In search of alternative metaphors for knowledge; Inspiration from symbolism

Prof. Daniel Andriessen, Dr. Marien Van Den Boom

INHolland University of Applied Sciences, Hoofddorp, The Netherlands

Daan.Andriessen@inholland.nl

Marien.vandenBoom@inholland.nl

Abstract

Conceptual metaphors play a vital role in our ability to think in abstract terms like knowledge. Metaphors structure and give meaning to the concept of knowledge. They hide and highlight certain characteristics. The choice of metaphor when reasoning about knowledge is therefore of vital importance for knowledge management (KM). This paper explores the possibility of introducing new knowledge metaphors to the field of KM. Based on a 'wish list' of characteristics of knowledge they want to highlight, the authors choose to explore the *Knowledge as a Journey* metaphor as a new metaphor for knowledge. This results in new insights regarding knowledge sharing, acquisition, retention, and innovation.

Keywords

Knowledge, knowledge management, metaphors, symbolism

1. Introduction

Knowledge is an abstract concept. It has no directly visible referent in the real world. As such it is similar to other abstract concepts like "time", "love", or "organization". Yet, people are able to reason about knowledge and have been doing so for thousands of years, from the Greek philosophers to post-modern epistemology. In human evolution, our brain has developed this unique ability to reason and speak about abstract concepts. With the development of cognitive science we begin to understand how this is possible. There is increasing evidence that conceptual metaphors play a vital role in our ability to think in abstract terms. These metaphors are not simply 'figures of speech' but pre-linguistic mappings from one domain to another, hardwired in our brain (Johnson 2008).

Following Lakoff and Johnson's (1999) theory on embodied metaphor we assume that there is no alternative for reasoning about knowledge and knowledge management but to use metaphor. However, every metaphor highlights certain characteristics of knowledge and hides others. Andriessen (2008) has shown that the choice of metaphor can have a big impact on the discourse within an organization about knowledge management . In the same article he highlighted some of the limitations of the *Knowledge as capital* metaphor that underlies the idea of Intellectual Capital. In a knowledge-based economy where organizations head for a new and not yet describable economic landscape, there is a need for alternative metaphors. Knowledge innovation places organizations in a situation comparable to recent emancipation movements (black consciousness, feminism) looking for a new language and new emancipatory metaphors to express the journey to self-definition challenging externally defined images (Collins 2000). Andriessen and Van den Boom (2007) explored alternative metaphors for knowledge from Asian philosophies. An alternative metaphor, *Knowledge as energy,* was explored in (Bratianu & Andriessen 2008). However, more alternatives are needed to cope with the richness of the knowledge concept. Therefore this turns to the field of symbolism to address the question: *What alternative metaphors can highlight important aspects of knowledge and other intangibles that the IC metaphor cannot?* In a search for alternative metaphors it is important to distinguish between those metaphors that we use on a constant basis without realizing that they are metaphors and those metaphors that we deliberately choose to alter the discourse. According to Lakoff and Johnson (1999) the former are part of the "cognitive unconscious". In this paper we will

focus on the latter and explore alternative metaphors for knowledge that one might use in a discourse on the role of knowledge is organizations in a knowledge-based economy.

Our paper is structured as follows. Based on recent work of Mark Johnson (2008) and others we first make a "wish list" of characteristics of knowledge we want the alternative metaphors to highlight. The characteristics are: knowledge is embodied, knowledge is largely non-conscious, knowledge is a continuous process, knowledge is enacting, knowledge is primarily based on bodily feelings and knowledge is human-bound. Then we turn to the theory of symbolism to gain insight into possible source domains for our metaphor. Comparing our wish list with the source domains from symbolism we identify an interesting candidate that we further explore: The Journey symbol. A *Knowledge as a Journey* metaphor can highlight the dynamic, contextual and social characteristics of knowledge. The paper concludes by providing examples of the *Knowledge as a Journey* metaphor. We indicate how it may be used in an organizational discourse on knowledge and knowledge management. First we develop a list of characteristics of knowledge we want to highlight, based on a specific view of the world.

