PSIHOLOGIJA, 2012, Vol. 45 (1), 71–94
UDC 005.332.2:159.9.072(497.11)

DOI: 10.2298/PSI1201071B

INTERVENTION STUDIES[1]

Creating Organizational Innovations in Countries in Transition Using Finnish Change Laboratory: A Case Study from Serbia

Zlatko Bodrožić and Ivana Stepanović

Institute of Psychology, University of Belgrade, Serbia

The Finnish Change Laboratory intervention method has been used in several Western countries to support innovation and learning within organizations. This study explored the applicability of the Change Laboratory method to work activities in Eastern European transition economies. The case of a Change Laboratory project at a Serbian publishing house was examined and discussed. The Change Laboratory led to a clear break from previous models and resulted in a new, much more efficient model of work organization based on teams. The studied publishing house can be characterized as an innovator within a relatively laggard industry. This characteristic increased the Serbian publisher's potential for developing "learning partnerships" with publishing activities in EU Member States. These "learning partnerships" enabled appropriate Western concepts to be found that could be used as stimuli to develop a new model of work for the publishing house during the Change Laboratory.

Keywords: *Change Laboratory, publishing house, organizational innovation, Eastern Europe*

The last decades of the 20th century and the first decades of the 21st century witnessed the change of paradigm in the world of work. The old organizational paradigm was characterized by pyramidal structures and several levels of managers and employees with narrowly defined roles and tasks. Organizations that still show these characteristics are today often seen as bureaucratic dinosaurs (Perez, 2009). Practitioners in Nordic countries created many organizational innovations contributing much to the development of a new organizational

1 The primary focus of our journal is the experimental approach to psychology. Occasionally, a separate section is created in order to publish examples of new scientific paradigms in psychology that do diverge from our primary focus. The research performed by Bodrožić and Stepanović is one such example and we are glad to present it to our readers.

Corresponding author: zbodrozi@f.bg.ac.rs

paradigm. Scholars in Nordic countries have developed scientific approaches to support practitioners in creating innovations. One such approach is the Finnish Change Laboratory (CL).

The CL is a research-based intervention method that supports innovation and learning within organizations. It was developed in the second part of the 1990s at the University of Helsinki (Engeström, Virkkunen, Helle, Pihlaja, & Poikela, 1996; Virkkunen, Engeström, Pihlaja, & Helle, 1997). In the CL, practitioners step back momentarily from their individual daily tasks and make the system of their joint activity into an object of collaborative inquiry and developmental experimentation. A vision for a new model of work is developed, tested and implemented step by step.

While CLs were used effectively in developed countries such as Finland, New Zealand and the United Kingdom, the method had not yet been tried out in countries in transition such as Central and Eastern European countries. The applicability of Western concepts and methods for supporting organizational change in Eastern Europe cannot be taken for granted. Attempts to apply such concepts and methods to work activities in Eastern European transition economies were often unsuccessful (Soulsby & Clark, 2007). This article addresses a CL project at a Serbian publishing house. Serbia is a country which was late in starting its transition. Many Serbian industries can be considered laggard in relation to EU Member States' industries (Bartlett, 2009). This is also true for the publishing industry. Companies in Nordic countries abandoned bureaucratic models of work organization and developed new ones much earlier than companies in Serbia. The objective of this study is to explore the applicability of the CL method to work activities in countries in transition such as Serbia.

We begin by describing the theoretical background and process of the CL approach. Then the research method used in this study is presented. Subsequently, the evolutionary analysis of a CL project a with Belgrade-based publishing house (hereafter called "Publisher") is described. Finally, a discussion and conclusions concerning the question of applicability of the CL approach to work activities in countries in transition are provided.

THEORETICAL FRAMEWORK: CHANGE LABORATORY AS A METHOD OF INTERVENTION FOR SUPPORTING ORGANIZATIONAL INNOVATIONS

CL was developed on the basis of cultural-historical activity theory (CHAT) (Vygotsky, 1978, Leontjev, 1978) and the CHAT-based intervention methodology of Developmental Work Research (Engeström, 1987; Engeström, 2005). Developmental Work Research was developed in Finland by a group around Yrjö Engeström in the last two decades of the 20th century. Engeström built on CHAT concepts for analyzing the past and current state of work

activities. He added the theory of expansive learning (Engeström, 1987) to support practitioners to develop new models for their future work activities. The CL approach is a condensed and very intensive form of utilizing Developmental Work Research, which typically lasts from three to twelve months (Engeström et al., 1996; Virkkunen et al., 1997; Bodrožić, 2008).

Initiation phase

Before the actual CL project kicks off, it is usually necessary to outline the project's scope and goal as well as to gain a first insight into the main problems. Visits to the research partner and interviews with its key stakeholders are ways of obtaining a first impression of its activity and the main existing problems.

Phase of analysis

The focus of this phase is on the analysis of the the past and current state of the work activity. The analysis of emergence and evolution of the work activity during main developmental periods leads to a deep understanding of the present activity's characteristics. This first type of analysis is usually based on interviews with the organization's founders and long-time employees as well as on the analysis of important documents from archives. The historical analysis is combined with the empirical analysis of the work activity's present situation, including the detailed analysis of present key problems and disturbances as well as the analysis of the activity's development potentials. This second type of analysis is usually based on interviews with the organization's managers, employees and partners as well as on participant observation and video recordings of important work situations.

The key model for analyzing the developmental periods and the current state of the work activity is the activity system model (Figure 1).

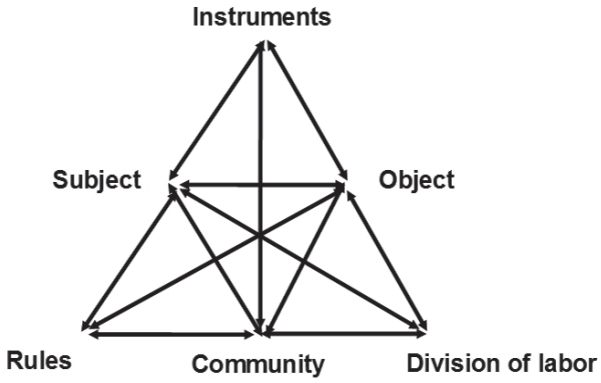

Figure 1. Activity system model (Engeström, 1987)

Activity systems comprise the individual practitioner, colleagues and co-workers in the workplace community, conceptual and practical tools, and the

shared object as a united dynamic whole. The model intends to link individuals and the society in which they live and work. It also reveals the decisive feature of multiple mediations in activity. The subject and object – or actor and environment – are mediated by artifacts that function as instruments, including symbols and representations of various kinds (Engeström, 1987). The concept of object is central within CHAT. The object is understood as a collectively constructed entity through which the meeting of a particular human need is pursued (Leontjev, 1978; Engeström, 1990; Foot, 2002).

As organizations have become increasingly intertwined in the last 30 years, it is often necessary to analyze not only one work unit or small organization, but an entire network of interacting organizations. To capture such complex phenomena, activity theorists use a more complex unit of analysis consisting of two or more activity systems (see Figure 2, a model consisting of two interacting activity systems). Networks of interacting organizations can be analyzed using a model of a network of activity systems with potentially shared objects (Engeström, 2001).

