

The significance of the personality of knowledge: its contribution in creating and utilizing the system of knowledge in organization

Význam osobnosti vědění: její příspěvek při vytváření a využívání systému vědění v organizaci

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Abstract: How does an organization utilize knowledge for the reproduction of its culture in innovations, it was a key-point of the question for an approach based on the methodology of social process in the recent past. Then the formation of knowledge was considered a process of power politics with the consequences for knowledge management. In the framework of those projects, attempts were made in organizations to extract the knowledge from experts and specialized professionals that it might be codified and saved in extensive databases; only then the remainder of employees ought to have possibility to consult them and add the results of their own ideas to these databases. Poor success of such attempts only illustrates the methodological failure of utilizing information technologies for knowledge formation, its storage and transfer. Moreover, when a new fact was soon discovered even in the framework of the new approach, that there was an abyss-like difference between information (that information technologies operate with) and the knowledge, then the significance of personality increased again. The research that was done with the “champions of organizational learning” in the framework of knowledge management emphasized their import in catching the best experience, knowledge codification and its distribution in the organizations. Among other qualities, the knowledge is strongly personalized: it means it is connected with personal experience, attitudes, and evaluations. On the other hand, an advantage of new methodology was that the possible social actions, connected with the knowledge management, search for a strategy, and implementation were studied. These very changes in methodology have been a valuable contribution even for the research into the role of personality within this social process, however. They induce circumstances and means for studying the infrastructure of relationships that make possible the impact of individual authority in organization in general. In this paper, we also pay attention to this social process in teams as compared to collectives and how team-leaders emerge within them.

Key words: knowledge management, information technologies, personality of science, epistemic authority

Abstrakt: V rámci nedávného přístupu, opírajícího se o metodologii sociálního procesu, byla klíčová otázka, jak organizace využívá vědění k reprodukci své kultury v inovacích. Tvorba vědění se v rámci tohoto přístupu chápala jako politický a mocenský proces s důsledky pro management vědění. V rámci těchto projektů byly činěny pokusy v organizacích extrahovat vědění od expertů a specializovaných profesionálů, aby je bylo možno kodifikovat a ukládat v rozsáhlých databázích. S nimi měli mít možnost konzultovat i ostatní zaměstnanci a přikládat k nim výsledky svých vlastních myšlenkových procesů. Nevalná úspěšnost těchto pokusů jenom dokresluje metodologický neúspěch využívání informačních technologií k tvorbě vědění, jeho ukládání a transferu. Na druhé straně však výhodou tohoto metodologického přístupu bylo studium možných sociálních akcí týkajících se managementu vědění, hledání strategie a implementace. Již pouhé tyto změny v metodologii byly přínosem i pro výzkum úlohy osobnosti v tomto procesu; vytvářejí totiž podmínky a prostředky ke studiu infrastruktury vztahů, která umožňuje, aby jednotlivec vůbec mohl svou autoritou na poli vědění působit. Kromě toho se význam osobnosti opět pozvedl, když se i v rámci nového přístupu záhy odhalila skutečnost, že mezi informací (s kterou informační technologie pracují) a věděním je stále ještě propastný rozdíl. Vědění má mimo jiné tu vlastnost, že je silně personalizované, to znamená, že se váže na osobu jednotlivce, na jeho osobní zkušenost, postoje a hodnocení. Výzkumy prováděné s „šampióny organizačního učení“ v rámci managementu vědění zdůraznily jejich význam pro zachycení nejlepších zkušeností, kodifikaci vědění a jeho distribuci v organizacích. Ve svém příspěvku věnujeme také pozornost srovnání tohoto sociálního procesu v pracovních týmech a v kolektivech.

Klíčová slova: management vědění, informační technologie, vědecká osobnost, epistemická autorita

When we follow news in scientific literature, we can easily come to the opinion that the significance of personality, as a concept in social sciences, has decreased today, because the accent is put on the research of social process. This process is seen as the base of such events that seemed to be bound, so far, with personality, e.g. leadership or knowledge, and such processes in organizations, as group membership, group dynamics, and power politics came forward. In the West, many organizations gain competitive advantage today by the means of knowledge management, i.e. by instruments and strategies for location and distribution of knowledge in an organization. This diverts from an approach, which was based upon methodological individualism, as well as the interest in the events, mentioned above, have opened new perspectives and new approaches and methodologies were formed, old theories reformulated, and new technologies utilized. On the other hand, new information technologies (IT) have also shown that knowledge, as the base for innovation, is something more than information itself. It is personalized, i.e. it is bound with certain individuals, persons, who are specialized talents, experts, etc. Here, we use the concept of personality in the same way as it is usual in English, saying e.g. "She is beautiful but seems to have no personality" (see the item *personality* in the *Oxford Advanced Learner's Dictionary*, 4th ed., p. 923). It does not mean she lacks the personal tone, as is the case of understanding in psychology, but rather the charm or individual charisma influencing us. In this case, her beauty is only an individual peculiarity in which she differs from other women in the same way as if she were tall or little but not in the social sense of attractiveness given by her manners. In the same way, *personality of knowledge* is not only a person who knows something, more or less, but someone presenting it in the influencing, e.g. inspiring, way and mediates new views, contexts, frames, backgrounds, etc. to us, i.e. confronts us not only with information but with a systemic whole of knowledge. The role of personality in knowledge formation, its storage and transfer in organizations, is neither replaceable, nor has a favorable substitute. This fact is even more apparent in such social and cultural environment, in which innovation brings competitive advantage to organizations and the effective production of innovation is one of their features. Recent researches have discovered that knowledge is not a thing in itself, in complete state, and not separated from the person of its bearer but, rather, it is the property, which is – in spite of its floating and sometimes sudden appearance – stuck in personal experience. However, knowledge is formed in cooperation with