2. Characteristics of the target domain: knowledge

When reasoning about knowledge we use conceptual metaphors. Plato's idealist epistemology, reflected for example in his famous Allegory of the Cave, is based on the metaphor of *Knowledge as Light*. The movement from ignorance to knowledge is depicted metaphorically as an ascent from darkness to light (Lakoff & Johnson 1999); a road towards eternal, unchanging, and perfect ideas (Nonaka & Takeuchi 1995). Aristotle's realist epistemology is based on the common metaphors *Mind as a Container*, *Understanding Is Grasping*, and *Ideas are Physical Objects*. "When the mind metaphorically grasps the form (the physical structure) of the object perceived, it understands (via the metaphor the Understanding Is Grasping)" (Lakoff & Johnson 1999, p. 376).

For both Plato and Aristotle there is no separation between the mind and the world. This changed in the epistemology of Descartes who introduced the metaphoric view of the mind that represents in its "inner theatre" the objects existing in the external world. Descartes introduces a difference between subject and object. At the same time Descartes separates mind and body because the mind is distinct from the body and can exist without it. Using the *Knowing is Seeing*, *Mind as a Container* and the *Ideas as Objects* metaphors, Descartes asserts that ideas (knowledge) are objects in the mind —independent of the body— that can be seen by Reason.

The Cartesian dualism of subject and object and mind and body has been dominant in Western philosophical thought ever since. It has also been dominant in management theories about the organization as an orderly machine and in pedagogical theories about knowledgeability of persons as mental storehouses (Bereiter 2002; Mcmillan 2004). The underlying metaphors of *Mind as Container* and *Ideas as Objects* have also been highly influential in our thinking on knowledge and therefore on our thinking of knowledge management. As Andriessen has shown, the *Knowledge As Physical Substance* (Andriessen 2006) or *Knowledge as Stuff* metaphor (Andriessen 2008) has been dominant in Western knowledge management literature. The idea that knowledge is something that can be "stored", "shared" and "used" is deeply embedded in our knowledge management theories. The subjective, bodily, and tacit aspects of knowledge are largely neglected (Nonaka & Takeuchi 1995).

The Cartesian Split has been challenged by many philosophers including Husserl, Heidegger, Sartre, Merleau-Ponty, Wittgenstein, James, and Dewey. In his latest book, Johnson (2008) even claims that the Cartesian Split is not only problematic from a philosophical point of view but is also not supported by recent empirical findings from cognitive science. He has developed an embodied theory of meaning in which meaning is part of a flow of experience from a biological organism engaging in its environment. In his theory, meaning is not a static object (a noun). Instead Johnson describes meaning as a largely non-conscious "continues process of immanent meanings that involve structures, patterns, qualities, feelings, and emotions" (p. 10) from which some are coded in concepts and propositions in a conscious way. Meaning is no longer a static "thing" but a continues process. Johnson does not use the word "knowledge" in this context as knowledge is a noun that automatically refers to something static, while he wants to emphasize the process: "But if we reduce meaning to words and sentences (or to concepts and propositions), we miss or leave out where meaning really comes from. We end up intellectualizing human experience, understanding, and thinking, and we turn process into static entities or properties" (p. 11). For the same reason Savage (1996) prefers to speak about "knowledging" instead of "knowledge". In this paper we will be using the term "knowledge"

because this is the common concept in the field of intellectual capital and knowledge management, however we will use it in such a broad way that it can possess process qualities.

We will use Johnson's embodied theory of meaning as our starting point for a search for alternative metaphors for knowledge. His theory is based upon the work of the pragmatic philosophers James and Dewey and is closely related to the work of Maturana and Valera (1998). This theory puts human cognition into a new light which has consequences for the characteristics of knowledge and therefore for the metaphors we use to reason about knowledge. From Johnson's theory we derive the following characteristics of knowledge. Most of these characteristics are not highlighted by the *Knowledge as Stuff* metaphor (see table 1).