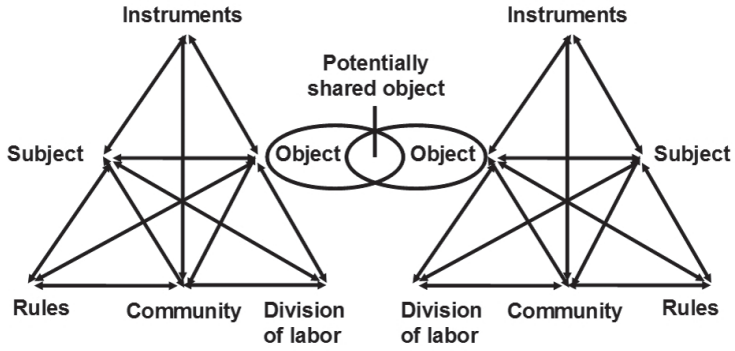

Figure 2. Two interacting activity systems with a potentially shared object (Engeström, 2001; slightly modified)

The units of analysis of "activity system" and "network of activity systems" emphasize that activities display characteristics of sustained systemic wholes. Correspondingly, existing problems encountered in the analysis phase should be understood as part of a systemic whole, as dysfunctional byproducts of the current logic of the activity system or network. Quick solutions to existing problems without changing the overall "model" of the present activity often entail the emergence of new problems. The use of systemic units of analysis is crucial to develop an understanding that is deep enough to be able to support the qualitative transformation of the work activity in the later part of the CL process.

CL sessions: process and setting

After the phase of analysis has been completed, a dynamic period of CL sessions follows where practitioners develop a new model of work for their joint activity. A concept that is important in capturing the transition from a past and present to a future form of work organization is the concept of zone of proximal development. Vygotsky (1978) introduced this concept to characterize the potential for development in a child's maturing process. Engeström extended the concept to characterize the potential for development towards new forms of work activity. The zone of proximal development in the context of work can be comprehended as a hypothetical transitional area towards an emerging, potentially more advanced form of the activity (Engeström, 1987). CL processes can be viewed as journeys across the collective zone of proximal development of an activity system. Developmental processes in the CL are guided by the main process model: the cycle of expansive learning (Figure 3).

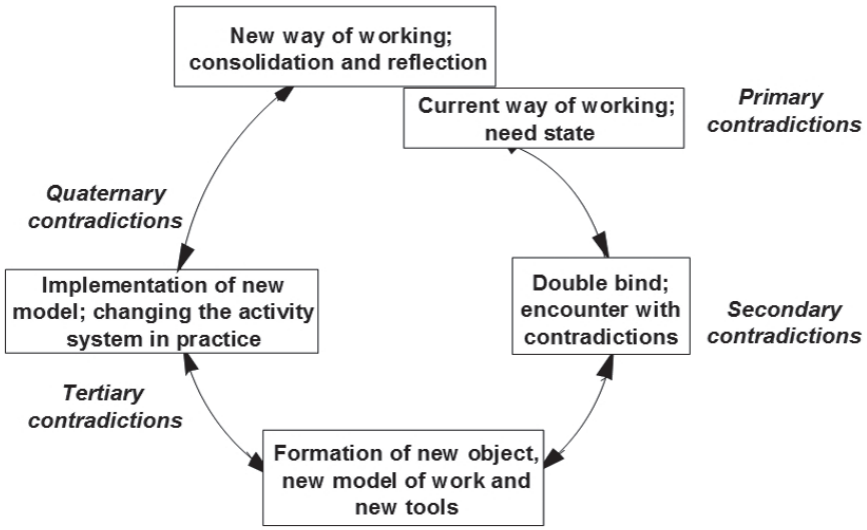

Figure 3. Cycle of expansive learning (Engeström 1994; modified)

The first phase of the expansive learning cycle addresses a state of need in an activity. To get a grasp of the need state, the researcher examines data about problems experienced by actors in their daily work. The state of need is connected to primary contradictions. Primary contradictions of an activity are usually related to a contradiction within one or more elements of an activity system (e.g. within rules). Actors perceive competing alternatives and are unable to determine the direction of their efforts (Engeström, 1987; Kerosuo, Kajamaa & Engeström, 2010). An example of primary contradictions that can be

observed in many activities is the contradiction between the pressure to produce something with maximum quality and simultaneously with minimum use of time and money.

In the second phase of the expansive learning cycle, the complete data about the activity (collected by interviews, participant observation, video recordings of sessions, document analysis, etc.) is used to discover secondary contradictions that describe the core challenges of the activity and that can act as drivers of change. A secondary contradiction can often be related to a transformation that took place within the activity system or its network and "destabilized" the system. It becomes manifest between two elements of an activity system. Historical analyses are often crucial to shed light on transformations and related secondary contradictions. An example of a secondary contradiction could be the contradiction between (1) the object of activity, which becomes so complex that it makes cooperation between experts necessary and (2) the division of labor within the activity, which hampers cooperation. Secondary contradictions are often experienced as "double binds" by individual actors (Engeström, 1987; Kerosuo et al., 2010).

In the third phase of the expansive learning cycle, participants analyze the secondary contradictions and explore qualitatively new models as possibilities for resolving secondary contradictions. In the course of this phase, an outline of the next, more advanced developmental form of the activity system is created. In the fourth phase of the expansive learning cycle, the new model is examined and implemented, and subsequently adjusted and enriched. In the course of this phase, tertiary contradictions, contradictions between the old and new models of the activity, usually occur: practitioners used to conducting their work following the logic of the old model may find it difficult to adjust to the new model. In the fifth phase of the cycle, the new model of work is generalized and consolidated. Consolidation and generalization can entail quaternary contradictions, contradictions between the new activity and its neighboring activities, e.g. partners or clients (Engeström, 1987; Kerosuo et al., 2010).

The process in the CL follows the steps of the cycle of expansive learning. The challenge is, however, to complete a major part of the phases of the cycle in the course of 10 to 12 sessions. These sessions usually take place once a week, often with additional meetings of subgroups or task forces in between main sessions. CL sessions take place in a room or space in the vicinity of the daily workspace that is equipped with a wide variety of instruments for analyzing disturbances and bottlenecks in the prevailing work practices, and for constructing new models and tools for resolving these problems (Engeström, 1999).

