Knowledge Relations and Policies. The Effectiveness of European and National Policies from the Perspective of the Theory of Tacit Knowledge[1]

MIHÁLY SZÍVÓS PhD

Doctor of the Hungarian Academy of Sciences (DSc)

szivosml@yahoo.de

Abstract

The successful formulation and effective implementation of policies depends to a large extent on the types of knowledge that are used to support them. In these public policy act sequences, a variety of problems may arise, among which the author draws on tacit knowledge theory and empirical studies - and among the latter mainly on the results of the EU-funded KNOWandPOL research - to focus on some of the causes of knowledge conflicts and unintended surplus changes. In his analysis, he makes extensive use of a classification of tacit knowledge based on what this knowledge, which is created in the course of various human activities, is organized around. From this classification of his own, he highlights institution-centred tacit knowledge and its four subtypes, which play a key role in the process of public policymaking. Ignoring or mishandling these knowledge sets triggers phenomena - knowledge conflicts and unplanned changes - that work against the correct design and implementation of policies. In contrast, a correct assessment of the different knowledge sets and avoidance or proper management of knowledge conflicts can lead to a creative interaction of different types of knowledge in the democratic public policymaking process. In the concluding part of the paper, the author argues that, when using tacit knowledge, its recontextualization, i.e. its reapplication in a series of new situations similar to the original context of its creation, is more important and fruitful than its externalisation, which also entails a significant loss of content.

Keywords

Public policymaking, public action, types of tacit knowledge, externalisation, recontextualization, institution-centred tacit knowledge, unintended surplus change, knowledge conflicts, and synergy of knowledge types.

1. Introduction

Knowledge management was born in the field of economics and the disciplines dealing with economics. At the same time, it was clear from the outset that its results could have a significant impact on the functioning of societal organizations other than companies. For example, when, in the 1980s, the new governance structure of the US President's office, the White House, was being considered as part of the inauguration of a newly elected President, the resulting document included a number of topics on knowledge management, although the

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discipline only formally became an academic subject in the early 1990s. This example from the world of politics illustrates how important the production or acquisition of appropriate knowledge sets has become from the point of view of policymaking.

The management of knowledge resources accumulating in libraries, information centres, health systems, universities and other institutions required new approaches and methods, also because of the explosion of information technology. The last decade of the last century was also the first golden age for knowledge theory and knowledge management, with a very rapid expansion. The most striking contradiction of this early development was between the rapidly accumulating ideas about explicit knowledge, already organised into various forms and sets by computing, and the theory of tacit knowledge, which was then coming to the fore again. It soon became clear that, despite the much wider range of new and more efficient media available, tacit knowledge could not be recorded on them. This very significant challenge has led to rapid developments in both knowledge theories and the knowledge management that relies on them. This contradiction is one of the main themes of this paper.

This crucially important dilemma of knowledge management also draws attention to the different knowledge theoretic and knowledge management conditions that can be used to formulate and implement policies through and mediated by public action. The creation of these conditions began to be addressed as early as the 19th century, including through the collection of statistical data and the establishment of appropriate agencies. In the first half of the 20th century, there was already considerable sociological research that helped to develop appropriate policies. It was also the time when the sociology of knowledge was developed. My aim is not to review all this literature, even in outline, but to clarify the role of tacit knowledge in the context of knowledge theory and knowledge management in policymaking. However, the literature on the use of tacit knowledge in this way has been very modest over the last thirty years of knowledge management. This has begun to change with the EU-funded KNOWandPOL research, which will be described in more detail below. This research has looked at health and education policies in several EU Member States and has produced some significant insights into knowledge theory and knowledge management. In my study I draw heavily on the results of this research.

I further narrow the definition of the topics by relying only on research findings on knowledge processes at local and small regional levels. These are the levels at which the policy agenda and the activities of the bureaucracy that organizes it meet reality, and more specifically the institutions and people working in these areas. These encounters can lead to both knowledge conflicts and creative interactions between the different types of knowledge. It is at these levels that the post-bureaucratic process becomes particularly important, both as a means of implementing and democratizing the process of public policymaking.

The aim of my study is also to explore the important points of intersection between tacit knowledge sets and small regional and local policies. It also aims to point out the inevitable emergence of knowledge conflicts. In addition, I will seek to include the concept of unintended surplus change to shed light on the consequences of ignoring or under-relying on available stocks of tacit knowledge in the implementation of a policy.

