**Tarja Kantola**

# **Transcending "the Impossible"**
## From Dead End to Expansive Learning

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## Abstract

This dissertation investigates changes in bank work and the experience of *impossibility* attached to these by workers at the local level from the viewpoint of work-related well-being and collective learning. A special challenge in my work is to conceptualize the experience of impossibility as related to change, and as a starting point and tool for development work.

The subject of the dissertation, solving *the impossible* as a collective learning process, came up as a central theme in an earlier project: Work Units between the Old and the New (1997–1999). Its aim was to investigate how change is constructed as a long-term process, starting from the planning of the change until its final realization in everyday banking work. I studied changes taking place in the former Postipankki (Postal Bank), later called Leonia. The three-year study involved the Branch Office of Martinlaakso, and was conducted from the perspective of well-being in a change process.

The sense of impossibility involved in changes turned out to be one of the most crucial factors impairing the sense of well-being. The work community that was the target of my study did not have the available tools to construct the change locally, or to deal with the change-related impossibility by solving it through a mutual process among themselves.

During the last year of the project, I carried out an intervention for development in the Branch Office, as collaboration between the researchers and the workers. The purpose of the intervention was to resolve such perceived change-related impossibility as experienced repeatedly and considered by the work community as relevant to work-related well-being. The documentation of the intervention – audio records from development sessions, written assignments by workers and assessment or evaluation interviews – constitute the essential data for my dissertation. The earlier data, collected and analysed during the first two years, provides a historical perspective on the process, all the way from construction of the impossibility towards resolving and transcending it.

The aim of my dissertation is to understand the progress of developmental intervention as a shared learning process within a work community and thus to provide tools for perceiving and constructing local change. I chose the change-related impossibility as a starting point for development work in the work community and as a target of conceptualization. This, I feel, is the most important

contribution of my dissertation. While the intervention was in progress, the concept of impossibility started emerging as a stimulating tool for development work. An understanding of such a process can be applied to development work outside banking work as well. According to my results, it is pivotal that a concept stimulating development is strongly connected with everyday experiences of and speech about changes in work activity, as well as with the theoretical framework of work development.

During this process, development work on a local level became of utmost interest as a case study for managing change. Theoretically, this was conceptualized as so-called *second-order work* and this concept accompanies us all the way through the research process. Learning second-order work and constructing tools based on this work have proved crucial for promoting well-being in the change circumstances in a local work unit. The lack of second-order work has led to non-well-being and inability to transcend the change-related sense of impossibility in the work community. Solving the impossibility, either individually or situationally, did not orient the workers towards solving problems of impossibility together as a work community.

Because the experience of the impossibility and coming to terms with transcending it are the starting point and the target of conceptualization in this dissertation, the research provides a fresh viewpoint on the theoretical framework of change and developmental work. My dissertation can facilitate construction of local changes necessitated by the recent financial crisis, and thus promote fluency and well-being in work units. It can also support change-related well-being in other areas of working life.

Tarja Kantola

## Mahdottoman ylittäminen
Umpikujasta ekspansiiviseen oppimiseen

### Tiivistelmä

Tutkin väitöskirjassani pankkityön muutosta ja siihen liittyviä mahdottomuuksia pankkitoiminnan paikallisella konttorin tasolla työhyvinvoinnin ja yhteisöllisen oppimisen näkökulmasta. Erityisenä haasteena tässä työssäni on ollut käsitteellistää muutokseen liittyvää mahdottomuuden kokemusta kehittämisen lähtökohtana ja kehittämistyön välineenä.

Väitöskirjan tutkimusaihe mahdottomien tehtävien ratkomisesta yhteisöllisenä oppimisprosessina nousi keskeiseksi Työyhteisöt vanhan ja uuden murroksessa -hankkeessa vuosina 1997–2000. Hankkeen tavoitteena oli tutkia muutoksen rakentumista pitkäjänteisesti muutoksen suunnittelusta sen toteutumiseen pankkityön arjessa. Tutkin kolmen vuoden ajan silloisessa Postipankissa ja sittemmin Leonia -pankissa, erityisesti Martinlaakson konttorissa tapahtuneita muutoksia näkökulmana työhyvinvointi muutoksessa. Muutokseen liittyvät mahdottomuudet nousivat yhdeksi keskeisimmäksi muutoksessa hyvinvointia murentavaksi asiaksi. Tutkimassani työyhteisössä ei ollut toimivia välineitä rakentaa muutosta paikallisesti ja tarttua muutokseen liittyviin mahdottomuuksiin niitä yhteisöllisesti ratkoen.

Tutkimushankkeen viimeisen kolmannen vuoden aikana toteutimme pankkikonttorissa kehittämisintervention, jossa työntekijöiden ja tutkijoiden yhteistyönä yritimme ratkoa sellaisia muutokseen liittyvä mahdottomuuksia, jotka työyhteisössä koettiin toistuvasti eteen tuleviksi ja merkittäviksi ratkaista työssä hyvinvoinnin kannalta. Kehittämisintervention dokumentaatio, äänitaltioidut kehittämispalaverit ja kirjalliset etätehtävät tuotoksineen, ovat väitöskirjani keskeisin aineisto. Aineisto kokonaisuudessaan kuvaa niin organisaation tason muutoksen suunnittelun kuin muutoksen ja sen mahdottomuuden rakentumisen arjessa aina mahdottomuuksien ratkomiseen konttorin työntekijöiden, johdon ja tutkijoiden yhteistyönä. Hankkeen kahden ensimmäisen vuoden aikainen tutkimustyöni luo historiallisen perspektiivin mahdottoman tehtävän rakentumisesta sen yhteisölliseen ratkomiseen.

Väitöskirjani tavoitteena on ymmärtää kehittämisintervention etenemistä yhteisöllisenä oppimisprosessina ja mahdollisena ekspansiona sekä tarjota näin välineitä paikalliseen muutoksen hahmottamiseen ja rakentamiseen. Tutkimuksessani nostan muutokseen liittyvät mahdottomuudet työyhteisössä tehtävän

kehittämistyön lähtökohdaksi ja käsitteellistämisen kohteeksi, mikä on väitöstutkimukseni keskeinen kontribuutio. Mahdoton tehtävä -käsitteestä muotoutui intervention edetessä kehittämistyötä stimuloiva väline, minkä prosessin ymmärtämisellä on sovellusarvoa kehittämistyössä myös pankkityön ulkopuolella. Oleellista kehittämistyötä stimuloivalle mahdoton tehtävä -käsitteelle on tutkimukseni mukaan se, että se kytkeytyy toisaalta vahvasti työyhteisön arkipuheeseen työstä ja sen muutoksesta, toisaalta kehittämistyön teoreettiseen viitekehykseen.

Tutkimuksessani kiinnostavaksi kysymykseksi nousi paikallisen kehittämistyön merkitys muutoksen hallinnassa, joka kehittämistyö jäsentyi niin sanotuksi toisen asteen työksi. Kysymys toisen asteen työstä kulkeekin mukana koko tutkimusprosessin ajan. Toisen asteen työhön oppiminen ja välineiden rakentaminen siihen osoittautuivat keskeiseksi myös muutoksessa hyvinvoinnin kannalta, jotta muutosta voitiin rakentaa ja ottaa haltuun työyksikössä paikallisesti. Toisen asteen työn puuttuminen näytti johtavan pahoinvointiin ja kyvyttömyyteen ratkoa yhteisöllisesti muutokseen liittyvää mahdottomuutta. Mahdottomuuden yksilöllinen tai tilanteinen ratkominen ei suunnannut ratkomaan mahdottomuuden problematiikkaa työyhteisönä.

Tutkimusaiheeni pankkityön muutoksesta ja siihen liittyvän mahdottomuuden ratkomisesta yhteisöllisenä oppimisprosessina pankkikonttorin tasolla on ajankohtainen ja ollee sitä myös lähitulevaisuudessa kansainvälisen talouskriisin ja pankkikriisin kohdatessa pankkitoiminnan arjen konttorien tasolla. Oletettavaa on, että pankkikriisin mukanaan tuomat muutokset haastavat lähitulevaisuudessa entisestään pankkitoiminnan arkea ja muutoksen rakentamista myös paikallisesti. Väitöskirjatyöni tukenee omalta osaltaan kriisin mukanaan tuomien muutosten rakentumista paikallisella tasolla niin työyhteisöjen arkisen toiminnan ja hyvinvoinnin näkökulmasta kuin muutoksessa hyvinvointia laajemminkin työelämän alueella. Mahdottomat tehtävät ja niiden ratkominen ovat väitöskirjani keskeinen lähtökohta ja käsitteellistämisen kohde ja tuovat uutta näkökulmaa muutoksen ja kehittämisen teoreettiseen viitekehykseen.

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your children Erika and Erik with me. I have always been able to be myself with you, and your friendship has brought much joy to my life. I have also been more than lucky to have you, Veijo, and your music as a friend in my life. You have given constructive criticism on my work and sometimes reminded me about the years I have spent on this.

Erika and Erik, you have been very close to me during these years, and often surprised me by coming to meet me with Kirppu and by staying overnight. We have spent unforgettable moments together.

My grandmother Anni and grandfather Martti passed away years ago, but they are still in my thoughts. They both had big families but they were always interested in my life, and I felt unconditionally loved by them.

I dedicate this thesis to Erika Mutanen and Erik Mutanen and to the memory of my grandmother Anni Keränen and grandfather Martti Kantola.

> My work has been about moulding shapes. Hopefully, though,
> the result is not plastic-like, but rather unpolished, respirating,
> even exhilerating. At the moment the work
> is still in some kind of dormant "idyllic" state.
> Is this appropiate? I don't know.
> And somewhere, beneath the surface, lies dread.
>
> *(Railo, 2005, p. 49)[1]*

Espoo, 25 April 2010

Tarja Kantola

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[1] The quotation is translated by Pia Kiviaho-Kallio.
The original quotation is available in Appendix A.

# Contents

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# 1 Introduction

This dissertation investigates recent changes in bank work and the experience of *impossibility* attached to these by workers at the local level from the viewpoint of work-related well-being and collective learning. A special challenge in my work is to conceptualize the experience of impossibility as related to change[1], and as a starting point and tool for development work.

The subject of the dissertation, solving the impossible[2] as a collective learning process, came up as a central theme in an earlier project: Work Units between the Old and the New[3] (1997–1999). The project was funded by the Finnish Work Environment Fund and carried out in collaboration with the Finnish Institute of Occupational Health and the University of Helsinki. Its aim was to investigate how change is constructed as a long-term process, starting from the planning of the change until its final realization in everyday banking work. I studied changes taking place in the former Postipankki (Postal Bank), later called Leonia. The three-year study involved the Branch Office of Martinlaakso[4–5], and was conducted from the perspective of well-being in a change process. The sense of impossibility involved in changes turned out to be the most crucial factor impairing the sense of well-being, in addition to the factors of haste[6] and perceiving the near future. The work community that was the target of my study did not have the available tools to construct the change locally, or to deal with the change-related impossibility by solving it in a mutual process among themselves. As a field researcher, I collected all my data during this project.

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[1] I will inspect the context and dynamics of the change in detail in Chap. 2.3.

[2] The concept of *"impossibility"* is used when referring to impossibility in the more general meaning. When referring to a specific and experienced impossibility the concept of *"the impossibility"* is used. *"The impossible"* refers mainly to the experienced and shared impossibility that is conceptualized more during developmental intervention. Also, *"the impossible task"* and *"the impossible situation"* are used later in relation to the intervention.

[3] *Launis, K., Kantola, T., Niemelä, A.-L. and Engeström, Y. (1998). Työyhteisöt vanhan ja uuden murroksessa.* [The Work Units between the Old and the New.] Helsinki: Finnish Institute of Occupational Health.

[4] The target bank organization of Postipankki, later Leonia, will mainly be called henceforth "the Bank", or "the Bank Organization", when emphasizing the organization. The target Branch Office of Martinlaakso will be called henceforth "the Branch" or "the Branch Office".

[5] During the intervention, we agreed with the Branch Office of Martinlaakso that the Branch Office would appear by its own name in the publications. It was the will of the work community, which I, as well as the research group, have respected in the previous publications. Nevertheless, it is important to note that the Branch Office of Martinlaakso no longer exists as it did during my research. There has been a turnover in employees, and the Bank Organization has merged into the another bank organization.

[6] Niemelä, A.-L. *(2006). Kiire ja työn muutos. Tapaustutkimus kotipalvelutyöstä.* [Time pressure and transition in work – a case study in home-care work.] University of Helsinki, Department of Education, Research Report 206, 2006. Helsinki: University Press. Academic dissertation.

During the last year of the project, we carried out an intervention for development in the Branch Office, as collaboration between the researchers and the workers. The purpose of the intervention was to solve such perceived change-related impossibility as experienced repeatedly and considered by the work community as relevant to work-related well-being. The documentation of the intervention – audio records from development sessions, written assignments by workers and assessment or evaluation interviews – constitute the essential data for my dissertation. That data, collected ten years ago, is still unique in terms of documenting a long-term process and a local change. The data describes how the change was first planned at the organizational, executive level, and how the change-related impossibility was constructed in daily work, as well as how the impossible was eventually solved by joint effort: cooperation with the workers, the management and the researchers. The documentation on the intervention concerning resolving the impossible turned out to be the most central data in my research. The earlier data, collected and analysed during the first two years, provides a historical perspective from constructing towards resolving and transcending the impossible.

The aim of my dissertation is to understand the progress of developmental intervention as a shared learning process within a work community and thus to provide tools for perceiving and constructing local change. I chose change-related impossibility as a starting point for development work in the work community and as a target of conceptualization. This I feel is the most important contribution of my dissertation. While the intervention was in progress, the concept of impossibility started emerging as a stimulating tool for development work. An understanding of such a process can be applied to development work outside banking work as well. According to my results, it is pivotal for a concept that stimulates development that it is both strongly connected with everyday experiences and speech about changes in work activity and simultaneously connected with the theoretical framework of work development.

My dissertation is a *theoretically compressed and compromised story* (Cicourel, 2002, see also 2006) about a journey of change, from its initial planning to its historical realization in daily banking work. In the course of telling the story, each chapter gives rise to a research question for the following chapter. Thus, theory and practice alternate, even within one chapter. The structure of the story varies; at some points theory guides the telling and organizes it, and at other points, the empirical data and the results of the analysis help one grasp the phenomena studied and thus take the story forward.

In the beginning of this study (Chapter 2), I review the research on well-being in change and its paradigms, especially from the viewpoint of the Branch Office of Martinlaakso. That research considered the experience of impossibility in a change context as an outstanding challenge to feeling well-being in that change. Lack of local development work and the required tools for it seemed to aggravate non-well-being and the accompanying inability to share and solve the change-related impossibility in the work community. This is how Chapter 2 begins the story of

my dissertation. The Chapter tells how impossibility and the process of solving the impossibility were found as a research object for my study. The primary research problems about how the impossibility is conceptualized and resolved will be considered in Chapters 4 and 5.

In Chapter 3, I proceed to examine the concept of impossibility theoretically and as a stimulating, so-called *intermediate-level*, conceptual tool[7]. This constitutes the most important theoretical contribution of my dissertation.

Chapter 4 considers the perception of the experience of the impossibility at the beginning of the intervention, from the workers' orientation to waiting for a solution from outside, to their questioning of the work community's mode of action.

In Chapter 5, I describe the progress of the intervention as a whole and in detail, from the perspective of expansive learning focusing on the objects of the activity and the tools, and the results of the development work.

At the end of the study, in Chapter 6, I interpret the impossible and resolving it from the historical perspective of banking work and service concepts.

In Chapter 7, I will present conclusions on the content of my dissertation, as well as the multiple methods used in my study. When telling the story of the change and the intervention the single method aims to work for the entire narrative and to describe the progression. Therefore, I will not interrupt the story by describing and evaluating the methods as they emerge but will examine the methods in my Conclusion.

During this journey, development work on a local level became of utmost interest as a case study for managing change. Theoretically, this was conceptualized as so-called *second-order work*[8] and this concept accompanies us all the way through the research process. Learning second-order work and constructing tools based on this work have proved crucial for promoting well-being in the change circumstances in a local work unit. The lack of second-order work has led to non-well-being and inability to transcend the change-related sense of impossibility in the work community. Solving impossibility, either individually or situationally, did not orient the workers towards solving problems of impossibility together as a work community.

My research theme, *change in banking work and solving the change-related impossible as a shared learning process in a local branch office*, is relevant and will remain urgent and relevant for daily work in local branch offices in the near future in light of the possible consequences of the recent international economic and bank crises. It is plausible that changes caused by the recent bank crisis will increasingly challenge daily banking work and thus, the construction of change locally, as well. Because the experience of the impossible and coming to terms with

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[7] The intermediate-level concept in the study means a concept that, on the one hand, arises from everyday talk, but on the other hand, is based on theory (see Chap. 3.1, p. 29).

[8] Second-order work in the study means development of work activity (first-order work) by scrutinizing and analysing it (see Chap. 2.4.2, p. 24).

transcending it are the starting point and the target of conceptualization in this dissertation, the research provides a fresh viewpoint on the theoretical framework of change and developmental work. For its part, my dissertation can facilitate constructing the local changes caused by the recent financial crisis, and thus promote flexibility and well-being in work units. It can also support change-related well-being in other areas of working life.

# 2 Activity-Theoretical Approach Challenges Traditional Theories and Methods of Dealing with Stress

This chapter will begin the story of a study for my dissertation: work-related well-being in a changing[9] work situation in a bank. The aim is to make visible how the change was planned, implemented, and realized at the local work unit, and how work-related well-being was constructed as an integral part of the change. Thorough research was required to understand how this change would be realized in everyday work. Also, a new paradigmatic method was required to understand well-being at work.

From the methodological perspective, the mirror data of organizational change at the local work unit level provided information on discussions about non-well-being at work as well as those about impossibility related to change situations. The chapter will conclude by asking what the impossibility is and how impossibility has been theorized in earlier research. It will also address the question of how the work unit could conceptualize for itself the apparent impossibility of its work requirements and resolve the impossibility.

Describing organizational change activity from the perspective of well-being at work –

By using interviews, observations and documents on the content and the way of implementing the change

Making visible the experiences of non-well-being and everyday talk about the impossibility related to change in work –

By "using" so-called stimulated recall mirror data collected from everyday work activity

Research questions for Chapters 4–5

**Figure 1. Progression of dissertation work in Chapter 2**

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[9] I will inspect the context and dynamics of the change later in Chap. 2.3.

When we[10] studied work-related well-being in a changing work environment during the three-year (1997–2000) research project "Work Unit between the Old and the New"[11], we discovered and brought up the problem of impossibility experienced in connection with change at work. The impossibility that workers faced repeatedly were experienced as essential problems undermining well-being at work. The prime objective of the project "Work Unit between the Old and the New" was to develop a methodology for incorporating the well-being of workers as an integral component of organizational transformation and developmental efforts within the workplace.

The stress-theoretical research examined in this chapter has been placed on the loading factors on the individual level, whereas my research will connect the discussion about non-well-being at work with the impossibility related to the work context. The Activity Theory will open up an opportunity to go beyond the individual interpretation and to perceive the problems of well-being at a collective work unit level.

I am aware that besides the stress-theoretical and epidemiological perspectives, work-related well-being has been studied from other perspectives in the 2000s; for example from the perspectives of *job demands-resources* or/and *work engagement* (e.g., Bakker, Demerouti, & Schaufeli, 2003; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Schaufeli & Bakker, 2004; Hakanen, 2004; Hakanen, Schaufeli, & Ahola, 2008). Nevertheless, in the following chapters I will discuss the theoretical framing that was predominant when we started the research project, and which we challenged with the activity-theoretical framework.

## 2.1 Critical Review of Earlier Theoretical Framing

Numerous attempts have been made to reveal the factors that cause stress and fatigue in the workplace, and to reduce the unwanted side effects of work. Despite these efforts, the problems of stress and the lack of work-related well-being seem to be on the increase, at least in situations of rapid change. In this Chapter, I argue that the traditional research models do not capture the problems of stress and well-being in a rapidly changing work environment. There is also a need for alternative theoretical framing and concepts. The Cultural-Historical Activity Theory

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[10] The pronouns ´we´, ´our´ or ´us´ refer to the research group: Kirsti Launis (project manager), Tarja Kantola (project researcher), Anna-Liisa Niemelä (project researcher) and Yrjö Engeström (scientific manager).

[11] The central publications of our research project are:

1) *Launis, K., Kantola, T., Niemelä, A-L., & Engeström, Y. (1998). Työyhteisöt vanhan ja uuden murroksessa.* [The Work Units between the Old and the New.] Helsinki: Finnish Institute of Occupational Health.

2) *Launis, K., Kantola, T., & Niemelä A-L.* (2005). The activity theoretical approach as a challenge to traditional theories and methods of dealing with stress in a rapid-change work environment. In Y. Engeström, J. Lompscher, & G. Rückriem (Eds.), Putting activity theory to work: Contributions from developmental work research. Volume 13, pp. 91–116. Berlin: Lehmanns Media.

approach will be used in one case analysis in order to provide an alternative view on the connections between the local change process and employee well-being, to surpass the individual interpretation and to go beyond the problems of well-being at a collective work unit level.

Several epidemiological studies have shown that there is one striking effect of the rapid and continuous change process in working life: psychological work-related, well-being problems and stress have become more prominent and widespread than ever before (Kompier, 2002). In a study conducted among European workers, for example, 28% of the employees studied reported that stress significantly affected their health and performance at work (European Commission, 1997, see also 2008; Kompier & Cooper, 1999; Kompier, Cooper, & Geurts, 2000). With good reason, numerous studies on work-related stress and workers' well-being have been carried out within different lines of business during the past two decades. Although a great deal of previous research had been aimed at identifying the sources of problems concerning employee well-being, when our intervention project was planned, little knowledge had as yet been gained about improving psychosocial work environments (see Kompier & Cooper, 1999).

Numerous surveys have also shown that perceived stress and health symptoms have increased, especially since the beginning of the 1990s. A comprehensive survey (Kompier et al., 2000) showed that 25% of European workers perceived stress as the cause of health problems and lower work performance, although they simultaneously reported that their working conditions had improved, and that occupational health services and training had increased. (see also De Greef & Van den Broek, 2004; European Commission, 2000, 2008; European Agency; Launis & Pihlaja, 2007; Lehto, 1999.)

Doherty, Forslin, Shani, and Kira (2002) argued that since the beginning of the 1990s, work intensity has grown because management has been increasingly driven by short-term goals of competitiveness. Later, Launis and Pihlaja (2007) brought out that there seem to be some aspects in work life, which are causing more and more problems for personnel, but they questioned whether management is solely to blame for this. Organizations hire specialists in occupational health, safety and ergonomics, and personnel development. The authors argued that in spite of good intentions, these professionals might add to the confusion in rapid-change situations with their prevailing concepts of occupational health and safety, working models and practical tools (Launis & Pihlaja, 2007; see also Kira & Eijnatten, 2008).

When trying to reduce individual stress or risk factors at work, or cure separate environmental problems using traditional models, they may be merely helping to maintain the problems brought on by rapid-change situations. Some of the most common problems in work-related well-being stem from the theories, models and tools of the experts. For example, the most prominent theory base in occupational health service has been epidemiology. Epidemiological theory and the practical tools based on the theory are not enough to ensure understanding of the well-

being problems caused by the transition process in workplaces (Launis & Pihlaja, 2007).

In order to survive in a competitive environment, organizations are constantly striving for more cost-efficient and functional production and service concepts. Although much has been written about this continuous change, it is not easy to identify the context and dynamics of such events, and they are not well understood from the perspective of either the organization or individual. In situations where the prevailing production or service concept does not correspond to business demands, or when new concepts are launched, several different disturbances occur in the organization (Engeström, 1988; Launis & Pihlaja, 2007; Mäkitalo, 2005).

> The transition process is not as smooth and linear as the management, experts and consultants usually claim. The work units and individual workers often experience the changes as challenging, but also as exhausting. The fluency of everyday work process is hindered by disruptions, disturbances, haste, or problems that are usually individualized as shortcomings of some personnel group (aged workers, newcomers, managers, planners), and attempts are made to overcome this by training or the creation of new regulations.

> *(Launis & Pihlaja, 2007, p. 100)*

During our three-year research project "Work Units between the Old and the New", we analysed the transition processes in four different work organizations (Launis, 1998; Launis, Kantola & Niemelä, 1998, 2005; Launis, Kantola, Niemelä et al., 1998; Launis, Niemelä et al., 2000). In my dissertation work, I will use the case data that I collected as a field researcher at one of the organizations, The Postipankki Retail Bank.[12]

At the beginning of our research, we found that the existing theoretical framing and methods of understanding stress and work-related well-being did not capture well the transition problematics of work at the local level, where work-related well-being was either promoted or destroyed. One outstanding problem seemed to be the relationship between transition in the work activity and the well-being of workers. Traditional stress questionnaires did not seem to capture the element of change in the workplace, but seemed, instead, to interpret change dynamics merely as typical of the nature of the work process, or attributable to the shortcomings of individual employees.

Our analyses of work-related well-being were primarily aimed at interventions. In order to reframe work-related well-being in connection with the local and contextual change process, we searched for alternatives to the traditional epidemiology-based methods, which typically involve surveys and questionnaires with large samples. In this chapter, I briefly discuss why we tried to go beyond traditional,

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[12] The Postipankki is mainly called henceforth "the Bank" in the text.

epidemiological research on stress – primarily because of its dualistic nature: 1) in theory: work *versus* worker, and 2) in methods: research *versus* intervention (see Engeström, 1988).

### 2.1.1 Beyond Theory: Work *Versus* Worker

A group of experts from the European Commission (1997, p. 1) defined work-related stress according to Lazarus:

> Work-related stress is the emotional and psycho-physiological reaction to aversive and noxious aspects of work, work environment and work organizations. It is a state characterized by high levels of arousal and distress and often by feelings of 'not coping'. Stress is also conceptualized as a multi-dimensional and complex process, which results from a broad system of variables involving inputs, outputs and the mediating activities of individual appraisal and coping.
>
> *(Lazarus, 1993)*

According to research carried out in different workplace contexts, numerous occupational stress factors (stressors, aspects or psychosocial characteristics of the work environment) cause psychological strain (Beer, Glaser, Canali, & Wallwey, 2001). Typical stressors tend to be the characteristics of the task, the employee's relationship with people at work, or the ways in which the organization places expectations and demands on the individual worker. The European Commission group (1997, p. 5) provided a lengthy list of different stress factors classified in many ways, the outcomes of which include poor psychological well-being manifested in dissatisfaction, emotional exhaustion, anxiety, depression and tension, as well as physical symptoms and illnesses (e.g., Härenstam, Theorell, & Kaijser, 2000; Maslach, 1998; see also Huuhtanen & Leino, 1990).