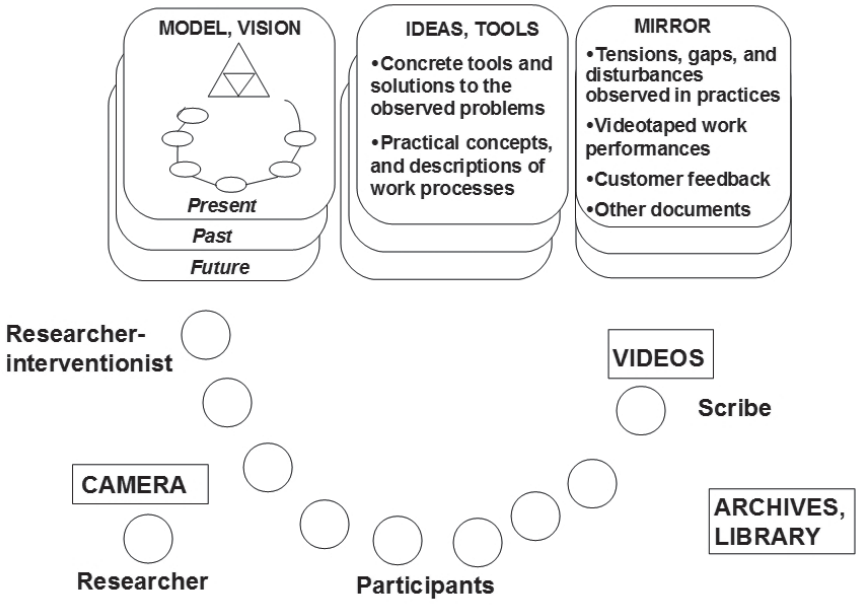

Figure 4. Typical setting of a Change Laboratory (Engeström et al., 1996)

The setting of the CL is depicted in Figure 4. The main tool within the setting is a 3x3 set of surfaces for representing the work activity. Participants in the CL process face the surfaces, aided by a scribe, video equipment and additional tools such as relevant databases (Engeström et al., 1996).

The horizontal dimension of the surfaces offers different levels of abstraction and theoretical generalization. At one end of the horizontal dimension, the mirror surface is reserved for representing and examining experiences from work practice. Experiences take the format of stories, interviews, videotaped work episodes, as well as customer feedback and performance statistics. At the other end, the model/vision surface is used for conceptual analysis with the main theoretical tools. The activity system model or the network model is used to analyze the systemic quality and interconnections of the work activity. The third surface in the middle is reserved for intermediate ideas and tools used to facilitate the analysis of problem situations and to design a new model of the work activity. As participants move between the mirror surface, with data of their own experiences, and the model/vision surface, involving theoretical tools, they also produce their own intermediate ideas and partial solutions. These are also represented on the middle surface. The vertical dimension of the surfaces stands for movement in time, between past, present and future (Engeström et al., 1996).

Guided by the cycle of expansive learning, and equipped with the described 3x3 set of surfaces, the dynamic part of the CL typically starts with the

mirror of present problems. The roots of current trouble are traced by mirroring experiences from the past and then modeling the past activity system. The next step is to model the current activity and its inner contradictions, which enables participants to focus their transformation efforts on essential sources of current problems. The process then moves to the envisaging of a future model of the activity. This part of the process includes the concretization of the new model by means of identifying partial solutions and tools which could be implemented first. The CL sessions usually conclude with a (partial) implementation of the new model of work (Engeström et al., 1996). All CL sessions are usually recorded on video.

Phase of implementation

At the end of the dynamic part of the CL, the implementation of the new model begins. The phase of implementation is usually supported by one or two further CL sessions which can take place after the new model has been in use for some time. During these sessions, the problems occurring after the implementation of the new model can be discussed and the new model can be adjusted and consolidated, if necessary.

CASE AND METHOD

The objective of this study is to explore the applicability of the CL method to work activities in countries in transition. A CL project with a work activity in Serbia is studied to accomplish this. The specific work activity under investigation is the Belgrade-based publishing house "Publisher". Publisher is a small but successful family business with about 50 employees. Publisher was interested in starting a CL project to develop a model of work organization that would support its development from a small, family business into a medium-sized company. The project started in May 2009. The main phases of the project were completed in February 2010. The first author of this study acted as the main facilitator of the CL. Prior to Publisher's CL project, the first author was involved in different CL projects in Western countries.

To be able to start the discussion of the applicability of the CL approach in Eastern Europe, a longitudinal case study approach is applied (see Pettigrew, 1990; Van de Ven & Huber, 1990). A typical focus of longitudinal case studies is the process of organizational change within a specific work activity (see Van de Ven, 1992; Pettigrew, 1997; Poole, Van de Ven, Dooley, & Holmes, 2000; Van de Ven & Poole, 2005). The process of organizational change investigated in this study is Publisher's development before (1989–2008), during (2009–2010) and shortly after (2010–2011) the CL project. Publisher's development from 1989 to 2011 was captured by collecting different kinds of qualitative data (see Table 1).

Table 1: Overview of instruments and data

Type	Time focus of data	Time when data was collected	Content of data
1. Interviews about historical development	1989–2008	2009	50 semi-structured interviews with all owners and employees about Publisher's historical development (1989–2009)
2. Document analysis of archives	1989–2008	2009	Analysis of the following written documents filed by Publisher: – Meeting protocols and memos – Strategy plans – Important correspondence with clients or other actors – Books by Publisher from different years
3. Interviews about current problems	2009	2009	50 semi-structured interviews with all owners and employees of Publisher about current main problems and opportunities and those in the past
4. Participant observation	2009	2009	Publisher's main coordination meetings and other important meetings
5. CL sessions	1989–2010	2009–2010	Video recordings of ten CL sessions with Publisher
6. Follow-up interviews	2010–2011	2011	18 semi-structured interviews with all members of Publisher's publishing activity about the changes occurring after the intervention
7. Participant observation	2010–2011	2010–2011	Publisher's main coordination meetings and other important meetings to investigate the changes occurring after the intervention

The period before the CL (1989–2008) was addressed by semi-structured interviews with all managers and employees about qualitative transformations that had taken place in Publisher's past evolution. Additionally, written documents from Publisher's archive were analyzed. The period during the CL (2009–2010) project was captured by semi-structured interviews with all managers and employees about Publisher's current problems and potentials. Furthermore, participant observation was adopted to examine the main coordination meetings. All of the ten CL sessions with Publisher were captured on video. One year after the final CL session (2011), semi-structured follow-up interviews with all members engaged in Publisher's publishing activity were conducted. These follow-up interviews were combined with participant observation to investigate what happened after the CL intervention.

The analysis of the data followed the principles of "evolutionary analysis" (Toiviainen, 2003; Poole et al., 2000). The data was processed towards sequences of action and further towards developmental periods of Publisher. These periods were characterized by major changes in Publisher's model of work organization. The CL intervention is regarded as effective if Publisher's model of work organization after the intervention has developed beyond the old organizational paradigm in the sense of Perez (2009). The next section describes the outcome of the evolutionary analysis.

RESULTS: PUBLISHER'S DEVELOPMENTAL PROCESS FROM 1989 TO 2011

Publisher's evolution before the CL

Publisher was formed at the end of the 1980s. The founder of Publisher, a professor of education, envisioned a qualitatively new concept for children's books in Serbia (then Yugoslavia) that would support children's development differently to how children's books from the socialist era supported them. His vision was that these books should (1) support interaction between children and adults, (2) find a way to address "difficult" and taboo topics through the use of humor in text and illustrations, and (3) have high-quality texts and illustrations.

Putting this vision into practice, he developed a number of picture books about animals. The pictures for these books were created by a young illustrator, now one of Serbia's most famous illustrators. The manuscripts for these early books were commented by family members and potential users of the books, such as preschool educators. The manuscripts were then further developed and a small quantity of the books was printed. The books were then sold to preschool institutions interested in a new type of children's books. In the early 1990s, both the creation and selling of the books was realized primarily by the founder as an individual actor.