Traditionally, the results of knowledge management have been discussed mainly in the context of the discovery and use of knowledge in enterprises, as the dominant history of the

discipline shows. In fact, as I have already given an example, it is an integral part of its evolutionary history that it has been recognized as being of paramount importance for government and other non-economic organizations in terms of the conscious and planned use of knowledge, the management of knowledge conflicts and the accounting of the new knowledge resources that are created. Experts in different kinds of knowledge have also recognised that this can lead to much greater efficiency in the design and implementation of policies.

2. Empirical research underlying the study

The empirical background to this study is provided by four studies and their results. They are listed in order of importance.

2.1 KNOWandPOL research in Europe

I joined the last phase of the EU-funded international KNOWandPOL research at the invitation of Hungarian researchers. The full title of the research project is *Knowledge and Public Policy - the role of knowledge in public policymaking and governance in health and education in Europe - similarities and differences across nations and sectors*. The work was carried out between 2006 and 2011 by 12 research teams in eight countries: Belgium, France, Germany, Hungary, Norway, Portugal, Romania, Portugal, France, Germany, Hungary, Norway, Romania, and the United Kingdom (Scotland).[2] In the final, synthesis phase of the research, in the autumn of 2011, I was commissioned to write a comprehensive study. Drawing on the empirical evidence already available, I had to review the types of knowledge that were found across the research and their role in public policymaking and policy design and implementation. This paper was published as an introductory theoretical paper in a volume summarising the findings of Hungarian research teams (Szívós, 2013: 23-60).

2.2 Distinguishing types of tacit knowledge

My research on the differentiation of types of tacit knowledge, which constitutes the second source of this paper, proved to be of paramount importance for the fulfillment of the commission related to the aforementioned major project. The rich empirical material offered by this international research has greatly facilitated my work. Since then, I have continued to work on separating and defining the different types of tacit knowledge, because I believe that without this, its effective management and use cannot be achieved. KNOWandPOL research has greatly confirmed this conviction. Nowadays I work with four different typologies or classifications of tacit knowledge. Of these, I will use here only the first, the description of which I have already published in English (Szívós, 2014: 21-30).

2.2.1 Tool-centred tacit knowledge

The first classification of tacit knowledge is based on the insight that it is essentially contextually fixed knowledge. For instance, tacit knowledge about playing the violin can only be activated in its entirety when we pick up a violin, and the same can be said about tacit knowledge acquired for using different tools. I have therefore called this kind of tacit knowledge tool-centred. This became the first category of the first typology. In addition, I selected four other equally very general categories. Thus, the complete classification was formed, which has one main criterion. Tacit knowledge is built up around something and is

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[2] The EU identification number of the Knowledge and Policy research project is: 028848-2.

contextually linked to it. The names of the classes of such things form the nomenclature of the types of tacit knowledge. Since it is a matter of classification, I have called this grounding criterion a classifier, borrowed from symbolic logic (Kempnski, 2005: 99).

2.2.2 Material-centred tacit knowledge

In addition to tool-centred tacit knowledge, material-centred tacit knowledge should also be distinguished. This type, together with the tool-centric tacit knowledge, encompasses the tacit knowledge that is necessary for, or arises from, the performance of a work process. While all types of tools are integrated into the corresponding part of the human body through tacit knowledge and therefore have a more hierarchical organisation, material-centred tacit knowledge has a more networked structure.

2.2.3 Environment-centred tacit knowledge

Environment-centred tacit knowledge is related to the set of external objects and things in which a person lives. Typical examples of such knowledge are that of a mountain guide who navigates safely in difficult terrain. The environment-centred tacit knowledge of the manager is essential to steer his company through the difficulties. Like the material-centred tacit knowledge, this type of tacit knowledge is also networked.

2.2.4 Person-centred tacit knowledge

In the course of multifaceted interaction with peers, one acquires specific knowledge, and among these, a great deal of person-centred tacit knowledge. This kind of knowledge is essential for all leaders and teachers.

2.2.5 Institution-centred tacit knowledge

Finally, the fifth category is that of institution-centred tacit knowledge, which is typically acquired by working or living in institutions or by applying certain institutionalised procedures. This knowledge is structured around typical and, to some extent, standardised forms of behaviour and communication specific to or associated with the institution. This type of knowledge will be discussed in more detail in a separate section because policies are created in and implemented by institutions.

