The Triad Conversation as a Method of Transforming Local Experience into Shared Knowledge

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Abstract. *This article introduces the triad conversation as a knowledge management method. This new instrument is designed to explain, transform and distribute experience-based knowledge, which is tacit and locally embedded. The foundations of the method against the background of a knowledge management discourse as well as the methodical principles are introduced.*

1. The importance of implicit knowledge for organisations

There is growing pressure on business organisations to restructure their operations in response to an increasingly complex and dynamic environment. Shorter product life cycles and smaller and more varied series challenge the worker's flexibility.

Organisations also face a gap between theoretical and practical knowledge. Inadequate central plans are corrected by local activities [WE96]. The more complex and dynamic the realities, the more difficult it is to control them by central plans. Deviations and variations become a regular feature and tolerances are reduced in response to higher quality standards. These deviations result in shop-floor routines and concepts that are independent of central steering concepts and rules. A form of knowledge known as local knowledge is established [WDW04]. Quality management concepts such as Kaizen and Lean Management already recognised that the knowledge held by workers is valuable and profitable. Quality circles were implemented in production settings, and an atmosphere which promotes innovation was generally encouraged [RR82]. Key conditions for success were sufficient rewards for and participation by shop-floor workers and a consequent feedback to their improvement proposals [DDWW96].

These findings suggest that innovation, organisational change and competitive capabilities depend on the knowledge of all employees. The strategic advantages of an enterprise are based on its specific assets, which create a unique identity as well as unique products and competencies [Qui92]. The focus of strategic management is to determine and develop core competen-

ces in a goal-directed way and to position them correctly [PH90]. This knowledge-based view of management [Tso96] inevitably focuses on the implicit quality of the capabilities and knowledge assets that form these core competencies [NT95; Spe96]. The distribution and transformation of these assets across the whole organisation involves a continuous process of cooperation between different social systems [WCB00].

2. Knowledge management is knowledge transformation

Regarding its tacit and local quality it is insufficient to treat knowledge merely as a result of information processing. In particular, the development and transfer of knowledge is excessively simplified if it is described solely as a transport of cognitive contents from one agent to another. Indeed, learning involves a process of transformation characterised by constantly changing knowledge carriers and knowledge content. These transformations are embedded in physical and social structures and depend on local conditions and needs [Bla95; Eng00]. Learning processes and the adaptation of knowledge should therefore be analysed and stimulated in close connection with the specific workplace and the real work process [Schö83]. This ecological dimension of knowledge has to be considered seriously in any project of organisational learning and knowledge management.

Recent empirical findings have shown that this dimension of knowledge management is greatly underestimated in practice [MMP03]. A survey covering 129 of Europe's largest companies concluded that the business culture is the most important success factor for KM [HV01]. In a self-assessment of their own knowledge of KM processes, only 17.4 % of the companies who replied proved to be familiar with the explication of tacit knowledge – whereas 62.3 % knew about databases of knowledge objects. A Delphi study showed similar results and stressed the significance of personal encounters in knowledge-related communications [SKMH04].

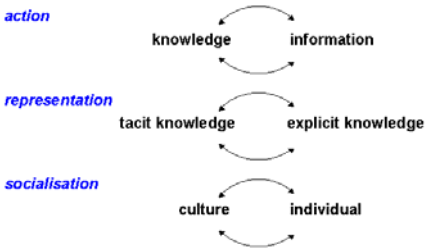

Figure 1: The most widely recognised transformations of knowledge [DW02]

Our approach to this dimension of knowledge transformation distinguishes between three transformation cycles [Fig. 1].

(1) When they are used to accomplish tasks, data and information are *transformed into knowledge* by placing them into a context of meaning. In this sense, knowledge is interpreted information. In the opposite sense, the knowledge developed in performing a task has to be reconverted into information, at least if it is to be documented.

(2) Knowledge is represented in different ways, for instance in verbal, visual, haptic, acoustic or bodily forms. The most popular aggregating concept for these representations is the difference between tacit/implicit and explicit knowledge [Pol66]. A *transformation between different representations of knowledge* is therefore crucial.

(3) Since learning is regarded as a process of socialisation in communities of practice, the third important *transformation cycle is that between individuals and communities*. It must be determined how individual concepts become shared and how they are materialised in the form of products, rules or artefacts. However, the classical purpose of training, practice and instruction is the individual acquisition of knowledge.

From a methodological point of view, these transformations can be supported in many ways. There are no standard procedures for handling tacit knowledge. Indeed, these requirements are so new that disparate professional fields such as qualitative social research, psychotherapy or creativity training may serve as examples. For our own research and developmental work, we suggest a classification of methods based on their principal function:

- *Choreographing methods*: Settings are built up which instruct participants in distinct roles. By assuming a role, a person changes his perceptual and cognitive focus. Examples are organisational constellations, open spaces and role-play.
- *Visualising methods*: Mapping techniques help to display concepts and their relations; a visualisation represents knowledge in a holistic way [MF00]. Analogies and metaphors may direct attention to the main aspects of a phenomenon. Examples include knowledge maps and repertory grids [Cla04].
- *Verbalising methods*: The classical approach to knowledge acquisition is that of question and answer. Speaking and writing are its main expressions. Narration is the form of verbal representation which seems to be closest to natural experience. Typical methods are interviews,

introspection, story telling [KR97], journals, diaries and micro-articles [Wil01].