As these early books were received well by children, parents and educators alike, it became clear that the new concept of children's books met an existing need in Serbia. This existing need can be described as the need to support children's learning and development. The future object through which the meeting of this need was to be pursued was the creation and distribution of children's books that supported the learning and development of children and their parents. The idea was born to develop an own publishing house that would focus on this object. The founder's daughters held university degrees in literature sciences. Hence, the founder's family provided a sustainable basis for the establishment of its own publishing house.

In June 1993, Publisher was formally established as a publishing house, with the founder and his family members as the owners and editors of the books. For much of the 1990s, Publisher's base was one room in the founder family's flat. The main instrument for creating the books was the qualitatively new concept of children's books described. The quality of Publisher's books was one of the main characteristics that distinguished their books from others. Consequently, quality became a core value in Publisher's activity. Step by step, a few people were employed to support the family members in operational accounting, the distribution of books and, after some time, in designing and illustrating them. Since the entire staff of Publisher worked in one room, the company could be described as a team in which everyone did everything that "rolled in" as a work task. The atmosphere in the team was characterized by an enthusiasm typical for pioneers. Planning, division of labor and coordination were realized on an ad-hoc basis.

On the basis of the analyzed data, it can be concluded that a model of work organization which we call "Quality-oriented family model" characterized Publisher's activity during the 1990s (Figure 5).

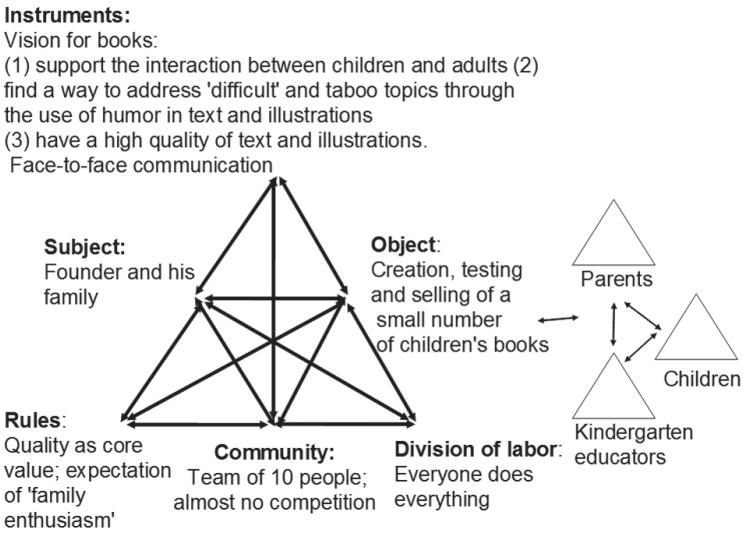

Figure 5. Publisher's model in the 1990s: Quality-oriented family model

At the end of the 1990s and the beginning of the 2000s, Publisher created a number of books that were received with enthusiasm and became bestsellers in Serbia. Publisher established a reputation as a creator of "good children's books". This success became the foundation for Publisher's growth in the 2000s. The number of books published increased and new employees were hired. Among the new employees were editors, proofreaders, designers, "typesetters" and others. In February 2002, a new central office was opened to provide a basis for the growing number of employees. Since more rooms were available at the new central office, the one-room-one-team based organization of work was abandoned. Employees of the same profession often used the same work instruments (proofreaders shared dictionaries, editors shared examples of children's books, etc.). Hence, it appeared to be most convenient for employees with the same professional background (proofreading, editing, design, etc.) to share a room. Consequently, functionally specialized sectors were formed. This development was not uncommon, as functional specialization was and often still is a key principle of organizing work in publishing houses in Serbia. The new sectors were headed by executives chosen mainly following the principle of seniority.

Specific instruments to perform particular tasks were created within each of the new sectors. For example, a guideline for proofreading to minimize the number of linguistic errors was developed. The function of coordination was fulfilled mainly within the sectors. Additionally, a weekly meeting with the heads of sectors was held. The developments within the sectors entailed a systematization of work processes. While the quality of books was kept very high, it became possible to further increase the number of books published. On the basis of the analyzed data, it can be concluded that a model of work

organization which we call "Quality-oriented bureaucratic model" characterized Publisher's activity during the 2000s (Figure 6). It is important to emphasize that the term "bureaucratic model", although it often has a negative connotation, should not be understood in a negative, but in a neutral way (see Figure 8 for a typology of different models of work).

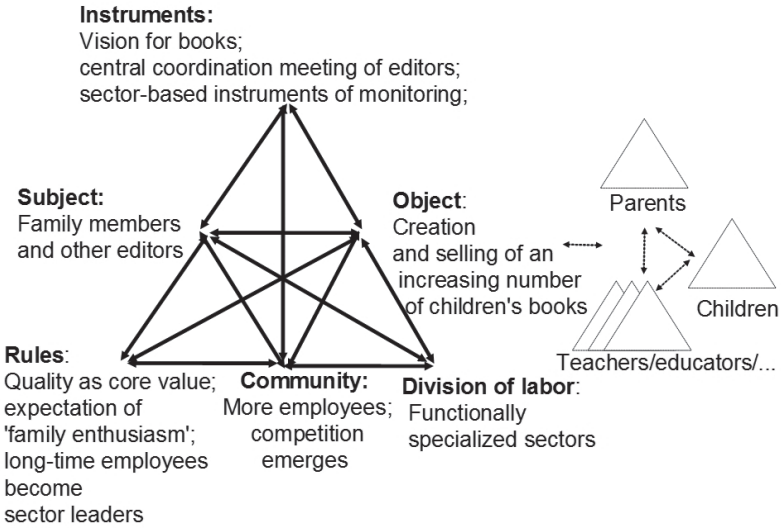

Figure 6. Publisher's model in the 2000s: Quality-oriented bureaucratic model

In 2003, the market for publishing school textbooks in Serbia was opened to private publishers. Publisher was among the first private publishers to enter this market. In the subsequent years, Publisher created school textbooks for elementary schools (grades 1 to 8). In this endeavor, Publisher's editors again followed the previously described new concept of books. As a consequence, Publisher's schoolbooks differed considerably from traditional Serbian (or Yugoslavian) schoolbooks. The schoolbooks were received well in Serbian schools and Publisher quickly became one of the leading publishers for schoolbooks. One of Publisher's books received an international award at the Frankfurt Book fair. After the decision to enter the schoolbook market, the numbers of books and employees increased again. Yet, creating schoolbooks was quite different to creating conventional children's books. Schoolbooks have to comply with strict rules regarding content and other characteristics in order to be accepted by state education institutions. The creation of schoolbooks took more time, involved more actors and was more difficult to plan. Moreover, tensions between Publisher's qualitatively new concept of children's books and educational regulations about schoolbooks had to be resolved. One consequence of all of these challenges was that schoolbooks occupied many of Publisher's resources.