In the last decade, there have been several attempts to surpass the dualistic nature of theoretical approaches to stress. There is also a wide variety of mediating or stress-attenuating factors such as social support, decision authority or teamwork. According to this research, different factors may produce direct or indirect effects through other factors, such as work characteristics (e.g., Tummers, Landeweerd, & van Merode, 2002).

Researchers have consistently emphasized the importance of control over one's own work Demand-Control Theory / Karasek & Theorell, 1990; see also Carayon & Zijlstra, 1999), and have focused on some work characteristics, such as job demands, that can be controlled (Beer et al., 2001). Van Der Doef and Maes (1999) and Beer et al. (2001) had employed the theoretical basis of the Demand-Control Theory, and advocated a new and better conceptual analysis of demand and control in research on well-being, since recent results seem to have been contradictory:

> More research is needed to illuminate the stressfulness of demands, the differences between psychological strain and other potential outcomes such as job satisfaction, and the notion of job satisfaction as a mediator between stressors and strains. Moreover, the central role of the interaction in tests of the Demand-Control model should be heeded, and the practice of reporting main effects as support for the model should be discontinued. If the demand-control interaction were not a key part of the theory, the theory would be much less innovative and interesting. If these variables are "only" two independent stressors, there is not much reason to focus on them.
>
> *(Beer et al., 2001, p. 127)*

Stress factors, such as the certainty of work, complexity and decision authority within the organization, autonomy, social support, role conflicts and role ambiguity, seem to consistently appear in promising research. In the last decades, research on stress and work has yielded long lists of work-related factors that seem to correlate with a number of problems that involve well-being (Mäkitalo, 1996, 2005). The most prominent methods involve extensive surveys and organizational summaries of various questionnaires that focus on stress. The work itself, its content, culturally developed tools, roles, the division of labour, and change dynamics are reduced into components of different stress factors, which are either perceived subjectively or measured by experts (Mäkitalo, 1996, 2005; Mäkitalo & Launis, 1998). Such questionnaires tent to decontextualise the local dynamics of work and the results they produce. Even the change process itself appears in the questionnaires as a stress factor.

### 2.1.2 Beyond Methods: Research *Versus* Intervention

Although most research on stress has focused on mapping different stressors, there have been many intervention activities in the field of stress management, as well (e.g., Johnson, ). Kompier and Cooper (1999) edited a book in which several European countries presented their latest ideas concerning stress interventions. Because this book contains a report that relates to my research site (preventing stress in bank work in Portugal [Graca & Kompier, 1999]), I will report in detail how the research results were used, and how they benefited the interventions conducted based on our own article (Launis, Kantola et al., 2005).

Graca and Kompier (1999) complained of a lack of epidemiological research on the causes and consequences of stress in bank work, as well as about the lack of data on work satisfaction and sickness absenteeism. They introduced an ongoing stress-prevention project in a large bank. With the objective of initiating workplace health actions in the future, they surveyed a random sample of 80 employees by means of a confidential health-needs questionnaire (behavioural and organizational risk factors). According to the survey, the main health-risk factors were the lack of regular exercise and inappropriate nutrition, as well as smoking

and drinking, while organizational pressures included poor work conditions, job overload, one's professional role, career development and other organizational stressors (Graca & Kompier, 1999).

The Occupational Health Services devised an action plan to reduce different risk factors. The objectives of the intervention seemed to be very précis; for example, "to decrease by 10 percent the level of stress reported by the Lisboan bank branches' employees". The authors came to this conclusion:

> Although in this company stress is now perceived as a major health issue that calls for action, several questions still have to be answered.
>
> *(Graca & Kompier, 1999, p. 281)*

What remained unresolved was how to combine preventive actions on an individual level and on the organizational level. The question in my study was: What defines preventive actions in situations of change? Are they interventions and activities that counteract an ever-changing mixture of stressors, and does this kind of activity combine stress interventions with the management of a constantly changing work environment?

The results of the former stress-prevention measures appeared to be disappointing. According to Kompier and Cooper (1999), what stress management was missing was the employment of systematic risk assessments, such as "stress audit", and the identification of mental risk factors. They considered the main problems in stress prevention to be a reliance on interventions that are directed towards individuals rather than the job or organization, and senior managers who are often inclined to blame individual workers and their lifestyles for health problems rather than the job or organizational factors. Kompier and Cooper called for properly designed longitudinal studies: the involvement of randomized control groups; the collection of both subjective and objective measures to be properly analysed with statistical techniques (Kompier & Cooper, 1999). Kompier (2002) argued against the need for more general and cross-sectional research, and advocated more longitudinal research and detailed data collection.

The central issue here did not seem to be a question of conducting longitudinal research, or of control groups and control organizations. The main problem seemed to be that the lists of stressors did not include any sensible, local and contextual starting points for the intervention, in which stress reduction would be part of the local change process. Compiling lists of general requirements for the psychosocial work environment will not solve the basic problem: the traditional epidemiological model neglects the real and changing situations posed by local work. The research setting itself sets up the problem, inasmuch as it separates stress research and intervention from each other, and from changes in the work environment as well. In addition, the research has produced neither scientific models nor tools for interventions. Tools developed for epidemiological research are instead introduced at the workplace level without investigating their use, or

their effects in promoting work ability (see e.g., Elo et al., 2002; Ylikoski, Launis, Lehto, Mäkitalo, & Räsänen, 2002).

Relevant knowledge related to local processes of development and change is lacking in the work-ability approach, in which models of change are based on assumptions that the knowledge produced through research creates desired changes at the workplace level. What is obviously needed is the means and models for examining change processes in the workplace. There is a lack of critical and constructive research concerning the work-ability approach as a whole. Researchers of work ability and work-related well-being must learn to analyse their theoretical basis and to extend their methodological approaches and research methods so that the necessity of local actors in organizations receives attention. It is truly a question of producing knowledge of a different quality (Ylikoski et al., 2002).

In my study, the problem was that these myriad "factors" or "characteristics" of work were not very useful as tools when employees were striving to understand the dynamics of their work's local change process and to enhance their well-being as an integral part of whatever transition they were in the midst of. For the local, contextual situation, the questionnaires seem to:

> 1. Measure the general experiences (perceived stressors) and general individual characteristics of a worker, not the historical change situation of the local work activity. The content and the dynamics of the changes were missed and reduced to an ever-growing number of stressors.
>
> 2. Convert the work process itself into detached features or factors that have either negative or positive effects on the individual worker. Instead of being (or becoming) the subject of his or her work activity, the worker seemed to be the object of the various negative or positive factors.
>
> 3. Fragment the qualitative properties of the work process, and changes within it. The change process was then seen as fluctuating between balance and imbalance between working individuals and different stressors.
>
> *(Launis, 1999)*

## 2.2  Activity Theory as a Basis for the Methodology

Much has been written about continuous change in the work environment. Pettigrew, Woodman, and Cameron (2001) nevertheless point out that it is not easy to identify the context and dynamics of such change. According to Engeström (1988), many daily occurrences at work prove that traditional psychological and sociological research does not tap change dynamics as they occur in real life. Engeström points out three dichotomies in problems related to traditional research: 1) work *versus* worker; 2) high- *versus* low-level skill; 3) research *versus* intervention. Although all of these dichotomies are interesting and topical regarding research on stress and well-being, the most relevant dichotomies concerning my case are the first and the third. Work vs. worker targets the theoretical basics of traditional stress research:

> The most fundamental and persistent dichotomy is that between work as a structural framework given from above and the worker as an individual who enters the framework. The effects of the given framework on the individual as well as the required remedies are pictured differently depending on the ideological stance of the research.
>
> *(Engeström, 1988, p. 24)*

As a solution, Engeström (1988) introduced an alternative to depicting workers as active parts of an interactive and dynamic system. He proposed a new unit of analysis, an *activity system* (Engeström, 1987) based on Cultural-Historical Activity Theory[13].

In our research project "Work Units between the Old and the New", we analysed the workers' well-being by using Activity Theory and Developmental Work Research (see e.g., Chaiklin, Hedegaard, & Jensen (Eds.), 1999; Engeström, 1987, 2000a; Engeström, Miettinen, & Punamäki (Eds.), 1999; Engeström et al., (Eds.), 2005). Instead of focusing on individuals and stressors, we tried to understand work as both a local and changing activity system. The concept of activity is basic within the cultural-historical tradition, because it provides a way of characterizing the aspects of social practice that are believed to provide the conditions for psychological development. The concept of social practice, interpreted as activity, facilitates a focus on the dynamics between traditions of collective activity and the realization of collective activity within institutions as it takes place through the subject's actions.

Instead of choosing individual workers or patterns of detached environmental factors, we chose local change situations as a research unit, and analysed them by means of the activity-system model. The change dynamics in different parts of the activity system can be seen to create continuous imbalance within the activity. This imbalance could be described as a contradiction within the activity system, and consistently appears in the form of disturbances, problems and inconvenience in everyday work life (Engeström, 1987, 2000a).

Renewal of the work process does not simply come about by balancing the situation between the worker and the different environmental factors surrounding him or her, but requires resolving of the contradictions within the content of the local activity system; by developing, for example, new tools or divisions of labour according to the changing clientele within the field of banking. The process of change is always complicated and unique, as well as a local and historical process. The transcending process originates in the need to find new ways of solving production problems. This continuous renewal of the activity system is

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[13] Activity Theory and the Cultural-Historical approach are rooted in the theories and research of Vygotsky (1978) and Leontjev (1981).

effected through an expansive learning cycle, in which the work community initiates and seeks new solutions, and makes sense of the work process in which it thrives (Engeström, 1987, 2000a). It is within this process – not from a separate stress intervention – that employee well-being is produced.

The two theoretical tools used for my case analysis in this chapter are the *activity-system model* and the *cycle of expansive learning* (Engeström, 1987, 2000a). During the gathering of data on local situations through interviews and ethnographic methods for intervention, there was also constructed an essential intermediate tool, the concept of *impossible task* (discussed later in Chap. 3) to understand conflicting, nagging and stressful situations in local transition processes.

## 2.3 Case Study Settings

In the study "Work Units between the Old and The New", the general research interest was: What happens during a local workplace change process, and in what situations and with what expressions do personnel talk about their well-being problems when they are in the midst of everyday change? The entire research project covered four different organizations in the midst of changes: a bank, a health and social-welfare service, a research laboratory, and a postal-service mail-delivery department. This dissertation work deals with the Bank, and the state of its organizational change as a context for the local case analysis.

A description of this context is based on the multiple case data[14] and analysis reported earlier (Launis, 1999; Launis, Kantola et al., 1998; Launis, Kantola, Niemelä et al., 1998).

### 2.3.1 Research Site and Context for Organizational Change

My research site was a Finnish commercial banking organization, The Postipankki Retail Bank.[15] It was undergoing structural and business conceptual changes, particularly in one of its local branch offices, the Branch Office of Martinlaakso. In order to understand the larger context of the change environment in the Bank,

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[14] The description of the examined organizational change is based on the following data: an interview with the branch manager (14 April 1997), interviews (8) with the employees, the field notes written by the researcher (16 April, 30 April and 28 May 1997), a group discussion on work-ability in the Branch Office (22 April 1997). The interview data is audiotaped and transcribed. The written material and documents used were: the job descriptions related to outcomes (Oct. 1995 and Jan. 1997), job descriptions (20 Nov. 1996), marketing plans (20 Dec. 1996, 15 April 1997 and 14 May 1997) and the follow-up data of the Vision (17 April 1997). The other written materials were the employees' descriptions of their personal work history, the result goals and result reports, the reports of use of working time, "Tuutti" (the internal journal of the Bank) and "Privaatti" (the journal of the Bank staff) and the annual reports of 1995 and 1996.

[15] The name Postipankki Retail Bank was changed to Leonia in 1998, to Sampo-Leonia in 2000, and to Sampo in 2001.

I first analysed the motives and starting points of the new banking model planned, as well as the content and plans for its implementation at the grassroots level. The research questions were: Why is this organization now planning a change? What motivates the change? What kind of new work model is proposed as compared to the existing one? How is this organization going to achieve its desired change? What kind of implementation strategy has been planned or carried out?

I gathered data on these plans by interviewing both planners and managers, analysing written documents (such as descriptions of the new vision and the training material), and by observing and participating in change seminars and planning meetings. Table 1 gives a brief summary of the change planned at the Bank, while Table 2 describes the plans for implementation.

Table 1. Starting points for change in the Bank (in 1998)

| | |
|---|---|
| **Main motive for the change** | To improve profitability and international competitiveness, new kind of customer relations, and changes in customer-behaviour Reduced personnel |
| **Organizational or local analysis of the work activity behind the plans for change** | Comparisons of profitability, analysis and presumptions of changes in customer-behaviour, client-satisfaction surveys, test-client analysis, attitude surveys of work climate |
| **Name of the new organizational activity model** | "Vision 2000", "The new kind of customer relationship" or "The new kind of banking relationship" |
| **Coverage of the new model within the organization** | A new strategy for retail banking as a whole; each "line" (branches, call centre, etc.) can specify the new vision according to their own special function |
| **Use of external consultants** | An external consultant firm was used in the planning process of the new vision |

There were two main explicit justifications for the changes in the Bank's organization. On the one hand, the Bank had to improve the basic profitability of its business operations. The Bank had incurred considerable losses during the first half of the 1990s. Competition in the banking industry was now seen as fierce and was becoming even more so as foreign credit institutions entered the Finnish market. As a result, Finnish banks were compelled to streamline their heavy cost structures to increase their profitability.

In early 1996, the Bank had decided to reduce the number of bank branches, as well as the number of post offices that offered banking services.[16] The goal was to reduce these branches and services from over 1,000 to approximately 550 by the end of 1998. This decision was mandated in the Bank not only to cut costs, but also to deal with the enormous changes that had taken place in customer-behaviour patterns. The banking service handled by post offices had fallen by one-third during the first half of the 1990s. At the same time, the volume of automated

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[16]  Postipankki Retail Bank and Finland Post Ltd both had a contract of cooperation on the grounds of which the post offices could offer banking services in Finland.

and self-service transactions had risen by more than five times the amount. This change was seen by the Bank as justification for eliminating the overcapacity in the service network.

On the other hand, the Bank had to boost competitiveness: its business needed to attract more customers, which constitutes the second challenge within the change process of retail banking. That called for constructing a new overall vision, called "Vision 2000", or "the new kind of bank relationship", or "the new kind of customer relationship". The core of this vision was to construct a chain-like organization, as well as a new kind of customer relationship.

According to the vision, the customer relationship was established between the customer and the entire bank, rather than between the customer and a certain branch office or official. "Catering for customers" was emphasized, and was meant to offer new kinds of banking attractions.

The idea was that in a nationwide network-like bank, customers could choose where to bank or what service modes to use. It also meant that wherever the customer chose to bank, the content and status of his or her banking matters would be well-known there. Whoever served the customer – in any of the branch offices, in the Call Centre or in any of the support departments (e.g., in Loan Service production) – would be able to access the necessary information about his or her banking or banking history. To support this new kind of banking relationship, new data systems were created (such as the "loan system"). Knowing the customers and taking care of their interests – along with the effective use of the data systems – required cooperation between the different units in retail banking. It was important that customers be seen as "our common clientele", shared by all of the employees.

With the Bank's drive for more profit as a background motive for the new vision, one important aspect was the idea that customers should handle their routine matters, such as withdrawals, deposits and payments, as much as possible by themselves through ATM cash points and payment ATMs, and by using PC Home Banking or Call Centre services. Thus, in the future, the remaining bank offices could be set aside for clients demanding expert services only, and many expensive offices could be closed down.

The officials, who were called "consulting salespeople" in the vision, would thus focus on loan and investment consultation instead of routines and cash work. In the Branch Office, this meant a great deal of hard work and substantial effort to change the behaviour patterns of customers. In practice, the challenge lay in selling the new type of out-of-office service to customers, while at the same time inviting new loan and investment customers.

The first phase of the research showed that the basic motive for the change within the Bank Organization was to increase its profitability and improve its competitive edge. The well-being of the workers was neither acknowledged nor included, nor was it taken into consideration in the proposed change plans. The compelling interests of the new model were not local, nor were they anywhere

near the organization's prevailing work models. Rather, they made use of general trends, which included teamwork, flexible organization, networking, and so-called "customer-based orientation" (Launis, 1998, 1999; Launis, Kantola et al., 1998, 2005; Launis, Kantola, Niemelä et al., 1998; Launis, Niemelä et al., 2000).

## The process of implementation

Table 2.  The plan for implementation of the Bank's new working model (in 1998)

| Above the organization | Market competition |
|---|---|
| Top management | New vision created jointly by the top management, experts and the external consultant firm<br>↓ |
| Middle management | ↑<br>Different service lines (branches, call centre, etc.) create their own visions, which are based on the vision of the top management. The middle management then conveys the vision to the field.<br>↓ |
| Work units and individual workers | ↑<br>Special training in each work unit, and feedback flows to middle and top management from every unit<br>↓ |
| Client's role in planning the new models | ↑<br>Analyses of the processes of the clients, changes in client-behaviour and client-satisfaction; test-client analyses |

↓ = initiative and direction of change
↑ = feedback and its direction

The basic implemention model of the new concept for the customer-relationship within the Bank was top-down (Table 2). The construction of the new vision began with the top managements' initiative in the retail banking sector of this commercial bank organization in May 1996. A group of 25 people, mainly consisting of the management team, built up the vision. The work was accomplished under the guidance of an external consultant firm, which had worked for years with the bank. The vision was "ready" to be launched during January 1997.

Implementation training started in spring of the same year. It included intensive and detailed training carried out with the help of complementary training material and a thorough didactic process that was planned in detail by the training department. Each employee in the retail-banking sector received four half-day training sessions acquainting them with the vision. The idea was to internalize and modify it from the viewpoint of each work unit, as well as each individual's own work. Additional specific training for evaluating one's selling skills, or using new data systems was also available. Both the management and planners gathered feedback from individual workers' opinions and reactions concerning the new vi-

sion, as well as about the training situations. Quantitative feedback was discussed during planning meetings among the top managers. Despite the customer-oriented ideas appearing in the management plans, the clientele was not acknowledged nor given an active part in this change process. Instead, client analyses were conducted via questionnaires only (Launis 1998; Launis, Kantola, Niemelä et al., 1998).

### 2.3.2 Change Situation at the Local Work-Unit Level

According to previous studies, managers, planners and change consultants often describe workplace change processes as thoroughly planned, well conducted and even rectilinear. The main issue for managers and planners seems to be the careful implementation of visions and plans, mainly through personnel training (Carnall, 1990; Hammer & Champy, 1993). Based on the activity-theoretical framework it is essential to understand change as a locally constructed process when investigating the realization of change on a local work unit level.

Thus, during the second phase of the research project, data was collected in order to understand what happens during the local transition process. In this specific Bank, the work unit comprised the Branch Office, chosen earlier as one of three pilot branches to carry out Vision 2000. The research questions probing the local change situations were the following:

1. What kind of tensions appeared when the work unit aimed to implement the new vision or the work model?
2. What kind of work-related well-being issues came up during the change process?

The Branch Office studied in this research was located in Vantaa, the "sister" city of Finland's capital, Helsinki. Most of the customers of this Branch were elderly and/or low-income customers, who often used the Branch's services in traditional ways. Over 90% of these clients were so-called "routine-banking customers". These regular customers were also very loyal to their "own" branch office, and they wanted personal service. The Bank's employees felt that in the new situation there just was not enough time in the Branch Office for consulting and sales work. The work primarily involved routine tasks and servicing customer queues.

Simultaneously with the launching of Vision 2000 in the branches, and while training for the Vision was still ongoing, cooperation between the mother bank, Postipankki, and Finland Post Ltd was coming to an end. This concluded banking services in seven post offices near the Branch Office, which caused an influx of new customers to this particular Branch Office. These customers also maintained traditional and old-fashioned ways of conducting their banking. It was a difficult challenge, to say the least, to motivate these customers inherited from the post offices to use the more modern services outside the Branch Office. Most of these

customers could not or did not want to use the ATM cash points or Call Centre services. As it turned out, the real-life customers at the Branch Office were nothing like those anticipated by Vision 2000.

> [...] What you should have done in regard to the employer and vision and all that, so that of course you should have sold those services in a very different way. For everyone, but, well, the tiredness shows, so that, well, you just don't get round to doing it. For every situation, every... we're told that if a customer turns up to pay a bill, we should interfere, ask which bank they use, and what they pay for the service there, and whether they should change their bank, that's what we're after. But in everyday work... it is totally impossible because of the rush.

> *(Bank employee, N9, stimulated recall-type interview, 11 March 1998[17])*

Both individual workers and the entire work unit perceived the resulting situation as burdensome, overloading and frustrating. There was a great deal of discussion about the impossibility in the work community. This talk was not about impossibility in the work in general, but was related specifically to the changes taking place within the concrete work activity. In the interview above, the employee mentioned "the vision" and the idea of active selling work: *"you should have sold those services in a very different way", "we are told ... we should interfere... But in everyday work ... it is totally impossible"*. The employees expressed dilemmatic feelings about how they should follow the Vision, yet felt that it was truly impossible to carry it out in practice. The new concept of "*consulting selling work*" was felt as impossible and inapplicable in everyday situations. Preliminary interpretation of the cause of this feeling of the impossibility revealed that it was related to the rush, the congestion of clients and the pressure of too little time as a result of the diminished number of branch offices.

I collected the data from the local Branch Office in question by using a longitudinal approach, which unfolded in several phases. My methods were ethnographic, so that I, as a researcher, observed, interviewed, audio- and videotaped the employees during the period of 1997 to 1998 (and during the intervention in 1999). Some of the audio- and videotaped data were transcribed and used in joint sessions with employees to interpret change situations and the feelings of workers. At this stage of the research, the researchers and work unit analysed and interpreted the collected data together and decided what kind of additional data would be necessary to collect in order to better understand the change situations.

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[17] *N1 = the branch manager*
*N2 = the occupational health care nurse*
*N3–N10 = the employees*
*R1 = the researcher*
*R2 = the student*

The primary data at this stage consisted of the *stimulated recall-type* interviews (in March 1998), which were gathered to obtain the workers' interpretations of work situations and work processes that had been videotaped earlier (Sep. – Oct. 1997). I had chosen specific parts of the video data, and asked each employee in the Branch to examine and interpret these by answering questions concerning both changes and the subjective sense of well-being at work. The work processes that were previously videotaped pertained to various service situations involving both cash and loan customers. These stimulated recall-type interviews (cf. Cicourel et al., 1974; Engeström, R., 1999, 127–130; Engström et al. 1989, 1990) were also audiotaped and transcribed.

## 2.4  Case Analysis by Applying the Ideas of an Activity System and Expansive Learning Cycle

In this chapter, I will inspect the manifestation of the change in the Bank and the findings of impossibility in relation to change by analysing the change situation with the models of Activity System and of Expansive Learning.

According to the data and analyses, the local change process emerged as vastly different from the one planned and trained for in the implementation process. Individual workers and the work unit often became entangled in situations where acting in accordance with the new model proved impossible in their everyday work. It was felt that the system did not function properly, and that workers were unable to do the right things or act in the proper way according to the ground rules of the Vision. The employees reported feeling uncertain, frustrated, nervous, tired or stressed when facing the impossibility that was embedded in the change process.

### 2.4.1  Change-Related Sense of the Impossibility Studied in the Framework of the Activity System

Engeström (1988) describes an increase in "situations where workers (on all levels of hierarchy) face tasks that they find impossible to solve." (Engeström, 1988, p. 22). He found something curious about such impossibilities. Situations are somehow resolved, although individual workers (on all levels) find them to be beyond their control. The situations in question did not involve system accidents or breakdowns, but were characterized as difficulties, disturbances or disruptions in the flow of work. The primary problem appeared to be that people could not even adequately define the problem (Engeström, 1988).

> The prevalence of such impossible tasks creates a nagging atmosphere of insufficient mastery over what is actually happening.
>
> *(Engeström, 1988, p. 22)*

The stimulated recall-type data in my study picked up repeatedly the talk about impossibility on the local branch level. I considered classifying different types of impossibility, but here I will examine only one type, as an example of how to apply Activity System and Expansive Learning Cycle for understanding the talk about the impossibility carried on in the collective work unit and on the work activity level.

In the following, I will interpret the dilemma in the local situation by using the model of an activity system and its crucial idea of contradictions in order to promote a better understanding of the constantly changing activity system as a context of impossibility (Engeström, 1988). There was an obvious contradiction in the Vision between the presumed kind of customers and the actual customers who came to do their business at the Branch Office. Vision 2000 envisioned customers who would require guidance concerning loan and investment matters, but the real-time customers of this Branch Office came primarily to carry out routine cash transfer matters. They also wanted to visit a real branch office and receive personal face-to-face service, instead of using the impersonal Call Centre or the even more impersonal automated ATM.

The analysis of the local activity system (Figure 2) showed a distinct contradiction between the real-life object and the object in Vision 2000 as planned by the top management and the consultant. The Vision failed to function as anticipated in regard to its conceptual modeling of customer relationships when compared to life in the actual local Branch Office. Therefore, a contradiction existed between the tool and the object of the activity (Contradiction 1), and a contradiction also surfaced between the object and the expected outcome. The outcome with the real customers was all about traditional service and routine cash transfer matters, instead of business influx through loan and investment matters (Contradiction 2). Vision 2000 also had strong expectations for carrying out ongoing sales work, but customers only wanted service and attention to their routine matters. This tension could be understood as a contradiction between the rules and the object of the activity (Contradiction 3).