This classification of tacit knowledge is logically open. The five categories can be extended, although this obviously always remains a small, closed set. This classification is also open in the sense that subcategories can be distinguished within the five categories. This is what I will do now when I discuss the role of institution-centred tacit knowledge in public policymaking processes. The selection of this type does not mean that the other types of tacit knowledge do not play a role in these processes. What is clear, however, is that institution-centred tacit knowledge plays a dominant role in public policymaking processes. This shows that I will always be analysing processes whose course I can only determine with some probability.

2.3 Research on hidden networks in societies

The third source for this study is German and Hungarian sociological network research. It has been known in sociology for about half a century that in all modern societies there are hidden networks linking different people and groups. Through these networks not only explicit but also tacit knowledge flows. In this way they also contribute to the formation and awareness of

interests. Research on the growing scientificisation of the public domain has shown that an increasing number of issues of public interest are judged by the current results of science, which have given less and less space to the articulation of the interests involved. These problems had already emerged in the 1970s and foreshadowed the need for the introduction of new public management, i.e., a new way of conducting public policymaking.

2.4. Research in innovation theory and the sociology of the public sphere

Finally, I drew on my own previous research on innovation theory. Among the several empirical studies carried out in the research network of the Hungarian Academy of Sciences, the one that proved to be relevant to the present topic was the one in which I conducted in-depth interviews with local decision-makers in large rural university towns, in particular deputy mayors, university leaders, local press leaders and prominent entrepreneurs from local industry. The focus of this survey was on how they see each other, their institutions and the opportunities for cooperation between them, and the overall direction and prospects for the city's development.

3. Key concepts

As it is not possible to go into the results of the research outlined above in more detail here, or as this has already been done in other publications, I will highlight the key concepts that link them closely to the themes of this study and which can also be linked to each other.

3.1 The practice of public policymaking

Based on the research practice and the results, the essence of the international project can be summarised as follows: 'The primary aim of the KNOWandPOL research was to explore the mechanisms of public policymaking within the disciplinary framework of the sociology of public action and, broadening the investigation to an interdisciplinary one, to examine the types of knowledge that are produced and used in it, their conflicts and their constitutive interactions. In doing so, the researchers hypothesised that 'public policymaking has moved from being top-down to bottom-up, i.e. it is not only decision-makers who decide, local actors and street-level knowledge play an increasingly important role in shaping public policies'. This mixed form of knowledge production, in contrast to 'type 1 knowledge production' serving traditional expertise and decision-making, has been termed 'type 2'. The main characteristic of type 2 knowledge production is that knowledge is created in interaction with policy, embedded in a shared context, involving a wide range of local experiential knowledge and directly and indirectly facilitating and accompanying public action throughout its entire process' (Szívós, 2013: 23).

3.2 Public action

The concept of public action is very closely related to public policymaking: 'The concept of public action views public policymaking as a process, [and] argues that to examine public policy it is not sufficient to look only at the moment of decision and the relevant legal norm [...] public policymaking is a fragmented process involving many and diverse actors.' (Berényi et al. 2013:13). The definition includes the joint production of knowledge, the separation of types of knowledge, their joint use, including the conscious use of different types of tacit knowledge, the selection of the results of knowledge production, and the management of knowledge conflicts.

3.3 Scientific knowledge

I will not spend much time characterising scientific knowledge, as it is perhaps the best known. In the public policymaking process, scientific knowledge mainly takes two forms. On the one hand, it is knowledge that is borrowed and used by participants in the process from external scientific sources. On the other hand, it is the newly acquired knowledge that some of these same participants transform into scientific knowledge using their own experience and collective knowledge production.

One of the downsides of the social use of scientific knowledge is the phenomenon identified by German sociologists as a consequence of the process of 'scientificisation' of the public domain. They argued that this could be contrasted with the concept of 'community organising', because this activity could be used as a means of defending interests against proposals for action based on scientific arguments.

3.4 Expert knowledge

This type of knowledge, from the point of view of tacit knowledge theory, is a mixed body of knowledge combining scientific knowledge and, above all, experiential knowledge acquired through its application. The latter is already dominated by tacit knowledge, which in this case is dominantly institution-centred tacit knowledge.

