## Unlearning as an integral part of Knowledge Management: The nature and visualizations of the process.

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Information and knowledge are sacred words for information professionals. The idea of deliberate losing information or knowledge may seem counterintuitive to many of us. When we consider knowledge, we first of all focus on such creative and positive processes as knowledge discovery, construction, sharing, transfer, application, recycling, etc. We often skip the somewhat negative process of deliberate loss of knowledge. Some managers would say that we do not need to focus on the latter because the nature of human cognition takes care of it. We need to make efforts to learn, to memorize, while forgetting seems to be effortless. It just happens. But is it true? Is it really easy? If we talk about occasional cases of forgetting names, numbers, to-do list entries, and the like, the answer is yes. But if we consider deliberate *forgetting* as an integral part of organizational and personal learning, the answer is not that straightforward.

All types of knowledge, many components of organizational culture, and some competencies can become outdated. In such cases, the employees may get stuck with an ill-structured mixture of advanced and obsolete knowledge, which may constitute a serious problem for organizations. Bedford warns that "outdated or invalidated knowledge will become part of the culture and can significantly inhibit any incentives to create or share new knowledge. Unlearning or discarding outdated knowledge, routines and beliefs incentivizes organisations to create, learn and acquire new ideas" (Bedford 2014/2015, 7). Wong, Shek, and Lam maintain that "organizations rarely learn in a manner that conflicts with their beliefs", and that organizational unlearning, "as a process of removing obsolete beliefs and routines", becomes an important precondition of organizational learning (Wong et al. 2012, 1202). Hislop states that "organizations need to get the balance right between retaining, protecting, and developing knowledge that is useful and important, while simultaneously being able to discard, forget, unlearn, or give up knowledge which has become outdated and of limited contemporary use" (Hislop 2013, 124).

Learning or knowledge acquisition/creation/discovery does not mean simply adding more information to our mental "databases". That would make us simply better informed but not more knowledgeable. We need to put new information into the context of our existing knowledge base, check it against our pre-existing cognitive constructs, and either (1) find the right place for the new piece of information within this structure, (2) discard the information as inadequate/wrong, or (3) adjust our knowledge state in order to make sense of the new information, and start thinking "out of the box". The latter would require letting some knowledge go, and it is crucial to understand the place of this process in the big picture of organizational and personal knowledge management. It is especially important in regard to "wicked" problems the society is facing, which require interdisciplinary, interprofessional, intercultural, and international approach. The ability to unlearn, to questions and give up some knowledge patterns in order to establish a common ground is especially important in teams whose members bring to the table not only a

variety of expertise and backgrounds but various disciplinary and professional biases, as well. Some relearning may be necessary to foster healthy group dynamics in teams working on projects calling for contributions from more than one discipline, as well as in interdisciplinary fields of study, including Library and Information Science (Bedford, 2014/2015).

There are several terms that are beings used in literature to denote the idea of discarding obsolete knowledge. Different authors use different metaphors, all of them employ some degree of anthropomorphisation: deliberate or voluntary forgetting, deliberate loss of knowledge, organizational forgetting, etc. Unlearning seems to be the most popular term, which may reflect the high level of popularity of the concept of learning organizations and organizational learning. The term "unlearning" is not new. It was defined by Hedberg in 1981 as a process of "emptying previous information or knowledge" (Wong et al. 2012, 1204). Becker conceptualizes unlearning as a "process by which individuals and organizations acknowledge and release prior learning in order to accommodate new information and behaviors" (Becker 2005, 661). The emphasis on the accommodating new information and behaviours is especially important, because unlearning should be always followed by relearning. Zhao, Lu, and Wang (2013) argue that "in order to achieve the dynamic knowledge management, organisations should pay more attention to the synergies of organisational unlearning and organisational relearning on knowledge management (Zhao et al. 2013, 903).

Review of the literature on the topic of unlearning shows that most organizations are not comfortable with the process. Many knowledge managers have very vague ideas about their options in regard to obsolete knowledge. It is easy to suggest "releasing prior learning", but it is very difficult to actually do that. Of course, we can always remove dated explicit knowledge from organizational knowledge storages, but tacit knowledge is much more difficult to deal with. Hislop writes that "research suggests that even the experience of failure in organizations rarely results in the adequacy of existing knowledge/value/ideas/practices being reflected upon and that consequently few organizations are systematically able to un/learn from failure" (Hislop 203, 122).

It is no wonder that managers find it very difficult to help their employees unlearn. Unlearning is a highly dynamic and complex process. It includes several sub-processes that can take place simultaneously or consequently. Researchers think that unlearning can precede learning or happen at the same time (Hislop, 2013). This is why it is extremely difficult to visualize, to integrate the process of *forgetting* into knowledge management cycle models. Very few of them focus on the process of giving up knowledge. The paper illustrates this point analyzing several visual representations of knowledge processing in organizations. For example, Bukowitz and Williams include the process of knowledge divestment in their model, but they do not specify the underlying mechanisms (Dalkir, 2005; Evans et al. 2014). The stages like *knowledge refinement* in the Meyer & Zack's cycle and *knowledge update* in Dalkir's model (Dalkir 2005) imply a process of letting go some dated knowledge but the authors do not explain how it would work in a real organization. Nevertheless, these models offer useful visual frameworks for knowledge workers and knowledge managers.

The processes of unlearning and forgetting cannot be separated from the processes of learning and memorization. Akgun et al. emphasise the connection between organizational unlearning and memory "...because unlearning has been conceptualized as memory eliminating, and investigation of how memory is formed and manifested could help in understanding and operationalising unlearning in organizations" (Akgun et al. 2007, 797). This paper makes one further step in the direction of the realm of cognitive science, which offers "two mechanisms that can produce forgetting. One is decay of trace strength, and the other is interference from other memories. There has been some speculation in psychology that what appears to be decay may really reflect interference" (Anderson 2000, 211-212). Thus, interference may be an effective and efficient means of replacing old memories/knowledge with the new ones. Psychologist think that both explicit and implicit memory is vulnerable to interference (Eysenck 2004), which may suggest that a well-organized process of relearning would automatically take care of unlearning, even when employees are not completely aware of the fact that they possess a particular piece of memory/tacit knowledge.

The analysis of the literature and several case studies, including examples of dramatic changes in the world of modern librarianship, allows to assume that in knowledge-intensive organizations, when learning is an integral part of knowledge workers' daily activities, there is no need to focus specifically on unlearning. When employees learn new things (new ideas, procedures, policies, etc.), the obsolete fragments of individual knowledge are naturally replaced by the current ones. Of course, "practice makes it perfect", so the newly acquired knowledge needs to be actively used on a regular basis in order to reinforce the process of relearning. This applies first of all to individual knowledge. Replacing obsolete organizational knowledge is a responsibility of knowledge managers. Ideally, a Chief Knowledge Officer would orchestrate the process, starting with mapping and monitoring organizational knowledge base, identifying the fragments of knowledge, both conceptual and procedural, that would require replacing through relearning.

In conclusion, in regard to dealing with obsolete knowledge in organizations, the main focus ought to be on relearning rather than unlearning. The efforts to discard obsolete knowledge may be replaced by facilitating organizational learning in all its forms, building an environment open to external knowledge, and creating a positive and dynamic atmosphere, which would make intellectual stagnation impossible. Further research is needed to build a comprehensive model of the process of organizational relearning.

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