1. Embodied	Knowledge is embodied. It is not only the result of a mind situated in our head but of the whole body.
2. Non-conscious	Knowledge is largely nonconscious in the sense that it is part of a mostly automatic and bodily process that we are not aware of.
3. Process	Knowledge is part of a continuous process of enactment between ourselves as biological organisms and the environment.
4. Enacting	Knowledge is the result of us discriminating objects, properties and situations within the flow of our experience from that environment. Those objects, properties and situations do not "exist" in that environment independently from us but they emerge "because of our perceptual and motor capabilities, our interests, our history, and our values" (p. 76).
5. Based on feelings	Knowledge is primarily based on bodily feelings. It constantly emerges out of our "felt sense" of the situation. "But the meaning is in what you think and feel and do, and it lies in recurring qualities, patterns, and structures of experience that are for the most part, unconsciously and automatically shaping how you understand, how you choose, and how you express yourself" (p. 79). When we put this felt sense in words we can never grasp its full meaning.
6. Human-bound	The distinction between tacit and explicit knowledge is false. Johnson refers to this dichotomy as the "felt sense" versus the "formal expression" and following Gendlin (1995) he states that these are two dimensions of one single ongoing activity of meaning-making. The formal expression can not replace the felt sense and the felt sense is always needed to distil meaning out of formal expressions. As this activity of meaning making is an activity of a human being, knowledge can not "exist" outside of human beings.

Tabel 1: Overview of characteristics of knowledge we want the metaphor to highlight

In order to highlight some of these characteristics in our reasoning about knowledge we need alternative metaphors. Knowledge metaphors can help us to understand the changes of ever time-bound landscapes of knowledge. Metaphors are tools of reason and meaning-makers, multiple, contextual, and to some extent public and negotiated, and thereby producing ever-new meanings (Maasen & Weingart 2000). In the next paragraph we call in the help of the field of symbolism to identify potential source domains that can be used as metaphors for knowledge.

3. Symbolism as a source of alternative metaphors

What kind of symbolic pattern or morphology could help us to provide the framework for using metaphors in interpreting and managing knowledge processes? Which metaphors allow knowledge workers to express themselves, and to experience deeper meanings and to unify knowledge experiences in terms of coherent, symbolic, structural worlds of meaning?

In the history of cultures and religions almost all objects from the mundane reality have been used to refer to symbolic meanings. It is valuable to sum up these possible carriers of symbolic meaning and to put these into a morphological and structural order. Academic disciplines whether it be in anthropology, sociology, archaeology or history find it hard to unlock the polyphony of visual and symbolic language in the history of mankind (Shore 1996). Yet, some attempts have been made to create an inventory of symbols and build a classification (Lurker 1978). Robin Coulter and Gerald Zaltman created a classification that illustrates the relationship among metaphorical expressions and conceptual, complex, (what they call) "deep metaphors", applying this classification to consumer theory. It consists of the following seven deep metaphors as agents for deep and profound messages (Coulter & Zaltman 2000) (see table 2).

Deep metaphors	Metaphorical expressions
Physicality	Body references such as taste it; feel it; pick up, ingest, see my point, hurts me
Balance	References to equilibrium, balance, equalize or compensate; including both sides; images of scales, teeter-totter, balance beam
Motion or movement	References to moving (flowing, travelling, running or walking); references to action (doing something, getting going); keep moving, keep it going
Nature	References to nature, outdoors, natural world, wildness; chaotic, untamed; specific images of nature – rain forest, desert, woods; references to breeding, evolving, growing
Force	References to power, a powerful presence or a source of energy; references to the consequences of force (getting hit; slammed, impact)
Fight vs. Flight	References to war; fights, battles; choose your battles; avoid a fight; don't get involved; running away or hide from something
The ideal	References to the ideal object, situation, feeling; statements about one's ideal self; references to perfection, the perfect one

Table 2: Overview of deep metaphors (Coulter & Zaltman 2000)