3.5 Experiential knowledge

All participants in public policymaking acquire experiential knowledge in the course of their activities. This knowledge is incorporated into all three other types of knowledge in terms of processing. In the most spontaneous way, it complements existing tacit knowledge sets. It also becomes part of expert knowledge and scientific knowledge in a filtered way. Thus, experiential knowledge of policy and public policymaking is generated.

3.6 "Street level" knowledge

The term 'grassroots knowledge', which has become established in the context of KNOWandPOL research, refers to the specific body of knowledge that is developed before and during public policymaking. In the pre-initiation phase, this knowledge refers primarily to the knowledge of the set of problems, assembled from different kinds of knowledge elements, that a policy's institutional system induces in everyday life. The people affected by local policy deal with the problems presented in the lowest local forums of public opinion formation and some generalisations are made. This knowledge focused on local policy problems both initiates the policy package and accompanies it during its implementation, because its bearers, the local people, experience and evaluate and criticise the proposed and incipient changes.

3.7 Knowledge conflict

On the one hand, conflicts of knowledge are conflicts of interest that unfold along the public policymaking process and at other junctures in the process. On the other hand, they include disagreements over whether to base action on so-called 'hard' - i.e. explicit data - or 'soft' data, in fact knowledge, experience and, within that, tacit knowledge, of facts embedded in context. These conflicts also raise the more general question of which version of knowledge should be

given priority in each policy or sub-policy area. In public action to implement policy, knowledge conflicts may arise between all these types of knowledge.

3.8 The creative interaction of knowledge types

The involvement of public policy stakeholders in the public policymaking process also aims to prevent or mitigate conflicts between tacit knowledge types and explicit knowledge types. The assessment and proportionate involvement of the different knowledge sets in the public policymaking process can lead to their creative interaction or synergy.

3.9 Unplanned surplus change

The issue of unplanned surplus change or unintended consequences has very significant antecedents in the history of ideas. As early as Hegel developed the principle of the 'act of reason' for the functioning of society (Hegel, 1966: 77) to show that the overall effect of changes cannot be calculated for human beings. Interactions and cause and effect relationships can only be revealed after the events have taken place, that is *post factum*. To use the philosopher's metaphor, Minerva's owl only begins her flight after nightfall. Later, in economics, the metaphor of the 'invisible hand' was used to indicate that the outcome of the conscious actions of economic agents cannot be calculated in advance.

One possible sociological definition of unintended surplus change is: "...any major social and economic intervention, to some extent planned by a group of people, is associated with unintended change or the failure to bring about planned change, the magnitude, location and direction of which cannot be calculated. The surplus change may be positive or negative in terms of the intended change, but the latter is generally more common." (Szívós 2013: 44).

Even in the most carefully prepared and implemented policy outcomes, unplanned and often undesirable surplus change can often emerge. Therefore, the public policymaking process involves examining the outcome and adjusting and fine-tuning it. This type 2 form of knowledge production provides an important opportunity to reduce unintended surplus changes. They can never disappear completely from public policymaking processes.

The study of this phenomenon has more recently often been reflected in areas of research such as quality assurance. Sponsors understandably expect certain guarantees regarding the results of research. Achieving these necessarily also requires a thorough investigation of the causes of unplanned surplus changes and ways of dealing with them. As unintended surplus changes cannot be completely eliminated at the policy level either, quality assurance there will require at least one or two additional rounds of action. These involve a repetition of the plan - do - check - act sequence. This procedure is also often used by controllers in corporate management.

3.10 Knowledge management in public policymaking

Successful public policymaking, including the management of unplanned surplus change, requires conscious knowledge management. All significant forms of knowledge should be explored, and their interrelationships clarified. This is the most important condition for their synergy, i.e., their creative interaction.

4. The nature of knowledge conflicts, based on an example from the history of knowledge

There are knowledge conflicts in the short term and even across historical periods. In both types, tacit knowledge may be accompanied by the types of knowledge already listed.