Tools:
Vision as a conceptual model
Selling new service-modes by
using new technology

1

2

Expected outcome:
New customer
relationships with better
profitability

Subject:
Branch Office and
its employees

Object:
Increasing number of
old and low-income
clients in the suburban
branch

3

Rules:
Use every opportunity
in sales work
Guide customers to
conduct routine
matters by themselves
outside the Branch
Office

Community:
Entire retail banking
department of
Postal Bank

Division of labour:
Everybody does everything
in the Branch Office
(multicapability/multiple
skilled persons)

**Figure 2.** Contradictions in the activity system of the Branch Office

### 2.4.2 Change-Related Sense of the Impossibility Studied in the Framework of the Expansive Change Cycle

In the following, I use the Branch Office case to illustrate how the impossibility (called impossible tasks and situations) tends to arise in a local change process. I have analysed this situation by using the idea of the Expansive Learning Cycle somewhat loosely and metaphorically. Later, in Chapter 5, I will consider the concept of expansive learning in detail. Although the redesign of the local work activity was complicated and many-faceted, the situation is simplified in Figure 3.
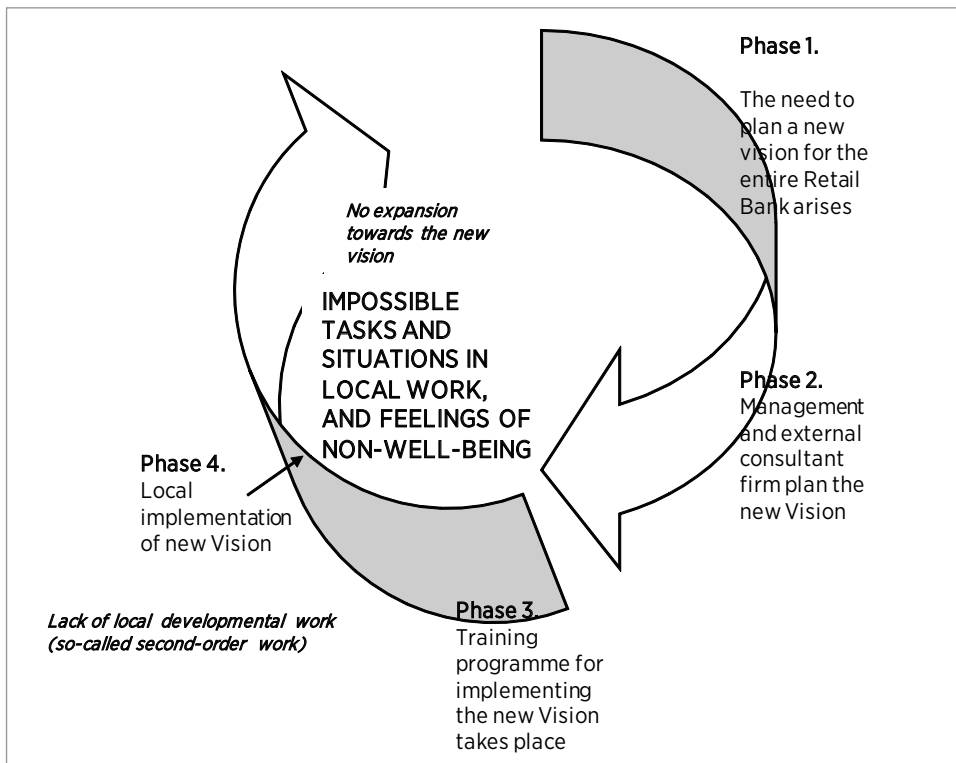
Figure 3. The cycle of change in the local activity of the Branch Office

The first phase (Phases 1 and 2 in Figure 3) of the change process towards "a new kind of customer relationship" was planned by the management, the vision planners and the external consultant firm. The principal motivation for this change was economic. The implementation process of the new Vision was carefully planned (Phase 3), and management gathered quantitative feedback from employees via questionnaires. The idea behind the new Vision was based on a conception of clients that differed form the real-life clients of the Branch Office (Phase 4). Situations in which the Vision should have been implemented in the Branch Office (Phase 4) gave rise to tasks and circumstances experienced as impossible, and employees met with many kinds of symptoms as a result – including fatigue and feelings of incompetence.

In the Bank Organization, problems related to the methods of planning changes accelerated when the local Branch tried to implement the actual change in everyday work. The anticipated new model had been based on general notions such as modern methods of client servicing and networking, but had excluded an analysis of local work models of activity, and therefore proved to be impossible to implement in everyday work activity (see also Launis, 1999).

The challenge of change in the Branch Office seemed to necessitate a thorough study of the local clientele. Ways in which the Branch Office could carry out and

balance routine and expert tasks had to be developed, as opposed to enforcement of the new Vision through a regimen of training days. It became a question of locally constructing a modified Vision to suit specific clients; however, the personnel at the Branch Office felt they did not have the time, models or tools for accomplishing this.

There was no space or tools for developing the local work activity, to do so-called *second-order work*. The concept comes from Hirschhorn (1984), who also used the concept of *developmental work* in the same connection. Hirschhorn perceived second-order work in relation to disturbances and quality of work, giving the responsibility of second-order work to the workers.

> "The sheer complexity of the mechanical-electrical processes and the continual modification of the technological equipment places developmental responsibilities on workers. We do not have to posit a series of extreme breakdowns or accidents to forecast the development of second-order work at the center of worker responsibility."
>
> [...]
>
> "Finally, developmental work can become the model of labor if the variety of outputs increases. [...] Today's machinery is more flexible. Engineers can modify existing equipment by changing the controls, but this requires prior knowledge of the interactions within the control systems and between the controls and the raw materials. Thus product variety would again require developmental work as workers modified the equipment, the controls, and the protocols for integrating controls. Is there evidence, or at least a theoretical rationale, for believing that the variety of input, the variety of output, and expectations as to quality are all increasing? If so, are managers, unions, and engineers encouraging workers to make developmental decisions?"
>
> *(Hirschhorn, 1984, p. 101)*

In this study, I defined second-order work as a development of work activity (*first-order work*) by scrutinizing and analysing it[18]. Thus, the concept of second-order work includes the idea that learning is not only acquiring knowledge already existing but also creating knowledge from one's own activity. When acting, one is also producing knowledge about that activity, which requires reflective work orientation with its specific tools. Consequently, it obviously requires differential competence, *second-order competence* (Ahonen, Engeström, & Virkkunen, 2000) related to a special learning process.

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[18] In the present case study, customer service and business activity in the Branch Office could be seen as first-order work. The intervention for resolving "the impossible" by developing first-order work could be perceived as second-order work and a learning process.

The Branch Office had to return to Phase 1 later in the process, during the intervention. The analysis of the change as a process that was both locally constructed and contradictory ultimately produced knowledge and understanding about the local change process. During the intervention, the work community analysed their local activity using the activity-system model, and planned their own change cycle in order to construct ideas of the new Vision according to their local situation. These analyses, as well as the results of the intervention, will be examined in detail in Chapters 4 and 5.

## 2.5  From Individualization to Interpretation at the Collective Level

The contradictions within the activity systems involved in the Branch Office work did not turn out to be stressors or environmental factors, but were rather expressions of imbalance in the activity system that occurred due to the change process on an organizational and local level. The solutions to this dilemma did not involve well-designed interventions to eliminate negative aspects (mental risks) of the job, or to increase the level of social support and opportunities to use initiative in general. Instead, the answer was to plan a new, collective and contextual action model within the local work situation.

What the employees actually needed were models and tools for understanding the change process of their local community, for analysing the transition of their own activity and loyalties, and for carrying out their own special and contextual solutions that arose from their own history, culture and prevailing state of affairs.

In summary, the ever-increasing transition process in the workplace has two sides: in the face of new challenges, workers are supposed to be motivated and feel satisfied, but they also experience significant stress, fatigue and feelings of incompetence related to transition. Most of this stress and fatigue as well as feelings of incompetence seem to derive from minor everyday tasks and situations that are recurrently experienced as impossible by the workers. The ethnographic observations and interviews demonstrate that the situations and tasks that were experienced as impossible were common in situations of change – regardless of the training programmes or interventions in which detached problems were solved – even by the workers themselves.

When the impossible tasks recurred, individual coping mechanisms seemed to lead to frustration and fatigue, because they did not solve the basic problem – the contradictions in loyalties that originated within the change process of the local work-activity system.

Stress and well-being problems seem to be associated with workplace change, and arise from imbalances in the ever-changing local and unique set-up; they cannot be understood by conducting even a well-designed and careful analysis based on an epidemiological research model. In terms of the development of stress interventions, the methodological gap is not the lack of properly designed longitu-

dinal studies with randomized control groups. Two companies with comparable stress problems do not exist in real life, and as far as finding a control company is concerned, it is not in the corporate interest to facilitate scientific research. The problems and shortcomings are rather in the theoretical basis of dualistic (work-worker) epidemiological research models. It would seem to be useless to direct research efforts only to finding out general stress factors, and to fret about the poor effectiveness of interventions focused on stressors. If they are to make a significant contribution to reducing work-related stress, researchers also must renew their own models, according to *the changing research object:* the local work place in the midst of various changes.

It also must be added that coping mechanisms are traditionally studied as different individual strategies or personal resources held by workers. Training in transition situations has also focused on the improvement of many kinds of individual qualities, such as mental resources and physical fitness. Later, using the concept of impossibility, I and the personnel of the Branch Office studied the actual transition situations. We identified, documented and analysed in detail the most salient impossible tasks in the context of various work activities in different types of change processes. Instead of inquiring about individual coping mechanisms, we sought out the transition that took place within the activity process itself. The implication was that the problems related to well-being could be interpreted and treated as disturbances in the planning of the local change process.

In conclusion, the analyses in this chapter have been preliminary from the viewpoint of my long-term research project. Later, during the intervention project, in collaboration with the work units and researchers, we closely analysed the local impossibility and situations in order to understand what kinds of imbalances and contradictions they reflected regarding the change in activity, and how the work units managed to construct models to facilitate continuous analysis of and improvements in their own local activity system. The unifying feature of the perceived impossibility appeared to be an imbalance between the changing object of activity and the other parts of the activity system. The objects of the activity (the clients in my case) seemed to provide a basic motivation for the workers. In any case, the *impossible task* or *impossible situation* seemed to be a promising intermediate-level concept – determined by ethnographic methods and set in an activity-theoretical framework – through which it is possible to incorporate workers' well-being as an integral component of organizational transformation and re-design in the workplace.

## 2.6  The Primary Research Problems

Chapter 2 demonstrated how the impossibily became a critical issue related to change and work-related well-being at the local Branch Office, and was perceived as an essential research object of my dissertation work. The primary research questions for the dissertation will be:

1) **How is the experienced impossibility conceptualized and what are the efforts to resolve it at the Branch Office?** How does the concept of impossibility take shape during the intervention process and become a stimulus for developmental work?
2) **How will the process of conceptualizing and resolving the impossibility be constructed as a collective learning process?** Can the intervention process enable an expansion? What would a possible expansion be like? What kind of concrete changes will be accomplished during the intervention?

For understanding impossibility as a phenomenon and as a background of the research questions, I will first discuss the theoretical ideas for conceptualizing impossibility in previous research. Later, I will consider research question 1 mainly in Chapter 4, and research question 2 in Chapter 5. Nevertheless, these questions and the chapters are closely connected.

# 3 "The Impossibility" as Providing Stimulus for Development Work

## 3.1 Sense of the Impossibility – Challenge to Development

Impossibility as a starting point for development and learning is paradoxical, because the concept itself implies the idea of being stuck in a deadlock. *Impossible task* as a concept sounds especially contradictory. There is a task to do, but one feels it is impossible to do. Nevertheless, in this study, my aim is to examine the process of resolving the experienced impossibility and trying to construct possibilities in a situation of deadlock. I have taken this impossibility as a challenge and as a starting point for learning and development. Thus, the impossibility has been used as a potential for development and learning, instead of being swept away.

The concept of impossibility is seen in this study as an intermediate-level concept (Engeström, 1995, p. 125) that arises from everyday talk about the experienced impossibility related to different kinds of work tasks and work situations. In the stimulated recall-type data, the workers expressed impossibility repeatedly in the following ways: *"it's not possible"*, *"it's impossible to do this"* or *"we don't have the means"*. There were also expressions of strong emotions and non-well-being at work in the context where the impossibility was being felt (Launis, 1999; see also Kantola, 2000). The experiences of the impossibility are interpreted as experiences of non-well-being at work as well.

The concept of impossible task is also based on the activity-theoretical way of understanding the experienced impossibility as an expression of historically constructed tensions and contradictions in work activity. By using Activity Theory (AT) and Developmental Work Research (DWR) as a theoretical framework for intervention, the idea is to overcome an individual and situational interpretation of impossibilities and the process of solving them. These paradigms, as a theoretical framework, are orientated to resolving impossibility by studying and analysing the real collective and object-oriented work activity as well as disturbances and breakdowns in it. In my study, the concept of an impossible task is interesting as an *intermediate level concept* when combining the experiences of impossibility and well-being. Such a concept provides a two-way bridge between the general theory and specific practice (Engeström, 1999a, p. 36). Chapter 3.4 scrutinizes the theoretical and methodological framework in more detail.

The special contribution of the present study is its treatment of the experiences and the expressions of the impossibility as a research object on the one hand, and as a basis for developmental work on the other. Even so, the concept of impossibility was not a ready-defined concept that could have been taken into use as a means for developmental work as such. Instead, an understanding of the concept became a creative endeavor during the intervention. The concept can be

understood both as a means of learning and as a concrete expression of something learnt (see also Gherardi, 2000). The aim of the chapter is to explore how the concept of impossibility took shape and was constructed both as a tool and as an object of the developmental work, in a collective discourse between the employees and the researchers during the intervention process.

The endeavour to conceptualize impossibility carries the narrative forward. First, as a basis for understanding and analysing the intervention process in resolving the impossibility in the Branch Office, I will examine how impossibility has been theorized in previous research. After that, I will consider (in Chap. 3.3) the change situation in the Branch Office as a context of the impossibility in real work activity. At the end of the chapter, I will consider AT and DWR as a theoretical and methodological framework for the intervention. The framework guided the intervention process and gave a preliminary hypothesis for identifying the impossibility, even though conceptualizing *the impossible* was a special challenge during the entire intervention, as well as for my dissertation work. Although conceptualizing the impossible should not be understood as pure theoretical conceptualizing, it has been "more than finding a term and describing some associated empirical phenomena", which is how Engeström (2008, p. 258) defines theoretical conceptualizing. The impossible as a specific conceptual and developmental tool has taken shape during the writing of this dissertation.

## 3.2 Theorizing Impossibility in Previous Research

Bateson, Jackson, Haley and Weakland (1956) and Bateson (1972) explored impossibility when studying *double binds* in the context of communication and therapy situations. They emphasized impossibilities that are experienced repeatedly, namely, a series of experiences that are impossible to solve: a single traumatic experience being not enough. Bateson's idea of metaphors as a means to cope in the double-bind situation is also interesting. It could appear safer to a person involved to start using metaphorical messages or even to change oneself into another personality in the double-bind situation. Such a situation is pathological if the person does not know that his or her reactions are metaphorical, or if he or she does not recognize metaphors that remain unclear. Bateson et al. (1956) also mentioned poetry as an example of the communicational power of metaphors. I will carry these ideas in my mind when writing this chapter and I will come back to this theme in Chapter 5, in the context of intervention.

In his article, *Reconstructing Work as an Object of Research*, Engeström (1988) singled out impossible tasks as one essential phenomenon related to changing work. However, impossible tasks were not the basis in his article; it was work as a research object. He saw traditional psychological and sociological work research as having focused on individual skills, competence and qualifications, and the expected transformations in work, and felt it would be more significant to study the actual progress of change and the disturbances involved.

According to him, it was important to scrutinize those situations where workers felt a given task impossible to solve and where there were continuing problems at work. Engeström carried over the context of impossibility to the context of change, as well as to the context of collective work activity and its development. He conceptualized impossible tasks as developmental contradictions embedded in a change situation and refered to Hirschhorn (1984).

Two classes of such events are becoming increasingly evident: disturbances or breakdowns in the work process, and rapid overall changes in technologies and organizational patterns. These two are connected to each other. The introduction of novel technologies and organizational patterns often increases the chance of disturbances and breakdowns, and serious disturbances often force the management to seek new technological and organizational solutions (Hirschhorn, 1984). Both are connected with changing national and international market demands and opportunities (see also Engeström, 1988; Noyelle, 1987; Stanback, 1987).

According to Engeström (1988), both factors create situations where workers on all levels of the hierarchy face tasks that they find impossible to solve. Engeström also proposed that an impossible task could be named as a cognitive dilemma. It is paradoxical that impossibilities are always solved in one way or other.

> There is something curious about this impossibility. Each individual worker (including engineers and managers) may testify that the situation was clearly beyond his or her control. Yet, most of those situations are somehow resolved. Moreover, it may well happen so that none of the persons involved can quite reconstruct or fully understand what actually happened and how the resolution was found.
>
> *(Engeström, 1988, p. 22)*

Later, Engeström (1995) related impossible task more explicitly to the idea of expansive learning and shaped impossible task as an expression of secondary contradiction becoming increasingly pronounced. Secondary contradiction means tension between two different elements in an activity system. The idea of expansive learning constitutes the core of the methodological basis of my study. Engeström referred to Bateson's et al. (1972, 206–212, 271–278) idea of double-bind and saw it as a psychological-emotional counterpart to secondary contradiction. For the work unit, that means frequent impossible tasks and downfalls. Contradiction is felt to be intolerable, but so are tentative solutions, or they cancel each other out. Resolving double-bind expansively requires analysing and having contradiction under conceptual control (Engeström, 1995).

Hargrove and Glidewell (1990) described *impossible jobs* in social welfare and health care public administration. Controversial expectations and demands made by different parties led to situations that were impossible to resolve to the satisfaction of all. According to Hargrove and Glidewell, all jobs include problematic

individual situations, but some tasks can become impossible jobs as a whole, in certain social circumstances. The unit of analysis is job and it is important to analyse impossible jobs locally.

Blackler and Kennedy (2000, 2004; see also Blackler, 2006) also referred to the impossible job in their articles on a leadership and organizational learning in a developmental program that was implemented to support long-serving Chief Executives (CEs) role in the UK's National Health Service. There was a high turnover amongst CEs, and survivors constantly had to deal with problems for which there were no solutions, as well as to reconcile incompatible objectives. They were sandwiched between demands for long-term quality improvements on the one hand and short term, often party political, imperatives on the other. They had to address long-standing professional rivalries on a daily basis. At the same time, they were constantly confronted by the inequalities that characterized the provision of healthcare in the UK. Blackler and Kennedy's interpretation is activity-theoretical and quite close to Engeström's ideas presented above.

> Some of the CEs with whom we were working with may, we felt, have become detached from the pain of the impossibility of providing a health service. In these circumstances their own development needs seem to have become divorced from those of the service itself.
>
> *(Blackler & Kennedy, 2000, p. 4)*

During Blackler and Kennydy's developmental intervention the final module of the programme was designed to create a contained environment where CEs could recognize and, perhaps ironically, accept the inevitability of an ongoing sequence of doubts, disappointments and uncertainties in their work lives. Blackler and Kennedy (2000) reported that rather than merely sharing "war stories" between themselves, the intervention event was structured to help the CEs develop a historically informed and analytical perspective on their activities (see also Blackler, 2006; Blackler & Kennedy, 2004).

In our research project "Work Units between the Old and the New", (Launis, Kantola et al., 1998, 2005; Launis, Kantola, Niemelä et al, 1998; Launis, Niemelä et al., 2000), one essential finding was that when trying to carry out new plans and visions, individual workers and work units very often found themselves in a situation where a new working model seemed to be impossible in everyday situations. Such situations were first called *impossible situations* arising for many different reasons. For example, many simultaneous changes that were mutually contradictory were going on. An essential finding was that the changes could not be seen as a linear process progressing according to plans. Instead, they were a series of different disturbances, breakdowns and impossibilities. Not all distur-

bances were equally important, and they were handled as routine solutions; but some of them appeared as impossible to solve time and again.[19]

In the research project, we repeatedly stated that change-related impossibility, impossible tasks and impossible situations were the most critical elements involved in change-related well-being at work. We used terms referring to impossibility quite randomly and did not conceptualize impossibility very carefully. Nevertheless, our preliminary conception was rather close to Engeström's (1988) activity-theoretical idea of an impossible task as a secondary contradiction of activity. However, the challenge to better understanding the concept of impossibility was an essential learning object for us during the entire developmental intervention and my writing process.

The methods of solving the impossibility thus seemed to be very critical from the viewpoint of well-being at work. Recurrence of the impossibility, and even the way of solving it "somehow", often situationally and individually, did not seem to enhance any long-term well-being at work. Orientation to the impossibility appeared to be more like coping with rather than resolving it, and seemed to maintain the impossibility. The "good work community", as the staff expressed it, gave perhaps too much support to continuous talk about the problems instead of to attempts to resolve them. There was a lack of culture and tools to grasp the impossibility locally in the work unit. There was no shared model of action, nor even time to construct changes locally in daily work. The general vision of the change and the general and individual training process associated with it were not enough to realize the change in actual work (Kantola, 2000; Launis, 1999; Launis, Kantola et al., 2005; Launis, Kantola, Niemelä et al, 1998; Launis, Niemelä et al., 2000). The following table will illustrate how impossibility was conceptualized in the previous research discussed above, also from the perspectives of well-being and developmental work.

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[19]  These findings manifested a new kind of an idea of well-being at work. The findings stood out from the more traditional idea of reaching a good work community by eventually resolving the problems confronted. It was merely a question of strengthening the capability of resolving those problems of impossibility that were confronted repeatedly.

**Table 3. Conceptualizing impossibility in previous research**

| Authors | Bateson et al. (1956); Bateson (1972) | Hargrove & Glidewell (1990) | Engeström (1998) | Blackler & Kennedy (2000, 2004; Blackler (2006) | Launis (1999); Launis, Kantola & Niemelä (2005) | Kantola (2010) |
|---|---|---|---|---|---|---|
| **Concepts** | *Double bind, mentioned experienced impossibilities* | *Impossible job* | *Impossible task* | *Impossible job* | *Impossible task and situation* | *Impossibility, The impossibility,* **The impossible;** *Impossible task and situation* |
| **Level of interpretation** | Individual situation | Whole job in certain social circumstances | Collective work activity | Management activity | Change situations and changing collective work activity | Collective work activity; Developmental work activity |
| **Context** | Therapy and interaction context | Job; Social welfare and health care; Public administration | Collective work activity in change situation; Developing of activity | Contradictory, "sandwiched" management activity; Health care | Well-being and/at changing work activity; Developmental work | Local work unit activity; Developmental work activity; Banking work |
| **Why examine impossibility?** | To understand double-bind situation | | To recognize impossible tasks as essential phenomenon related to changing work | To find constantly problems for which no solutions; Reconcile incompatible objectives; Being sandwiched between demands for long-term quality improvements and short-term imperatives | To recognize experienced impossibility as symptoms of contradictions in work activity and as symptoms of non-well-being at work; Contradictory-like changes, not progressing in a linear way according to plans; Change as series of various disturbances, breakdowns and impossibility; Not all disturbances were equally important, but some appeared as impossible to solve again and again | Exploring impossibility as a stimulus for developmental work; Conceptualizing impossibilities |

| | | | | | | |
|---|---|---|---|---|---|---|
| **What is interesting from the viewpoint of well-being?** | Emphasizing impossibility experienced repeatedly; A series of experiences that are felt to be impossible to solve | What is interesting...: Coping with impossible jobs | Double-bind as a psychological, emotional counterpart to secondary contradiction; For the work unit this means frequent impossible tasks and downfalls; Contradiction is felt to be intolerable, but so too are the ways out | High turnover amongst CEs; Survivors constantly had to deal with problems for which there were no solutions, and to reconcile incompatible objectives, which might have been considered an impossible job | (Felt) Impossibility as a symptom of contradictory changes and non-well-being; Impossibility as an object of well-being interventions | Impossibility as an intermediate-level concept for bridging change and well-being at work; Integrating well-being at work with the intervention process for solving the impossibility at the work unit level |
| **The contribution to developmental work?** | Idea of metaphors as a double-edged means to cope in the double-bind situation | Importance of analysing local job | Impossible tasks as expressions of developmental contradictions (secondary contradiction) embedded in a change situation; Resolving double-bind expansively requires analysing and having contradiction under conceptual control | Instead of merely sharing "war stories", the intervention event was structured to help the CEs to develop a historically informed and analytical perspective on their activities | Experiences of impossibility as means for developing work during the well-being intervention | Conceptualizing impossibility explicitly as a stimulus for developmental work (the impossible); the impossible as an intermediate-level concept for bridging AT & DWR and development of the activity and practices of banking work |

Vygotsky (1978, pp. 74–75) found and specified the principle of double stimulus for consciously breaking through the borders of circumstances and for resolving the contradictions expansively. The general meaning of the principle of double stimulus is that for resolving the contradictions of activity people need their own will and means for strengthening and clarifying their will and judgment (Engeström et al., 2007, pp. 67–68). In Developmental Work Research (DWR) Vygotsky's (1978) idea is used a great deal and the relevance of the participants' own sense making is emphasized. Thus, developing a new model of activity and a new means for realizing it is supported by dialogical spaces constructed by researchers. Engeström (1999a) described a dialogue as a place where actors produce the meanings related to the situation (see also Lambert, 2006).

In the *Change Laboratories* developed in DWR, the first stimulus is often mirror data, such as videotapes of work situations expressing the contradictions and disturbances as problems. Conceptual models, like the model of activity system or of expansive learning, are used as a second stimulus (Engeström, 1987, p. 78, p. 322; 2007, pp. 363–383). When analysing the causes and origin of the disturbances, the participants of the Change Laboratory use the models and give a specific content to them related to their own work (Engeström, 2007).

In my study, the concept of impossibility as an intermediate level concept operates as a second stimulus and creates the dialogical space when shared conceptualization and reconceptualization are needed. The intermediate concept provides a two-way bridge between the theory and the meanings related to the specific practice. This will be explored more closely in Chapter 4.