other people in solving common problems during social interaction with their opponents, in mutual making viewpoints clear, although these are often different and controversial and are set in the context that is given by time (Easterby-Smith, Lyles 2003). This social and constructive character of knowledge, discovered by L.S. Vygotski (1896–1934) in the framework of cognitive and educational psychology, has such an effect that the knowledge cannot be shared with other people so simply as pie pieces can be shared (Dewey 1916).

According to psychological approaches, such as, for example, the behavioral theory of elementary learning, knowledge was considered for a long time as something that can exist outside of individuals and can be presented to somebody in the same way as a piece of meal can be. Perhaps it also was a consequence of the Marxist standpoint that the psychical is only the material that was removed from the outside world into a human head. On one hand, the accent was put upon explicit knowledge, and, on the other hand, corresponding abilities of an individual mind that should absorb it were stressed. In the training of individuals, programs were oriented upon the so-called *event-driven training mechanisms*, known to public, for example, from the field of auto-learning with help of personal computer. Although, in the form of instruments, these older approaches and concepts have validity of their own right and are still considered innovations in some Czech universities, they have always represented only a fraction of the existing knowledge and learning in organizations (Easterby-Smith, Lyles 2003). Not only explicit cognizance but, also, tacit insight is included in knowledge. Explicit knowledge, often expressed in symbols, is readable for computers; tacit knowledge is not.

The tacit knowledge may even show direction for next attempts and thoughts, usually in absence of the corresponding evidence, and, also, for the next possibilities of trying to prove them or to develop further. In spite of that, the processes of transforming intuitive, tacit knowledge into the explicit cognizance are an important source of knowledge in organization (Konrad 2001). The simplest way how to do that is direct inquiring an expert of the domain given, as to whether we are doing our job performance well. However, this approach demands a specific interaction between two persons, the willingness of the expert to share the knowledge and our ability to express it in some suitable way. The further approach is indirect and somewhat complicated in that the interaction with the expert is concentrated upon a specific job-performance in a job task. In this second case, knowledge develops during the solving a problem,

which – usually at the beginning – use to be ill-defined. Aside of group discussion, also the role playing works here (Polišenský 1996; Konrad 2001). The individual willingness or endeavor to learn depends upon the topics solved by the team and upon how careers by its individual members are perspective. This is rather the case in the fields, in which the need to learn is generally high (Sonnentag 2001).

With introducing the IT into organizations, there have appeared new approaches that focus less on the role played by individual factors and their aggregates, attributes and behavioral potentials, but more on the role played by social processes and the basic epistemological facts. Social process has driven individual out of the interest of researchers and they instead began to pay their attention to ways, in which knowledge is formed, preserved and transferred in organizations. According to this new approach, knowledge formation is conceived as the political and power process with consequences for knowledge management. On the base of these social processes and the epistemological facts, a specific way of understanding and thought receives the character of truth, it becomes a social reality, and defines what is considered normal, rational, moral, objective, and, thus, evident in itself (Dachler 2001).

On the other hand, all the changes, introduced above, that have caused this diversion from the methodological individualism mentioned and the lean towards the study of social process, are, at the same time, a contribution to the research of the role of personality in this process. The reason is that, in this approach, the conditions and means are formed, through which contextual infrastructures may be studied. It is given just by these infrastructures that an individual might operate by means of his/her authority at all, because they make it possible. Thus, aside of knowledge formation, even *knowledge codification and its distribution* in an organization are open for study. The significance of personality was raised again, when this new approach soon discovered that there was an abyss-like difference between *information* of IT and *knowledge*; the latter being personalized in a strong way, the former being not. The knowledge is attached to the person of an individual, to his/her personal experience, personal attitudes, and personal evaluation.