Although entering the schoolbook market had enhanced Publisher's further growth, it also entailed many difficulties. At the end of the 2000s, the number of disturbances had increased considerably, which led to a lower degree of satisfaction among Publisher's employees and managers. In addition to these internal difficulties, there was a growing pressure from outside the company. After the political change in Serbia in 2001, many new Serbian publishers emerged, many of which published children's books. On top of this, multinational publishing companies entered the Serbian market and became strong competitors to Publisher. Against this background, the "Quality-oriented bureaucratic model" was considered to be an increasingly less reliable basis for Publisher's further development. There was a feeling among many employees and managers that something needed to be changed. This was the state at Publisher before the CL project began.

The CL intervention

The idea for the CL project was born at a coincidental meeting between the founder of Publisher and the project leader of the research team at the University of Belgrade in April 2009. The analysis phase of the project was from May 2009 to October 2009. The CL sessions started in November 2009.

At the first CL sessions, the main problems connected to the creation of books were discussed and analyzed. It became clear that the process of creating books did not run smoothly. Since quality was a crucial value, a manuscript was checked several times before going to press. The final stage of the book creation process could take a very long time. When one of the sectors was overwhelmed with work, as quite often happened, work on some manuscripts was blocked, sometimes for weeks or even months. As a consequence, the work on these manuscripts had to be started again almost from scratch, which caused frustration among those involved. In such cases, employees from different sectors had a low degree of understanding for each other's respective tasks. For example, conflicts between proofreaders demanding "final" corrections within manuscripts and typesetters rejecting "repetitive" corrections occurred frequently. While the quality of the final product was always ensured in the end, the efficiency of the book creation process was rather low.

When deadlines for books were approaching, the tension between quality and efficiency often became very pronounced. Editors demanded their deadlines for books to be met, especially if they had to be ready for major book fairs (e.g. Belgrade, Bologna or Frankfurt book fair). In contrast, employees from other sectors (e.g. proofreaders or designers) had their own rules and priorities, often deviating from the editors' ones. As a consequence, editors repeatedly found themselves in situations in which they had to make a decision: either a book would have 100% quality but would not meet the deadline or it would meet the deadline but may contain errors. The quality vs. time phenomenon was often

experienced as a psychological double bind. The following paragraph, an extract from an interview with one of Publisher's editors, illustrates this:

> Editor: I had to decide whether the book should go to printing in a bad state or whether the book should be late. ... This is not good. ... This is a typical situation, it happens quite often. [...] What I want to say is that we have to change something.

This psychological double bind is an individual actor's expression of the need state the publishing system of Publisher was in. The need state was closely connected to the primary contradiction of quality vs. time. Quality was one of the key values for Publisher and it was unthinkable to compromise it. However, time and efficiency also had to be taken into account. Those of Publisher's employees who had experienced this psychological double bind demanded that the future process of creating books should be organized such that quality and efficiency were no longer mutually exclusive.

In the course of the first CL sessions, the deeper reasons for the repeated occurrence of such and similar dilemmas were traced. The historical analysis described in the last section was used in the CL discussions to accomplish this. The model of Publisher in the 2000s, the "Quality-oriented bureaucratic model", was characterized by functionally specialized sectors. Within the functionally specialized sectors, there were instruments and rules that ensured coordination and quality for part of the book creation process (e.g. proofreading, design, etc.). However, virtually no instruments and rules existed that could support the entire book creation process. A weekly meeting with the heads of the sectors was the only regular meeting that attempted to coordinate the entire process. However, this meeting was too remote from the ongoing daily work to enable the effective coordination of book creation. No clear responsibility for the entire book creation process existed.

The main secondary contradictions could be described as existing between the object of the activity (books as a complex whole that required cooperative work between different experts) and the sectorized division of labor, instruments and rules (Figure 7). Since the number and variety of books increased after Publisher entered the schoolbook market, these contradictions were aggravated, explaining the increase in problems in the last part of the 2000s: frequent disturbances in the book creation process, frequent conflicts between employees from different sectors, and a decrease in efficiency.

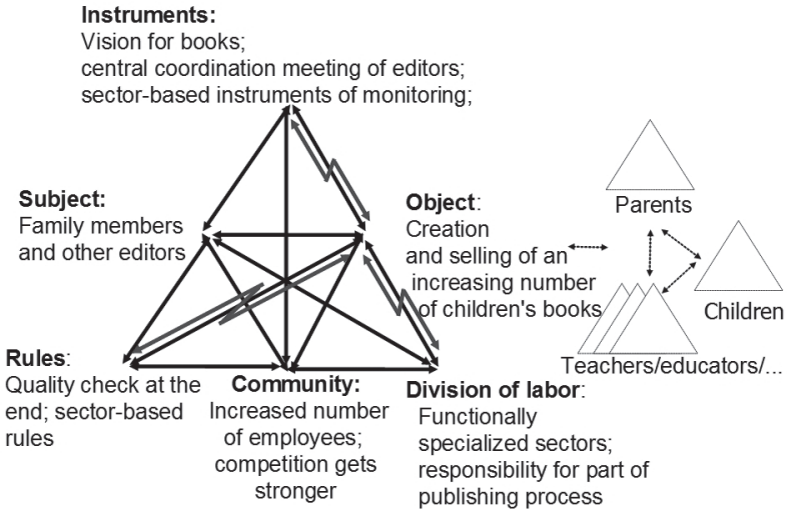

Figure 7. Publisher's model at the end of the 2000s

The analysis of the core primary and secondary contradictions became the basis for the discussion about resolving the contradictions and developing a new model of work for Publisher's publishing activity. The discussion about the direction of development was supported by the following "typology of models of work" (see Engeström, 1987; Bodrozic, 2008) that addressed the core primary contradiction quality vs. efficiency:

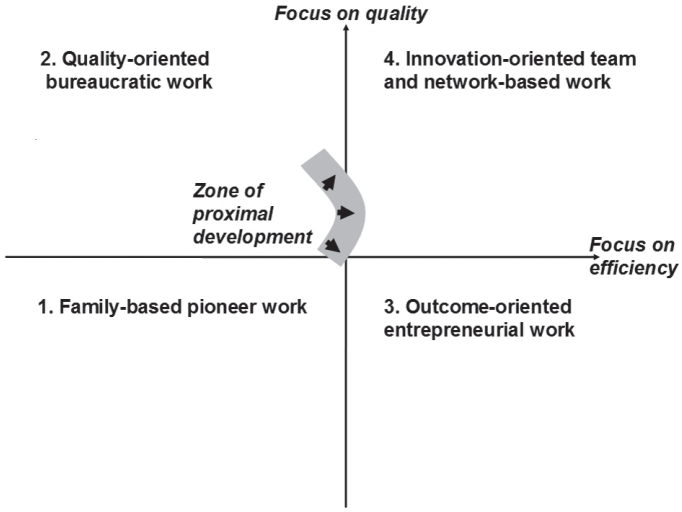

Figure 8. Typology of models of work used
in the CL to outline Publisher's development

Publisher's model of work organization in the 1990s ("Quality-oriented family model") was located in the bottom left quadrant. Quality being more important than efficiency, the model in the 2000s ("Quality-oriented bureaucratic model") moved towards the top left quadrant. To resolve the contradiction of quality vs. efficiency, the participants of the CL suggested that Publisher's future model should develop towards the top right quadrant, towards innovation-oriented models of work.