In modern European states, statistical offices were established in the 19th century. This was also the case in Austria, where the Statistical Office was established in 1829 in the then Ministry of the Interior, which then developed into a much larger statistical institution. The Hungarian Statistical Office, which had national competence, was founded in 1871. These offices made the functioning of the state organization very much more efficient, as they helped to detect problems and trends, while at the same time providing the basis for a series of measures. However, statistical data are in fact explicit data, so from a knowledge-theoretical point of view they belong to the category of explicit knowledge, and within that, formalised knowledge. Over the decades, states' hunger for data has increased and has become a constant feature of policy preparation and public policymaking processes. At the same time, it has also become the source of an important series of knowledge conflicts, which have been very prominent in KNOWandPOL research. The all-encompassing tendency to quantify results and facts is inevitably entangled in a knowledge conflict with efforts to enforce the management and use of all kinds of tacit knowledge, including institution-centred tacit knowledge. Professionals who want to focus on tacit knowledge and use its varieties are confronted here with a very predominant tendency to quantify what can only be achieved at the cost of very crude simplifications. In fact, the data sets thus produced contribute greatly to the creation of illusory images of certain processes in society. Moreover, even such conflicts of policy knowledge are not independent of conflicts of interest. However, I cannot go into this any further here.

5. A brief introduction to institution-centred tacit knowledge

Institution-centred tacit knowledge has a long history and a short history. The former stems from the fact that the knowledge needed to run and maintain organisations has long been studied under the heading of organisational knowledge. Tacit knowledge theory has been able to give new impetus to this research by separating explicit and tacit organisational knowledge. It became clear that most of the knowledge that can be acquired in organisations is also tacit knowledge. Such knowledge generated within the internal organisation of institutions is, by definition, part of the institution-centred tacit knowledge. Thus, it has long been on the research agenda, but largely in a latent way. The short history is that I started studying and isolating institution-centred tacit knowledge a little over a decade ago. I hope that this story will continue for a long time, and with this study I am now trying to establish it more broadly.

Institution-centred tacit knowledge emerges through learning and to some extent practising behaviours and roles that are linked together by repetitive stereotypical goals and procedural formalities. Contrary to the common understanding, I also consider as institutions those regulated procedures and followed prescriptive systems that are permanently used in a subsystem of society. In this sense, for example, the regulated information system of a municipality may be considered an institution, but so may the regularly conducted church procession. One learns these forms of behaviour and roles in an institution or by means of an institution, either actively or passively. For example, they learn to perform or understand and accept formalised, restrained, disciplined behaviour that follows given norms and goals.

Institution-centred tacit knowledge is clearly distinguishable from tool-centred, material-centred and environment-centred tacit knowledge. However, it seems that the

distinction from person-centred tacit knowledge requires some explanation. One of the best examples of what might be the difference between person-centred and institution-centred tacit knowledge might be a phrase we often use. If we use the distinction that someone in the "civilian sphere" is quite different from someone in the workplace, for example, we are saying something important about the two types of tacit knowledge. To take a simple example: a doctor who is serious and strict employee at work, an almost unrecognisably pleasant and affable person in civilian life. This stark difference in the two types of behaviour also points to a significant difference in the underlying tacit knowledge types. In institutional behaviour, many personality traits are overshadowed and therefore become difficult to identify.

There are many disadvantaged social situations that do not provide sufficient opportunities to learn about the different institutions and therefore do not provide sufficient opportunity to acquire institution-centred tacit knowledge. For example, children who have grown up in very small villages or farms may not learn institutional behaviours as well and may find it difficult to adapt to them later, compared to children who have grown up in cities and have access to many more institutions and for whom behaviour in these institutions becomes routine. For example, if children in villages and farms can travel by train, they can authentically play the role of the conductor, who exhibits behaviours appropriate to the institution. If this is not the case, however, they may lose the tacit knowledge that comes with it, or at most make up for some of the shortfalls with films. These types of handicaps, though seemingly minor at first sight, are very important examples from the point of view of public policymaking, because the democratic formulation, reception and implementation of policy should be first mastered at the most basic level. For this, knowledge of the various types of institution-centred tacit knowledge is an important prerequisite.

The distribution of institution-centred tacit knowledge is also important because in areas where there is less of it, people tend to be more inclined to be conservative and distrustful of institutions. Hence, they are also more susceptible to conspiracy theories related to institutions.

6. Tacit knowledge sets for public policymaking and implementation

There are several reasons for exploring the knowledge sets that underpin public policymaking. Firstly, it is essential to launch a successful public policymaking process. Secondly, it is also a prerequisite for the democratic process of policy formulation and implementation. Thirdly, and of particular relevance to one of the main themes of this study, they can reduce the proportion of unplanned surplus change.