METHOD

The diversion from the individualistic methodology has an advantage of enabling us to study much broader potential of the possible social actions in relation to

knowledge management, and to search after strategies and implementations. For our approach, in which the methodology of social process plays a substantial role, there is of key significance the question in what way does an organization utilize knowledge in the innovative processes, in which its culture is reproduced. Solving this problem, the attention of researchers is also paid to the character of work-groups, collectives and teams, their structures and management. In this article, our objective was to show the import of personality for organization, especially for information aggregates and their transformation into knowledge. We have chosen the method of comparative analysis and compared these aspects with such features of personality that may, also, be seen in individuals in further levels of social process in organization, i.e. in leadership and authority. We have compared the personality of knowledge or creative personality, as a knowledge maker and inventor, with the statutory personality, as a key factor for realizing innovative projects and a natural leader of work collective or team. We have, also, analyzed the mechanism of authority, through which the influence of one person upon the other is legitimized. Certain differences regarding the methodology between this new approach, based on the study of social process, and the older one, based on psychology, were pointed to.

DATA

Our data represent the basic information from literature on how to be successful: 1) in social process of codifying knowledge and distributing it in organization, 2) in leadership of collectives and work-teams, and 3) in general influence upon the other people, changing their opinions.

Knowledge formation and its codification and distribution

Not only the quantity of knowledge can be different among different people, as we say that somebody knows a lot and some other knows little, but, also, the quality and kind of knowledge may differ from man to man. It reminds us of the known difference between individuals, those having even a detailed encyclopedic overview and those with a deep systemic knowledge. Thus, in general, also professional knowledge of a person can be described, for example, on only two dimensions: 1) *Breadth of View*, and 2) *Depth of Knowledge*. The larger breadth of view of a person is, the more connected frames or set-

tings have been included in his knowledge. He/she is able to see the thing easily from different angles and his/her thinking is more versatile. The depth of knowledge may be defined with a measure for details, on which the person is able to communicate with anybody else. The larger depth of knowledge of a person, the more detailed is his/her knowledge. Both dimensions must be combined, however, if the outcome should have some predictive value. Every educated person of today, which has received a specialized university education, has also received its prerequisite, i.e. solid base of universal high-school education that makes them relatively versatile workers (Polisensky 2003).

Another point of view upon knowledge has stressed its system character. Some practitioners have observed that, from the long-time perspective, professionals use to be more successful in solving the practical specific problems, if they are open to reality, which need not be in necessary accord with their ideas, but their attempts and failures are not quite random and follow a systematic theory that is descriptive and verifiable. In the West, this way of knowing corresponds to the usual procedure of science, which it is not only empirical but, also, theoretical and systemic. For this reason, such practitioners usually consider reality a kind of a dynamic field, in which one element can change the whole. These persons usually accept a possible change of view and are able to learn from their failures in the past experience (Kobylka 2005).

Western science has an apparent systemic character and, at the same time, it forms an integrated unity of different disciplines, such as mathematics, physics, chemistry, biology, etc. Indeed, even the other ways of knowing may have, more or less, such character of a system. In philosophy, systems of thoughts may also be observed, e.g. the systems of Kantian, Hegelian, or Marxist philosophy. But the systemic character of science enables, for example, an assistant of a dry-cleaning shop and a photographer, to understand each other more easily than could be the case of two philosophers, each devoted to a different system. The sentence by A. Giddens that knowledge is a system, because a specialist in one discipline is in position of a layman in regard to a specialist in another (Giddens 1998), may have been influenced rather by his view on system character of philosophic knowledge than on the systemic character of knowledge in science, because if the same should hold even for the (natural) scientists, then the unity of science would remain only in a potential state. However, in nuclear physics, for example, the integrated unity of, at least, mathematics, physics, and chemistry, is real, not potential. Thus, within the science (including technology), the integration of different disciplines into unity is real and,

for this reason, the team co-operation of different specialists is possible, while in philosophy, it would nearly require that ideological antagonists might co-operate.

In organization, differences in the ways of handling information and knowledge among different persons have led to the construction of means for measuring efficiency of knowledge management in action (Akli, Sonnentag 2001). The researches, made in the context of knowledge management, have stressed the significance of the so-called, "champions of organizational learning" for grasping the best experiences, codifying knowledge and its distribution in organization (an overview of these researches has been given in Easterby-Smith and Lyles 2003). The personal contribution of these individuals enters even into their products. However, even the best *practice databases*, formed with the help of such champions, are, in itself, i.e. without these persons, only *information junkyards* (McDermott 1998). Those organizations that made the system theory a base for their approach to solving their own professional problems and a part of their organizational culture are usually aware of that the persons who are able to transform information into knowledge are very expensive, of course. However, they know as well that to employ workers who are not able to learn and put themselves wise may be even more expensive.