## 3.3 Change Situation as a Context for Transcending the Impossibility

As Chapter 2 explained, the banking business in Finland has been tumultuous for almost three decades. Individual workers and work units have been confronted with impossible tasks when trying to realize the many, and often contradictory, changes going on and organized in a top-down fashion. Even well planned changes have not progressed in a smooth, linear way, but have been beset by many kinds of disturbances and breakdowns when implemented in everyday work. As I have presented earlier, experiences of impossibility have also been noted in some studies carried out in different fields of working life (Blackler, 2006; Blackler & Kennedy, 2000, 2004; Engeström, 1988; Hargrove & Glidewell, 1990; Launis, 1999; Launis, Kantola et al., 1998). However, impossibility has not been seen as a starting point of the research in these previous studies.

I am examining the impossibility experienced in banking work, in the context of one Finnish Bank Branch when trying to put into practice a new vision of customer relationship and customer service model, Vision 2000. The main idea of the vision was that customers would handle their routine banking-cash transfer matters themselves as much as possible outside the branch offices by using mod-

ern modes. The workers would focus on loan and investment consultation, instead of withdrawals, deposits and payments. On a local branch office level, in every day work practice, the workers felt it impossible to be "consulting saleswomen", to guide ordinary-customers to use modern service modes and to make good business results, when at the same time there were so many old and low-income customers.

The impossibility were tried to be resolved during the developmental intervention in the dialogue between the Bank employees and the researchers. The process of solving the impossibility was multiple and there would have been many possible viewpoints to examine that process. Simultaneously with the process of solving the impossibility, there took place a process of learning to do that. The aim of Chapter 4 is to explore how the concept of impossibility took shape during the intervention and became a stimulus for developmental work in the collective discourse between the employees and the researchers. Thus, the emphasis in Chapter 4 is not on the concrete solutions that were found during the intervention. Later, in Chapter 5, the focus will be more on the concrete solutions and on the outcome of the intervention.

As mentioned earlier, the concept of impossibility was not a ready-defined concept that could have been taken into use as a means for developmental work, as such. When exploring the role of the concept of impossibility in developmental work and its role in producing situated knowledge in work activity, it is necessary to explore, how this concept was constructed in the collective discourse during the intervention process. Like metaphors, an understanding of the concept of impossibility could be perceived as a creative endeavor during intervention; the concept can be understood both as a facilitator of learning and the tangible manifestation of something learnt (Gherardi, 2000).

## 3.4 Theoretical and Methodological Basis for Intervention

The theoretical and methodological background of the present study has been the Cultural-Historical Activity Theory (CHAT) (see e.g., Chaiklin et al. (Eds.), 1999; Engeström, 1987; Engeström et al. (Eds.), 1999; Engeström et al. (Eds.), 2005) and Developmental Work Research (DWR) (see e.g., Engeström, 1995, 2000a, 2005). Work activity is, hence, understood as object-orientated human activity, which is mediated by historically developed cultural means. Human activity is also seen as socially mediated activity, constructed in the system of collective activity by a division of labour.

Change is seen as a historically and locally constructed process. It is understood as driven by expansive reconceptualization of the object and motive of the activity and as grounded in disturbances appearing in every-day work actions. The object of the activity is seen as internally contradictory, and developmental changes are seen as attempts to resolve these pressing contradictions by reorganizing or re-mediating the activity system locally. Any change in the activity system is a

change in the object as well (see e.g., Engeström, 2000b). A very special idea for my research has been that of an *epistemic object* (Miettinen & Virkkunen, 2005) or a *runaway object* (Engeström, 2005). During the conversations throughout the intervention there appears to be an endeavor to seek and perceive the common and shared work object. When the object finally seems to be found, it "runs away" again.

The idea of *developmental changes* comes close to the model of expansive learning (Engeström, 1987). Expansive learning can primarily be understood as a process of expanding the object and the motive of the activity. The object of expansive learning comprises the whole activity system. The expansive learning process can be seen as a collective and long-term process, not progressing linearly but in a cyclic way (Engeström, 1987, 1999b, 2000b).

An expansive learning cycle consists of an ideal type of learning, which is a theoretical reduction. In daily activity, there may be many different kinds of learning and development processes going on, either individual or collective, or processes related to some restricted part of an activity or of a process. It is important to understand how the various learning processes construct each other, what kind of interaction takes place between them, and how they construct the whole learning cycle. Engeström, Kerosuo and Kajamaa (2007) have later considered this thematic aptly (see also Kajamaa, Kerosuo & Engeström, 2008).

> When one small cycle of innovative learning efforts ends, there typically occurs a more or less problematic break in the overall process. Such a mundane discontinuity generally requires actions of *bridging* that enable the next small cycles to build on the results and experiences of the preceding cycle. Such actions of bridging span breaks and gaps in time and social space, between discrete projects or local efforts that have happened in the past or that may be taking place elsewhere in the organization. Bridging is thus an important ingredient of expansive learning. Without such actions, the process of expansive learning may disintegrate into a series of isolated fragments.

> *(Engeström, Kerosuo & Kajamaa, 2007, p. 5)*

The model of expansive learning is crucial to the analysis of the intervention. Nevertheless, I will first (in Chap. 4), consider a restricted part, the first four intervention meetings, of a larger learning cycle and a developmental dimension of expansion. I will examine the process of learning – and especially the process of conceptualizing the impossible as part of the study and analysis of the impossible in everyday work activity – to study and analyse the impossibility in everyday work activity, and, especially, the process of conceptualizing the impossible through studying it. I perceive this as a process of learning to do second-order work (Hirschhorn, 1984, p. 101). It is also a question of articulating (Schmidt & Bannon, 1992; Star, 1991; Strauss, 1991, 1993, 1995; Suchman, 1987) and docu-

menting the impossible. Even so, I am aware that this process progresses in a context of a larger learning process and in the historical perspective that I will investigate later, in Chapters 5 and 6.

Expansive learning can also be understood as constructing a collective zone of proximal development. This can be seen

> "as a grey area between actions embedded in the current activity with its historical roots and contradictions, the foreseeable activity in which the contradictions are expansively resolved, and the foreseeable activity in which the contradictions have led to contraction and destruction of opportunities."

> *(Engeström, 2000b, p. 10).*

The idea of a collective zone of proximal development is based on Vygotsky's (1978, p. 86) concept of *a zone of proximal development*. In this dissertation, I perceive the process of solving the impossibility as proceeding in a zone of proximal development of the work community under scrutiny.

Basically, the concept of impossibility is seen in this study as an intermediate concept that arises on the one hand from everyday talk about the impossibility related to different kinds of work tasks and work situations. In the data, the workers express the impossibility repeatedly in the follow ways: *"it's not possible"*, *"it's impossible to do this"* or *"we don't have the means"*. On the other hand, the preunderstanding of the concept was based mainly on AT and DWR, and especially on Engeström's (1987) model of expansive learning. The expressions of the experienced impossible were interpreted as expressions of historically constructed tensions and contradictions in work activity. By using the activity-theoretical interpretation of impossibility, the aim was to transcend the tendency to individual and situational interpretations of impossibility and of the process for resolving it. The idea of this theoretical framework was to orientate to resolving the impossibility through studying and analysing the real collective work activity and the disturbances and breakdowns occurring in it (see Engeström, 1987, 1988, 2000a; Engeström & Sannino, 2009).

Tensions and contradictions in the activity were seen as potential for development, and experiences of the impossibility were understood as expressions of tensions in work activity. The hypothesis was that the impossibility was a task or situation that was felt to be impossible or difficult to implement, and that was faced repeatedly by individual workers or in a work unit. The work hypothesis assumed also that such impossible tasks or situations express tensions associated with changes in a work activity. Consequently, solving impossible tasks expansively would demand special collective problem solving based on an analysis of the impossible task as a tension and contradiction in actual work activity. Routine solving and situational or individual solving and learning by trial and error would not be enough, but seemed to facilitate coping in the short term. The capability for

developmental work as well as special tools for it were needed in the local work unit. The intervention process in this study, was a pilot attempt to understand and solve the impossibility collectively in the local Branch Office.

The intervention that will be analysed was planned on the model of the expansive learning cycle, containing the phases of questioning prevailing wisdom, analysing the situation historically and systemically, modelling the newly found explanatory relationship, examining the model, implementing the model, reflecting and evaluating the process and consolidating its outcome into a new, stable form of practice. The special significance of this intervention was its attempt to construct work-related well-being throughout the process. This meant an evaluation of the plans for a new activity model and implementing it from the viewpoint of workers' well-being.

The intervention project for solving the impossibility in the Branch Office was largely implemented between February and May 1999. Two (2) hours of paid working hours each week were reserved for each worker during a period of 17 weeks. The intervention consisted of 19 hours of joint meetings and 15 hours of independent work. The tape-recorded meetings and the tasks included in the meetings will be used as the main research data. The progress of the planned development cycle with 10 meetings was, in short, as follows:

1. Joint orientation to the intervention process, mutual planning of the process, discussing the impossible tasks

2. Reconstruction of the near past of the work activity and the sources and construction of the impossibility

3. Detailed study of actual work situations (e.g., videos of customer service situations, descriptions of impossible tasks and situations, customer interviews) in order to view, analyse and grasp the impossible tasks and situations

4. Analysing impossible tasks or situations based on the data and planning of a new model of the activity with the actual changes that were intended to resolve the impossible tasks in the near future

5–8. Implementation, evaluation, development and study of the new work activity model

9. Group and individual evaluation of the intervention process as a learning process, also from the perspective of work-related well-being

10. Expansion of the new activity model and learning

The realized intervention included the phases planned previously, but it did not progress in a straightforward way. Difficulties were encountered in data production by the workers themselves. Documenting and articulating the problems be-

came a challenge and a learning process throughout the whole intervention, especially in the beginning. Tools for the study were continually created during the whole process of analysing the impossibility in actual work situations.

In the analysis that is forthcoming in Chapter 4, I will focus on the first four intervention meetings, during which an understanding of the concept of impossibility was mainly constructed. We will see how the process evolved, from the first planning meeting and its initial orientation of *"waiting for an outsider to find a solution"* to the fourth meeting, when the prevailing model of activity was questioned.

# 4  Conceptualizing "the Impossible" in the Local Work Unit

This chapter examines the process of trying to resolve *the impossible* in banking work on a local work unit level during the intervention. It presents a theoretically compressed and compromised story about the intervention for resolving the impossible during the developmental intervention as a dialogue between the bank employees and the researchers. The aim is to explore how the concept of impossibility takes shape during the intervention process and becomes a stimulus for developmental work. The process of solving the impossible involved both *solving* the impossible and the process of *learning* to do that. The impossible is taken here as a challenge and starting point of the research and developmental work.

The concept of impossibility was not a ready-defined concept that could have been taken into use as a means in developmental work as such. When examining the role of the concept in developing work and in producing situated knowledge in work activity, it is necessary to clarify, how the concept was constructed in the collective discourse during the intervention. Learning to understand the concept of impossibility can be perceived as a creative endeavour during the intervention; the concept can be understood both as a facilitator of learning and a tangible manifestation of something learnt (Gherardi, 2000). The concept itself was also constructed as an object of learning through the intervention process. The process of perceiving, conceptualizing and analysing impossibility is seen as a process of progressing in a collective zone of proximal development of the work unit.

As the story unfolds, I will focus on looking at how the intervention progressed through the discussions on tensions, and, how these appeared during the dialogue. We will also see how the intervention progressed through the method of double stimulus, with the researcher, a mirror and a new kind of mirror taking turns.

I perceive the concept of impossibility as an intermediate level (see Chap. 3.1) concept that arises from everyday talk about the impossibility of various kinds of work tasks and work situations. In addition, the concept is based on the activity-theoretical way of understanding the impossibility as an expression of historically constructed tensions and contradictions in the work activity. At times, the material for the dialogue comes from the researcher or researchers, at other times from the staff, and everyday talk in the Branch Office. The aim is to overcome the individual and situational interpretations of the impossibility and the process of solving it. AT and DWR as theoretical frameworks are orientated to resolving the impossibility by studying and analysing the real collective and object-oriented work activity as well as the disturbances and breakdowns occurring in it. For resolving the impossibility at work-unit level, there was a need to understand both what the impossibility meant in every-day work activity and how the phenomena related to impossibility had been studied earlier.

*Case trajectory* has been used as a metaphor for perceiving the intervention as a journey and as paths on the journey. The concept of trajectory is a central concept in Strauss's (1993, 1995) interactionist theory of action. He specifies the notion of trajectory in the following way: it is the course of any experienced phenomenon as it evolves over time, and it comprises the actions and interactions contributing to its evolution. Kärkkäinen (1999) has used this concept in her analysis of the planning processes of curriculums in teacher teams.

This study points out the trajectory of one chosen impossibility (*the impossible*) and the development taking place within it. The idea is that a careful analysis of one trajectory may shed light on the process of conceptualizing impossibility; that is, the way in which the concept of impossibility and a perception of the concrete impossible situations and tasks experienced are constructed together during the collective discourse between researchers and employees.

The impossibility of rush was chosen as a case trajectory, because the problem of rush was evident even in the first expressions of the impossibility, and because the problem of rush was pivotal during the whole intervention process owing to the fact that many of the solutions found during the intervention were related to organizing the rush. The impossibility of the rush also reflected on customers, the work object of the Branch Office. The bank employees also pointed out that the rush was a basis for the intervention, when reflecting on it afterwards in the evaluation interviews:

> N9: When this project [intervention] started [...] it was the rush I guess, a lot of work and that we were not ... the rush and the hurry couldn't be controlled in any way at all, no re-arrangements possible, and [...] people [had] just worked as much as they possibly could manage, but we never stopped to think that maybe something could be done about those problems and pressures.
>
> R2: [Interviewer]: The hurry and rush were like...
>
> N9: ... Yes...
>
> R2: Like it was the main thing?
>
> N9: Yes, and it started showing in people's physical and mental well-being.
>
> *(Bank employee, N9, evaluation interview, September 1999)*

Next, I will deal with the first four intervention meetings during which the understanding of the concept was mainly constructed. I will examine the process of conceptualizing *the impossible* through studying it. I will analyse what kind of path was traversed from the planning meeting and its orientation of "waiting for an outsider to find a solution" to questioning the prevailing model of activity in the fourth intervention session. During this journey, the vague talk about impossibility in the work community was shaped into a developmental tension integral

to the work activity. The uniqueness here, as compared to the traditional idea or Participatory Action Research (PAR), was that the Branch Office participated as a work community, also in *defining* the problem of the impossible, not only in *resolving* it. (see also Gustavsen, 1992; Mäntylä, 2007; Reason & Bradbury, 2001)

The tape-recorded meetings and the tasks included in the meetings comprise the main research data. Chapter 5 will deal with the whole intervention journey with its various steps and turning points.

The first four intervention meetings and their main themes were as follows:[20]

1. Meeting: Orientation and planning the intervention
   10 February 1999 (1h)
2. Meeting: Perceiving the near past of the impossible
   3 March 1999 (4h)
3. Meeting: Describing the impossible tasks and situations
   18 March 1999 (2h)
4. Meeting: Studying and analysing the collected data of the impossible
   and perceiving the new preliminary model of the activity
   7 April 1999 (4h)

The following narrative is meant to allow the reader to discover where the material of the intervention dialogue comes from, who offers it, and what kind of material is either included or left out, and how that would happen. The idea is to make visible not merely the impossibility but also the method of resolving it during the intervention. It is essential to understand how, by studying and analysing everyday work activity, the intervention enables the participants to see behind the talk about the impossibility. Gradually, the means of trying to resolve the impossible evolve into documenting and analysing it, rather than merely talking about it.

*It might be illuminating to look at this developmental journey as a process of "cooking and serving" together, including the process of experimenting, "tasting" and transforming the recipes together, an idea I will return to during the journey in this Chapter.*

## 4.1 Premise of and Orientation to the Project: "We *will commit to a proposed timetable … We need some outsider to find a solution*"

As researchers, we offered the opportunity to the Branch Office as a local work unit to participate in our research and developmental intervention, which would be based on earlier results of the research project Work Unit between the Old and the New, according to which the impossibililities were expressed repeatedly as

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[20] The planned proceeding of the entire intervention process is described in Chap. 3.4, p. 40.

problems of work-related well-being. We brought out the challenge of resolving the impossibility experienced from the viewpoint of work-related well-being and with the Activity Theory and Developmental Work Research as a theoretical and methodological framework and as a basis for the potential intervention. On the one hand, that would mean exploring the impossible as historically constructed contradictions of the work activity. The preliminary hypothesis was that the impossibility named as *impossible tasks*[21] could be interpreted as a culmination of secondary contradictions in an expansive learning cycle (contradiction between two different elements of the activity system).[22] The theoretical and methodological framework would entail resolving the impossible by analysing the local work activity in the Branch Office. Well-being during change would be bound to the process of resolving the impossible.

The staff of the Branch Office wished to discuss (14 January 1999) the intervention with the researcher before deciding whether to join the research. As possible problems to solve, the staff brought out specifically the rush that had come to a head when the bank services in the branch nearby had been closed down at the turn of the year. The number of customers had multiplied many times over during the spring of 1997, after the termination of bank services in several post offices. The situation had become critical at the turn of the year 1998–1999. The employees reported that it was not possible to find enough time for both productive sales work and for drumming up new customers because of the multitude of customers. The staff described the situation as the most stressful matter in their work and they wanted to start resolving it through the development project.

In addition, the new differentiated job description for financial, investment work did not function in practice, since every worker was still trying to do all the tasks on her own. They were multiple-skilled persons, so-called "multi-taks service providers". The problematic situation had already been under discussion for years in the Branch Office, and customers were systematically being directed to use the new kinds of services, such as bankcards and the phone bank. The staff said that "*the management perceive this problem only as a problem of selling more*", a problem that could be taken care of, if only the new services sold well enough. Also, changes in the data systems to accommodate the Euro, as well as the implementation of several new data systems simultaneously, had slowed down customer service. At the worst, only two customers an hour were served, and once the Branch Office had to be closed down during opening hours because the data systems did not function. The staff experienced a need to construct a so-called "*express-lane*" in the new data systems. These new systems were slower than the old ones, making it impossible to service queues as fast as before and "get *[the customers] who made two ten-note withdrawals out fast*."

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[21] We mainly used the concept of "impossible task" when planning the intervention.
[22] See p. 22.

The work unit decided to participate in the project and see what could be done about the situation. On the one hand, the experience of the staff showed that the planners of the change did not understand everyday work at the Branch. On the other hand, they felt that the new management of the Leonia Bank (which took on the new name at the beginning of 1998) was interested in the opinions of the employees, and that it would be an appropriate time to forge a dialogue with them. The staff also felt the project would be useful for the other branches if the problems could be solved successfully.

The Branch Office seized the opportunity and confirmed in writing (15 January 1999) its willingness to participate in the project, which was justified as follows[23]:

---

[23] The *authentic* written tasks and other documents used as data are framed in boxes in the text.

> *"We want to develop our work towards greater profitability both at the level of the Branch Office and at the level of the entire Bank.*
>
> Things came up in the earlier report [of the research project] such as *impossible tasks,* haste and the difficulty of perceiving the near future [of the Branch Office] and making it visible.
>
> In addition, we would also like to consider the *TYKY* [24]*project* in this context and integrate it *as a part of this research.*
>
> *We will commit ourselves to the proposed use of time, about 2 hours/week* based on a timetable that will be agreed later.
>
> The participation will necessitate the permission of the [top] management.
>
> > The staff of the Branch Office of Martinlaakso"

*Each of the workers was mentioned by name, and two of them had signed the confirmation letter.*[25]

*Impossible tasks*, haste and the difficulty of perceiving the near future *were written in the agreement.* In addition, the employees wanted to tie the developmental work to the TYKY project, which was organized at the same time by the occupational health-care unit.

The work community's orientation to resolving the impossible was, however, geared to expecting the solutions to come from outside "d*eus ex machina"*, in spite of their commitment to solving the impossible by themselves.

> We need some outsider to find a solution; we have become blind [to the issues] ourselves, having pondered [the same questions] for years.
>
> > *(Bank employee, N3, Orientation session, 14 January 1999)*

The "waiting" orientation was reflected on again later, when evaluating the intervention afterwards.[26]

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[24] TYKY activity means work ability maintenance activity, in which the employer, the employees and the partners in cooperation in an organization together aim to improve and support everyone's work ability and capacity in working life, during all the stages of their career. TYKY is a Finnish innovation resembling workplace heath promotion in many EU-countries. (See also critical examination of TYKY activity [Korhonen & Mäkitalo, 2001].)

[25] The italics in the document are the writer's.

[26] Unlike the other data used in this chapter, this excerpt is not from the data situated in this particular ongoing stage inspected here, but it was from the evaluation interview data after the intervention.

We also expected the researcher to bring us a ready-made model; we were used to taking orders from above, like this is the procedure, do it, and then every section would try to conform to the given model; but it very seldom works in that way. Fortunately, we now have room to apply our own solutions a bit; as long as the result is what's expected, and the operations work within a secure framework, we have a say in what we do.

*(Bank employee, N9, on the Finnish Commercial Channel MTV3, December 16 1999)*

At the first primary intervention meeting (10 February 1999, one hour) we jointly talked through the plan for the progress of the project. Together with the work unit (the employees and the branch manager), we constructed a plan for the intervention. The theoretical and methodological basis (historicality, developing the activity by studying it, and the models of expansive learning and development cycle) was incorporated into the plan purposefully. The theme for the second meeting would be perceiving the near past of the work unit and understanding the construction of the impossible as a part of the activity. The period between the third and the fourth meetings would be reserved for studying the impossible in one's own work and for producing a mirror data of the real work activity. In addition, the results of the previous stage of the research project Work Units between the Old and the New, which introduced haste and the difficulty of perceiving the near future as problems, were taken into account when the intervention was planned and scheduled.

The schedule of the project was integrated into "The Picture of the Near Future" (shown on the next page) and was created by the researchers. It served as a means for planning and was based on our preliminary ideas of the progression of the project. The project was planned to cohere with the everyday work activity and with other projects going on simultaneously. The officials had worked on the schedule before the first meeting. Weekly meetings concerning basic business activity would take place on Mondays and Tuesdays, the intervention meetings on Wednesdays or Thursdays. The one-hour meetings would be in the mornings before opening the Branch Office, and the longer meetings would take place be after closing time at 4:30 pm.

It was significant that the work unit did not wish to start a separate project but wanted to connect it to the ongoing TYKY project. Thus, the TYKY meetings were recorded for visibility. The Bank's occupational health care unit also wanted to be a partner in the project, and the occupational health care nurse participated in our meetings from the beginning. In addition, the regular breaks of the employees, as a part of everyday work, were made visible in the picture. The role of the picture was not merely to integrate the intervention into the everyday work activity and other projects going on. Its aim was also to show that the work community was accomplishing local acts of change on its own accord, instead of waiting for some-

thing external coming from above – from the management or from outside the Bank – to make decisions for them. Thus, the idea was to strengthen the agency of the work community. The Picture of the Near Future was placed on the walls of the dining hall and meeting room of the Branch Office.



**WHAT CHANGES ARE COMING OR GIVEN FROM ABOVE?**
(Top-down measures)

Time (week, month, year)

**EVERYDAY WORK**

*change act*
(date, content)

**WHAT ARE WE DOING OURSELVES?**
(How shall we prepare for the forthcoming changes?
How shall we construct conscious development in our everyday work?)
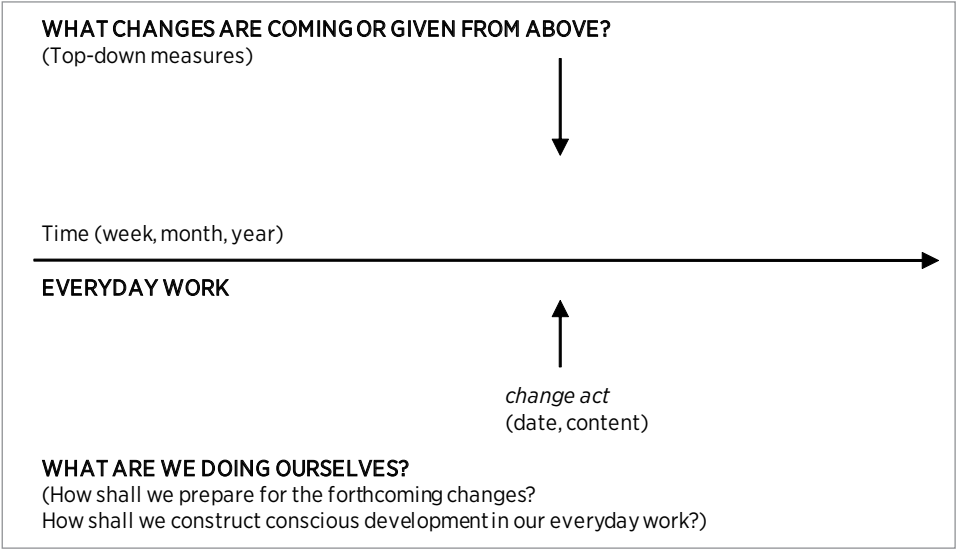
Figure 4. Model for the "Picture of the Near Future"

The first intervention meeting was concluded with the employees' and branch managers's commitment to resolve the impossibility and to plan the intervention together with the researchers. As a conclusion of the first intervention meeting, I can say that the employees and the branch manager committed to the process of resolving the impossible together with the researchers by planning the intervention together. Even though the staff expressed the desire to start the project and to participate in it, the initial orientation was that of a waiting mode. The staff felt it was necessary to resolve the impossibility, but the solution was expected to arrive from the outside. The employees keenly felt that they had become "blind" to the situation and thus helpless, and that they needed someone from the outside to come and solve their problems. *It looked more like committing to participate in a "ready-made dinner", in a good time, perhaps preparing some of the foodstuff to bring along, but not really taking part in the cooking itself or serving the dinner.*

## 4.2 Construction of "the Impossible" in the Near Past: *"Many changes, but the way of implementing them has remained unchanged"*

During the second meeting (3 March 1999), we took a good look at the near past of *the impossible*. The employees had been given the task of acquainting themselves with a template of the near past (Appendix B) beforehand, but they said that because of the rush at work, they had not been able to do it. The template was planned and presented by us researchers, and was called a "history sheet". It was used as a concrete means for writing down and making visible the changes experienced by the employees in their work in the work unit over the previous ten years (during the '90s). It was alse placed on the wall in the lunchroom.