Institution-centred tacit knowledge dominates the process of public policymaking and therefore sub-types are more easily generated. I will now present some of them.

6.1 Tacit knowledge within the institutions involved in the change agenda

Many of the participants in public policymaking work within the institutions involved in the process. They, therefore, have the institution-centred tacit knowledge needed to run these institutions. The institution-centred tacit knowledge associated with the participating background institutions is both used and complemented in the public policymaking process, as they work with other institutions, such as local government institutions.

As each institution has its own specific organisation, it is, therefore, appropriate to distinguish a type of organisational tacit knowledge within the concept of institution-centred tacit knowledge. At the same time, the question arises as to how organisational and institutional tacit knowledge differ. Since behaviours within or in support of an institution are to a large extent formalised and follow fixed norms, it is the content of this formalisation that distinguishes institution-centred tacit knowledge from organisational tacit knowledge in general. This formalisation, while being one of the keys to the stable functioning of the institution, can lead to knowledge conflicts with other types of knowledge that are necessary for public policy actions.

In contrast to this tacit knowledge, which is necessary for the daily routine and operation of the institutions and is therefore active, network-based institution-centred tacit knowledge can be classified as passive. A distinction can therefore be made here between active and passive institution-centred tacit knowledge.

6.2 Narrative-based institution-centred tacit knowledge in the public policymaking process

Participants in the KNOWandPOL research emphasised that the narrative component became important in the research. In the interviews, interviewees were asked to tell their own narrative about their participation. Therefore, it seems legitimate to include the adjective 'narrative' in the name of this sub-type of institution-centred tacit knowledge.

Since public policymaking also takes place within an institutional framework, involving multiple institutions, and has as one of its aims the creation or modification of institutions, it is also in the processes of interaction that institution-centred tacit knowledge is produced. According to the narrative model of public action, the participants in the process produce an institution-centred tacit knowledge in the course of their experience, which is separable from the other types, since it is primarily about the inter-institutional part of the process of public policy itself. In this process, conflicts can arise between institutions, and between them conflicts of knowledge.

6.3 Institution-centred tacit knowledge related to the institutions that are being created

The third type of institution-centred tacit knowledge arises from institutions that are created in the public policymaking process or that emerge as a result of one or more of the existing institutions being modified. Here I would like to recall the broader conceptualisation already made that not only institutions that are physically located in buildings are associated with the institution-centred kind of tacit knowledge, but also with procedures that become formalised, regulated, standardised ways of working in public policy. Thus, this third form may become the newest kind of institution-centred tacit knowledge within research.

6.4 Tacit knowledge in hidden networks or network tacit knowledge

Through the social hidden networks already mentioned, there is a flow of knowledge and, necessarily, a flow of tacit knowledge. An apt example[3] illustrates this as follows. In a small town, a local history museum was set up, but only a minority of the local population visited it and formed an opinion based on personal experience. However, after some time, the research

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[3] For this example, I am indebted to the German sociologist Professor Heiner Treinen, who told me so during our personal meeting.

showed that although the majority had still not seen the museum, everyone now had an opinion about it, because information about the museum and attitudes to its evaluation had been disseminated through networks. It is mainly the attitudes of judgement that are spread most implicitly through gestures, facial expressions, and body movements. This is an example of an institution, which suggests that tacit knowledge is also transmitted and preserved through the hidden networks of society. This also applies to institution-centred tacit knowledge, although only a small part of the tacit knowledge about museums can be considered institution-centred.

The affinity between institution and network is also based on the fact that the institution is a specific network with a fixed hierarchy. Therefore, among the tacit knowledge types that exist and circulate in networks, institution-centred tacit knowledge may be present alongside other knowledge types, because the threads of these networks also run through institutions. Some of the tacit knowledge from these networks can therefore also be considered as institution-centred.

7. Unplanned surplus change and limited use of tacit knowledge resources

The great world economic crisis of 1929-33 made it clear that the state needed to intervene in the economy in a timely manner and, in addition, to address the development of underdeveloped regions. Even more social intervention took place in the states that were building a so-called "socialist" social system and a planned economy. However, these interventions have often produced undesirable results, the study of which has also been increasingly taken up in sociological research in the latter states. Against this background, it seems worthwhile to pay particular attention to the research and management of unintended surplus changes in the Central and Eastern European region.

