of several actions he posited as necessary to overcome deficiencies of rational models by "sensibly" increasing foolishness through treating:

- "goals as hypotheses;"
- "intuition as real;"
- "hypocrisy as transition;"
- "memory as an enemy;" and,
- "experience as a theory."

Following March's line of reasoning, the practice of discovery is more child-like and develops more interesting wants and values. It is the foolishness, irrationality, and intuitiveness of a child's choice process that March [14] proposes as a valid alternative to the adult rational choice process. And, it is in play that the child's choice processes are readily observed.

5.0 Play theory

Play, and particularly children's play, has been a topic of interest to educators, anthropologists, and psychologists. Educators and recently instructional technologists share a particular interest in the linkage between play activities and learning. The prototypical notion of play includes the characteristics of a voluntary behavior, intrinsic motivation, active engagement, and make-believe [26].

Play has at least nine forms [29:4-5] (ordered from private to public): Mind or subjective play, solitary play, playful behaviors, informal social play, vicarious audience play, performance play, celebrations and festivals, contests (including games and sports), and risky or deep play. While the common sense notion of "play" provides a widely shared and intuitive understanding of play, it is a concept that is surrounded with misconceptions including play is the antithesis of work, play is easy, play is only "right" for children, play is irrelevant, or play produces irrelevant outcomes [29].

The motivations to play (or not to play) are framed through various themes or rhetorics. Four dominant themes are play as progress, power, fantasy, or self [25]. Sutton-Smith [29] also proposes play as fate, identity, or frivolity. Play as progress asserts the value of children's play to advance their development. Power themes emphasize contests, heroes, and control of play. Fantasy play themes focus on irrationality, imagination, and creativity especially as expressed in literature. The notion of the solitary person, intrinsic motivation and escape are elements of self play themes. Celebrations, rituals, and collectives are central to identity rhetoric. The determinism of fate is illustrated by games of chance and gambling. Lastly, play as frivolity is a counterpoint to the Protestant work ethic and draws attention to tricksters and fools. The various forms and paradigms of play illustrate that is not confined to children nor limited to child-like activities that only a child enjoys.
6.0 Playful organizations

The notion that play, humor, foolishness, and amusement are part of organizational life has not been overlooked in the received literature of economic organizations. To introduce play as an aspect of organizational life may seem absurd to some [8]. However, organizations are not really "all work and no play" as the play as frivolity theme would suggest. Of the 326 organizational mission statements compiled by Abrahams [1], "fun" was mentioned 43 times. Clearly, "playful" behavior is important to some organizations.

Huy [10] posits that an organization's capacity to create a context for playfulness allows creativity to flourish without premature commitment to a course of action or decision. Playfulness extends beyond routine humor to allow [10:340] "safe experimentation and, like jokes, institutionalizes disorder within order, expression of taboo issues within a legitimate forum, and surfacing of the repressed without extreme discomfort. Emotional playfulness induces a state of relative emotional equanimity to juggle tensions between foolishness and cold rationality." Under these conditions organizational learning should be enhanced [10]. Some organizations are known to encourage "time out" sessions for play [33]. Others have institutionalized the notion of a "jester" or "fool" [29].

Playfulness can also be seen as a component of informality which Morand [18] posits increases the potential for creativity by reducing the emotional distance between organizational members. Honda's team discussions "often over sake and away from the office" [21:85], for example, demonstrate informal socialization mechanisms necessary for transferring tacit knowledge. Playfulness is one manifestation of "esprit de corps," a desirable characteristic of learning organizations. Furthermore, playfulness and foolishness introduce chaos into an organizational routine [18]. Socialization and chaos are both conditions that Nonaka and Takeuchi [21] think necessary for organizational knowledge creation. On the other hand, playfulness introduces a characteristic other than "crisis" and "tension" that Nonaka and Takeuchi [21] emphasize in their theory.