The elements of the history sheet consisted of the elements of the activity system, such as: customers, the employee's own mode of action, the space and facilities, the number of people in the work unit, the division of labour and the ways and means of co-operation, the partners, the most important rules and instructions of the work, and the business result of the Branch Office. The sheet also consisted of some other items that were experienced subjectively as essential, such as the method of measuring the business results, the changes in well-being at work, work ability, the endeavours to solve impossible tasks previously, and the ways of effecting changes in the organization and in the work unit. In addition, there was space for items that had been felt as important in the near past and that the officials wanted to add to the picture. These included the management of the organization. During the discussion, the history sheet was filled in by writing down items that the officials considered meaningful. They worked as scribes themselves. Essentially, the researchers wanted to elicit an understanding of how the impossible had been constructed in the near past as a part of the then work activity. The following is a detailed description of the diverse discussions on the near past.

At the beginning of the discussion, the fusion of the Merita-Nordbanken in 1997, the repeal of the stamp tax in 1998, and the changes deriving from the introduction of the Euro were mentioned as significant changes affecting the staff's jobs. The number of customers had varied and customers had declined when the Branch Office had switched to Postipankki (Postal Bank) from Säästöpankki (Savings Bank) as a result of the demerger of the bank organization among four Finnish retail banks. Then, the number of customers grew sharply in 1997, when banking services were eliminated at the nearest post offices. The Branch Office perceived customer quality as becoming "lower", and *"TR[27]-customers"* were numerous at that time. In addition, customer fidelity to the Bank had become weaker after the mid-'90s and again in the early 1998, along with the repeal of the stamp tax. Customers had become increasingly demanding and they were ready to invite competitive bidding for their loans.

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[27] The income-limited (in Finnish: "*t*ulo*r*ajoitteiset") customers were called "TR-customers" in the Branch Office.

The most dramatic change was seen in the data systems, especially after 1997. In line with Vision 2000 (see Chap. 2.3.1), several new data systems were taken into use and some were still undergoing development.

Two "*computer robbery*" were mentioned as interesting and as emblematic of the way back-office work was organized in the Bank. Sometimes one or more computers were taken away, because back-office work in the specific back room was not approved of in the organization. One time the computers were given back and then taken away again.

Waiting for the planned renovation of the Branch Office had been the "big" event of the whole decade. The first plan had been announced in 1991, the second one in 1994 and the third was incorporated in the Vision in 1996. But the renovation was cancelled each time. According to the officials, once they had even packed up the office equipment, and waited for the work to begin, but no one appeared. When they had enquired after the matter themselves, they heard that the renovation had been cancelled. Finally, at the beginning of 1999, the facilitates were actually renovated. Later, after the computers were moved to a new space, the back-office room provided an important resource for the intervention, enabling the space and means for second-order work.

Increase in profit-making had been measured from the beginning of the '90s with the adoption of management by results. Individual sales records had been monitored since 1992 and the proper individual profit targets were initiated in the mid-'90s, along with the "MYT"[28] system for saving all sales information in the data systems, thereby making it possible to monitor how well the sales targets had been reached. In 1999, monthly reports and targets measured the profit of the Branch Office. In the discussion, the officials commented that invisible work such as routines were not included in the measurement indicators. Simultaneously with our intervention project, Leonia Bank was experimenting with a bonus pay arrangement for the workers, which included individual-profit and team-profit units.

The work unit's interpretation of the changes that had taken place and how they were implemented was startling. Obviously, there had been many different changes, but the way of implementing them was experienced as stable: "in fact *it has not changed*". For the researchers this manifested as throwing away an opportunity to learn from the changes in the Bank Organization. The manner of implementing the changes was also experienced as "top-*down information about them [the changes] at the last minute*". At the end of 1997, they were introduced to change management with vision. The employees described the transformation of leadership as follows: "from *dictated rules to commitment*".

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[28]  MYT was a system for saving sales information (in Finnish: "***my***ynti***ti***etojärjestelmä").

Furthermore, the discussion touched on the organization and leadership in the context of "what else is important…" in the template. Implementing changes had been top-down, but change management in the Branch was said to change the work atmosphere "from *control to confidence and democracy"*. The changes in governance had come along with the fusion of the organizations of PSP-Vienti-luotto (Finnish Export Credit Ltd) and Postipankki (Postal bank) were mentioned as promising matters. The staff explained that there was more power, responsibility and exacting job demand on the Branch Office at that time, and, that, because of this, there was more opportunity to raise profitability (in services).

Discussion about work-related well-being in the near past revolved around the impossible. There was talk about the "*contradiction between demanding and routine work"* as an impossible task. In addition, the fear of the Branch Office possibly closing in 1998 and the ensuing sense of uncertainty were on the minds of the employees. On the other hand, the matters they mentioned as promoting well-being were: *"sincerity of the work community", "good community spirit"* and "*the feeling of working together"*.

The impossible in the near past was perceived in the discussion and written down on the sheet as follows: *"the basic servicing of customers takes time from profit-oriented consulting work with 'special' customers"*. The staff wanted to develop the activity of providing *"after-care"* for their clients, and this was experienced as a long-term goal. At the same time, the situation in the Branch, similar to other branches, was that the employees wanted to devote their efforts to getting new customers. They also managed to do this somehow, but they also noted that "*the back board [of the boat] was leaky",* meaning that old customers were leaving. There were no tools for after-care. The support of the marketing unit as well as concrete tools were needed, such as ready-made calling lists to remind them of after-care clients. Instead, all their energy was used to clear the queues, and there was not enough time to recruit new customers for the Branch.

We researchers had planned an everyday means for collecting data and documenting the impossible that the employees would be faced with in the near future. The employees were given the task to describe the impossible over a period of a week according to the following instructions:

*(The intructions for keeping a diary of the impossible tasks and situations given by the researcher on 3 March 1999)*

We researchers assumed that the descriptions of impossible tasks and situations would document and provide concrete evidence of the impossibility faced in everyday work. The idea was that the diaries would function as tools for making the faced impossible visible and mutually shared, and enable discussions for developing the kind of activity needed for resolving the experienced impossible.

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[29] The practice in our research group was that we discussed the data and the preliminary analysis of the previous intervention meeting when we were preparing for the next meeting.

The employees had to produce descriptions of the impossible for the mirror data that would be examined during the next (third) intervention meeting. However, describing the impossible was laborious in the middle of the rush at work, and the researcher had to remind them of the task:

> Where are your descriptions? I´ll be meeting Kirsti and Tiina in 2 hours on the other side of the city… Please, call me. Tel. 708 4826. Regards, Tarja

*(The researcher's telefax sent to the Branch on 17 March 1999, at 7:55 a.m.)*

At the second intervention meeting, the researchers presented the history template as a theoretically justified artefact, along with some other items felt to be important in the work practice. The means, therefore, was a combination of theory and practice. The template enabled a lively discussion on the near past from various perspectives and the participants began using the template during the meeting. *The discussion and talk were the most important material for the "developmental soup" at this stage and it seemed to "taste" good.*

We researchers were worried about getting behind the talk and discussion and had prepared instructions for documenting the impossible by describing concrete tasks and situations felt as impossible. The concept of impossibility was not ready-made at this stage even for the researchers. Instead, *both the impossible task and the impossible situation were "tasted" as concepts, and in the receipt above it became obvious the presupposition that the impossible could be understood and studied through impossible situations.*

## 4.3 Seeking the Object of the Work Activity: *"Tension between expert and routine work or between special/demanding and routine customer?"*

At the third intervention meeting (18 March 1999, two hours), the researcher directed the discussion back to the previous meeting and the interpretation of *the impossible* as *"tension between expertise-demanding and routine work or between special/demanding or routine customer"*, based on how it was written down in the history sheet. The aim was to make sure that the impossible would be perceived and understood profoundly, and that the participants would not be satisfied with the view and understanding that were formed at the beginning of the project and at the earlier intervention meetings.

At this point, there arose an intensive discussion in the work unit about understanding contradiction and placing it in their work activity. The discussion went on about whether it was a question of the tension between demanding and routine

work or between demanding and routine customers. It seemed to be a process of trying to find a shared work object, a process of reaching for an epistemic and a runaway object.

> R1: But... how I looked it [the history sheet] after the last meeting, what your impossible task was, it was written on the history sheet like this, here under one's own well-being, that it is the contradiction between demanding and routine work [...] that was the way it was perceived and it was quite the same in the beginning, when you had to consider if you would like to participate in this project. That [contradiction] was then a consultatative type of activity and the realization of a new task description in practice. That was the problematic matter [...] We were talking about that in a way, your clientele is divided in two, that on the one hand, there are cash customers and the loan and investment customers on the other hand and the loan and investment customers are also outside the Branch Office. And then this cash clientele that is here and that is huge, which can be seen in your descriptions on your impossible tasks very explicitly. But I still intended to ask, when I was now writing [on the history sheet] the contradiction, that this is, or we don't even have to talk about the contradiction yet, but that the object of the work is a customer, the demanding ones and the routine ones and, well, do you see yourselves that this distinction is that demanding customers are loan and investment customers and then these TR-customers are these routine customers, is this the same thing? Is the demanding customer the one needing consultation?

This turn started a spirited and rambling discussion on the work and on the customers as work objects:

> N2: Or is this question related to the person, that someone is a demanding customer? [...] Who is a demanding customer to whom?
>
> R1: Or in fact, [...] it [what was written down on the history sheet] was not really a demanding customer but it was demanding and routine work...
>
> N3: Yes, I was just saying that it...
>
> R1: It's a different thing.
>
> N3: Yes, it's a totally different thing [...] The routine is that... we are face-to-face daily with the same customers, maybe twice a day, then that's really the routine.
>
> N8: That we can work blindfolded.
>
> N3: Yes, we don't even have to ask the identity number any more...
>
> N2: No fear of big mistakes...

One participant tried to turn the conversation above into a more personal question. The researcher reminded them of the earlier discussion about demanding work instead of demanding customers, since routine work was interpreted as a

steady stream of customers who could be served without paying much attention and without the fear of making mistakes. These customers were talked about as non-challenging customers that did not require any learning. The discussion on the two kinds of customers went on and soon turned to the topics of a "goal and profit" and thus to the pressure of doing investment consultation work and to the desired customers as being investment customers instead of the mere payment transaction customers:

> R1: Well, in a way the problematic nature comes from the two different types of customers.
>
> N3: And we have two types of … or in fact we have one type of goal, that's as good profit as possible and that profit doesn't necessarily come, of course it comes from the transactions payments partly, but that is not a strategy of our organization that it would be devoted to. That's not number one, but the pressures are on the investments […] for getting new potential, new clever customers having investment portfolios and then we want to have a new customer base, people well off that are solvent to pay back their loans and who will visit the branch office once a year if some changes have taken place…
>
> N1:Or even then invited by us.
>
> N3: Yes, after being invited.
>
> R1: Yes.
>
> N3: That we want to see them.
>
> R1: Well, in a way this demanding customer is the one who doesn't even necessarily come to the branch at all, but you have to go to her/him or ask her/him to come here [to the Branch Office].

This discussion then returned to the theme of demanding customers and demanding work ended with the conclusion that pointing the finger at demanding customers or demanding work was wrong. The discussion was set up in the wrong way. It was neither work nor customers but *business* that was demanding: it was mentally draining to smile at "those" unwanted customers. In fact, "those" customers, unwanted from the viewpoint of profitmaking, were of a heterogeneous background and service seeking. At the same time, the staff felt that their own strengths and competence were significant when they were business-oriented and profit-oriented[30]. In addition, an interesting dilemma entered the discussion. Those unwanted customers came to the Branch Office daily because they wanted to save the employees' jobs:

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[30] This business orientation was specific to this work unit compared with other work units (also in the same Bank) participating in the project Work Units between the Old and the New and the orientation was related to the talk about well-being at work, even in the previous stage of the project. From the beginning, they were exceptionally conscious of the strengths of the work unit as a good community.

N3: Well, the customer is not necessarily so demanding or [... ]

R1: Yes.

N3: ...and the work isn't so demanding either [...]

N1: No.

N3: ...so, it isn't like...

N2: [...] but to you it's only the business like over there; like it should produce a lot.

N3: It's a goal for us...

N1: ...multiple.

N3: ...so its more like a target [...] on the contrary, it's more, somehow, more demanding to serve those [customers] with a smile on your face; it's a lot more demanding.

N2: [...] it [the definition of impossible] has been put wrongly.

R1: Yes.

N5: Actually it's not...

N1: It is mentally demanding that [...] serving the TR-people [low-income customers]. And all of them are not TR-customers... some of them are just our retired people... those who come here daily to get their bankbooks signed and other things...

N3: So that the girls can keep their jobs.

N4: Yes, the more often they visit us.

[...]

N1: [...] In my opinion **its wrongly said when we talk about demanding work and then about this routine**, because as you said it's not so demanding.

N3: It's not demanding for us, for somebody it could be, but for our people it's not so demanding.

N1: Not for us, not for this group, it's because we are so business-oriented and result-oriented...

R1: Yes.

N1: [...] so the other one [other part of the work] is about result-oriented work and the other one is that you are just grinding it out, and that...

R1: That's service.

The discussion turned to the topic of service as a "basic business", where the whole banking activity was seen to originate as a societal function. Now the basic business was seen as gobbling profit while taking time away from sales work. The ten-

sion placed between basic customer service and profit-oriented special business work. The tension between low-income customers (TR-customers) and "good cases" became very pronounced in the discussion. Pressure from the management and Vision 2000 to get rid of the TR-customers was felt to be exhausting.

> N1: That's the service, the basic banking business: money out, money in and out.
>
> N2: Where the banking business has been come from.
>
> N3: Yes. Just so.
>
> N4: It's weird, now that work is eating up the profits.
>
> N3: Yes, exactly.
>
> N1: Yeah.
>
> [...]
>
> N1: It's not actually eating up the profits, it uses up time.
>
> N3: Yes, exactly [...]
>
> N4: But in Finland the labour force is expensive, so when that... expensive time is used...
>
> N1: Yes.
>
> N4: ...on something that doesn't make a profit, it really does eat up the profit.
>
> R1: Yes.
>
> N1: So, it takes time from selling, so we could get into that business.
>
> R1: So, in a way you have that tension there all the time, that one has to give basic banking service...
>
> N3: But you have to do that or...
>
> N8: And then when you see that there are long rows of basic low-income people sitting there, it's also irritating when you know that you should get rid of those [customers], those are making that withdrawals of one mark and fifty penies or whatever they want, and when you know that you have such a good case on your mind and you should take care of it [instead]...
>
> R1: Yes.

In the end, feelings were expressed about being sandwiched between two tasks/places and contradicting loyalties. The employees were also worried about inadequate planning for the business in the near future. In addition, the expressions regarding the impossible were related to "aftercare" work, and were mostly in the conditional: "*If only we could...*" or *"We should...",* but were also expressed also candidly: *"We can't do that any more, we don't have time"* or *"...but we don't have the possibility even for that".*

N8: ...but not... it's not possible to do two things at the same time.

N3: And still a third: you should start to think about something [to do] for the next month and for the next one... you should make sure your back...

N1: Hum...

N8: No.

N3: That's that, and then? What is coming next when we have got this out of the away.

N8: And in fact, everyone has to have a humongous number of loan offers for example... or appointments...

N3: Exactly, and next...

N1: And again and again...

N3: Today it was in fact... it was good, if I may complain [...] we were talking in the credit meeting [...] how lovely it would be if you could also handle after-care... So it's a little bit embarrassing that we are just like hyenas, hunting for prey, and when the papers are signed, it's thanks and the next person in. It would be...

N5: We can't do it any more, there is no time.

N3: ... it would be lovely after one month or half a year to call and ask, have you been satisfied with our service? As if this was our firm and we emphasized all the time that we should be like chief executives of our own firm, everyone here... So, how lovely it would be if you could just call in peace and say how are you, I'll treat you to lunch... how do you like this [service]? But this [dream] is so far away.

N1: So if you even had time to write a letter to these customers, and say hi, is everything still all right? ...

N3: Or call.

N1: Or call at least, but we have no possibility to do even that.

N2: And when they [customers] call, the call reaches the call centre (laugh).

The meeting in question was promising for further development work because of the endeavour to try to find a shared genuine understanding of customers as a common work object instead of taking them as a given. But it also was essensial to perceive the tension mentioned above in a justified way. For researchers, it was of concern that customers were considered routine customers and as a static object of routine work, instead of an object of learning or opportunity for development in any way.

All in all, the discussion was an essential tool for trying to grasp the impossible, and it "*tasted*" good. It was necessary for giving meanings to the impossible and for locating it as a tension in the work activity. Discussion, however, was an inadequate tool for a deep understanding of the essence of the impossible. How-

ever, I interpret the conversation above as an illustrative example of an endeavour to seek an epistemic object, and thus to proceed in a collective zone of proximal development through it. The concept of tension was used during the conversation to express the contradictions in the (demands of) everyday work activity. For understanding the impossible, concrete descriptions of the impossible as mirror data were needed in addition to discussion. Thus, after the previous discussion, we examined the descriptions of the impossible that the employees had documented and sent to the researchers.

**The descriptions of "the impossible"**

The substance of the impossible was enriched by scrutinizing impossibilities in everyday work activity. In the previous meeting, the employees were given the task of keeping a diary of impossible tasks and/or situations encountered over a period of one week. The idea was to describe briefly, what, and what kind of, experiences of the impossible each one had, in what situations, and when they would occur, and how the employees tried to solve the task or situation. The instructions for the diary were presented in detail in Chapter 4.2. (p. 54). The following table includes all the authentic descriptions categorized on the basis of content.

**Table 4.The decsriptions of the impossible**

| The authentic descriptions of the impossible (written by the employees and faxed to the researchers on 17 March 1999) | The content of the description (categorized)[31] |
|---|---|
| **Description 1.**<br>*"8 March at 14.00*<br>*– the last parts of the identity numbers of customers were missing –*<br>*it was impossible to do deposits* | Data system<br>Service |
| *– the queues were about 30 minutes long* | Queue<br>Waiting time |
| *– back-up support unit was getting nowhere – waiting – waiting* | Back office support |
| *Why couldn't we add the identity numbers ourselves??* | Data system |
| **Description 2.**<br>*"impossible tasks"*<br>*– constantly increasing aims and demands, with the number of staff remaining the same or even decreasing* | Goals vs. number of personnel [1] |
| *– the systems getting trickier ALL THE TIME* | Data systems [3] |
| *– directing income-challenged customers to self-service paths* | Customer direction [1] (outside the branch) Service<br>Quality of customers |
| *– "after-care"* | Service |
| *– mental pressure from all the work not done becomes a "bedfellow", causing stress and physical illness* | Well-being [1] |
| *– the quality of customer service deteriorating because of the congestion* | Quality of service [1]<br>Congestion [1] |
| *SUPPORT CENTRE is not a SUPPORT!* | Back office support [2] |
| **Description 3.**<br>*"4 March*<br>*– the whole morning 5-15 people in queue [all the time], cash customers and bankbook customers from 9.30 until 1 pm, became slower at 1-2 pm* | Queue<br>Quality of customers |
| *– two-three [cashiers] were serving the cash customers, person N was in the back office* | Number of cashiers/Delivery of work<br>Service |
| *5 March*<br>*- about twenty people [queuing], two cashiers have long-time customers, call requests and calculations impossible to do, continuous queue* | Queue<br>Quality of customers<br>Service vs. Back office work |
| *- not possible to do anything promised, calls and memos, continual queue* | Back Office Work [2]<br>Queue |
| *8 March*<br>*- at 12-2pm all 3 cashiers that are serving have long-time customers, waiting time 33 minutes, irate customers* | Service [5]<br>Number of cashiers<br>Quality of customers<br>Waiting time [2] |
| *10 March*<br>*- 10 people in continual queue*<br>*- 3 cashiers are serving, 2 of them have long-time customer* | Queue [6][32]<br>Number of cashiers [3]<br>Quality of customers [5] |
| *THE SAME THING EVERY DAY* | Repeated situation [1] |

---

[31] The numbers in brackets mean the number of expressions in the specific category (e.g. Data systems [3]). The number is under the last expression.

[32] Tne number includes the expressions of queues and congestion.

The descriptions of the impossibilities (task or situations) were related mostly to service and specifically to the queues and rush. In addition, disturbances and breakdowns in the data systems and problems with the back-support unit were mentioned several times, as well as the delivery of work in the Branch Office. The expression of non-well-being was explicitly connected with the work left undone. The specific contribution of the descriptions was to make it visible that expressions of non-well-being were also explicitly connected with the work undone, not only with face-to-face customer service. Although the content of the descriptions was multiple, they were still quite broad, such as: "data systems are *acting up ALWAYS and forever*" or "BACK SUPPORT is not support". The descriptions were complaints rather than concrete and careful descriptions of the tasks or the situations felt as impossible. The challenge for the researcher was to show that these kinds of descriptions did not work well enough as tools for development or for dialogue in the intervention. When resolving the problems, "the concrete and visible narratives of the impossible tasks and situations" would be needed.

*In summary, the researcher and the employees obviously differed on what kind of things the description materials should include for making the "developmental soup" rich and tasty and thus the intervention worthwhile. In the beginning, especially, the employees did not seem to consider the descriptions an essential "foodstuff" for themselves, while for the researcher the "developmental soup" was too mild. The employees seemed to react to the scrutinizing of their own work as to an "exotic spice in the soup".*

To remedy the situation, a more profound and varied data collection was planned for the fourth meeting, to be done in pairs or small groups. The most laborious stage of data collection was planned to take place between the third and the fourth meetings. The researcher and the staff arranged that the following data of the impossible would be collected for sketching a new model of activity:

- ethnographic observational data of impossible situations from the viewpoint of customers
- videotaped work situations
- data about customer flow (the number of customers, quality of customers, time of queuing, the number and quality of customers who gave up queuing without being served)
- as concrete descriptions of impossible situations as possible (e.g., specific information of breakdowns and disturbances in the data systems or in the activity of the support unit)
- information on the ideal time of queuing.

The intervention process was supported by an ongoing intensive e-mail discussion, of which the following e-mail message related to data collection can serve as an example:

"Wishing you energy for your data collection! This period between the third and the fourth meeting is surely the most laborious stage from the viewpoint of your data collection. And, it is really essential for constructing a new mode of action. That is why you will have a "rest" from our common appointments. The next time we have a meeting at your place [the Branch] (7 April), the idea is that each of you [or each pair/group] will bring to the discussion the data that you are responsible for collecting. It is essential that "the impossible situations" are constructed (put) in as concrete and explicit, a narrative as possible, as we we mentioned last time. All of your ideas are welcome in making the stories visible. It is worth putting an effort into "making things shared visible" at this stage. It also creates the tools for dialogue, which will be needed in the future and should be the core aim during the whole project. Whatever data you collect and want us to examine beforehand, is welcome. It is best to send it by mail."

*(Researcher's e-mail, sent on 23 March 1999)*

## 4.4 Mirror Data as an Eye Opener: *"This would not be an impossible task, if only we had a more sensible service model"*

At the fourth meeting (7 April 1999, four hours) the multiple data of impossible tasks and impossible situations collected from concrete work situations by staff and researchers after the previous meeting were jointly examined by the staff and the researchers. It was a huge challenge for the employees to launch an analysis of the data collection in the middle of their stressfull work situation. Only one of the employees had brought her description of the impossible task or situation to the fourth meeting. The typical explanation for not doing the documenting was the rush at work. One of the employees said that she had found the task of describing impossibilities an impossible task in itself.

> 24 March 1999, at 10.45 am
> – 2 cashiers are serving
> – 10 people in the queue
> – notary account left undone for 2 weeks
> – 3 clarification calls waiting for a call back
> – promises given yesterday not fulfilled
> – lunch hour begins in half an hour
> – loan papers related to a case from yesterday are still waiting for clarification
> – branch-office orientated account left undone for two weeks
> – renewal of bearer paper in April is done but is still waiting for dispatching
> – NO POSSIBILITY FOR CONSULTING SALES WORK

*(Bank employee, chief cashier, N9, Written description of an impossible task/situation, 24 March 1999, made for the fourth meeting)*

The employee commented on her description above to the others as follows:

> N9: I have one there, it was such a terribly maddening, stressful day, there's been quite a few of them, and there was a maddening queue there, and I thought that now, in spite of everything I will write down what the situation is. That this is the situation for me at that moment, that which is still not done, what's ahead, what's weighing on my mind, and I can say that that situation repeats itself, over and over again.

*(Bank employee, chief cashier, N9, comment on the description above at the fourth intervention meeting 7 April 1999)*

The other employees commented in the following way: *"That could be generalized..."*.

> N1: Yes, very well.
>
> N5: That was really good in my opinion. You can generalize it, only those terms, the tasks change. But that's like, it must be a concrete case. That's a concrete case, but the titles change.
>
> N3: If that's yours, there has to be your area of responsibility.

*(Fourth intervention meeting in the Branch on 7 April 1999)*

Lack of time was the typical excuse why the other employees had not produced the descriptions. In any case, the description above was a turning point in documenting and articulating work during this intervention. The description made visible

that the impossible was not only a question of about the face-to-face customer service, but also of multiple back-office work. The first two matters mentioned in the description were the only ones related to face-to-face service, the others to back-office work. In the end, we arranged that each employee would produce one description of an impossible situation of his of her own in the near future.

Two of the officials had printed the statistics from the queue-number system describing the customer flow. Printing the cash specific numbers of customers had been troublesome and had taken a great deal of time. Statistics of queuing time and of customers who gave up could not be printed, but a system expert expected to help with that.

The officials found out that the busy period in March 1999 was concretely evident in the statistics. In January, 3,926 customers were served at the Branch, in February, 3,998, and in March, 4,726. When the number of customers that had taken a queue number was compared with the number of those who had been served, it was found that less than 10 % of the customers had given up. The officials were not yet able to obtain specific statistics that would have shown what kind of customers gave up, that is, why they were queuing up for service. The staff and the branch manager said that taking advantage of the queue-number system to extract the statistics could be learnt in the future with greater efficiency. The system did not quite function as a tool yet, in the developmental meaning. The branch manager made it a point to find out what kind of customers had given up. It was essential for the developmental work in the Branch Office that the process of producing data from the customer flow was included in the shared learning object. The employees observed that producing various customer statistics, as well as getting help and support to do it from outside experts would be a long-term learning process.