It seems evident that in the public policymaking process that takes place at the local and small regional level, unplanned surplus changes are also mostly of a smaller scale. But for me, the main question here too is really whether, by taking account of and using different types of knowledge, the unfolding and impact of unplanned surplus changes can be mitigated.

7.1 Possible causes of unplanned surplus change in knowledge management

The primary cause of unplanned surplus change associated with large-scale human social action is the complexity of society, of which I will now try to shed light on just a few aspects from the point of view of knowledge types. Since social action in the context of the member-state or the European Union involves some form of planning and the prior collection and processing of knowledge, some of the causes of the surplus changes that will occur are already imperceptibly present at these stages.

The infinite complexity of society is also reflected in the fact that random and unexpected changes occur, perhaps just after the assessment phase of public policymaking has been completed. Thus, the subsequent stages of public action will take place in these modified circumstances, and the surplus change will be the result of chance from the point of view of those who carry out the intended public policy action.

The reasons for the surplus change include the 'blind spots' of theories, which mean that they hide parts of reality from researchers during preparatory research. In this way, factors may be left outside the scope of a preparatory study that could induce some kind of

surplus change. In the philosophy of science, the idea of theory-laden observation already appeared in the 1950s and 1960s.

Here I cannot examine the phenomenon of unplanned surplus change in its entirety. In line with the aims of this paper, I will limit myself to the causes that can be linked to types of knowledge, knowledge conflicts, and, within these, to the forms and sets of tacit knowledge that are institution-centred. The causes of unplanned surplus change thus include, at several levels, the lack of institution-centred tacit knowledge on the one hand, and the neglect of these types of knowledge in the process of public policymaking on the other.

In what follows, I will examine the consequences for the public policymaking process of not researching and taking into account the sub-types of institution-centred tacit knowledge. In discussing these, I follow the order in which I have discussed the four types of institution-centred tacit knowledge.

As a first factor, I will therefore discuss institution-centred tacit knowledge in existing and background institutions. This type of knowledge is worth considering and including for two reasons. First, because this knowledge can be linked to the preparatory operations of the public policymaking process. On the other hand, because it supports efforts to build new institutions or to modify and improve existing ones.

In particular, the mobilisation of tacit knowledge linked to the underlying institutions is best ensured by involving more experienced staff. This work can start at the very beginning of the preparatory processes. It is here that simulations of flexibility and restructuring can be considered and possibly conducted to some extent.

Traces of institution-centred tacit knowledge of narrative origin were, as already mentioned, discovered by KNOWandPOL researchers during the process of conducting in-depth interviews and, upon closer examination, were found to be of an inter-institutional nature. The individual action stories are linked into a whole by the policy goals and their implementation. One of the sources of the narrative tacit knowledge that emerged was that the participants in public policymaking were primarily linked to their background institutions or their so-called 'parent institutions' in their activities, but also used the tacit knowledge they had acquired there in building and maintaining relationships with other institutions. The other source was that their actions also involved examining the functioning of the institutions and their staff that were subject to the objectives and thus had to be changed. In doing so, they developed proposals for change or even sought to set up a new institution and gained experience in this respect. Their narratives have already directly reported on knowledge conflicts as well as unplanned surplus changes.

The third subtype of institution-centred tacit knowledge was tacit knowledge related to newly emerging institutions. Since public policymaking always involves the transformation, expansion, or operational change of an existing institution, as well as the introduction and operation of a new institution, as the process of change progresses, a new kind of institution-centred tacit knowledge is generated by the staff developing the new institution or by the people working in or coming into contact with it. Taking this into account and using it in the appropriate later phases of public action can be useful to achieve various goals, including the formulation of conscious knowledge management to mitigate unplanned surplus change. For example, a new institution in the health sector might take the shape of the introduction of a

new catalogue of diseases in a particular field. The tacit knowledge of the staff involved in its design and implementation can be valuable for the staff responsible for the continued running of the institution. A conflict of knowledge may also arise in this example if the classifications of this catalogue, which are assigned a code number, prove to be too simple for the complexity of the symptoms observed in practice.