While the rough direction of development was outlined by making use of the typology of models of work, the content of the new model (new division of labor, instruments and rules) still had to be explored. One main source for developing elements of the new model were participants' discussions in the CL sessions about possibilities for resolving the secondary contradictions of Publisher's current model of work organization.

Another main source were interviews with experts from a leading Italian and a leading Finnish publishing company. These two companies had a history of good cooperation with Publisher. On that account, they offered to support Publisher's organizational development by agreeing with experts from their companies being interviewed. These interviews took place in Italy and Finland in fall 2009. In the interviews, questions were asked regarding the models of work organization of the Italian and the Finnish publisher. Information about their models of work organization was used to inspire ideas for resolving the contradictions of Publisher's current model.

The Italian and the Finnish publisher's concrete instruments, rules and division of labor for organizing their respective publishing activity differed considerably. The Italian publisher was essentially a family business with two editors who were responsible for planning and monitoring the entire publishing process. In contrast, the Finnish publisher had around 30 editors who were supervised by a smaller number of managers. However, the models of work organization of the Italian and the Finnish publisher had several aspects in common. Three of these common aspects became important conceptual ideas during the CL process. These ideas resulted from analyzing the following statements made in the interviews and further similar statements:

> Finnish expert: We had quite many, like 10 or 15 proofreaders all the way until the 1980s, 1990s. Then we gradually kind of melted away this function. [...] [In the past,] a proofreading function, which is a service function, became a bottleneck in our process, because proofreading often took several weeks. Just in the stage when everything else is ready for printing, you have to send it [the manuscript] to a proofreader and miss the marketing date because of the service function of proofreader. [...] [Today, the] editor is responsible for the schedule and timetable. Of course, the editor has to know the printing date, the publication date and that comes from

> his or her superior, from the manager. [...] Systematically we have editorial managers who follow the schedule and timetable of the whole department and put books into an order of importance.
>
> Italian expert: We have a lot of forms to follow. [...] My colleague knows very well that for the books have to be done this, this, and this and she follows very strictly the form. [...] We have different checklists. [...] We decided to put it on paper because otherwise it is impossible to follow. [...] And each one has to know how to follow, and what to follow and the time to follow. [...] It is so smooth here that I do not even realize that there is a tough schedule. If you have to have the book finished, published in March, six months before you have to start with this, with this, with this, with this, with this. And every single desk has a different part of the job to be followed. So I should put together all these parts.

The three conceptual ideas derived from the interviews can be described as follows:

(1) A division of labor within the publishing activity that guarantees a focus on the entire book creation process and not just on part of it.
(2) A prescriptive representation of the entire book creation process that contains all necessary actions of the process and serves as a guide for all employees contributing to the process.
(3) Long-term, middle-term and short-term planning of publishing.

The concrete instruments, rules and division of labor of the Italian and the Finnish publishers were not directly applicable in the Serbian context. However, the conceptual ideas described were used in the CL to inspire the development of own concepts which would be adequate for Publisher's publishing activity:

(1) Both the Italian and the Finnish publisher emphasized the importance of a clear responsibility for the entire process of book creation. Within both publishing companies, editors played a key role in monitoring the entire process. The role of functions such as proofreading or "typesetting" was understood to be auxiliary. In the case of the Finnish publisher, almost all of these auxiliary functions were realized by external suppliers. In the case of the Italian publisher, some of these functions were retained within the company, while others were delegated to external companies. In the case of Publisher, the idea of strengthening the responsibility for the entire book creation process was considered to be a good basis for overcoming the core contradictions described. However, it was decided that all functions should remain within the company. An idea was developed to establish multifunctional teams, each with one or more editors, a designer, a proofreader, and a typesetter. Editors should function

as team leaders. Team leaders were to be supervised by two managing editors. One managing editor would be responsible for schoolbooks, the other for the general production of children's books. Each team would be responsible for a number of specific book series. Operational tasks of the book creation process would be completely managed by the respective teams. Fulfilling strategic tasks, such as the development of ideas for new book series, would mainly be the job of managing editors.

(2) The Italian and the Finnish publisher also emphasized the importance of shared instruments for guiding the book creation process. While the Italian publisher had many shorter checklists and forms that complemented each other, the Finnish publisher had one comprehensive "book creation guide" and further additional forms. In Publisher's CL, it was decided to develop one main instrument that would serve as a prescriptive representation of Publisher's entire book creation process. It should contain all actions necessary for creating books and serve as a guide for all employees contributing to the process. A subgroup of the participants of the CL developed a draft of this core instrument, called the "Process map for creating books". The draft of the process map was then discussed and elaborated in the CL sessions. Subsequently, it was discussed with all Publisher's employees involved in the book creation process. Additional forms were created by further subgroups.

(3) A further conceptual idea, highlighted by the Italian and the Finnish publisher, was careful long-term, middle-term and short-term planning. Publisher adopted this idea. Annual and monthly publishing plans were to be developed and monitored by managing editors in cooperation with team leaders. Weekly operational plans were to be developed and monitored by team leaders in cooperation with their respective team members.

On top of the previously described new ideas, rules for supporting quality and efficiency were developed and became part of Publisher's "rules of work". An important element of these new rules became a bonus system for Publisher's employees. In annual evaluation meetings, the contribution of teams and individuals were to be discussed. Teams and employees who had met the expectations with respect to quality and efficiency would be rewarded with a bonus. The newly developed division of labor, instruments and rules became the main pillars of Publisher's new model of organizing their publishing activity (Figure 9).

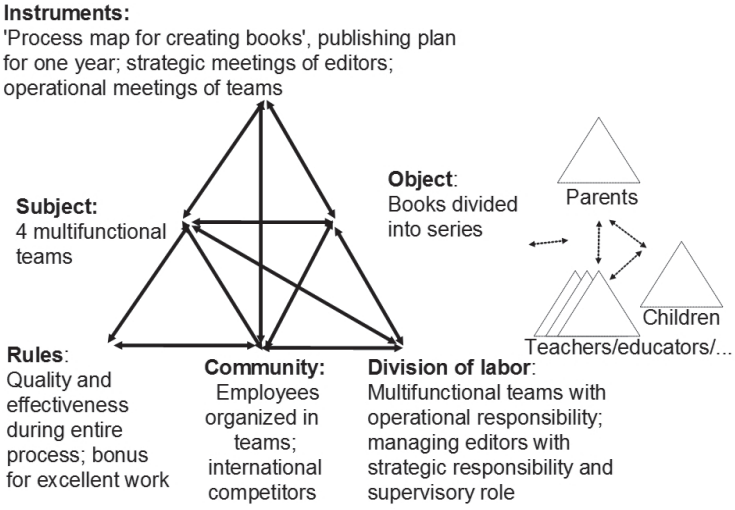

Figure 9. Publisher's new, innovation-oriented model based on teams

In later sessions of the CL, the new model of work was examined. It was discussed whether the new model would resolve existing problems and contradictions and whether it would lead Publisher towards the top right quadrant of Figure 8, towards innovation-oriented models of work. The participants of the CL concluded that both would be the case. In the final sessions of the CL, possible future difficulties after implementing the team-based model were discussed. The participants mainly felt optimistic about the prospects for book creation on the basis of the new model. The main concern was that Publisher's external partners would need some time to become accustomed to Publisher's higher emphasis on planning and deadlines.