Important deep metaphors in world mythology referring to knowledge and wisdom are the human heart (commitment), pearls (wisdom and transformation), snake (earth mysteries, wisdom or prophecy), sun (creative energy, vitality, renewed knowledge), and journey (intellect and truth personified, self-development) (Eliade & Apostolos-Cappadona 1985;Lurker 1978). When we compare these lists of metaphors with our list of characteristics of knowledge we want to highlight there is one metaphor that seems to encompass most, if not all, characteristics: the journey metaphor. A journey is bodily experience in which both conscious reasoning and non-conscious experiencing play an important role. It is a process in which a constant enacting takes place between the traveller and its environment. The felt sense of the experience plays an important role for the traveller in making decisions about where to go and what next step to take. The experience of the journey can never fully be grasped in words, in will always be human bound. In the next paragraph we will explore the metaphor of the journey by analysing the general structure journey stories have. This will lead to an overview of characteristics of the journey that can then be mapped onto the target domain of knowledge.

4. Characteristics of the source domain: the journey

In world mythology and literature, the entailments of the journey as a metaphor have been used in relation to knowledge. For example, many journey metaphors in world mythology and literature reveal the search for knowledge as self-development. In the "Great Learning" Confucius clarifies the voyage by which self-development is attained and how this journey is beneficial to serve the state and the society. The various stages of this journey set out by Confucius are: investigation of phenomena, learning, authenticity, integrity of purpose, self-development, family-discipline, local self-government, and universal self-government. The Neo-Confucian philosopher Shao Yung emphasizes that this search for knowledge involves a life-long process: "To become a sage learning consists in not stopping. Therefore Wang T'ung said that it is simply [a matter of continuing to study] to the end of one's life" (Birdwhistell 1989).

Among the Akan (Ghana) the search for knowledge is a life-long process and closely interrelated with the tradition and the community. The Akan do not automatically consider knowledge as the preserve of a particular group. The expression *the well travelled is more experienced than the elderly who has stayed in one place all his/her life*) captures this view about knowledge as a journey. In this regard the Akan views the "stay-at-one-place" person as being insular as compared with the travelled person who is said to be cosmopolitan. The metaphor of the knowledge search as a voyage reveals other interesting entailments. When travelling, the traveller meets other people from whom he or she may learn. When commenting on the oft-quoted Akan proverb *wisdom is not in the head of one person* the African philosopher Kwame Gyeke concludes that "(1) that other individuals may be equally wise and capable of spawning equally good, if not better, ideas; (2) that one should not, or cannot, regard one's intellectual position as final or beyond criticism, but expect it to be evaluated by others; and (3) that, in consequence of (4), one should be prepared to abandon one's position in the face of another person's superior ideas or arguments, or in the event of one's own ideas or arguments being judged unacceptable or implausible by others" (Kwame Gyekye 1995). These Ghanaian metaphors refer to knowledge, not as a thing but as a life-long search and process and a continued quest.

An illustrative example of a contemporary knowledgeable hero is Merry in Tolkien's Lord of the Ring. During his quest Merry learns from various cultures. In both Tolkien's trilogy and Jackson's cinematic interpretation Merry shows his strengths as a planner and a student of books. Merry is exemplary for the hero as a lifelong student, collecting information from other peoples and cultures, analyzing languages and topographic maps, biology and geography. Gaining new information gives Merry the ability to provide new answers and to tackle new problem situations, going through new experiences supplementing his previous knowledge. Sharing his knowledge inspires others to participate in his endeavours and wanderings. Merry is an exemplary knowledgable hero and role model demonstrating that the best actions and reactions are based on reason and that reason needs to be steeped in knowledge, not just getting together data and information, but the investigation of information combined with personal experience as the basis for a wise plan of action (Porter 2005).

Departure

Call to adventure — Hero starts in the everyday world, and receives a call to enter a world of adventures.

Refusal to the call — Hero hesitates or negates and refuses the call to adventure and exploration.

Peculiar support — Hero meets a caring, often senior figure, who provides extraordinary tools and advices for his mission.