Leadership in collectives and work teams

The relationship between a person and leadership presents another viewpoint upon the phenomenon of personality in the field of management. Today, leadership is conceived as a kind of group-produced ability. The group, to which the leader belongs, is considered the necessary base for a new feeling of membership that is more and more conceived as a source of leadership performance (Spaltro 2001). The traditional process of fulfilling leadership power is broken down in the multidimensional, interactive process characterizing the life and functions of organizations (Soro et al. 2001). Sometimes, an assumption is made that the leadership hierarchy is a consequent of concentrating the leadership power in hands of only one person. This assumption is evidently false, however. Large groups in organizations always require several leaders and give an opportunity that many really might have emerged, in proportion to that as they grow and become larger (Whyte 1948). The way, in which these leaders emerge, and even in which the leadership function, is determined through the situation, structure and tasks of a group (Krech et

al. 1962, 1968). In accordance with his central position in a group, the leader has a significant role in forming its goals, ideology, structure, and common activities of its members. This relationship is reciprocal, however, because it is the situation itself, the structure, and the tasks, what determines the way, in which the leadership does emerge in the group, and also the functions that he/she takes on. The researches that have been done in 72 conference groups in commercial, industrial, and governmental organizations in the United States demonstrated in 83 per cent of groups, in which their formal leaders did not fulfill their leadership functions, another member of such a group took over these functions on himself/herself. On the contrary, if the formal superior fulfilled his functions efficiently, then a new leader emerged only in 39 per cent of those groups (Crockett 1955). Thus, the research confirmed an older observation made in sector groups of railroaders (Katz et al. 1951).

In the communities grouping individuals focused on the same professional activity, and thus having the character of collectives, as, for example, that of farmers, workers, soldiers, and students, those individuals do emerge as leaders, who in the best way express the values and norms of these communities, such as villages, factories, garrisons or classes of students, i.e. values and norms to which their members adjust their own behavior (Krech et al 1962, 1968). If members of such communities were, in majority, conservative and ascribed no worth to innovation, then the individuals, who were chosen as leaders by them, had a tendency to cling to the old, tested, and conventional procedures of thought and action. However, if the innovation was positively evaluated in the collectives, then even the leaders chosen had the reputation of inventors and innovators, and, by virtue of their own experience, they were able to push the change proposed by the government. These collectives were different from the conservative ones in the following two points:

1) Members accepted innovation and experimented with the other recommended methods in a significantly higher measure, i.e. the subcultures of these communities were open to novelty; 2) In these experimenting and taking over novelty, the leaders of innovative collectives overtopped the other members, who have chosen them (Marsh, Coleman 1954). The latter finding was also confirmed through the research in other professions. So, as their leaders, soldiers choose those, who overtopped them in abilities relevant to the character of a military task that was to be realized by their troops (Jenkins 1947); students, in little discourse groups, choose those, who had the "best ideas" (Bales 1953).

If an organization plans innovation in order to gain competitive advantage, there is a need of organizational change and the competitive environment should stimulate it to learn all the time. However, without taking into account that aspect of social process, in which new competent leaders and creative personalities spontaneously emerge in the community of organization, such a change in organizational structure is hardly thinkable. Namely, in groups with the different social structure (e.g. in teams as compared with collectives) and the different culture (e.g. in Western culture as compared with the cultures of Eastern civilizations), the character of learning is different. It was demonstrated in the following research that both aspects, structural and cultural, are mutually combined (Forester 2001b). At least one aspect might have been kept constant in this research, because the application of work teams has increased in popularity across all types of organizations today.

Automotive manufactures are one sector that has been at the forefront in utilizing teams. In Europe, this sector also is at the forefront of organizations introducing open learning policies and facilities. Ross H. Forester (Aston University, Birmingham, U.K.) examined the process of innovation and explored the application of innovation teams in two automotive manufactures in Europe, one with Japanese and the other with U.S. cultural base. His research highlights the different deployment of teams, the adherence to standardized processes for innovation and learning outcomes, and the resultant impact on idea generation, implementation and knowledge capture. Both of the organizations sought to innovate through using teams. At the core of innovation policies, in both of them there was the need to increase competitive advantage through cost advantage, gained through the financial savings. Innovation by teams was seen as a very important means of achieving these savings. However, there were fundamental differences in the application of teams in terms of composition and process deployed between the organizations. These differences were observed in the criteria for the selection of their members expressing itself in the distribution of specialized talents within the teams as well as in the impact of formalized policies and the utilization of the external knowledge resources by the teams. The U.S. teams deployed the talents of a specific group of staff(!). They had large informal networks still operating within the organization which gave them a unique access to knowledge. Moreover, external sources were used to help checking the arguments and ideas. This highlights difference in the risk management for the organization. These external workers were quasi team members and en-

abled higher financial savings for the organization to be produced. Even though their organizational commitment was (as compared with the Japanese) very low, among other members of the teams there was an over-reliance on this experienced staff. The more open process pursued by the U.S. team generated more radical innovations, and higher savings. In contrast, the Japanese were utilizing and developing the learning of everyone in the organization, as is usual in collectives. Adherence to their formal processes by the Japanese teams forced strict deadlines, and the deterred idea generation, constraining and preventing radical suggestions being pursued. They effectively reduced the internal resistance to change by involving everyone. However, the resistance was not totally eliminated. Self-censorship was only mentioned by the Japanese teams. Instead of utilizing external knowledge resources, their teams were far more internally focused. Through this characteristic and risk aversion resulted in the Japanese teams (at best) single-loop learning, whereas the U.S. teams conforming more closely to a double-loop model of innovation and learning (Forrester 2001b).