- *Concept-guided methods*: Predicated on theoretical assumptions knowledge can be focused in a very systematic way. Inventories for work analysis or intellectual capital [PG00] are examples. Compared with verbalising and visualising methods, these approaches are less open and pre-format the way in which knowledge is expressed.
- *Instructing methods*: Lessons, tuition, training, business games or exercises are classical forms of knowledge acquisition applied in primary and vocational education. An important question is how these approaches may be integrated into daily business and the work process.
- *Simulating Methods*: Multimedia and virtual reality tools allow complex and realistic scenarios to be set up for training and practice. Scenarios may then be modified and varied for didactic purposes; errors and faults may be committed without serious consequences. This results in an experimental mode of learning and interaction.

3. Triad conversations as a method of knowledge transformation

A *triad conversation* is a method of knowledge transformation based mainly on verbalising (narrative) and choreographic principles [Dic06]. It has been developed to explain and transfer experience-based knowledge from experts to novices.

A triad conversation is a methodologically supported conversation, limited in space and time, in which three people participate voluntarily (an expert, a novice and a layperson with respect to the relevant subject). It aims to exchange professional knowledge in order to handle future working and management tasks more efficiently.

The three choreographed roles are derived from professional knowledge about the subject of the conversation: the expert acts as a narrator, the novice is the auditor and the layperson acts as facilitator and methodical listener. The *expert narrator* is a senior employee or specialist in a certain subject area who is asked to reflect on his vocational experience. He selects individual learning situations and narrates them as concrete examples. In this narration, he will express his personal values and present relevant points. The *novice and listener* is an employee who is less experienced in the subject area than the expert. He is qualified to acquire the knowledge necessary to become an expert. He is asked to listen to the expert's narration and to ask questions in the course of the conversation whenever something

is unclear or he finds an aspect of particular interest. The layperson and moderator has no knowledge of the subject area and remains a layperson on the subject after the conversation. He provides the setting and initiates the triad conversation by giving the opening instructions to the narrator and listener, chairs the conversation and keeps it flowing. He assures comprehensibility by asking relevant questions, concludes the triad conversation and records the results. He is also responsible for the documentation and for evaluating the outcome.

By setting up these roles and the narrative mode, we try to satisfy several quality criteria for the knowledge content of the conversation.

- The expert represents the context in which the knowledge originates. This validates the contents.
- The novice represents the context in which the knowledge has to be applied. This strengthens the utility of the contents.
- The layperson challenges the embedded and routinised concepts and supports comprehension of the contents.

By anticipating the different needs of the listeners – the layperson and novice – the expert outlines his presentation in a distinct way that differs signifycantly from an everyday conversation between colleagues. The characteristics of a narrative conversation are outlined theoretically by the research of Fritz Schütze [Schü83]. Thus such a conversation is structured by an implicit agreement between the participants about the activities of narrating and listening. The listener agrees to follow the narration attentively, while the narrator endeavours to make his story comprehensible to the listener. They are consequently obliged to follow a particular pattern of narration ("Zugzwänge des Erzählens", [Schü83]): a narration is always based on the narrator's personal experiences [authenticity] which are presented in all their particulars (detailing), complications and involvements (dramaturgy). Moreover, the narrator is forced to select between important and non-relevant contents (condensation) and to complete every topic and thread in his narration (gestalt completion).

This leads to clear differences between a narrative and a report: in a narration, the place and time are unique and explicit, the succession of events is singular, the actors are specific persons, and complications and experiences are evaluated by a narrator who is involved in the events (first person). In contrast, a report is designed to transfer information, place and time are arbitrary and transferable, the order of events is typified, the actors are described as roles, subjective evaluations are omitted or signified, and the reporter follows the events from a distance (third person). Compared with other methods of KM, a triad conversation has the following attributes:

- Expert knowledge in action is verbalised with high credibility.
- Knowledge is transferred directly from its origin (expert) to its destination (novice).
- The experts become aware of their strengths, routines and knowledge profiles - and there resources are transferred to the organisation.
- Knowledge in action becomes appreciated.
- Experiences and concepts are synchronised and mutually validated.
- Ecological settings of knowledge exchange are developed.

4. An exemplary implementation

The empirical foundation of the triad conversation was developed in two stages. In the first stage, we explored the conditions of implementation and set up 27 triad conversations in an engineering department of an international organisation. Two research assistants joined the department on a full-time basis for 6 months each [DFU04]. The second study evaluated this pilot scheme by conducting guideline interviews with 32 participants in triad conversations [DNS06].

To sum up the results of the evaluation study, we can state that:

- The participants acquired major professional and social benefits through the triad conversations.
- Triad conversations are fully accepted by the participants.
- The benefit of the knowledge transfer can be increased by: A) a strictly demand-oriented application, B) accurate implementation, preparation und practice, and C) by using a pro-active and trained layperson.

Further research will have to vary different settings and conditions of application and to specify the tasks and functions of the chairing layperson. Fundamental research is necessary to examine the mechanisms of explanation and comprehension in a triadic interaction.

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