In February 2010, the new model was implemented. The old functional sectors of Publisher's publishing activity were disbanded and the employees involved in book creation were divided into four multifunctional teams. Two teams were mainly responsible for schoolbooks, one mainly for humanities and the other mainly for mathematics and natural sciences. The two other teams were responsible for the general production of children's books, each of the two teams for specific book series. Each team had a joint room equipped with the instruments required to fulfill their new tasks.

Publisher's development after the implementation of the new model

After the implementation of the new model, the process of creating books became much more efficient. The number of books prepared for printing increased from 62 in 2009 to 86 in 2010. The main instruments – the "Process map for book creation" as well as annual, monthly and weekly plans – played an important role in supporting the efficiency of the publishing activity. The

resolution of systemic contradictions entailed the reduction of intra– and inter-individual tensions. Publisher's employees experienced psychological double bind situations (quality vs. time) less frequently than before. Mutual support and coordination between previously separate functions improved greatly. Different points of view concerning design, text, etc. still existed, but were dealt with within the teams and often led to improvements of manuscripts.

As expected, some of Publisher's external partners, especially authors and illustrators, needed some time to become accustomed to Publisher's new emphasis on planning and deadlines. It became necessary to intensify communication with some of these external partners to explain the new model to them, to support them in developing a better self-organization, and to remind them more frequently that a deadline was approaching. Some of the team members also needed some time before they fully understood their new role in the teams and all details of the "Process map for book creation". The problems that occurred were all resolved and entailed only minor modification of some of the instruments of the new model.

One year after the implementation, follow-up interviews were conducted with all employees involved in Publisher's book creation activity. The vast majority of the interviewees held the opinion that, one year after the implementation, the team-based model still fulfilled the expectations.

> Editorial manager: One result of implementing team-based organization was that everyone knew exactly what tasks they had to perform, when to perform them and the time in which they had to perform them. [...] What is also very important is that we did not have any big problems, virtually none at all. A high level of performance was maintained; tasks were fulfilled well, successfully. Really, in all these months we did not have any major omissions at work; this used to happen a lot. People's self-reliance is something that makes me very happy. I would not say that people were incapable of acting responsibly before, but somehow we had got used to everyone doing everything. [...]
>
> We never let books that we were not 100% satisfied with go to press. In the past, the quality of the books was also ultimately ensured, but only after huge efforts and having to deal with a variety of omissions in the work process. [...] Now everything is done more accurately and efficiently, we avoid many mistakes and corrections during the process, enabling us to improve some aspects of quality. [...] The final product was always okay, but we had to cope with a lot of problems. Against this background, I think what we do now is much better.

The efficiency of the book creation process as well as the cooperation between previously separate functions was considered higher than when the "bureaucratic model" formed the basis of work. The quality of books was still considered to be high; some interviewees even held the opinion that it had

increased. Almost all interviewees concluded that the new model offered a better basis for book creation than the previous model.

DISCUSSION AND CONCLUSIONS

This paper aimed to explore the applicability of the CL approach to organizational settings in countries in transition as well as to explore which of the findings and interpretations expanded the understanding of the CL approach.

The main outcome of the CL for Publisher's publishing activity was a new model of work organization based on multifunctional teams with clear responsibilities for a certain group of books. After the implementation of the new model, mutual support and coordination between previously separate functions improved greatly. The process of creating books became much more efficient and the number of books prepared for printing increased by more than 30%. Altogether, the CL project entailed a clear break from the previous "bureaucratic model", a model of work organization related to the old organizational paradigm in the sense of Perez (2009). Therefore, the change project for Publisher's publishing activity can be regarded as an example of an effective application of the CL approach.

While Publisher's CL can be regarded as effective, it would be too strong a conclusion to argue that CLs can be applied effectively in all Serbian companies. Many companies in Eastern and South Eastern Europe, especially (former) state-owned enterprises, were reluctant to undertake strategic restructuring (Soulsby & Clark, 2007; Clark, 2008). During the period of privatization, many well-placed senior managers and other powerful actors utilized their positions and network connections to become owners of former state-owned enterprises (Branyiczki, Bakacsi, & Pearce, 1992; Soulsby & Clark, 2007). This new "elite" is often less open to organizational innovation. When reluctance to change and innovation in a company is pronounced, particularly if this reluctance is shared by top management, any intervention can be expected to be difficult, if not impossible. This is even more the case if the intervention is based on dialog between different stakeholders, as is the case in CL interventions.

In contrast, Publisher showed a pronounced openness to change and innovation. Publisher's success in the first 15 years was based on its stakeholders' readiness to experiment with new concepts of children's books and schoolbooks. Rogers' (2003) model about the adoption and diffusion of innovations underlines innovators' exceptional role in an industry. Based on the mathematical function of the Bell curve, Rogers proposed that adopters of any new innovation or idea can be categorized as innovators (2.5%), early adopters (13.5%), early majority (34%), late majority (34%) and laggards (16%). Being an innovator opens up different kinds of opportunities that can be benefited from (Jacobides, Knudsen, & Augier, 2006; Von Hippel, 1986). Publisher was the first to address the need for new concepts of children's books in Serbia and benefited from this by becoming market leader within the industry. Publisher's key stakeholders' positive experience with playing the role of an innovator for new concepts of

books contributed to their openness to organizational innovations. This article argues that the selection of a research partner such as Publisher that had played the role of an innovator contributed greatly to the effective use of the CL.

While Publisher could be considered as having played the role of an innovator within the context of the Serbian publishing industry, this interpretation has to be revised if publishing industries in Western countries were to be included in the discussion. Children's books and schoolbooks that emphasized the importance of the child's perspective became prominent in countries such as Finland much earlier than in Serbia. Finnish companies abandoned bureaucratic models of work organization much earlier than Serbian companies. While Publisher can be viewed as having an advanced position within its industry (in relation to other Serbian companies), the Serbian publishing industry as a whole can be viewed as being a laggard (in relation to Western countries' publishing industries).

This interpretation of Publisher playing the role of a relative innovator in a laggard industry is important to explain the applicability of the CL. Publisher's relatively advanced position within its industry contributed to the effectiveness of the CL. Publisher's stakeholders' uncommon openness to change and innovation was a "pull factor". The relative laggard position of the Serbian publishing industry can be related to the emergence of multinational publishing companies on the Serbian market. The pressure of strong competitors on Publisher was a "push factor" in the CL.

Furthermore, Publisher's characteristic of being a relatively advanced company in a relatively laggard industry sheds light on one further particularity of the CL: the fruitfulness of using concepts from publishing activities in EU Member States as stimuli to develop own concepts. Publisher's zone of proximal development (its hypothetical transitional area towards an emerging, potentially more advanced model of work) was "distant" enough from the Italian and Finnish publishers' level to expect learning from these international partners to support organizational innovation. On the other hand, Publisher's zone of proximal development was "close" enough to the Italian and Finnish publishers' level to avoid the risk of becoming excessively challenged and frustrated. It is important to emphasize that Western concepts were not copied, but that the core ideas of these concepts were grasped and used as an inspiration in CL discussions to develop new concepts adequate for Publisher's activity. This kind of cooperation of Publisher with the Italian and the Finnish publishers could be described as a "learning partnership".