Even though these results by Forrester do not confirm the conclusions that were gained in Japanese firms on the base of different methodology by older researchers (Ouchi 1981; Pascale, Athos 1981; Peters, Waterman 1982; Peters, Austin 1985), his research, in which 48 innovation teams were observed in a concrete task, is very well based just on the methodology of the studying social process. Moreover his results correspond even to long-run experience from the 2nd World War, when the both organizational cultures, the Japanese and the U.S., were confronted in stress and it was possible to observe adaptation processes within the corresponding social systems since first days of the conflict till its end (Boyne 1995, 2001):

The Japanese recipe for victory consisted in utilizing of a relatively small number of arms by disciplined and resolved specialists on the professional level, always fighting persistently till the very end of the combat. The Japanese navy that disposed of very professional commander staffs and disciplined squads showed maximal flexibility in fighting operations, in spite of that single actions were often complicated and dependent on good connection and precise timing. Japanese planning executives were caught unawares just by the time. All the things (including Japanese victories) happened much faster than was planned and the planners soon succumbed to the impression of their own invincibility. As for the knowledge management, the reconnaissance was considered defensive arrangement, contradicting their offensive strategy, and it was depreciated by them. Nor up to the time of their attack on Midway (June 4, 1942) did

the Japanese navy dispose of radar. And as for the innovation management, a long-run contention between the navy and army has reached to the very top of absurdity, when the army, in a secret way, began to build up their own submarines without any assistance and know-how from the navy. Unlike Japan, the U.S. was not prepared for war in a sufficient way. The Americans had to compensate the starting imbalance only during its progression with numerous improvisations of their commanders. In stress, however, they showed the ability in mobilizing all human and industrial potential, in quick suggesting and realizing effective innovation, and, above all, in providing with them *all* (!) their fighting troops. As for the knowledge management, the decipherment of the secret radio code of the Japanese navy had enabled the U.S. troops to predict its movements and operations. Moreover, the Americans utilized the increasing numbers of their arms to form new fighting regulations that their enemies could not face. And this all was done despite of usual organizational difficulties, haggling about competencies and rivalry, technical problems and all the time continuing amateurish approach of some commanders.

The influence on the other people

The relationship between a person and authority presents another viewpoint on the phenomenon of personality in the field of management. Also, this relationship works in the cultural and social selection and it is dependent on the character of cultural environment. The nature and impact of authority have been central to social theory since antiquity. The concept of authority is relatively broad including several meaning shades, reaching from the warranty of credibility or its certificate, which is necessary in attestation, over the respect and conclusive influence up to the legal sovereign might or power of lordship, delivering permissions and decisions. We can speak of real authority, i.e. *de facto* authority, only when its bearers rule by the real force and “control a certain area, monopolize the use of violence, and succeed in getting their commands obeyed” (Geuss 2001). If the term *commands* in the Geuss’s definition is substituted by some more general term *x*, for which not only “commands” but also “requirements”, “suggestions”, “recommendations”, “warnings”, and the like, are suitable substitutes, then the real authority is an attribute of a man, to whom the other people listen, because the weight of his argument is high. In such cases, it is apparent we submit ourselves to such a man not primarily for being deterred, but for his influence on us and for recognition or prestige he enjoys. Then, of course, the power that such a person

uses need not express itself in the form of violence but, rather, in the form of knowledge and its presentation to the public. It is just the power of argument itself, corresponding to the *truth* (as one of the universal principles of the Western civilization cultures: "Speak the truth and shame the devil!"), what makes the authority out of such a man, and not the power of violence, corresponding to the might, which only must be legitimized by an ideology (i.e. by the *faith* in the cultures of Eastern civilizations) (Polišenský 1997, 2004a). In the cultures of the West, the power of a person with knowledge must be legitimized through media, however (conference proceedings, journals, books).

Cultural processes in society provide and define yet another kinds of authority (Geuss 2001): Thus, morals and education define the "moral authority", public media provide the "media-derived authority" (Herbst 2003), political and election processes provide "legal authority", i.e. *de iure* authority, etc. An authority derived through expertise in a bounded domain is called the "epistemic authority". The "natural authority", by contrast, is most akin to leadership, mentioned in the previous section. Some Geuss's categories of authority, namely *de facto*, *de iure*, moral, natural, and epistemic authority are overlapping.