Passing of a barrier — The hero passes barrier on his journey, leaving his familiar world towards a new, challenging one.

Interior of a monster — Instead of passing the barrier, the hero finds himself inside a shadowy context or in the belly of a monster.

Journey

Facing trials — Hero encounters a world of uncertain events and circumstances.

Initiation and new landscape

Meeting with desired person(s) — Hero meets desired person(s) he has been looking for on his journey, with whom he finds a close connection and affinity.

Return

Hesitation — Hero tends to hesitate returning to the world he has left.

Confrontation — Hero is almost often confronted with disdain and condemnation. The hero loses his trust, authority and status.

Figure 1: The archetypical structure of a hero's journey (based on Campbell, 2008)

Many more examples of world literature could be given, but the essential point is that in the source domain, a journey has certain characteristics, which Lakoff and Johnson (1999) refer to as "entailments": a journey is a search, that has several stages: departure, initiation and return. The journey is a dynamic process; it takes time, maybe even a whole life; it involves moving from one position to another; it is a social event as you meet other people along the way; and it is about experiencing. The journey implies a transition to another world, facing tasks and trials, alone or with help of others. Having survived severe challenges and having acquired important knowledge, the hero must then decide whether to go back with this gift to the ordinary world and to transfer it to others, which faces him again with new challenges and difficulties, although he knows for certain that this new

knowledge will improve the world. Further characteristics of the journey can be found by looking at the story archetype of a particular and often used journey: the hero's quest. Joseph Campbell, researcher in the field of comparative mythology and comparative religion, outlined the concept of a story archetype of the hero's quest, omnipresent across all cultures, (Campbell 2008). Campbell delineates the following stages along the hero's voyage in search of knowledge and wisdom: departure, initiation and new landscape, and return (see figure 1).

Very few narratives include all of these stages. Some narratives may have as a focus only one of the stages, while other narratives may deal with the stages in a somewhat different order. Central, however is that the three sections of departure, initiation and return are often clearly perceivable. In the next paragraph we apply the characteristics of journeys described above to the target domain of knowledge and analyse what new meaning this can generate that we can use for knowledge management.

5. Applying the *Knowledge as a Journey* metaphor

The journey metaphor is an apt and appropriate vehicle of meaning to trigger complex and multifaceted changes in knowledge processes in organisations. The quest for knowledge is not a travel along linear lines, but consists of several stages: departure, initiation and new landscape, and return with many paradoxical opposites: refusal to the call, helplessness and the need of someone else's support, passing barriers, facing trials, returning and being met with distrust and opposition by others. Knowledge is not a given and a prearranged body of data and information, but a discovery-like process with hindrances, obstacles, reluctances as well as positive stimuli: denial that the current and familiar position no longer holds, stepping out of the box, leaving one's position and the current knowledge environment, persuasion by others and the need of help from others, breakthrough experience of something completely new. A structured mapping of the characteristics of journeys to the target domain of knowledge can be found in figure 2.

Applying the metaphor of the hero to individual and organizational learning in schools, Brown and Moffett conclude that a fundamental tenet of the hero's journey is its reinforcement of experience-based learning. Heroes in search for new knowledge discover that insight and understanding are impossible if we limit our learning to the study of someone else's knowledge. Despite the complexity of human learning at the individual and collective level, too often educators cling to the behavioural-rational paradigm of learning as neat, controllable, and programmable, presuming a discrete cause-effect linkage between teacher input and student output around a body of declarative knowledge. This old paradigm serves factory-like and assembly-line types of organizations. However, in this era of rising complexity, metaphors in general and the hero's journey in particular can provide us with vital pathways to individual renewal and organizational empowerment. The various phases of the hero's journey, -divided into: innocence lost; chaos and complexity; heroic quest; gurus and alliances; trials, tests and initiations; insight and transformation- can people and organizations offer collective symbols when they themselves threatened by the enormity of change and transformation in current societies (Brown & Moffett 1999).