In order to access the institution-centred tacit knowledge that is disseminated and retained through networks, participatory research is needed in addition to the familiar methods of sociological network research. Mapping the expectations of planned policy changes, and in particular their institutional aspects, seems appropriate because they reflect both the mistakes of the past and the 'gut attitudes' of network stakeholders in response to the news they receive.

7.2 The relationship between unplanned surplus change and knowledge factors

Knowledge conflicts, like tacit knowledge sets that are ignored and unused, can have their own consequences. The omissions in these areas may establish a strongly probabilistic theorem: all other things being equal, the less the tacit knowledge present in the arenas of action is involved in the implementation of public action and policy, the more likely it is that a larger unintended surplus change will occur.

Although knowledge conflicts are not always desirable, they can have the advantage that their recognition can provide a way to prevent unintended surplus change from occurring. Indeed, in the case of tacit types of knowledge, knowledge conflicts may also draw attention to a knowledge set. Dealing with it can have a mitigating effect on the development of unintended surplus change.

8. Addressing the types of institution-centred tacit knowledge

The question rightly arises: how can all forms of institution-centred tacit knowledge be accessed or exploited? To do this, we should consider the main ways in which tacit knowledge sets can be used. These include externalisation, recontextualization and intuition.

We already know from experience that, to a certain extent, knowledge sets composed of sub-types of institution-centred tacit knowledge can be externalised, i.e., transformed into explicit forms, like other types of tacit knowledge. At the same time, the bulk of tacit knowledge is always preserved in its original form. This mode of access has been studied primarily by the excellent Japanese researcher Ikujiro Nonaka and his colleagues, who have tried to develop procedures for externalisation (Krogh et al., 2000). If we look at the literature, externalisation seems to be the most widespread form of exploitation, although the study of everyday practice clearly shows recontextualization to be dominant. The disadvantage of externalisation is that it both significantly transforms the knowledge that it makes explicit and distorts the part of the knowledge that remains tacit. It is therefore recommended for limited use.

The other way of use, recontextualization, has already been referred to here and there in this paper. This mode is more natural and economical because it follows the procedure of putting the holders of knowledge types into a situation of action by providing them with the appropriate context for their tacit knowledge. I call this procedure the recontextualization of tacit knowledge because the user mobilises such knowledge in the same or a very similar context to the one in which it was created. In the process of public policymaking, this means that sub-types of institution-centred tacit knowledge are brought into the public policymaking

process and thus provide their users with opportunities for action, not just discussion, at the right place and time. It is in finding these two latter elements that the difficulties of using institution-centred tacit knowledge lie. I will write about the third way of use in a separate paper.

9. Concluding thoughts

In my study, I have examined how, from the perspective of tacit knowledge theory, the design and implementation of policies through the process of public policymaking and conscious knowledge management can be facilitated by the knowledge and use of specific sub-types of tacit knowledge. In doing so, I have sought to shed light on the roles that each type of institution-centred tacit knowledge can play in the collective process of public policymaking. The KNOWandPOL research, which primarily focused on the effectiveness and implementation mechanisms of health and education policies, has produced several empirical findings on the types of knowledge and their conflicts. In processing these, I have directed the focus of the investigation towards how the participants in these policies use the four types of institution-centred tacit knowledge available. The first conclusion to be highlighted is that the development of appropriate knowledge management is of particular importance for the effective functioning of policies. This is an essential prerequisite for implementation and for dealing with the difficulties and new situations that arise during implementation. An integral part of the development of appropriate knowledge management is the identification of sub-types of institution-centred tacit knowledge and the assessment of individual knowledge sets, as this creates the conditions for them to play their role in the public policymaking process.

The identification and use of types of institution-centred tacit knowledge can also be fruitful in mitigating and managing the unplanned surplus changes that also accompany public policymaking. Thus, in a broader sense, quality knowledge management also contributes significantly to the development of quality assurance in public policymaking. These lessons are, in my view, valid at both national and EU level of policymaking.

I have briefly discussed two of the three main ways of using tacit knowledge, namely externalisation and recontextualization. I am firmly of the opinion that the latter is the more important and effective. Of course, there are situations in life where externalisation is preferable. And it is particularly important for the policies to be developed and implemented to ensure that all types of tacit knowledge are usable, and that people with different types and subtypes of tacit knowledge are adequately involved in public policymaking processes.

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