Positive response of the public to the epistemic and the natural authority depends on the behavior of an authority bearer. The only conditions that must be fulfilled are the access of personality of knowledge to media and sensitivity of the public. Then, both these forms of authority seem to be primarily dependent on public opinion. If the value of truth in a society is high, then the public will be more sensitive to the argument of reason and this one will gain more power than in the society, in which the value of truth is relatively low, because people believe there that only the superior (disposing of the right of violence) is always right. Not all the components of the public are equally sensitive to the argument of expertise, however. As for the field of information and knowledge, which is relevant for the epistemic authority, only those individuals are more sensitive, who have gained suitable level of knowledge corresponding to the field of science in play. In this context of information and knowledge, the influence of media also is felt, of course. Charismatic authority has communicative (e.g. rhetorical) components, but media give to his ideas even more force than he might have without access to the mass media audience (Friedrich 1958). Besides, the figures who derive authority through media are not necessarily charming or attractive or with particular leadership qualities. So, natural authority and charisma of personality are not the basis

of their legitimacy. The basis is in the technological and rhetorical power of the media themselves: the way they single out and listen to certain individuals and institutions, signaling to viewers that they should as well – that it behooves them to pay attention to those on the airwaves. On the other hand, viewers and listeners do not automatically believe media or think journalists, for example, always know more than they do (Herbst 2003).

Epistemic authority is usually connected with an expert of a relevant domain. However, it also consists in other experts, specialists, and, even, some kinds of creative individuals, who were described by H. Gardner as "master" and "creator". The development of a domain is observable through their eyes. The master works with the existing problems and finds their solutions. The creator, by contrast, is looking for the problems on the periphery of the field given and his attention is focused to system formation, i.e. he rather forms new domains (Gardner 1997a, 1997b). Those specialists, who are recognized foremost persons among the experts of the same or of a connected field, do enjoy epistemic authority.

DISCUSSION

As has been just shown, in studying social process in organizations, the concept of personality is applicable from all three viewpoints described above. However, it is just the different methodology required in this study, what makes the personality a socio-cultural phenomenon. In the frame of IT projects, attempts have been made in organizations to extract the knowledge from experts and specialized professionals that might have been codified and stored in extensive databases. Other employees should have an opportunity to consult these databases and, even, to add outcomes of their own thought processes to them. Poor success of such attempts only demonstrates methodological failure in utilizing information technologies for knowledge formation, its storage, and transfer in organizations (Dachler 2001). The experts themselves need not have any scruples about it, however. Every expert needs a suitable environment, in which he/she can make himself/herself useful as expert or creative personality. What utility could he/she gain from spending his/her work-time in a collective of co-workers coming from the same field, whose competencies hardly suffice to understand, what he/she is talking about, when they themselves have apparent difficulties to understand, what have they themselves written or spoken of, in full sense? Again, from the background of context, the processes of social selection emerge that put such

a crew in the work-place together. In social process, the utility of knowledge (similarly as that of goods in economic transactions) can be attained only in mutual interactions of people and not in consequence of a centrally planned and controlled realization of ideas in social practice(!). It is apparent, that in addition to the power politics and group dynamics there is also an organizational culture that cannot be left out of play in the study of the social process. Organizational cultures, in some substantial aspects, show a long-run tendency to survival, which does express itself in the observable behavior of their bearers. Knowledge is bound to the patterns of thought that are inherent in the culture given, as may be seen, for example, from its artifacts, behavior patterns and actions, described in historical records. Personalities in the field of knowledge are generally more sensitive to these cultural patterns.

Also, the bond between knowledge and scientific personality makes the knowledge personalized. Thus, unlike information, the transfer of knowledge in organization is not easy to recapture. Above all, in the Western culture, the significance of personality is great. It is expressed itself in the relationship of knowledge to the basic personality, who is more sensitive to the truth than is the case in other cultures, as well as in the relationship to the statutory personality, who feels the natural (not only statutory) responsibility for innovation and modernization, and, therefore, invites the products of invention by their subordinated employees. In Eastern cultures, this relationship of knowledge to the statutory personality need not be so apparent, because the truth is absent among the basic values of their cultures. It is substituted by the faith there (Polišenský 2004a).

An original thinker or inventor, who was considered unfaithful, because of lack of loyalty to the regime, received no support from their superiors in the socialist countries of the Eastern Block and had no chance to attain recognition and evaluation, even if his arguments were sound. Even today, the patent productivity of residents in the former socialist countries of the Eastern Block is, in long-run, more than 10 times lesser than is usual in the comparable Western countries of the EU (Polišenský 2004b). To be sure, the function of statutory representatives as personalities of knowledge was more than 50 years in the Czech culture superfluous and, thus, undervalued. Evaluation of the granted outputs without regard to their quality has enabled many insignificant *de iure* authorities of science to hold their statuses up today. Since this cultural and social background also finds its full expression in social selection processes in organizations, the social practice mentioned does not surprise and will probably survive.