The branch manager had also received (on 1 April 1999) an answer from the CEO of the Leonia Bank about the acceptable queuing time:

"The queing time is different for customers queing than for us. For them even one minute is a long time. In our work we can turn on the computer, make copies or maybe ask someone to sit down. For us the time is short. From the viewpoint of the customer that time is felt to be too long! An appropriate waiting time is a combination of these perspectives. In customer service we must understand the different conceptions of time. Our business profit is sufficient for taking care of a limited number of customers. Thus, we cannot shorten the queues other than by levelling out the peaks: providing service more evenly during the day, month and year. The means could include more flexible opening times, and varying interest/salary etc. payments on different days."

The employees were disappointed with the answer: "vague talk". The staff was not willing or capable to either question or change the policy of the local Branch activity, which was based on the answers that came from the outside or from the top management.

Supposedly, the answer, together with the statistics and the descriptions examined earlier that evening, stimulated an intensive discussion about the established way of doing things in the Branch Office. In any case, strong mirror data was needed before the staff could able to question the policies on the local level.

> N6: If you think about the daily 258, 200, 168, 192, 199, 201, 153, 208, 160, 230 [customers]...
>
> N7: **It's the maximum** number [of customers] we can manage...
>
> N3: **It's not sure that we are able to do this**, ultimately, for a long time, for many years.
>
> N7: No, **only those but these we have been able to serve, but nothing else**, all loan matters are left undone, neglected, we haven't been able to do anything else but [serve] those [customers].
>
> N6: **Today it came to me that maybe we're just stuck in the same old grind, that we should now change course, or the service model [...] What we could change here, because this would not be an impossible task, if only we had a more sensible service model.**
>
> *(Fourth intervention meeting in the Branch, 7 April 1999)*

The same employee (N6) who questioned the prevailing method of activities had tried to speak once before during the same session, when the employees, the branch manager and the researchers were looking at the video data about customer services, which had been collected beforehand in the Branch Office. On the first occasion, the employee was not given the floor, but she was allowed to ask a question later, during examination of the other mirror data.

Later the same evening, the employees all agreed that "*No outsider could resolve the situation of the Branch*". Based on the concrete mirror data and the previous experiences examined together, the staff realized that they had been too attached to the idea of "multi-service", and that this approach did not work well any more. The idea of a new model of activity, the so-called "*Express-Counter model*", started to take shape gradually during the discussion. The main idea in the new model was that, at all times, two cashiers would focus only on taking care of customers with withdrawals, deposits and payment transactions. In this fourth meeting, the work community also made a decision not to address the breakdowns in the data systems or in the back-office unit at this stage of the intervention, even though they were mentioned repeatedly in the documentation. Those matters

could possibly be addressed later on. Instead, face-to-face service was seen as the most essential matter that needed to be reorganized.

The Express-Counter model was not implemented straightaway, but the model was further developed during the fifth meeting on 14 April and the sixth meeting on 21 April. For these meetings, the employees produced more specific statistics of customer flow and the fresh results of the customer inquiry conducted at the Bank were examined. These results supported the idea of differentiating customer service in the Branch Office, since customers were most critical about the fluency of customer service. Experimenting with the new model started on 19 April 1999.

Characteristic of the developmental process at this stage was that local work was scrutinized, and an attempt was made to resolve problems in the middle of the everyday hassle. The impossible was addressed between busying with the tools for articulating and documenting, collecting data and producing local knowledge of the impossible tasks and situations as they were constructed. On the one hand, novel and suitable tools were developed to describe the impossible. On the other hand, the existing tools that were used in basic banking work were brought into play for developmental work. For example, the queue-number system was already functioning in everyday customer service work (first-order work), but not yet in developmental work (second-order work). The queue-number system organized the customer service, and, in principle, made it possible to print and analyse many different kinds of customer statistics, although in practice it could not be used for that purpose. In addition, it was difficult to get technical help and support from outside the Branch. Merely producing customer statistics proved to be a much slower and complicated process than we researchers had presumed. Even when the intervention project was finished, producing the statistics remained complicated.

It was essential at this stage of the intervention that the staff understood the meaning of the mirror data for developmental work in a new, qualitative way. The mirror data produced from their own branch activity enabled them to give significance meanings to the impossible and to understand it as it appeared in everyday work activity. The data also made it possible for them to make the change from talking about the work object from the viewpoint of demanding work or demanding customers to seeing it as an opportunity for organizing the activity at the Branch Office in a new way.

At the beginning of the project, the comments of the employees implied that, if anything, the mirror data was produced more for the researcher than for the work unit itself. Gradually, the work community understood that it was more a question of participating in the research and the development process as an agency. In my view, as a researcher, they began to see themselves more as proactive participants than passive recipients. It looked as though they were *"participating in a school of cooking"* instead of only preparing a single dinner, and all this in a situation of the everyday rush. The employees seemed to understand that it was possible to reach the limited menu in the moment at hand, but in the future, the special part of the menu would be prepared slowly in time and carefully.

## 4.5 From the Logic of Implementing to Supporting in Agency

In this chapter, I have examined the first four intervention meetings. The justification for this choice came from the findings that the work community was constructed as an agency in developmental work during the first four meetings. There happened a meaningful turn in agency when the original orientation of passively waiting for solutions coming from the outside transformed itself into the proactive orientation and activity of second-order work. Thus, the structure of the dissertation echoes faithfully the progression of the intervention as it took shape.

The employees and the work community had been the *object* of implementation in the change situation, not an *agency* themselves. The first intervention meetings told the story of enabling the emergence of agency through the intervention dynamics. Essential for breaking the circle of implementation was the opportunity to question and challenge the prevailing work activity in the Branch Office and in the Bank. The data and analysis showed that the challenge was made possible through the mirror data of everyday work activity. The employees' opportunity to question the prevailing work mode of the local activity seemed to be especially important. During the process of learning second-order work, that is, to scrutinize and analyse the local work activity in the Bank Branch and to develop it, it was not a matter of simply implementing a well-planned intervention process. Instead, the idea was to make it possible for the employees to define and share meanings of the problems to be resolved during the dialogue and to scrutinize them carefully. It was paramount that the employees participate in defining the problem of the impossible, not merely in resolving it.

My argument is that an important role of the intervention was to break down the logic of implementation and, instead, to enable constructing the logic of second-order work at the local work unit level. Also, it must be noted that there can be a risk of the intervention process itself becoming a miniature implementation if it consists of well-planned intervention assignments without enough space for giving them meaning. In an endeavour to support and empower agency, ready-made means for developmental work cannot be then emphasized, but must be constructed jointly by the employees and researchers, with ampleroom for dialogue.

On example of the all important dialogical space in the intervention was the discussion for seeking a common and shared work object. It was an important tool for grasping the impossible; it was necessary for giving the impossible meaning, as well as for understanding it and recognizing it as tension in the work activity. The seeking of an epistemic object was an ongoing process, during the entire intervention. However, the everyday conversation was not analytical enough for understanding the impossible. It was a huge challenge for the researcher to guide the participatants beyond the rambling talk, to document the impossible and scrutinize it. The work community was not capable of questioning the local mode of activity and breaking through the borders of circumstances until the multiple

mirror data of everyday work was available and used as a means for dialogue. We progressed by making the impossible visible through the use of the mirror data (first stimulus) and conceptualizing it (second stimulus).

In the following Chapter, I will look at the entire intervention process from the perspective of the *results* of the intervention. The focus will be on concrete results and new practices for resolving the impossible, but also on new interpretations of the impossible and new ways of doing second-order work. From the viewpoint of expansive learning, the paramount question will be whether the clients were perceived in a new, qualitative way as object of bank activity. During the first four sessions, the main outcome was the shaping of vague talk about impossibility in the work community into a more organized understanding of it as a developmental tension related to the work activity; in addition, the work unit was launched into studying its own work. The more concrete outcomes and resolutions emerged in the sessions that followed.

# 5 Transcending "the Impossible" through Intervention: Possibility for Expansion

In this chapter I will examine the intervention process from the viewpoint of expansive learning and the concrete outcomes of developmental work. The intervention will unfold as a narrative through the following questions: Could the intervention process enable expansion? How could that happen? What would a possible expansion be like? It will also be interesting to understand what kind of outcomes and concrete changes were accomplished during the intervention. Interesting also are the concrete changes in the Branch's activity and the everyday solutions for solving the impossible there, as well as the new ways of perceiving the impossible.

> "Not only the concrete outcomes are important, but also the fact that now we can better resolve new kinds of impossibilities that we will be face."

> *(The evaluation interview, September 1999)*

Thus, the outcomes of this study include not only the concrete outcomes of the resolving process and new practices, but also new kinds of interpretations of the impossible, and novel ways of doing second-order work. From the viewpoint of expansion, one significant question will be whether customers will be perceived qualitatively in a new way as an object of banking activity in the Branch.

In the previous chapter, the first four intervention meetings were considered in detail. Here, I will briefly come back to them from the perspective of learning and expansion and clarify them in Table 5. The process of learning and development carried on in the later meetings, will be more closely examined. The entire intervention is considered in Table 6 at the end of this Chapter.

The template of the table has functioned as an analytical tool when exploring learning and expansion. The template is based on the core ideas and hypothesis about *how the expansion will be realized and how it is observable*. The pivotal idea has been that besides the concrete outcomes, other essential matters to investigate are second-order work and learning to do it, as well as the orientation to developmental work and the way of perceiving the impossibility. It is not only a question of investigating the outcomes from the perspective of a solitary intervention and problem-solving project, but above all, the development of second-order competence. The work object of the developmental activity and the object of everyday banking activity in the Branch Office are the basis for potential expansion. When developing the customer service activity, it will naturally be crucial to focus on customers as potential object of activity. The question stated above, "*whether a customer will be perceived qualitatively in a new way as an object of banking activity in the Branch*", is crucial also in connection to work-related

well-being, which becomes explicit later in Chapter 5.3., when considering the transformation of the new experimental working model to a more developed one. The object of non-well-being talk is also considered specifically. The template illustrates that an expansion is perceived as a potential, not taken for granted as a consequence of the intervention. There is always a risk of destruction of opportunities in developmental work, which is essential to recognize during the intervention.

## 5.1 From Waiting Orientation to Questioning Local Branch Activity: *From Vague Talk to Documenting and Creating a New Model of Activity*

The following table crystallizes the potential learning and expansion, and the outcomes taking place in the first four intervention meetings. In fact, the preliminary discussion on participation in the intervention is also considered, because it reveals the orientation to developmental work before it really started.

Table 5. The first four intervention meetings as potential expansion and as outcomes

| Intervention meetings: Order / Date / Duration & Findings of the process | Orientation meeting (14 January 1999, 1 hour) | The 1st Meeting (10 February 1999, 1 hour) | The 2nd Meeting (3 March 1999, 4 hours) | The 3rd Meeting (18 March 1999, 2 hours) | The 4th Meeting (7 April 1999, 4 hours) |
|---|---|---|---|---|---|
| **The theme of the meeting** | Justifications for participation | Planning the intervention and how it will proceed | The near past; construction of the impossibility in the near past | Perceiving the impossible and orientating to studying it during one's own work activity | Scrutinizing impossible tasks and situations and perceiving the "Express-Counter Model" as a new model of activity |
| **1. Employees' orientation to development** | Idea of participation – need to stop and to start to resolving the impossibility<br><br>Committing to the timetable; However, still waiting for solutions coming from outside<br><br>Development in tandem with the TYKY project | Project in tandem with the TYKY project and connected to everyday work | | More talking than scrutinizing | Stressful situation when trying to study local work activity in the middle of haste |
| **2. Second-order work and tools for it** | Knowledge about results of the earlier project, "Work Units between the Old and the New";<br><br>Preliminary idea of AT & DWR<br><br>Dialogue | "The Picture of the Near Future" as a tool for planning and as a tool for making visible one's own change acts; based on the theoretical idea of a collective zone of proximal development | "The History Sheet", applying the model of the Activity System; making visible the near past with several changes coming top-down<br><br>Remembering; based on the idea of the impossibility as historically constructed tensions and contradictions; several changes without changes in way of implementing them | Diary/descriptions of the impossible tasks/situations faced in everyday work;<br><br>Difficulties in documenting and articulating the impossible | Multiple data from everyday work (descriptions of the impossible tasks and situations, customer statistics, video data from customer service situations etc.)<br><br>Strong feelings of stress when doing data collection in the middle of haste<br><br>Insight into the meaning of the data and learning documenting work |

| | | | | |
|---|---|---|---|---|
| **3. Shared idea of "the impossible"** | Rush; no time for productive selling because of the rush and number of customers | Tension between basic service and productive selling | "Contradiction between demanding and routine work"; "Basic service takes time from profit-oriented consulting work" | In talk: related to so-called after-care work; In descriptions: related mostly to service and specifically to queues and rush; in addition, related to disturbances and breakdowns in data systems, problems of the back support unit and the delivery of work in the Branch Office | Idea changed after questioning the prevailing model of activity: *"this would not be an impossible task, if only we had a more sensible service model"*; the impossible connected to local way of activity instead of customers / Data collection was said to be an impossible task in itself |
| **4. Object of non-well-being talk** | Stressful situation | | Related to the impossibility; however expressions of "good community spirit" and "common feeling of doing" | Related to work left undone; mental pressure from the work not done; causing stress and physical illness | Number of customers; handling queues instead of anything else; Data collecting was experienced as stressful in the middle of haste |
| **5. Object of developmental work/ developmental actions** | Productivity of work; Problems of haste, impossible task and perceiving the near future | Planning intervention as part of the everyday work activity | The endeavour to understand how the impossibility had been constructed in the near past | Documenting work and articulating work; descriptions of the impossible | Learning to do documenting work and collecting data; First ideas of "Express-Counter -Model" as a new working model |
| **6. Concrete results** | Shared and common decision to participate in the intervention | Visible plan ("The Picture of the Near Future") of proceeding with intervention | Making visible the near past on "the History Sheet" | First descriptions of the impossible; perceiving that the impossible is related also to back-office work, not only to face-to-face service | Multiple data of the impossible; questioning the prevailing working model and perceiving the new one |
| **7. Object of activity** | Productivity; Profit; Service | More profit than service | More profit than service | More profit than service; loan and investment customers instead of TR-customers | Number of customers, queues and rush |

| | | | | | |
|---|---|---|---|---|---|
| **8. Customer as object of activity** | Rush, number of customers | Division between cash customers and loan & investment customers | Customers needing basic service were seen as obstacle to productive work<br><br>Idea of after-care of desired customers | Customers as rush/queue;<br><br>Unwanted (TR-customers) vs. desired customers (loan and investment customers) | Number of customers |
| **9. Possible expansion (or new type of orientation)** | Stopping for reflecting<br><br>Change agency when willing to integrate separate projects | | | The endeavour to have shared understanding of customers and tensions in work activity | Questioning the prevailing model of activity<br><br>Launching into second-order work |
| **10. Risk for destruction of opportunities** | "Waiting" orientation | Waiting orientation | | Seeing routine work with routine customers as lacking learning challenge;<br><br>Relying too much on talk; talk as prolonging problems instead of solving them | Waiting orientation in critical situation;<br><br>Continued complaining |

The outcomes of the first four meetings, and the work related to them outside the meetings, took the form of learning to do second-order work and of launching into doing it. Specifically, it was the start of the learning process of documenting and articulating the problem of the impossibility and of scrutinizing it in the everyday work activity. Through this learning process, the work community developed itself as an agency in a change situation. By getting new tools for perceiving the near past (the History Sheet) and the near future (the Picture of the Near Future), and by customizing the means (the diaries and descriptions of the impossible tasks and situations, and the intermediate-level conceptual tools, such as impossible task and impossible situation) to document and conceptualize the impossibility, the participants were able to see the impossible in a novel way. The core outcome was that the Branch Office questioned the prevailing mode of service activity and the embryonic ideas of a new working model, Express-Counter model, started to take form. In addition, the impossible was no longer seen as only a problem of face-to-face service but as a problem of organizing the back-office work as well. The learning process can be seen as a journey travelled from a waiting orientation to the turning point in documenting and articulating work, to insight into the meaning of the mirror data in developmental work and thus to questioning the prevailing mode of activity.

Each one's own work and the local work activity were scrutinized and solving the problem of the impossible was attempted in the middle of haste. A new model of activity was developed for resolving the impossible, while tools were constructed for collecting more thorough data, and for producing information on the impossible task, as well as on the new model. On the one hand, new, suitable tools for rush work were developed to document the everyday impossible tasks and situations. On the other, the existing tools that were already in use in the basic work were brought into play for studying the impossible. For example, the queue number system was already in use for face-to-face customer service, but not yet for developing the basic work, for doing second-order work.

After examining multiple and concrete data related to customer service situations and the flow of customers, the staff was able to question the prevailing mode of local activity. The employees discovered that they were too much stuck in the idea of multi-service, and that this model of activity no longer functioned.

## 5.2 Experimenting with and Evaluating the "Express-Counter Model": *Being at the Bottom – Constructive Non-Well-Being*

The Express-Counter model was not implemented straightaway, but the model was concretized further during the fifth meeting on 14 April 1999 and the sixth meeting on 21 April 1999. For these meetings, the employees aimed to produce more specific statistics of customer flow and the fresh results of the customer inquiry conducted at the Bank were examined. These results supported the idea of differentiating customer service in the Branch Office. The most critical feed-

back customers offered involved the fluency of customer service. Experimenting with the new model started on 19 April 1999. The fifth and the sixth meetings focused on concretizing the new model developed for customer service, the Express-Counter model. During these meetings, the discourse focused on concrete matters such as reorganizing the division of labour and reprogramming the queue number system to serve the Express-Counter model. Overall, a huge amount of energy was needed for the researcher to "push" and motivate the employees to do their second-order work, especially the documenting work, in the middle of haste and simultaneously with the basic first-order work. Experimenting with the new model went on constantly. Many things arranged for the meeting on 14 April had to be postponed until the meeting on 21 April, because the employees did not have enough time to do the second-order work (producing more precice statistics, the diagram of the new model, the floor plan with the idea of the new Express-Counter model and becoming acquainted with the express-counter model in the other branch nearby). The slides (Appendix C) clarify how the researcher had prepared to support the employees and push them into producing data and taking care of their duties related to second-order work by writing down the different tasks that had to be done in preparation for the meeting on 14 April.

The planned seventh Meeting (28 April 1999) was cancelled because of the stressfull and hasty situation in the Branch Office. The atmosphere during the seventh Meeting (5 May 1999, 1 hour) was tense, which I as a researcher was able to sense immediately. At this stage of the intervention, experimenting with the Express-Counter model as a new model of action was going on, and it was not functioning as well as expected. The customers were being served more fluently than earlier, as evidenced by the statistics of the queue number system, but at the full-time express-counters the high pressure of the work had become exhausting: "*we are just pressing the call button all day*".

The new working model had been created in the Branch Office, so it was not possible to complain about it as "coming top-down" or as "unworkable" therefore. There were no ready-made solutions to be taken from elsewhere and the staff felt lost. The feelings and the talk about non-well-being were very uppermost in their minds during the meeting. An emblematic feature in this mutual discussion was that when talking about this really critical matter related to developmental work (feeling worse during an intervention particularly aimed to promote well-being) people often laughed at the end of their turn to speak.

> N8: I don't really know if I'm totally lost, but during these couple of months I have got a feeling that when these things have been researched, analysed and having gone a little bit further, so are we feeling, are we feeling now even worse than earlier?
>
> N1: Yes.
>
> N5: But it's better to study and shake things than leave it undone...

N3: Yes, I agree [...]

N1: But you are right. We are almost going through the bottom, we will examine this case, what this is about.

N8: Hum.

N9: And one thing that really makes us feel bad is that earlier, all of us got to work outside the Branch to find new customers, which [work] we found very enriching, when we didn't have the masses of people that are exhausting us. Now it has been taken away from most of us, and impoverished our work very much as well.

N5: Yes, there are more customers now.

N9: Yes, now it's that mass there.

N5: ... you don't have time to do that work that way.

[...]

N8: Well, what if we don't find a solution to these problems? (laugh)

N3: (laugh)

N1: Very good.

N8: Will we remain this ragged crew? (laugh)

N3: Can the doctor give an answer to that? (laugh)

N8: How about the prescription?

N1: Well, I don't in the first place believe that you won't find, I don't believe that you won't find. (laugh, chatter)

N8: We have to take everything into account.

N9: That you don't leave us there... (laugh)

N8: Think about it, what a trauma... (laugh)

One of the employees who took up the subject on non-well-being had brought out her own non-well-being and non-well-being of the work community already in the previous meeting. She told about her feelings of guilt because the other employees had had to work so hard after her own task had been switched to consultation service with investment customers. In the light of the data, it seemed that the experiences of non-well-being were important indicators in the Branch Office, when the new model was evaluated. Learning about the workers' experiences and the documentations based on them helped the work community recognize the pitfalls of the new model, such as the narrowing and overload of work if an employee worked only at the express counter. Non-well-being operated thus as *"constructive non-well-being"* *(*as it was called at the meeging) in the long run.

### 5.2.1 From Words to Deeds

At the beginning of the experiment, it was also found that the back-office work was still "wild" and disorganized. Merely differentiating the face-to-face customer service by using the queue number system was not enough for solving the problems of back-office work. The double-edged nature of talk as a means for development again came up for discussion. The branch manager highlighted that they had repeatedly talked about the need to organize the back-office work without doing anything about it anyway. Thus again, it became obvious also to the participants themselves that talk was not enough for problem solving.

> R1: Just a practical question, didn't it come out pretty clearly [...] in the work arrangement matter, in the work shift matter, something like [...] it doesn't function if everyone has a solution of their own, but there has to be, so to speak, a schedule and it has to be agreed together, who is where and when.
>
> N3: Yes and this matter has been mentioned by everyone, almost everyone has said that, if you listen [...] it's not only my idea, but everyone has thought so.
>
> [...]
>
> N1: Well, do remember one thing, that in the middle of all this investigation and experiment, we are in any case a work community with an aim to serve customers. We are living off of them, this is not the Wild West either, it really isn't so that the fast ones are the winners, but that we should really find some good solution instead of just whizzing through, one day this way one day another way, instead we should find a permanent and good model
>
> [...]
>
> N1: We can't live like in a jungle. We should really think now...
>
> [...]
>
> N1: We come to that point every time.
>
> [...]
>
> N9: I know that the timetable would be helpful at least for me, if I would know that I could have even half a day a week, to do those securities and take care of the expiring mortgages and those branch matters and trust department matters, because they are there in the background [in the mind].
>
> N1: You know exactly, when they are coming...
>
> N8: Yes, same thing.
>
> N5: You have to reserve it.
>
> N3: Sure, this is the basic thing, no question, but ... even then...

N1: Why don't we get around to doing the timetable? Do you remember when we talked about that the first time? It was when we got that back-office desk, at 5 December, it was then I said that now we have it… let's do the timetable. Now it's 5 May, it's taken exactly, December, January, Ferbruary, March, April…

N3: Half a year.

N1: Half a year. We have talked about that half a year. We said then that no time-table is necessary. Now we have chanted a couple of months that it is necessary. I really get mad, we talk about this every time, but we get nothing done. Or, shall I do it myself? The work schedule.

[…]

N9: You do that, please!

N1: Okay. You will get it.

## 5.2.2 Doing Second-Order Work in the Middle of Haste at Work

The employee who was responsible for producing the customer statistics for the meeting was leaving for some company visitation at the beginning of the meeting. Her comments given below reflect the continuing haste, and the difficulties of merging developmental work into the intensive and fast moving banking work.

N6: This was just a real bad day…

R1: Well, if you could tell me in a few words about them [customer statistics], so that we can come back to them next time, when we have this two-hour thing [meeting], see what […] Is there something that you wanted to discuss first? (buzz and clatter)

N6: Yes, there is a lot of everything; there would have been a real lot, a shitty day, to be frank! … Well, no, we took these [customer statistics] for two weeks… I am now totally…

N4: You're thinking of other things.

N6: Totally different things, yes.

N3: I understand.

## 5.2.3 Individual Feelings of Non-Well-Being Create Communal Well-Being

Non-well-being was also related to the struggle between the old and the new model of activity, as a natural stage of the transformation and during the expansive

learning process (*tertiary contradiction)*[31] in the model of expansive learning (see Engeström, 1987, pp. 87–89). The employee's bad conscience of doing counselling work separately from the cash work while the colleagues were overloaded was an example of that. In the Branch Office, it was essential to cross the boundaries between individual and communal well-being that became explicit in the discussion. In this meeting, it enabled the discussion of individual guilt about how the changes in one's own work would affect the entire work unit and the other employees in the Branch Office, and vice versa. It became possible to perceive the meaning of the change from the perspective of the entire work unit and the object of the work. In a situation of struggle, the employees were constructing a shared view of the new model and of the justifications for it instead of choosing to return to the old working model.

The other express-counter employee had written down her experiences of working at the express-counter during one week:

---

[31] Tertiary contradiction apperas between the object/motive of the dominant form of the central activity and the object/motive of a culturally more advanced form of the central activity (Engeström, 1987, pp. 88–89). Culturally more advanced activity may involve the creation of new practices or artefacts or division of responsibilities.

"EXPRESS-COUNTER

Thoughts arising during the experimental week

1. What is the job description of the express-counter like? During the experimental week: counter services – card applications, opening different types of new accounts, stock exchange, redemption, currencies, foreign commissions for payments, loan tendering, printouts of loan certificates, updating banking keys, counting coins, and various clearances demanded by the customers, such as totals for accounts.

2. Whom are customers directed to? If there is nobody else available, should you volunteer?

3. What sales objectives are set for the express-counter, if any?

4. How is the maintenance of skills guaranteed in other banking matters (loans, investment, etc.).

5. Is the express-counter a circulating job? Everybody was supposed to try, so that they could say what they think. The job feels pretty monotonous (production-line approach), motivation at risk.

6. Who does it during lunch and coffee? Replacements?

7. Systems working too slowly for an express-counter, customer numbers so big that you have to ask if even two people specialising in counter services can help them.

8. The feeling of doing a less valuable job than the rest of the staff. If the express-counter directs everything but counter matters elsewhere, the customers might get the impression of unprofessional staff, or restricted duties, and they would not trust the services of the person in question. The customers remember people, not the specific counter desks.

– The customers have kept asking what the new service model actually means.

– Some think that queue numbers are not needed for counters 4 and 5, having read the sign, directing bill payments, withdrawals and deposits to those counters.