The value of humor, fun, and aesthetics, even in serious and dire circumstances that are objectively less serious than routine organizational affairs, is captured by the remarks of Viktor Frankl [7:54], a concentration camp survivor and psychologist, who said:

To discover that there was any semblance of art in a concentration camp must be surprise enough for an outsider, but he may be even more astonished to hear that one could find humor there as well; of course, only the faint trace of one, and then only for a few seconds or minutes. Humor was another of the soul's weapons in the fight for self-preservation. It's well known that humor, more than anything else in the human make-up, can afford an aloofness and an ability to rise above any situation, even if only for a few seconds.

Whether it is through art, humor or play, the pleasing, foolish or amusing situation removes one's self from the present circumstances and affords us an opportunity to "think outside the box" and facilitate knowledge creation. Berger and Luckmann [4:25] call this shift in perspective a "commutation" that can be observed in children's play and "even more sharply" in the play of adults. Indeed industries have emerged centered on providing opportunities for adult play including arts, entertainment, and sports.

This is not to posit that playfulness is a panacea [29]. In fact, play can be physically and emotionally harmful and support domination or rebellion if it is one-sided. Jokes, cartoons, and parodies can become harassment. Physical harm can be the result of "normal" physical activities, pranks, and hazing. In some cases, playfulness is a manifestation of domination or rebellion. While not ignoring these possible inhibiting outcomes, there is support for the notion that organizations may improve their performance by introducing playfulness.

7.0 Including playfulness in organization learning theory

Nonaka [20][21] has not, as March [14] has done, chosen to separate within the theory the notion of rational and foolish activities that are needed to support knowledge creation. While each researcher recognizes the benefits of child-like behavior, only March espouses it as an alternative behavior to enhance the learning process. Moreover, as discussed earlier in this paper, the play of children is but one form of play. Since Nonaka [21] asserts his theory is more comprehensive than other extant theories, including March's, I will examine the relationship between play and Nonaka's model of knowledge creation.

Sutton-Smith [29] suggests that play provides a context for evolution and adaptation since play is found in all cultures and over all periods in history. Play is posited to provide [29:222] the "quirky shifts," discontinuities, and chaos that are one enabling condition for knowledge creation. Second, play introduces redundancy, another enabler, that can be observed in the retelling of jokes, the repetition of various forms of games, and the internationalization of games. Third, play provides flexibility to introduce the necessary requisite variety [2]. Fourth, some forms of play allow autonomy and other forms encourage collective sharing. Finally, when viewed from the paradigm of play as power, the individual and
the collective share intentions to win a contest or competition.

From this perspective, play is an element of each enabling condition in Nonaka's model [21]. One approach to recognizing the value of play as an enabler is to include play in the model by identifying specific forms of play associated with enablers. Another perspective is to consider play as a mediator of enablers since play may support all of the necessary enabling conditions. However, it might be also more parsimonious to consider play in relationship to ba.

Since ba is a platform for knowledge creation that consists of various notions of place and transcendence of place, various forms of play support the transcendence necessary for knowledge creation. For example, intuition is a component of tacit knowledge whereas rationality can be expressed explicitly. Solitary and imaginative play capitalizes on intuition whose insights can be transformed to explicit representations through performance or vicarious play.

The transformation from tacit to explicit, which is part of the SECI knowledge creation process, requires socialization. A primary aspect of socialization is the physical proximity of individuals engaged in joint activities. Contests and celebrations are forms of play that engage people in joint activities.

However, play engages people through intrinsic motivation rather than an extrinsic motivations (e.g., pay) generated through producing outcomes supportive of organizational intention. Play draws people into an informal activity that can encourage creativity and learning while commitment to formal organizational intention must be drawn out of people. Play can captivate, engage, and transform. Thus, I posit that non-harmful play is positively associated with building the knowledge creation platform — for building ba.

8.0 Putting foolishness and play into practice

From the practitioners standpoint, encouraging organizational playfulness may be improved by being able to know when play is present in their organization. One notion of "playfulness" is found in Lieberman's [13] research on the link between play and creativity. Since defining play is usually thought to be problematic, Lieberman [13] approached the question from a behavioral standpoint that she labels "playfulness." She [13:23] posits that playfulness can be operationalized as the "physical, social, and cognitive spontaneity, manifest joy, and sense of humor." Using humor in the workplace is a popular training activity. Jokes, animations, and cartoons are regularly traded by e-mail. Spontaneous "tricks" are played on co-workers.