The journey metaphor unveils that gaining a new view and vision of the world is difficult, as it is not automatically and immediately incorporated into conscious and accepted competences of the surrounding group. This has important consequences for knowledge management. We highlight and summarize specific consequences of the *Knowledge as a Journey* metaphor for knowledge sharing, knowledge acquisition, knowledge retention, and knowledge innovation.

- Knowledge sharing:
  One of the challenges of the journey is that the hero does not conceal his hard-won knowledge for personal advantages. Contrary to defensive attitudes as "knowledge is power", "not invented here" and human reluctance to seek advice from others, the hero narrative unveils that human factors and motivational aspects are the real obstacles of knowledge sharing in organizations. At the same time the metaphor highlights that the full content of knowledge can never be shared, like the whole experience of the journey can never be communicated by words. However, telling stories about a knowledge journey can contribute to the transfer of knowledge. The journey metaphor reinforces the potential of storytelling as a KM instrument (Denning 2000).

- Knowledge acquisition:
    Having acquired knowledge in non-familiar situations and in different contexts, the hero returns to his homeland in the awareness that knowledge obtained for different purposes may be helpful in totally different contexts. The journey metaphor higlights that non-familiar tools may elicit innovative developments, given that people acquire new knowledge by conquering organizational barriers, by entering new connectionist ways of business performance and by looking for new knowledge connections - across a variety of borders and disciplines. However, the journey metaphor also highlights that on his return, the hero is often confronted with disdain and condemnation. This also happens with people that bring new knowledge to the organization, for example newly hired staff that bring in their experience from other contexts. For knowledge management it is important to be aware of this mechanism of refusal of new knowledge and to support new employees in their attempt to bring new knowledge and innovative ideas to the organization.
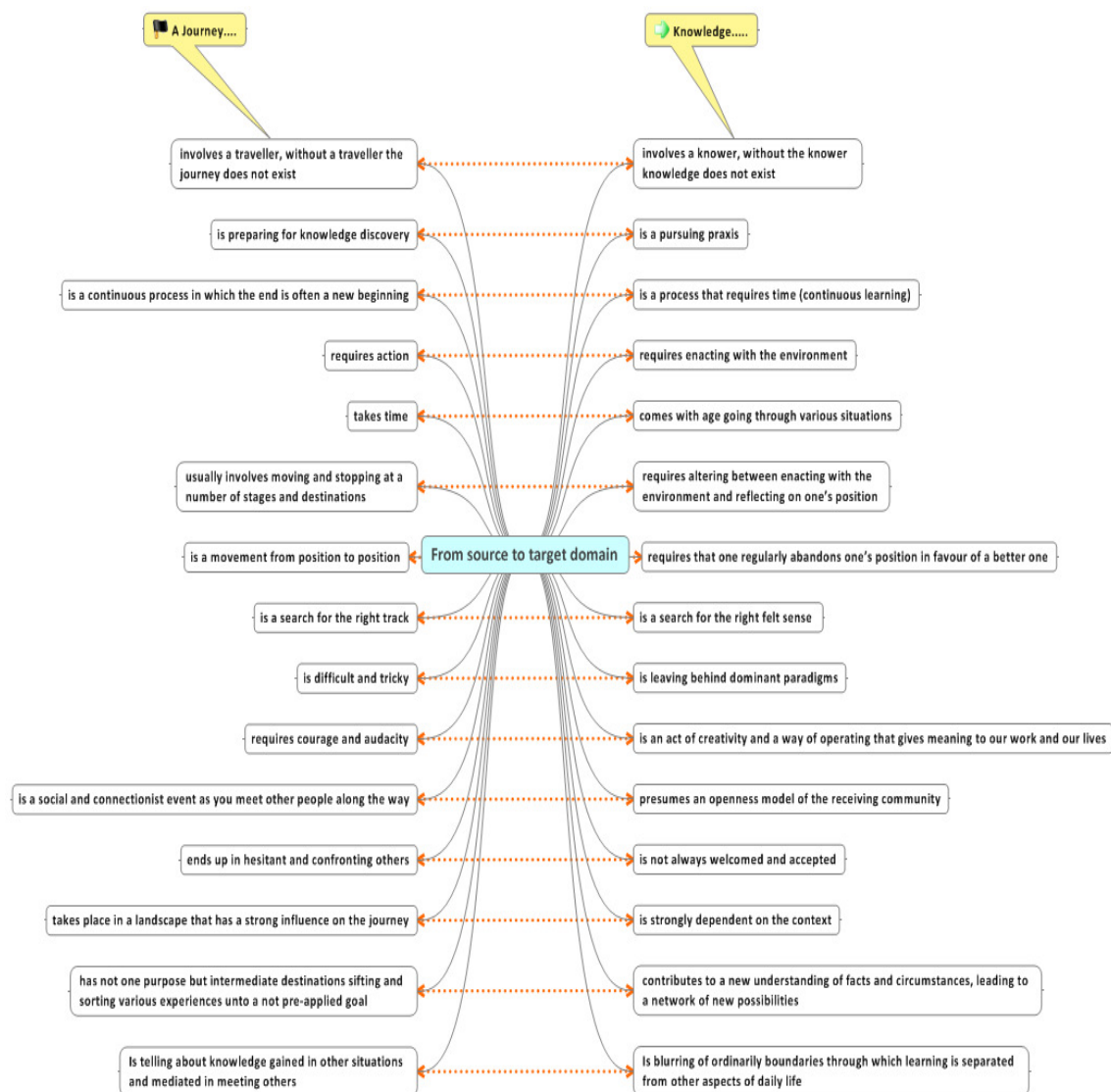