– Some have hit their heads on the sign.

– Breaks for the express-counter?"

*(Documentation written by the express-counter, N10, 5 May 1999)*

The documentation above showed that the task was much more diverse than was assumed when planning the new working model, the Express-Counter model. The so-called cash customers had needed more varied services than withdrawals, deposits or payment transactions. Especially during the service situations, it came out a need to direct the customers to have business with some other cashiers. On the one hand, the express-counter employee had felt the work as monotonous

and compulsory. On the other hand, she was worried about how to keep up her know how in matters other than cash work, and she was concerned about motivation to work and about the respect of customers. The description of the express-counter's work based on the experiences during the experiment week showed that the employee felt her work was less valuable than other staff menbers' work at the Branch Office.

The reaction of the work community to the documented experiences above was contradictory. Some comments were, *"we don't want to sacrifice anyone"*. The impossible had been tolerated for a long time. As the work unit came along the project, it had made the choice to address the problem solving. Nevertheless, that would not mean feelings of well-being during the entire process. Giving up the old models and finding new ones would not be straightforward. Now, when facing the problems with the new model developed locally by themselves, some of the employees were also disappointed. However, the employees were brave in bringing into the mutual discussions difficult and stressful matters experienced on the individual level. Individual and communal well-being were integrated repeatedly in the discussion, which I interpret as a shoot of expansion when aiming to locally manage work-related well-being in a change situation. This could be interpreted as "Ba" (Nishida, 1990), referring to high ground solidarity, but also including the elements of different Ba's (Nonaka & Konno, 1998).

### 5.2.4 Situational Sensitivity

Even though the employees were considering a new kind of division of labour and a new way of organizing the back-office work, one of the employees and the branch manager brought up the demand for *"situational sensitivity"* in the Branch Office. Organizing matters related to staff in reserve for express-counter work and installing queue number buttons so that every employee could check the queue situation, would not be enough. The discussion also turned to the question of re-organizing the back-office work. The time reserved for that work should be long enough to enable flexibility when doing back-office work. Also, other work should be temporally suspended if necessary for serving cash customers. I also interpret this discussion on situational sensitivity as an embryo of expansion in developmental work. Talk about the timetable as a novel tool for back-office work and simultaneously about the role of flexibility when using that tool as an opportunity to do back-office work again manifested a local *"change act"* done for managing work-related well-being on the collective work unit level in the Branch Office, and was therefore an embryo of expansion.

> N3: Well, is this some kind of standby responsibility so that when you see that people begin to line up behind the button, a number of them, ten or so, that we should decide if this is the system? I just thought that the standby cashier, whose turn it is to look after it, the situational sensitivity between us, the cooperation

within the community. [...] The queue number buttons are reinstalled, so everyone is able to see how many people are there queuing in back of the button.

N5: And not only to see.

N3: No, no. But we have to agree together. And then just the back office work, we will always have that, and it will not help us if we do it once in half a year, but now it's lovely when we have been able to work, one person one whole day doing the backlog of back office work. We perhaps have to split them into smaller parts. Is it then a couple or three hours at a time, once a week or something, or instead during a whole unloading day or shorter turns. In my opinion, it is not a matter of arguing about people but about matters. The floor is open, this is a free county. My turn was here and I hope that it will open a discussion, negative discussion also [...] where we can continue...

[...]

N1: Situational sensitivity...

N3: Then you have to go and say that you have here, that is it okay, that do you have this job under control? But we have this, of course we have this frame, the division of labour [the timetable for back office work].

N1: And the back office place has to be flexible enough, it's not a question of dividing the back office place hour by hour, that's not okay, but we're living off customers and we're here for them, customers are coming here. Our task is to take care of customers, so that [back office turn] has to be so flexible that it's a morning or an afternoon or daily. We have to experiment with it, ask for opinions and then change it, but tighter than morning or afternoon it cannot be. You have to see that there is a queue outside, when the doors are opened. So you can't do that. And you have to see yourself, that if there is a queue, you can't stay in the back office place, but first you do that job, and when that's done, you can move to your back office turn and place. But this definitely can't be any Wild West job.

### 5.2.5 Non-well-being and Lack of Learning Challenges

The researcher encouraged the workers to express possible feelings of non-well-being in the future and said that these feelings would be addressed together in the work community. Non-well-being could be a sign of being at least partly on the wrong path, such as the experiences of doing express-counter work had shown. It seemed to be critical for well-being that motivation had not been integrated into express-counter work. This work was routine work as the worker described it. Any idea of creating a better understanding of the cash customers as work object was not explicit. Cash customers seemed to be a clientele whose needs were already familiar enough. The idea that there would be something worth learning about these

customers and that it would be worth developing the work unit's way of serving them was considered strange. Planting the idea of learning and constructing competence into express-counter work was troublesome. Cash customers were not perceived as an object of learning, nor as desired customers. During the seventh meeting a discussion developed concerning this:

> N5: That know-how, it surely doesn't pertain to the express-counter.
>
> N3: No. (laugh)
>
> N5: We really need really other kinds of know-how and skills, come on.
>
> N3: Yes, it is relevant, because I know a branch near here, where the people are specialized to work only with loans and securities; they aren't able to do express-counter work anymore, because they don't know the pruducts well enough...
>
> N5: But it's easier to learn them, than these other tasks [...]

In the research group meeting, when studying the express-counter model together with the other researchers, we were worried about the opinion that the new model was routine work that was compulsory, but that there was no motivation nor any idea of understanding the clientele better as an object of the work activity. After investigating the experiences of the express-counter, the researcher asked the staff to discuss the questions below. Thus, well-being as a significant argument for joining the entire project became again an essential part of the intervention.

> – How would the new model support a process of developing competence and learning in the work unit?
> – How would the new model construct well-being or non-well-being?
> – How would the new model resolve "the impossible task"?

### 5.2.6  Networking in the Bank Organization and Outside of It

At this stage of the project, the Branch Office had received an invitation to tell about the developmental project during the Leonia Bank's TYKY seminar, which was attended by all the branch managers of the organization. Two of the employees of the Branch Office participated. Later, the occupational health care nurse and the industrial safety delegates told the researcher that they had found the seminar and the presentation of the employees successful. The nurse related that the officials of the Branch had presented their project honestly by telling of *"being at the bottom",* but they had also told about their wish to continue the developmental work without giving up. They had also admitted that participating in the project had been difficult. The presentation had initiated a lively discussion and

after the seminar the presenters had received several calls related to the presentation. It turned out that the opportunity to participate in the seminar and to discuss there the developmental work done in the Branch Office had been built into the process at the start, when the intervention was tied to the TYKY project. An opportunity for this kind of "concurrence" was constructed beforehand by keeping the intervention process as multivoiced as necessary.

Simultaneously, a radio journalist asked to come to the Branch Office to do a story about the development work. Telling about the project at the TYKY seminar and to the journalist seemed to be meaningful for the work community. On the one hand, they had to reflect on their activity in the project, and in a situation where they felt as though they were at the bottom. On the other, they got feedback from outside the Branch Office that they were doing meaningful work when resolving these problems of the impossibility. In many other branches, too, the staff had been wrestling with corresponding problems without finding any solutions.

## 5.3 Express-Counter Model Transformed to the Model of Payment-Transactions Service – *Customer Resurface*

During the eighth meeting (20 May 1999, 2 hours), a discussion went on about how to notice competence, learning and well-being in the new working model. There was a desire to change the name, Express-Counter model, and to talk about the "Payment-Transactions Service" model instead, as well as to incorporate into the new, further-developed model the idea of expanding the express-counter job from routine work to the multi-task work of an expert. The essential difference between the Express-Counter model and the model of Payment-Transactions Service was thus not only more diverse tasks instead of monotonous routine work; the new model included the responsibility for developing this task and for training other employees to deal with payment-transaction matters in the Branch Office. That can be interpreted as an expansion, as a qualitatively new way of perceiving the cash customers as not only routine customers but also as object of learning in the work community.

> "THE LEVEL OF COMPETENCE" IN PAYMENT-TRANSACTIONS SERVICE
>
> One has to be an expert in payment transactions (guiding the customers)
> Service-orientedness, initiative, activeness
>
> LEARNING PROCESS
> Person in charge takes the courses, gets information about current matters and familiarizes the others in the Branch
> One has to take the time
> One has to keep instructions and brochures up to date.
>
> GOALS
> Work arrangements aim at a more well-defined and workable work community
> Decreasing the continuing pressure caused by work left undone
> An opportunity to concentrate on the work that is going on
> An opportunity to contribute more clearly to the profit
> Taking responsibility for one's own shift!!! + Also for a short turn; if one promises cover for a colleague for a moment, one has to keep that promise
>
> OUTCOME
> Experiences are collected continually. Follow-up of the service model.
> How to evaluate the impossible task, well-being and learning."

*(Documentation written by the express-counter, N10,*
*for the meeting on 20 May 1999)*

The transition from the Express-Counter model to the model of Payment-Transactions Service did not happen straightforwardly. The struggle between the old and the new models was explicit in the discussion. The idea of enlarging the task description related to the Payment-Transactions model was at variance with the prevailing rules and the contract of employment in the Bank Organization. In addition, the prevailing tradition in the Bank was that the contracts of employment were done between the employee and the branch manager, not the work community. Now the idea of enriching and remoulding the prevailing work and task descriptions was being discussed in work community meetings. Thus, the practices related to contracts and task descriptions supported the old model. There was risk of reverting to the old, but the work community was strong enough to continue developmental work.

## 5.4 Evaluating the Project and Learning during the Intervention

In early summer 1999, the project was evaluated by the work unit in two group interviews. The first one (1 June) was a theme interview, and in the second one (9 June) the project was evaluated from the viewpoint of the expansive learning cycle –model. In addition, two workers and the branch manager evaluated the project on radio program (21 July 1999)[32]. Besides writing her thesis as a graduate student Simula (2000)[33] also interviewed each of the employees during the period of 21-29 September 1999, the results of which I will use here. In these individual interviews, the process of resolving the impossible was evaluated also from the perspective of learning. Naturally, the concrete outcomes, such as the model of Payment-Transactions Service and the shared timetable for the back-office work, were repeatedly mentioned as meaningful results, which was coherent with the other evaluation data mentioned above. In any case, it was interesting that learning to do second-order work was emphasized in the data, instead of concrete solutions.

After the intervention it was observable that workers no longer saw the impossible as solvable once and for all, but as a continuous process, as something "that is done *continually"*. As an example, the workers mentioned that they were experimenting with and evaluating regularly the common timetable taken into use in an intervention. Solving the impossible as second-order work was constructed into a part of the everyday mode of action in the Branch Office. Developmental work in the Branch Office also continued after the project. The workers found that as a learning result they saw problems as mutually solvable, whereas earlier they had coped with them by tolerating them. The workers experienced having more and appropriate tools for transcending the impossible.

> R2: To come back to the impossible, do you think that the problem of the impossible is finally solved?
> N8: I can't say that, there's no way of telling what's coming up, what's going to happen, what the future might bring. You never know what sort of jobs you're going to face. There's always going to be new ones [problems of impossibility], but this situation now, this situation is relatively ok. But, I can't say that this is final, because I'm pretty sure that there will be changes at some stage, and we'll have to face new impossibilities. But then we'll be a bit more capable of thinking about how things can be solved, thanks to this spring.

> *(Evaluation interview, Bank employee, N8, 9/-99)*

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[32] "Reclaim Work-Ability! What is the reason for the haste? [In Finnish: "Työkyky kunniaan! *Mistä kiire syntyy? Radio-ohjelma Leonian Martinlaakson konttorin kehittämishankkeesta keväällä 1999"]. Radio program on 21 July 1999, YLE1*

[33] *Simula, T. (2000).* Työn muutos ja oppiminen: kuinka asiakaspalvelutyön mahdottomia tehtäviä ratkaistaan pankissa?: Tapaustutkimus pankkitoimihenkilöiden selviytymisestä ja kokemuksista mahdottoman tehtävän ratkaisemisessa. Pro gradu-tutkielma. University of Helsinki. Department of Education.

R2: How do you think that this impossible problem has been solved, or hasn't it, or…?

N9: Well, you can't say that it's been solved. It shifts all the time, so that as recently as this morning, we were thinking about the scheduling a bit more carefully and summed it all up, so that it keeps moving, it goes on all the time, but something is done all the time. That's what's good about it.

R2: You mentioned to me that this impossible problem is dealt with all the time. What do you mean by that?

N9: I mean that we have a better look at how much time those tasks [back-office work] take, time taken away from customer service in the branch…

*(Evaluation interview, Bank employee, N9, 9/-99)*

N1: And now we are developing our schedules further. Just this morning we discussed the regular jobs there are, repeated weekly, or every second week, or monthly, jobs with a deadline, but not helping customers. We made a list of them [repeated jobs], and people thought of how much time they'll spend doing them. These are taken into account, and they'll be put on the timetable…

*(Evaluation interview, Branch manager, N9, 9 /-99)*

## 5.5  Developing Work Continues on Site in the Branch Office – *Expansive Use of Novel Tools*

The Follow-Up Meeting on 25 November 1999 (1.5 hours) was the only project meeting during the autumn and the last official meeting of the project. The workers told the researcher what had happened after the summer and how the new model of activity was established and developed further.

Developing the task descriptions had been going on unprompted in the Branch Office after the summer. The new way of organizing the back-office work was expanding to internal training in the Branch Office. The practice of training Leonia Bank personnel with so-called "colleaque training" was experienced as an impossible task and that practice was seen as a problem that needed to be resolved. For example, only one worker could get official training organized in the Bank Organization for using a new data system, and even that for a very short time. After that, the worker was supposed to train the other workers in her work unit. This practice would be going on on the organizational level, so the problem desired to be resolved in the Branch Office locally. The training was seen to be as "wild" and disorganized such as the back-office work had been earlier. However, the timetable was developed for better predictability. The marketing chief of the Branch Office would regularly reserve time for the back-office work for every employee without any specific requirements. Now, the training time in the Branch Office would be included into the timetable as well.

In addition, after summer 1999, development of the payment-transaction task was written down in the task description, and described as working in everyday practice. Second-order work seemed to be constructed as a part of the everyday work in the Branch Office.

## 5.6  Conclusion and Discussion

In this chapter, I have tried to understand, how the expansion was realized during the intervention process. Second-order work and learning to do it proved to be the essential elements during the entire developmental process. Learning to do second-order work can be seen as an indication of expansion, but it was also a pivotal means for examining the impossibility and trying to find the expansive resolutions for the impossibility. Before questioning the prevailing model of activity and practices, a strong mirror data was needed of the everyday work activity and the recurrent problems involved. An insight was that talk was not a strong enough means in second-order work, although it was significance when trying to conceptualize the impossibility. Talk seemed to have a role in sustaining the impossibility as well.

An important concrete effort to resolve the impossibility was to reorganize face-to-face customer service, first with the Express-Counter model, later on with the Payment-Transactions Service model. Pivotal from the viewpoint of expansive learning was that the work community could perceive a customer qualitatively in a new way, as an object of banking activity in the Branch Office. That was the issue when transforming the Express-Counter model to the Payment-Transactions Service model. Instead of being monotonous routine work the new model included the responsibility for developing this task and for training other employees to deal with payment-transactions in the Branch Office. It was question of constructing the customer-based motive into this job; the customer was seen as an object of learning as well. This was well illustrated later, when the task as well as a duty of developing it, was included in the written task description.

The other concrete solution was the creation of a common timetable for back-office work. It was not to be implemented in a routine way, but in a situationally sensitive way, and expanded further as the means for education and training in the Branch. In order to create a shared timetable, the impossibilities had to be documented and articulated. In shared discussions, the impossibility was perceived for a long time as the number of customers and spending valuable working time on the "wrong tasks or customers". Documenting the impossible situations and tasks proved that the impossibility was involved in the invisible back-office work and its reorganization, as well as in the face-to-face service.

Altogether, the journey from experiences of the recurrent impossibility to the effort to conceptualize and resolve it can be seen as a journey to create agency at the local level, which the excerpts on page 88–89 illustrate. During this journey conceptualizing the impossibility and giving a shared meaning to it was pivotal.

By learning second-order work the work community constructed itself as an agency for possible impossibilities in the future as well.

I will conclude the outcomes in the following Table 6.

**Table 6. The intervention meetings from the viewpoint of expansion and the outcomes**

| Intervention meetings: Order / Date / Duration & Findings of the process | Orientation meeting (14 January 1999, 1 hour)[1] | The 1st Meeting (10 February 1999, 1 hour) | The 2nd Meeting (3 March 1999, 4 hours) | The 3rd Meeting (18 March 1999, 2 hours) | The 4th Meeting (7 April 1999, 4 hours) |
|---|---|---|---|---|---|
| The theme of the meeting | Justifications for participation | Planning the intervention and how it will proceed | The near past; construction of the impossibility in the near past | Perceiving the impossible and orientating to studying it during one's own work | Scrutinizing impossible tasks and situations and perceiving the "Express-Counter Model" as a new model of activity |
| **1. Employees' orientation to development** | Idea of participation – need to stop and start resolving the impossibility; Committing to the intervention and the timetable; However, still waiting for solutions coming from outside; Development in tandem with the TYKY project | Project in tandem with the TYKY project (see p. xx) and cohered with everyday work | More talking than scrutinizing | More talking than scrutinizing | Launching into second-order work; Stressful situation when trying to study local work activity in the middle of haste |
| **2. Second-order work and tools for it** | Knowledge about results of the earlier project "Work Units between the Old and the New"; Preliminary idea of AT & DWR Dialogue | "The Picture of the Near Future" as a tool for planning and as a tool for making visible one's own change acts | "The History Sheet"; applying the model of Activity System; making visible the near past with several changes coming top-down  Remembering; based on the idea of the impossibility as historically constructed tensions and contradictions; several changes without changes in the way of implem-enting them | **Diary/ descriptions of the impossible tasks/situations faced in everyday work;** Difficulties in documenting and articulating the impossible | Multiple data from everyday work (descrip-tions of the impossible tasks and situations, customer statistics, video data from customer service situations, etc.); Strong feelings of stress when doing data collection in the middle of haste; Nevertheless, insight into the meaning of the data and learning docu-menting work |

| The 5th Meeting (14 April 1999, 1 hour) | The 6th Meeting (21 April 1999, 1 hour) | The 7th Meeting (5 May 1999, 1 hour) (The planned 7th meeting on 28 April was cancelled because of excessive haste at the Branch) | The 8th Meeting (20 May 1999, 2 hours) | The 9th–10th Meetings (1 June and 9 June 1999, 1 + 1 hour) | The Follow-Up Meeting (25 November 1999) |
|---|---|---|---|---|---|
| Concretizing the new Express-Counter Model | Experimenting with the Express-Counter Model | Evaluating a new model of activity | Further developing the new model | Evaluating the new model of activity | Follow-up meeting |
| Developmental work is done in the middle of haste work | Developmental work is done in the middle of haste work; The new Express-Counter Model will be experimented with | Experimenting with the new Express-Counter Model; busy and stressful time The work unit has launched into the developmental work and the experiment | Developmental work is taken as essential part of everyday work; It was seen as continuing: "Experiences are collected continually.", "Follow-up the service model" | Group discussions | Developmental work is going on; Use of shared timetable: developed further for studying/ training |
| Results of fresh enquiry of customer satisfaction Researcher pressures to produce data | Multiple and specific statistics of customer flow and considering them together; Floor plan including the new Express-Counter Model | **Specific descriptions and documentation of experiences related to the Express-Counter Model in practice;** Second-order work is done in the middle of haste | Shared developmental discussion based on careful documentation of experiences and ideas | Evaluation discussions | Regularly meetings for developmental work; Shared timetable for back-office work |

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|---|---|---|---|---|---|
| **3. Shared idea of the impossible** | Rush; no time for productive selling because of the rush and number of customers | Tension between basic service and productive selling;<br><br>Need for resolving the impossibility | *"Contradiction between demanding and routine work"; "Basic service takes time from profit-oriented consulting work"* | In talk: related to tension between "TR-customers" (see p. xx) and "good cases", and to so-called "after-care work";<br><br>In descriptions: related mostly to service and specifically to queues and rush; in addition, related to disturbances and break-downs in data systems, problems of the back support unit and the delivery of work in the Branch | Idea changed after questioning the prevailing model of activity: *"this would not be an impossible task, if only we had a more sensible service model";* **the impossible is connected to local mode of activity instead of customers;**<br><br>Data collection was said to be an impossible task in itself |
| **4. Object of non-well-being talk** | Stressful situation | | Related to the experiences of impossibility: *"Contradiction between demanding and routine work";*<br><br>However, expressions of "good community spirit" and "common feeling of doing" | Related to work left undone: *"mental pressure from all the work not done",* causing stress and physical illness | Number of customers; "maddening queue"; handling queues instead of anything else;<br><br>Data collecting was experienced as stressful in the middle of haste |
| **5. Object of developmental work/ developmental actions** | Productivity of work<br><br>Problems of haste, impossible task and perceiving the near future | Planning the intervention as part of the everyday work activity | The endeavour to understand how the impossibility had been constructed in the near past | Documenting work and articulating work; descriptions of the impossible | Learning to do documenting work and collecting data;<br><br>**First ideas of "Express-Counter -Model" as a new working model** |

| | | | | | |
|---|---|---|---|---|---|
| The impossible is seen as solvable by the new service model | The impossible is seen as solvable by the new service model | | The impossible would be solvable by the new, more developed model of "Payment-Transactions Service" | New impossibility: "Leonia's attraction"; Too many new customers compared with the number of employees; not solvable by the projects | "Churn up training" |
| Non-well-being seen as reverberating to customer service | | Feelings and talk about non-well-being very uppermost; Related to being "at the bottom" when doing develop-mental work; Express-Counters feel new task is exhausting; others feel: "we don't want to sacrifice anyone"; **Integration of individual and mutual well-being;** Investment consultant feels guilty about her task being differentiated when seeing how busy others are. | Well-being as an explicit object of developmental work: "Decreasing the continuing pressure caused by work left undone" | Haste, tiredness and the pressure from the work not done; Difficult to concentrate on the evaluation in the middle of haste The impossible was no longer seen as solvable once and for all; Solving is seen as a continuous process | Related to the way of training in the Bank Organization; **New impossibilities are seen as possible to be faced but as solvable as well** |
| The new Express-Counter Model and concretizing it; Reorganizing the division of labour; Repro-gramming the queue number system | | New work-ing model and evaluating and redeveloping it | The transition from the Express-Counter Model to the model of Payment-Trans-actions Service | | Shared timetable as tool for organizing training at the Branch Office |

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|---|---|---|---|---|---|
| **6. Concrete results** | Shared and common decision to participate in the intervention | Visible plan "The Picture of the Near Future" of proceeding with the intervention | Making visible the near past on "the History Sheet" | **First descriptions of the impossible; perceiving that the impossible is related to multiple things, not only to face-to-face service** | **Multiple data of the impossible; questioning the prevailing working model and perceiving the new one (Express-Counter–Model)** |
| **7. Object of activity** | Productivity; Profit; Service | More profit than service | More profit than service | More profit than service; Loan and investment customers instead of TR-customers (as desired customers) | Number of customers, queues and rush; Second-order work; scrutinizing the data |
| **8. Customer as object of activity** | Rush, number of customers | Division between cash customers and loan & investment customers | Customers needing basic service were seen as obstacle to productive work; Idea of after-care of desired customers | Customers as rush/queue; Unwanted (TR-customers) vs. desired customers (loan and investment customers) | Number of customers |
| **9. Possible expansion (or new in orientation)** | Stopping, reflecting Change agency when aiming to integrate separate projects | | | **Endeavour to have shared understanding of customers and tensions in work activity** | **Questioning the prevailing model of activity; Launching into second-order work** |
| **10. Risk for destruction of opportunities** | "Waiting" orientation | | | Seeing routine work with routine customers as lacking learning challenge; Relying too much on talk; talk as prolonging problems instead of solving them | Waiting orientation in a critical situation; Continued complaining talk |

| | | | | | |
|---|---|---|---|---|---|
| Division of labour during experiment with the new model | | **Decision on organizing back-office work mutually and in a new way; making and taking into use a common timetable for back-office work** | The transition from the Express-Counter Model to **the model of Payment-Transactions Service** | The common timetable for back-office work was seen as an important solution | One more employee in the Branch; **Shared timetable as a tool for organizing training at the Branch Office** |
| Experimenting with the new model in addition to basic customer service | Experimenting with the new model in addition to basic customer service | **Experimenting with and redeveloping Express-Counter Model as new model of activity; Basic customer service** | Customers and profit; Learning and development of payment-transactions service; Well-being at work | Coping with the huge number of customers vs. marketing | |
| Customers as object of the experiment | | ***"Despite the experiment we are working here for customers"; "Situational sensitivity"*** | *"We're living off customers and we're here for them"* | Huge number of customers | **Cash customers are seen as valuable for the business of the Branch Office** |
| **Experimenting with and documenting the new model** | Experimenting with and documenting the new model | **Mutual timetable for back-office work; from words to deeds; Advanced way of documenting and articulating work situations; Integration of individual and communal well-being began; Concept of "constructive non-well-being"** | Routine customers were seen as object of learning; Service-orientedness as well as contributing to the profit; **Taking the rules, the contracts of employment and the task descriptions as shared objects of development** | Perceiving the need for increase in personnel; developmental work will not resolve all the problems | **Timetable as a tool for back-office work is taken as a tool for organizing training as well; Task of payment-transactions was written down in the task description, including responsibility for developing the competence related to it; The task was seen as important task for the Branch Office; Agency in developmental work;** second-order work is part of daily work |
| Risk of returning to an earlier model used at the Bank (the division of labour) instead of constructing a new model customized for the Branch's situation | Customers were not participating in the intervention meetings | Cash customers were not seen as any object of learning | Risk of reverting to the old practices involved in the rules, the contracts and the task descriptions | Too little attention was paid to the management during the intervention; bottom-up development is challenging for the branch manager | |

# 6 From Service Institution to Money-Making Listed Company: "The Impossible" in the Context of Changing Service Concepts

The purpose of this Chapter is to provide a brief description of the transformation of banking work and *service concepts* in the context of the work. The impossible and the process of solving it are interpreted from a larger perspective, paying special attention to the transformation of the *work object* and the *logic of the service activity* as essential parts of the transformation in banking work. I do bridge here the considerations of changes at macro and micro level. The decisions and changes made at the macro level produce the work object and logic for the micro level in banking industry. When there is a lack of tools for second-order work at the branch office level, there is the risk that top-down changes will not reach everyday work and clients at the branch office level where multiple and even contradictory changes are taking place simultaneously.