Unlike in Eastern cultures, including the Czech one, where work-teams are established in advance, *a priori*, without respect to the concrete task given, and the team is often identical with collective in the workplace, work-teams in the West are formed by careful selection procedure only after the task had been given and when its character and requirements on individual team members had been ascertained. Thus, the finding by Forrester that, in the Western cultures, experts, as personalities of knowledge (often of external origin), despite their lesser organizational commitment, have a high natural authority among their team colleagues, is of great importance here, indicating a different cultural background and contextual infrastructure. Not formal belonging to an organization but mutual dependence of team members, working together on the task given, creates conditions for getting the natural authority by personality of knowledge into play through social interaction, while *de iure* authority of statutory personality is not so important.

The comparison of personalities of knowledge to leaders, emerging in Western cultures spontaneously, shows similarity just by virtue of the accent put on the role of natural authority. This viewpoint is not new, however, because J.F. Brown conceived the phenomenon of leadership in the same way as early as 1936, when he wrote: "A successful leader needs to become a member of the group that he attempts to lead... because all organized groups (in the U.S.) reserve that their officials must be members of the group" (Brown 1936). These words were to be understood, of course, in the sense of "non-formal group members (and yet not members of an *informal*, i.e. friend, group)". Today, the revival of the older idea (Spaltro 2001; Soro et al. 2001) is a response to the sterile approach of the so-called "psychology of personality" that focused its research mainly on personal character accenting the role of personal tone or temperament, whereas the social aspect of personality entering into social process, which is so important for leadership, was either overlooked or not integrated in some unique theory and the psychologists of personality took refuge in eclecticism. Only research (made in the U.S.) in such cultural and social phenomena (declared as "social psychological" events) as, for example, the influence of group values on the leader selection in respect to accepting innovations (Wilkening 1952; Lionberger 1953; Marsh, Coleman 1954) or the influence of a group structure and composition on its own innovative productiveness (Forrester 2001b), confirmed the idea that effective leadership depends on the character of a non-formal group membership. In both cases, selection processes take place in social

interaction within the group and their consequences are significant for evaluating every its member. The different methodology of social process study has enabled us to see how central character of leader is weakened in the benefit of interaction processes between the leader and other members of the group he leads. It is not to be understood, however, in the sense of weakening the charismatic influence of the leader upon the other members of the group, as it has been interpreted (Soro et al. 2001). In the interpretation of the cultural difference mentioned we must recall, however, that weakening of the leader's function is a consequence of changes in culture and social structure of work groups during the last 50 years in the West (Bell 1973, 1979; Gouldner 1979; Boehme, Stehr 1986). Under the changed conditions, it appears, by contrast, that the status of leader is contributing to his/her charismatic influence in a much lesser measure than before. The natural authority of the charismatic leader is based on his personal qualities, the knowledge among them, when he/she enters into social interaction with the other members of his group. Thus, in the research of leadership today, we can observe similar trend as was seen in the research of knowledge.

Persons with *epistemic authority* are those, who have mastered the body of knowledge. Their authority does express itself in that they tend to have cultural sway. In the knowledge sharing process, the epistemic authority is an analogy of natural authority. Besides, out of useful social psychological concepts, it is *source credibility* (Herbst 2003), the meaning of which seems to come closest to that of epistemic authority, but is not quite the same. The source credibility is defined, usually, as the "cue-based communication", i.e. communication based on signals for the right moment. It specifies the conditions, under which experimental subjects will attend to characteristics of the source (attractiveness, gender, humor) in evaluating a message. Unlike source credibility, which has indeed been useful in some forms of research (Petty, Cacioppo 1981; Iyengar, Valentino 2002), the epistemic authority, as well as the *media-derived authority* (Herbst 2003), is a culturally and historically situated formation, not one that can be easily manipulated in a laboratory. This is in part because authority evolves over time in the reality of public sphere, within particular sets of institutions and configurations of social forces. In other words, having "credibility" (including personality of knowledge) is not a psychological question. It is the sociological matter of legitimacy, in the first instance at least (Herbst 2003). Thus, persons with authority are not only "credible" but they have a right

to power, either through legality, rationality, more force, or expertise, and their power is recognized by the public, who listens to them and takes their advice or, in other words, subordinates to them.