Furthermore, while not specifically identified in the received literature as a component of "foolishness" or "play," various techniques that are consistent with March's [19] notion of foolishness can be found in the literature as mechanisms for facilitating innovation and change. For example, goals are treated as hypotheses in discovery-based planning. McGrath and MacMillan [17] describe this approach as a system to convert "assumptions into knowledge as a strategic venture unfolds." "Organizational self reflection" is another technique for discovering "assumptions about the current and future behavior of an organization's stakeholders" [6:326].

Brainstorming activities generate ideas unconstrained by a distinction between rational ideas and intuitive ideas. The widespread use of tama dashi kai or brainstorming "camps" in Japanese firms is one example cited by Nonaka and Takeuchi [21]. Although decision making using intuition is often described as "irrational" or "illogical," intuition can be seen as a heuristic or pattern matching activity that a decision maker uses to quickly come to a conclusion albeit without being able to articulate a rational reason except, maybe, post hoc [28].

Hypocrisy is observed in organizational practice both formally and informally. Formal hypocrisy is demonstrated by banks admonishing customers to "save" and to "borrow" [32]. Informally, to save face or to mentor others, we sometimes hear the admonition "Do as I say, not as I do." The use of metaphor, as advocated by Nonaka [21] and observed in other organizations [19] creates contradictions that contain some of the elements of hypocrisy without the insincerity. Morgan [19:4] says that metaphors create "constructive falsehoods" that are distorted and paradoxical. External sources (e.g., financial analysts and reporters) may provide evidence of organizational hypocrisy and its attendant impact.

March's [14] counsel to treat "memory as an enemy" was a concern with organizational forgetting. Forgetting allows foolishness since there is no past pattern on which to evaluate current actions. Other researchers have voiced similar concerns about over reliance on organizational memory leading to "encased learnings" and "cognitive traps" [31]. Weick [32] also suggests that hypocrisy is one technique of discrediting memory; that is, "treating memory as a pest."

Finally, stories, histories, and anecdotes capture essential experiences of organizational practice. They are, however, not accurate reproductions of events since they are value-based histories that are constantly being rewritten and retold for the particular context [32]. Recognizing the potential benefits of constructing one's own story, Kleiner and Roth [11] propose that organizations create learning histories that, among other benefits, allow a challenge of current beliefs and exposure of "undiscussable" issues that are impediments to learning.
9.0 Conclusion

The notion of a "foolish" or "playful" technology for serious decisions may in itself initially appear foolish or playful. But that is the point, a priori goals and evaluation standards (e.g., "all work and no play") are not always suitable for a dynamic and uncertain world. This is particularly relevant when the consequences of a decision reach farther into the future or interdependently effect outcomes. Playfulness has the potential to relax evaluations, introduce chaos, create conditions to improve sharing of tacit knowledge, and increase the bonds between organizational members. It can support the platform for knowledge creation and organizational learning.

However, like the old saw "all things in moderation," March [14:75] points out that nonsensical or playful behavior is not appropriate in all situations — "Not always. Not usually. But sometimes." Also, it is a problem for organizations to produce the right conditions and amount of foolishness to produce innovations. "On average, such foolishness is dumb" [14:101]. Nevertheless, two circumstances found in organizations encourage foolishness: slack that increases autonomy and allows sub-optimization to occur; and, professional norms that challenge organizational norms [14].

On the path toward clarification of the organizational role of play and informality in knowledge management several issues deserve investigation. First, what are appropriate technologies and activities to effectively introduce play into organizational routines to enhance learning. Second, if it is the social interaction between organizational members that creates the knowledge, should the knowledge creators, as Grant [9] points out, become the firm's owners? Finally, will the newer organizational forms let members separate work and play or will the distinction irrelevant?

Pleasure is the state of being brought about by what you learn.
Learning is the process of entering into the experience of this kind of pleasure.
No pleasure, no learning.
No learning, no pleasure.

Song of Joy
Wang Ken
(reproduced in Langer [12:66])

10.0 References

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