The previously described findings contribute to the better understanding of the applicability of the CL approach. Good long-term relationships to research partners are emphasized as an important factor in CL interventions (Engeström, 2005). However, the role of the research partner (as an innovator) has not yet been a topic of theoretical CL discussions, nor has the state of the research partners' associated industry (as relatively advanced or laggard in comparison to other countries' industries). The use of different concepts and ideas as stimuli in CL interventions is a basic part of the CL approach. However, the use of conceptual ideas of "learning partners" from more advanced industries or further developed countries extends our knowledge about the use of stimuli in CL interventions.

The first use of the Finnish CL intervention method in a country in transition entails different conclusions and implications for the future. Publisher's CL project was effective. It led to a clear break from the previous bureaucratic model and resulted in a new model based on teams. We have argued that Publisher can be characterized as a relatively advanced company in a relatively laggard industry. This characteristic played an important role in the CL. It increased Publisher's potential for using concepts from publishing activities in EU Member States as stimuli to develop its own new model of work. A possible implication for innovation strategies of countries in transition and policy regarding their National Innovation Systems is to increase state support for (relative) innovators, as it might be easier for them to catch up to companies in developed countries.

The importance of Publisher's role as an innovator in the described CL process points to the conclusion that in future CL interventions, we should give more attention to the research partners' relative role within their respective industries.

Finally, the example of "learning partnerships" between companies from different countries might inspire a possible idea for future research. Interconnected CL interventions, that would take place in different countries at the same time with internationally operating companies or networks as research partners, might present a good platform for supporting organizational innovation and learning.

Acknowledgement

This article is one of the results of the research project "Identification and Development of Cognitive and Emotional Competencies Important for a Society Oriented towards European Integration Processes" (No. 179018) of the Ministry of Education and Science of the Republic of Serbia.

REFERENCES

Bartlett, W. (2009) Economic development in the European super-periphery: Evidence from the Western Balkans. *Economic Annals*, *54*(181), 21–44.

Bodrožić, Z. (2008). *Post-industrial intervention. An activity-theoretical expedition tracing the proximal development of forms of conducting interventions.* Helsinki: Helsinki University Press.

Branyiczki, I., Bakacsi, G., & Pearce, J. L. (1992). The back door: Spontaneous privatization in Hungary. *Annals of Public and Cooperative Economics*, *63*, 303–16.

Clark, E. (2008). The post-socialist transformation and global process: knowledge and institution building in organizational settings. In C. Smith, B. McSweeney, & R. Fitzgerald (Eds.), *Remaking management: Between global and local* (pp. 127–155). Cambridge: Cambridge University Press.

Engeström, Y. (1987). *Learning by expanding*. Helsinki: Orienta-konsultit.

Engeström, Y. (1990). *Learning, working and imagining: Twelve studies in activity theory.* Helsinki: Orienta-Konsultit.

Engeström, Y. (1994). The working health center project: Materializing zones of proximal development in a network of organizational learning. In T. Kauppinen, & M. Lahtonen (Eds.), *Action research in Finland* (pp. 233–274). Helsinki: Ministry of Labour.

Engeström, Y. (1999). Innovative learning in work teams: Analyzing cycles of knowledge creation in practice. In Y. Engeström, R. Miettinen, & R.-L. Punamäki (Eds.), *Perspectives on activity theory* (pp. 377–404). Cambridge: Cambridge University Press.

Engeström, Y. (2001). Expansive learning at work: Toward an activity theoretical reconceptualization. *Journal of Education and Work*, *14*(1), 133–156.

Engeström, Y. (2005a). *Developmental work research: Expanding activity theory in practice.* Berlin: Lehmanns Media.

Engeström, Y., Virkkunen, J., Helle, M., Pihlaja, J., & Poikela, R. (1996). The Change laboratory as a tool for transforming work. *Lifelong Learning in Europe, 1*(2), 10–17.

Foot, K. A. (2002). Pursuing an Evolving Object: A Case Study in Object Formation and Identification. *Mind, Culture and Activity*, *9*(2), 132–149.

Jacobides, M, G., Knudsen, T., & Augier, M. (2006). Benefiting from innovation: Value creation, value appropriation and the role of industry architectures. *Research Policy*, *35*(8), 1200–1221.

Kerosuo, H., Kajamaa, A., & Engeström, Y. (2010). Promoting innovation and learning through Change Laboratory: An example from Finnish health care. *Central European Journal of Public Policy*, *4*(1), 108–31.

Leontjev, A. N. (1978). *Activity, consciousness and personality*. Englewood Cliffs, New Jersey: Prentice-Hall.

Lewin, K. (1947). Frontiers in group dynamics: I. Concept, method and reality in social science; social equilibria and social change. *Human Relations*, *1*(1), 5–42.

Perez, C. (2009). Technological revolutions and techno-economic paradigms. *Cambridge Journal of Economics*, *34*(1), 185–202.

Pettigrew, A. M. (1990). Longitudinal field research on change: Theory and practice. *Organization Science*, *1*, 267–292.

Pettigrew, A. M. (1997). What is a processual analysis? *Scandinavian Journal of Management, 13*(4), 337–348.

Poole, M., Van de Ven, A., Dooley, K., & Holmes, M. (2000). *Organizational change and innovation processes: theory and methods for research.* Oxford: Oxford Press.

Rogers, E. M. (2003). *Diffusion of innovations* (5th edit.). New York: Free Press.

Soulsby, A., & Clark, E. (2007). Organization theory and the post-socialist transformation: Contributions to organizational knowledge. *Human Relations, 60*(10), 1419–1442.

Toiviainen, H. (2003). *Learning across levels. Challenges of collaboration in a small-firm network.* Helsinki: Helsinki University Press.

Van de Ven, A. H. (1992). Suggestions for studying strategy process: A research note. *Strategic Management Journal, 13, 169–188.*

Van de Ven, A. H., & Huber, G. P. (1990). Longitudinal field research methods for studying processes of organizational change. *Organization Science, 1(3), 213–219.*

Van de Ven, A. H., & Poole, M. S. (2005). Alternative approaches for the study of organizational change. *Organization Studies, 26,* 1377–1404.

Virkkunen, J., Engeström, Y., Pihlaja, J., & Helle, M. (1997). The Change Laboratory – a tool for transforming work. In T. Alasoini, M. Kyllönen, & A. Kasvio. (Eds.), *Workplace innovations – a way of promoting competitiveness, welfare and employment* (Report No. 3). Helsinki: Ministry of Labour.

Von Hippel, E. (1986). Lead Users: A source of novel product concepts. *Management Science*, *32*(7), 791–805.

Vygotsky, L. S. (1962). *Thought and language.* Cambridge, Mass.: The MIT Press.

Vygotsky, L. S. (1978). *Mind in society*. *The development of higher psychological processes.* Cambridge, Mass.: Harvard University Press.