However, epistemic authority is not formed by private thoughts and knowledge of its bearer, limited to some circle of interested listeners only, but, above all, it is formed through their broad publicity in the conference proceedings, scientific journals, books, etc., undoubtedly giving legitimacy to their ideas and knowledge and conferring prestige upon them. The social psychological concept of the *status conferral* (Lazarsfeld, Merton 1948) is similar to that of media-derived authority and it means that "the mass media bestow prestige and enhance authority of individuals and groups by legitimizing their *status*". However, its primary difficulty is that it is not strong enough to denote real power in the public sphere: The status conferral is not quite charismatic authority, but more a form of attractiveness and may be useful in explaining such advertisement events as, for example, how engaging actors and ballplayers can lend their charms to automobiles or cellular telephones in TV advertisements. The authority has a much bigger punch than status conferral, and is decidedly political (Herbst 2003). Yet one needs to be something more than a popular speaker, who is able to persuade his public and one must have a bit more than just attractiveness to hold the natural authority. Attractiveness, popularity and simple persuasiveness neither severally nor together do lead to the natural authority, even though they are its components. Charismatic individuals also have a component of peculiar suggestiveness that makes the natural authority an interesting phenomenon, "because", as Raymond Geuss has written, "I may not be able to say exactly why I think I have reason to take seriously what a person with natural authority says" (Geuss 2001). So, as may be seen, these events, such as the epistemic authority and media-derived authority, are terms denoting more complex social and cultural events, than psychological terms denoting their components are. Also here, we may observe a methodological advantage of studying personality in the context of social process over the psychological approach, be it the psychology of personality, social psychology, or the eclectic approach of the, so called, social training (Hermonchová 1982; Pechačová et al. 2002) still popular today over the former socialist countries of the Eastern Block, where it has originated (Vorberg 1971) in order to vault, in vain, over apparent difference in social behavior of superiors of the East and those of the West in the last quarter of the 20th century.

RESULTS

The new methodology, which has focused on the study of social process, has also made possible to integrate different views on personality functions, namely its role in 1) knowledge formation, its transfer, and utilizing in innovations; 2) leadership, and 3) influence on the other workers. The function of an expert with the epistemic authority is non-replaceable in aggregating information and transforming it into knowledge with utility for innovation. This exclusiveness of expert in the process makes him the personality of knowledge and creative personality. In a similar way, the function of leader with charismatic natural authority is non-replaceable in aggregating and transforming inventive ideas and suggestions by his subordinated co-workers into innovative products. The influence of these personalities on the other workers is mediated through their authority within organization. Authority, however, and especially the epistemic and media-derived authority in organization is a culturally and historically situated formation evolving over time in the reality of public sphere, within particular sets of institutions and configurations of social forces. The epistemic authority of experts and leaders with utility for innovation as well as their natural authority is formed in social interaction with their team co-workers and subordinates in certain cultural and social environment which may indeed differ in different cultures. Knowledge is bound to the patterns of thought that are inherent in the culture given and personalities in the field of knowledge are generally more sensitive to these cultural patterns. For this reason, the scientific literature on this topic of the West may gain normative character in the East, but need not necessarily lead to desirable changes in culture and the social structure of Eastern organizations, because organizational cultures, in some substantial aspects, show a long-run tendency to survival, which does express itself in the observable behavior of their bearers.

CONCLUSION

New methodology, which is focused on the study of social process, has not only generally enabled researchers to study various possible social actions regarding knowledge management, search for strategies, and their implementation but, also, enabled them to overcome the eclectic approach in studying personality in organization by psychology. In the new context, such terms, as, for example, the epistemic authority and the media-derived authority, are terms

denoting more complex social and cultural events than psychological terms denoting their components used to be. Doing so, new methodology does not diminish the significance of personality in organization, however. The role of the personality of knowledge is not replaceable in aggregating information and transforming it into knowledge. Personal qualities of experts also express themselves in codifying knowledge and its distribution in organization. As our results have demonstrated, success in functions of personality in organization depends on the character of social structure in groups and empowerment, on one hand, and cultural aspects, such as universal principles and basic values, appearing in the internalized form through people behavior and their sensitivity to these things, on the other hand. There are cultural differences, indeed. It is interesting to note, that in the West, natural epistemic authority of experts (personalities of knowledge) in work-teams is relatively high despite of their external origin and a relatively low organizational commitment. In other words, their epistemic and natural authority has a higher weight there than their *de iure* authority resulting from their status in the organizational hierarchy has. This fact is respected by their superiors in organizations and is reflected in different management of their work. By contrast, in organizations with Eastern culture, a higher status in the hierarchy of power legitimates decisions and actions by superiors, their epistemic authority and sensitivity to knowledge being not so important. Teams use to be established in advance, *a priori*, without respect to the task given. In the CR, for example, the team in the workplace is often identical with a collective, to which, only secondarily a task is given. In consequence, also selection processes are different. Thus, in the East, all the three kinds of organizational personality, expert, leader, and the authority person, work in a quite different cultural, social, and organizational environment than the same kinds of organizational personality do in the West.

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