Figure 2: Mapping from the source domain of the journey to the target domain of knowledge.

- Knowledge retention

  In the hero's journey, the hero receives a call for adventure which can be compared with when qualified workers look out the window and see new opportunities outside of the organization. So in a way, the journey metaphor deals with the problem of how to capture knowledge when it walks out the door. The hero leaving for his journey symbolizes the loss of critical knowledge by managers and executives retiring and exciting from the company. However, the metaphor also highlights that the journey itself will produce new and potentially valuable knowledge for the hero. From a KM perspective the challenge is to capture this new knowledge for the benefit of the organization the person is leaving. The old employer should try to learn from the transition his former employee is making. One way to do this is to support the transition through coaching by a senior figure, just like in the hero journey where the hero meets a caring senior figure who offers tools and advices for his mission. So, paradoxically as it may sound, organizations should invest in employees who are leaving by coaching in order to learn as much from the transition as they can.

- Knowledge innovation

  The journey metaphor highlights the fundamental notion that innovation is not just the introduction of new knowledge, but a non-linear and complex process that involves discovery, barriers, trails, monsters (failures), and the combed competence of connectionist people from various backgrounds. It also highlights that it requires people to quit isolated and remote islands of knowledge, to discover the unknown and to welcome interdependent relationships between various internal and external partners and stakeholders, including outsiders, in the innovation process. As a consequence, knowledge innovation can not be managed in the traditional, planning & control sense of the word. Instead, knowledge innovation can only be encouraged and supported by allowing people to go on a journey of discovery, by providing them with coaching from senior, experienced people, and by giving them the opportunity to meet other and new perspectives and opinions. In addition, management should encourage the voicing of different perspectives and meanings instead of trying to provide one fixed meaning to the organization. Knowledge innovation results from the confrontation and reconciliation of various perspectives, meanings and opinions.

6. Conclusion

In Western knowledge management common used metaphors for knowledge entail an analytical mode of cognition in which verbal information is processed serially, sequentially, logically, and rationally. When using alternative deep metaphors like the journey metaphor, knowledge management can be enriched by a relational and synthesizing mode of cognition, where knowledge processes are perceived as simultaneous structures and patterns. Such alternative metaphors also provide insight into the structure of a system by integrally and comprehensively focusing on the whole and overall meanings instead of details only. The use of new knowledge metaphors may lead to the highlighting of different knowledge-related issues in organizations and may inspire to new, unorthodox solutions and recommendations.

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