Launis and Pihlaja (2005, 2007) considered change-related well-being at work and the problems connected with it as disturbances and breakdowns of production and *service concepts*. They named the inconsistency of the transformation of activity concepts as *asynchrony*. They conceptualized changes in activity systems as qualitative and historical changes in production concepts, and used the historically changing work types described by Victor and Boynton (1998). These work types represent a different basis according to which production or service is organized. In order to put changes into practice, companies have to learn novel ways of reorganizing work, new processes, new types of knowledge, new kinds of manager-employee relations, and new kinds of information systems.

In situations where the prevailing service concept does not correspond to business demands, or when new concepts are launched into practice, several different disturbances and breakdowns occur in the organization (Engeström, 1988; Mäkitalo, 2005). The transition process is not often as smooth and linear as the management, experts and consultants usually claim. The work units and individual employees often experience the changes as challenging, but also as exhausting. The fluency of the everyday work and service process is hindered by disruptions, disturbances, haste, or problems that are often individualized as shortcomings of some personnel group (aged workers, newcomers, managers, planners), and attempts are made to transcend this by training or the creation of new regulations (Launis & Pihlaja, 2007).

Accelerating and divergent changes in the production and service concepts raise problems in both fluent activity and work-related well-being. When solutions have been sought for work-related well-being, they have been found in the transition processes of production concepts. This means that to be preventive, it is essential to analyse and conceptualize problems in work-related well-being in the

context of concept transformation. Launis and Pihlaja (2005, 2007) argued that promoting work-related well-being requires new theoretical approaches, research and analysis methods in order to connect the whole organization with the disturbances perceived by the employees, rather than to separate them into different (micro-macro) levels. CHAT provides good opportunities for this.

> "Novel conceptualizing, models and tools were needed to analyse and interpret transition processes and solve the ever increasing asynchronies and collapses in production and service concepts. In the rigorous transformation processes, ease of production and service processes improves both health and safety of the personnel, and productivity."

> *(Launis & Pihlaja, 2007, p. 104)*

According to Launis and Pihlaja (2007) changes in production and service concepts were a major challenge for research on well-being, especially since continuous change had become an inseparable part of the modern work life from the beginning of the 1990s. In order to cope with the redesigning of production/service and without undue health and safety problems for the employees, novel types of encounters and alliances would be needed between management, production designers, health and safety specialists, and local work units.

A quick look at the change situation in the Bank and the Branch Office depicted in earlier chapters makes it explicit that accelerating and divergent changes in the service and activity concepts caused problems in both fluent service and work-related well-being. Simultaneously with Vision 2000 as a specific change depicted in my study, several Post offices giving banking service near the Branch Office were closed, causing significant rush and queues at the Branch Office and experiences of impossibility when trying to realize the Vision in everyday service work. Therefore, the simultaneous contradictory changes – the new way and service concept of activity and the turbulent changes in the operational environment – constructed the impossibility in the Branch Office work. The new service concept and the new logic of activity included in it did not reach everyday work and customers.

Also, the method of implementing changes described earlier (in Chapter 2) was based on the logic of mass service and mass training instead of the logic of second-order work as locally done developmental work. Thus, the method of implementation did not support the employees as active agents and actors in constructing changes in their local work activity. In addition, in terms of Vision 2000 as a change, different levels of the Bank Organization were out of step with each other. It would seem insightful to interpret the problem of the impossibility as asynchronies in transformation of service concepts and thus at the concept level. The concept of asynchrony has entered the developmental discourse after main data of my study was collected. The data therefore does not enable a systematic analysis based on the concept. I will, however, interpret the impossibility from the

perspective of changing service concepts and the logic of activity and consider the asynchronies related to them.

I will first explore the transformation in banking operations in Finland against the background of the transformation of service concepts in banking. Later, I will return to the transformation of banking operations and banking work in the context of the specific Bank and Branch Office investigated in my study. The question of how the object of banking work has changed is especially interesting.

## 6.1 A Brief Description of the Transformation of Banking Work in Finland during the 1960–2000s

*In the 1960s,* the banking business in Finland was quite stable until the end of the decade. There was no competition for products. The essential competitive weapon for the banks was good and courteous service. The range of services was narrow and easy for the employees to master. Banks were used less, because salaries in general were paid to employees in cash. Bills were also paid directly to payees in cash (Pasanen, 2000; see also Sylvänne, 1987). An essential change that influenced banking was the contract made in 1968 between the labour market organizations, according to which salaries would be paid directly to the bank accounts of employees. The change meant a growth in the number of account customers and capital growth as well (Pirkkalainen, 2003; see also Tilli, 1996; Vihola, 2000).

Financial markets were dominated by the regulation policies of the Bank of Finland. The Bank of Finland decided deposit rates and loan interests. This control also meant that banks could be engaged in lending only to the extent of the total funds on deposit. The amount of lending was therefore bound to the fundraising cumulated by retail deposits, thus making it difficult to get loans, because there was over demand on loans (Elomaa 1998).

The increase of funds available to banks because of salary deposits meant the opportunity to increase lending as well as more competiton for customers. An increasing number of salary accounts resulted in a growing number of visits to the branches and the gradual expansion of banking operations. Success in market competition meant a growing clientele. In everyday banking work that meant growing numbers of customers and queues in branch offices (Pasanen, 2000). Because of the growing clientele and rigorous competition, the banking business was among the first to apply information technology in its operations[34]. According to Kullberg (1996) the period of regulation was an idyllic time for banking in

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[34] As early as the Winter War in 1939, the first modern payment system, the postal giro, was introduced. The Postal Savings Bank was the first enterprise in Finland to enter the computer age in 1958 when the bank adopted an IBM "electric brain". (The Postal Savings Bank, which operated as a state enterprise, was renamed Postipankki in 1970. The bank became a state-owned limited company in 1988 and started to operate as a full-service bank similar to private commercial banks.)

Finland. There was no competition for interests, yet under the regulation, interests from deposits and lending guaranteed profitability for the banks, which made it possible to expand office networks (Pasanen, 2000).

Hämäläinen (1996) argued that the regulation removed the risks in banking, and the lack of competition in interest rates forced banks to compete for savings by offering free service, such as payment services. Banking operations became a business industry without hardly any risks. The banks directed their operations to competition for market share and the production of services. According to Hämäläinen it was the control of interest rates that opened the way to developing a dense and expensive office network by international comparisons. Later, in the 1990s, the office network was reorganized (Pirkkalainen, 2003, 69; see also Tarkka, 1988).

*The 1970s and '80s* were decades of growth for the banks. They expanded their office networks and increased their personnel (Rouvinen, 2003). The structural change in financial operations and the financial fund were new phenomena in Finland, one of the reasons being that, according to Elomaa (1998) was that the regulation of financing continued until the end of the '80s in Finland, a longer time than in many other EU-countries. The financial system was deposit bank-centred in Finland. In the 1980s, more than 80 % of the total financial capital was bank deposits (Elomaa, 1998).

Owing to foreign capital import and domestic interests the regulation of financing started to dissolve in the 1970s, but banking operations became entirely free from regulation by the early 1990s (Pirkkalainen, 2003). When banks were able to finance the lending partly directly from the money markets, the ratio became less dependent on deposit fund-raising (Elomaa, 1998).

Along with deregulation came heavy reorganizing of banking. The deregulation that happened during the profitable trade cycle caused strong growth in the financial market at the end of 1980s (Suomen rahoitusmarkkinat, 1995). The growth of consumption in the household and private sectors, and an increase in borrowing and running into debt followed in 1987–1990. Accelerating inflation, rapid growth in the number of loans and a downward economic balance caused the state to tighten up its monetary policy in 1988–1989. The profitability of banks started to deteriorate (Rouvinen, 1998).

According to Pauli (1994) after the financial market became free in 1986, the demand for credit increased sharply in 1987-1989. When deposits did not increase in a similar way the banks raised the missing capital from the money markets. In the middle of the 1980s, mark-lending and mark-deposits were about same amount, but at the end of 1989 lending was over 30 billion marks more than deposits. Simultaneously, market-based financed real estate investments and the investments on stocks and bonds increased (Pasanen, 2000; see also Kuisma, 2004, 2009; Pauli, 1994).

*The 1990s* can be perceived as a period after financial deregulation in Finland, as a period of descent into crisis, structural changes and mergers. Growth stopped

at the beginning of the 1990s and led to a crisis. At this stage, the banking system became the object of heavy reorganisation (Suomen rahoitusmarkkinat, 1995). During the winter 1992 – 1993, the Finnish economy weakened. Consequently, the creditworthiness of the domestic banks decreased, which furthermore weakened the capacity of the banks and their ability to cope with the situation on their own. In 1993, the government of Finland made a decision on state subsidy for the banks, through which the continuity of the banking was guaranteed, and the enseeing year brought huge changes in the banking sector (Rouvinen, 2003; see also Kuisma, 2004, 2009.)

The office network of the Finnish banks was too widespread according to international comparisons. It was two times denser than in Sweden, for example. There were more personnel working in banking services and productivity was lower than in the other Nordic countries. Consequently, the banks started to reorganise their activities by decreasing personnel and by closing down branch offices (Koistinen, 1992; see also Jolkkonen, Koistinen, & Kurvinen, 1992; Tienari, 1995, 1999).

In 1993, the Savings Bank of Finland (Suomen Säästöpankki) was in a critical state. The bank was divided between the KOP Bank (Kansallis-Osake-Pankki), the Union Bank of Finland Ltd (Suomen Yhdyspankki), the Finnish Co-operative Banks (Osuuspankkiryhmä OKO) and the Postal Bank (Postipankki PSP). The prevailing office network and the personnel of the Savings Bank of Finland were merged with the above-mentioned banks. (Laakso-Manninen, 1998; Rouvinen, 2003). The Branch Office of the Postal Bank, the research subject of my study, had been the former the Branch Office of the Savings Bank of Finland.

Major changes were going on in the banking industry in Finland. In February 1995, two of the biggest retail banks, SYP Bank and KOP Bank, merged to form the Merita Bank Ltd. In late 1995, this new bank announced of the need to decrease the personnel (Heikkilä, 1998). The state-owned companies Postal Bank and Finnish Export Credit Ltd (Vientiluotto Oy) merged into a new company in 1997 and became the Leonia Group the following year. Also in 1998, the Merita-Nordbanken was born as a consequence of the Nordic banking fusion. An enormous change for the banking system came with the preparations for the transition to the Euro and the actual transition to it in 1999 (see Talvio, 2002).

The *2000s* have been the decade of "financial department stores" and listed companies. In addition, at the end of the millennium, one meaningful change was taken place. In October 1999, the shareholders of the Sampo Insurance Company and the Finnish government decided to merge Sampo and Leonia into a new full-service financial group. The merger took place on the last day of the year 2000. As part of the new group, the bank initially operated under the name Leonia Bank. The name was changed to the present Sampo Bank in February 2001. In 2001, the Sampo financial concern started operations and was also listed on the stock exchange. Becoming a listed company changed "the tempo of the work". Acquiring new profitable customers and giving them special service and products, along with high monetary goals, directed everyday banking operations.

Later, after the merger between Sampo and Mandatum in 2001, the Sampo Bank specialised in investments and savings. Sampo became the country's leading investment-focused bank while Mandatum continued on its existing track and became the most valued private bank in Finland. Sampo expanded its banking business into the Baltic countries in the 2000s: in Estonia in the summer of 2000, in Lithuania the same year, and in Latvia in the 2004. In November 2006, the Danish company Danske Bank A/S announced its acquisition of Sampo Bank, which became a part of Danske Bank Group in February 2007. Through the acquisition, all companies belonging to the Sampo Bank Group (such as the Finnish bank Sampo Bank plc, its subsidiary banks in the Baltic States and Russia, as well as several investment service companies including Mandatum Asset Management Ltd, Sampo Fund Management Ltd, Mandatum & Co Ltd and Mandatum Stockbrokers Ltd) became parts of the Danske Bank Group. The transfer to new ownership brought about great changes at Sampo Bank as its operations and organisation were integrated into Danske Bank Group' organisational structure during a process of approximately 14 months. At the same time, the banks in Estonia, Latvia and Lithuania were separated from the Finnish organisation. As the culmination of this historical integration, Sampo Bank's information systems were merged with Danske Bank during Easter 2008. After the merger, Danske Bank became one of the largest banking groups in Northern Europe. Sampo Bank is the third largest bank in Finland. The Sampo Bank is now a part of the Danske Bank Group, which is one of the largest financial enterprises in the Nordic region. Sampo Bank has more than 1.1 million personal customers and more than 100,000 corporate and institutional customers in Finland.

In 2005, OKO Bank acquired a majority stake in the insurance company Pohjola and sold the bank's retail banking operations to OP Bank Group Central Cooperative. Following the acquisition, Pohjola became OKO Bank's subsidiary. In 2006, Pohjola Group plc was delisted from the Helsinki Stock Exchange and Pohjola Group Ltd merged with its parent, OKO Bank plc. In 2007, OKO Bank plc decided to change its name to Pohjola Bank plc, effective in March 2008, with the banking and investment operations and non-life insurance operations run under a single brand. OP Bank Group changed its name to OP-Pohjola Group. In 2008, Pohjola Bank became a Finnish financial service company providing banking, investment and non-life insurance services to companies, and acting as the central bank of OP-Pohjola Group.

## 6.2 Changes and Service Concepts at Sampo Bank and its Branch Office in Martinlaakso in the 1990s

The following chapter is based on the data collected during the project "Work Unit between the Old and the New" in 1997–1999 (see Chapter 2), the data collected during the follow-up project "On the threshold of new expertise: Personnel as change-agents in transition" in 2002–2004. The aim of the latter project was to follow up the changes in the specific Branch Office of Martinlaakso, the target work unit in the earlier project.

The data of the latter project consisted of interviews with the branch manager and one of the bank employees and the group discussion in January 2004 to remember the realized changes. The aim was to follow the changes in the activity in 1999–2003, after the first project.

### 6.2.1 Era of Säästöpankki, Recessionary Period and Merger 1990–1994

In the early 1990s, the Branch Office of Martinlaakso was one of the branches of the Savings Bank of Finland[35] with eight (8) employees and a branch manager. The Branch Office served enterprises, self-employed persons and private households in this area. At the beginning of the decade, a typical feature of bank officials' work was "customer guidance", that is, teaching to use new tools for banking, such as cash machines and bankcards. The officials were called "bank secretaries", a title expressing a holistic way of taking care of service. In the Savings Bank of Finland, the employees did not participate in planning changes; the changes came from top down, and they were taken as such and acted upon them. Customer service was the basic activity and the bank secretary's task was to take care of matters came from the customers. The work tasks in the Branch Office were differentiated.

In 1992, the mode of activity can be described as "everybody does everything". The entire customer process had to take place at the banking desk from start to finish, and the back office facilities were taken away. The employees were called "multiple skilled persons". The new model of activity based on multicapability did not function in practice, but caused "terrible chaos" instead. The Bank eventually reverted to a differentiated division of labour.

Management by results was also taken into use at the beginning of the 1990s, and individual selling records began to be monitored from 1992. The '90s saw a massive reform concerning accounts, which was described as "a terrible mass reform" and as "a terrible rumba". In 1993, the Savings Bank of Finland was split between competitors, other retail banks. The Branch Office of Martinlaakso became the Branch Office of the Postal Bank[36]. The Savings Bank had had a

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[35] Säästöpankki is hence called in this chapter under the English name "the Savings Bank of Finland". (In this chapter Säästöpankki is referred to as "the Savings Bank of Finland", its english name.

[36] Postipankki PSP is called hence in this chapter under the English name "the Postal Bank".

reputation based on the "Idea of a Savings Bank", while the Postal Bank was owned by the State and had a more stable and conservative reputation. The former employees of the Savings Bank felt that their competence was appreciated when they became the personnel of the Postal Bank. The Savings Bank's mode of action was described as "co-operative action". The employees that came from the Savings Bank experienced Vision 2000 as in many ways a return to an old way of action for them, instead of a change.

Because of the demerger and the resultant fusion, changes in the clientele were taking place. The clientele of the Savings Bank consisted of self-employed persons and small entrepreneurs, a customer segment not desired by the Postal Bank: "They were rudely told no". Over the years, Kela[37] customers, such as child benefit earners and pensioners, had been desired as new customers at the Postal Bank, and had now become the main customers of the Branch Office. These customers were seen as weaker quality.

New customers were important for the profitability of the Branch Office. From 1993, bank employees were offered an opportunity to participate in customer acquisition themselves. The employees of the Branch Office organized marketing events at the nearest residential areas, at the market place and at the railway station. In the background, there was a fear of the Branch Office being closed down. In this stage, the occupational titles changed from multi-skilled workers to sellers.

> It was a struggle of survival, that are we now on the list [of branches] closing down or are we a branch office that will stay. We had to prove that we can manage, that this branch sells well and pays off and that it should not be merged with the Myyrmäki branch. It had to be proved.
>
> *(Bank employee, N9, 4 February 2004)*

After the fusion, the IT-systems of the Postal Bank as well as the flow of information were developed and the product range was expanded. These together meant increasing training. Banking work was on the threshold of a new phase of development.

## 6.2.2 The Subsequent Years 1995–1996

In 1995, two of the biggest commercial banks in Finland, the KOP Bank and SYP Bank merged. Bank loyalty of the clientele started to decrease and clients started to compete the banks. The employees described 1994–1995 as a shutdown of banking and as a "collapse of the value of the work". New products were offered to customers continually and the customers became nervous and resistant: "I don't want that card."

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[37] Kela is the Social Insurance Institution of Finland, provider of social security benefits for all residents of Finland.

The aim was better profitability, and in 1995, the Branch introduced individual selling targets and their follow-up. The employees experienced the personal selling targets as increasing initiative. The targets made it necessary to develop oneself, too. In spite of the Branch Office's marketing campaigns and target follow-up there was a lack of customers in autumn 1996. A new employee described the situation as follows:

> It can't be like this, there is time for nothing else but doing withdrawal-deposit. It was quiet [earlier]. Sometimes we were angling for customers with customers with him [the branch manager earlier]. And we had a desk at the bus station, we were in the gourmet house [a food shop] and in the commercial school.

> *(Second intervention meeting in the Branch, the employee, 3 March 1999)*

### 6.2.3 "Work Units between the Old and the New" Project during 1997–1999

The year 1997 was a time of dramatic changes in the Branch Office in many ways. The Finland Post decided to end its co-operation with the Postal Bank, ending banking operations in the Post offices. In addition to Post office on the floor below the Branch Office, banking operation ceased at seven (7) other Post offices nearby, causing an "incredible growth" of customers. The new customers were generally low-income clients who mostly paid the bills or withdrew small sums of money from their accounts and who did not use bankcards. The number of TRA-customers[38] increased and the work became more monotonous, consisting of repeated payments and withdrawals.

At the same time, Vision 2000 that I have specifically considered in Chapter 2 launched into the branches, also into the Branch Office of Martinlaakso as a pilot branch of the Vision. The officials that called "consulting salespeople" repeatedly fased impossibilities related to the change situation in their everyday work. As it turned out, the real-life customers at the Branch Office were nothing like those anticipated by Vision 2000. In addition, when a new organization Leonia was created after the merger in 1997, the top managers did not no longer talk about the Vision 2000. However, the employees and the branch manager experienced being got more power and responsibility at the branch office level.

> That you are [now] able to evaluate the situation yourself and consider what would be appropriate for this customer. Earlier you just said that these and these are the prices. […]

> *(Second intervention meeting in the Branch, the employee, 3 March 1999)*

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[38] TRA (in Finnish: tulorajoitteiset asiakkaat) customers were low-income customers.

The profit were monitored monthly at the branch office level and the idea was to get rid of the unprofitable customers. Simultaneously, the employees experienced impossible to take after-care of customers.

### 6.2.4 From Sampo-Leonia Bank Group to Listed Company in 2001

The end of the millennium brouht along the time of a listed company and a financial department store in the Bank. In October 1999, the shareholders of the Sampo Insurance Company and the Finnish government decided to merge Sampo and Leonia into a new full-service financial group. The merger took place at the end of 2000 and the Sampo Bank was created in February 2001. When the Sampo financial concern started operations it also listed on the stock exchange. Becoming a listed company changed the tempo of the everyday work. Acquiring new profitable customers and giving them special service and products, along with high monetary goals, directed everyday banking operations.

> Earlier we gave service to customers, nowadays we try to sell profitable products to the customers.
>
> *(Bank employee, N9, 13 Jan. 2004)*

Later, after the merger between Sampo and Mandatum in 2001, the Sampo Bank specialised in investments and savings. Sampo became the country's leading investment-focused bank and expanded its banking business into the Baltic countries. The employees worked in teams with tight personal and team based targets that were monitored often and regularly, personal targets were monitored weekly.

> We internalized that we have to do something about these problems that we have here. We started to think on the branch unit level in a different way. [...] Not merely do we see how the week has gone, but we see how we have got there and what we should do, maybe some corrective action. That it is nothing, that we see after one month that, huh huh, how badly it has gone, but we react really fast. The goals are so demanding that if we don't react to them very fast, if we are behind, we can't reach them any more.
>
> [...]
>
> The activity means how our people have really used the day, which they have been given, for example, for debt collection. They are not then sitting at the service place but they have a back office place to use and they have been given the target group customers, the names and the phone numbers to call and to visit and to reserve a time for them. The idea is that on the phone they are not selling anything but appointments. But of course the people have to know what it is a question about. [...] That is, is everything in order, how many acitivities, how many calls made previously, how many people really reached, how many ap-

pointments made and how many of these customers have come into the Branch and what kind of business, has our network system been used when making a customer survey and a budjet. These are the key issues making for better sales. It's a kind of a big wheel, on many levels. And we are handling these things in the sales meetings. We have raised our market share a lot during the last two or three years.

*(Branch manager, N1, 10 Feb. 2004)*

## 6.3 Changing Work Object and Changing Service Concept

The following table illustrates the changes in the activity and service concept, as well as changes especially related to the work object of the Branch Office.

Table 7. Changes in the object of activity and service concepts in the Branch Office during 1990–2004

| Time periods of the Bank Organization | Object of activity in bank work<br>*The main idea in the service concept* |
|---|---|
| 1990–1993<br>Savings Bank<br>*"Customer service – from specialized bank secretary to multiple skilled staff"* | *Serving* entrepreneurs, self-employed persons and households. Advising customers in the use of cash card and cash machine. |
| 1994–1996<br>Postal Bank (merger 1993)<br>*"Banking sellers"* | Serving pensioners and low-income customers. *Selling,* marketing and acquiring new customers for achieving better profitability. |
| 1997–1999<br>Leonia Bank (merger 1997)<br>Change and well-being project (1997–1999):<br>*"Work-Units between the Old and the New"* | *To reduce* the increasing number *of low-income customers* with routine banking matters.<br>*To increase profitable* loan and investment *customers* and *their after-care. Consluting sales work.*<br>*Developing work activity* and resolving problems of impossibility at work. |
| 2000–2004 –<br>Sampo, listed financial company.<br>New expertise project (2002–2004):<br>*"On the threshold of new expertise.<br> Personnel as change-agents in transition"* | Acquiring new *profitable customers* and giving them *special service and products.*<br>*Strong orientation to* achieve high personal *monetary goals* and evaluate them daily. |

During the Savings Bank period, the work object was the customer, who came into the Branch Office when needing service. There was not much competition between the banks. However, the banks competed for customers by the service they provided. Therefore, pivotal was good, precice, trustful and kind service. The changes were implemented as top-down changes, but there was a spirit of mutuality. The Postal Bank period was period of serving Kela-customers and the other low-income customers. In addition, selling, marketing and acquiring new customers became into the focus of the activity. During the project Work Units between

the Old and the New, the work object expanded from customers and marketing to developing the work activity and to resolving the problems of work-related well-being in a change situation. The Branch Unit was learning to manage and develop the local work activity, and trying to cope with contradictions between the new Vision with its profit goals and a realized clientele without the service needs expected. In terms of changes related to the Vision and the Euro, the IT-systems were continually under furious transformation, which often made the everyday work slow. Both the desired loan and investment customers and the less desired TR-customers were object of everyday work. There was a contradiction between the object and the aimed profit and between the object and the tools. Becoming a listed company brought continual changes in the Bank Organization and in the operational environment. The teams were working as a subject, but the tempo and volume of work were increased. Individual daily goals were monitored often and regularly. The systems enabled the precice control of the activity and offered many services that could be sold to customers as well. On the one hand, monetary goals seemed to become the real work object in the Bank. On the other, time was reserved for acquiring new customers and taking care of the old clientele. Continual evaluation and the resulting development of activity based on it, as well as the time reserved for developmental work, created an opportunity to do second-order work on the local branch level. The goal and changes were seen as coming from outside, but they were tailored to suit the Branch Office.

## 6.4 Increasing Asynchronies and Non-Well-Being

The asynchronies related to the changes in the Bank seemed to cause meaningful problems for the personnel's work-related well-being. I consider here the period of the research project Work Units between the Old and the New in the Bank. The Vision 2000 as a new service concept was not based on an analysis of the prevailing branch activity or of customers, but on general trends. The Vision as a plan was far from the prevailing local service model and concepts, and caused a gap between goals and practice. Analysing and conceptualizing the problems of work-related well-being in the context of concept transformation proved essential when trying to develop a means for workplace health promotion.

In the Bank Organization, the asynchronies inspected were mostly *vertical* and obvious when implementing Vision 2000 as a specific change. When the branch personnel was still participating in training for Vision 2000, the new managers were no longer talking about the Vision. The branch manager and the health care nurse participated in the intervention and acted as mediators between the Branch Office and the entire Bank Organization, including the top management. The branch manager included the themes coming from top management in the discussion. However, face-to-face encounters between the employees and top managers were missing, which apparently enabled the asynchronies mentioned above. The renovation of the Branch Office was also a concrete example of a planned change

at the local work unit level proceeding out of phase with the change ideas at the top management level.

Later, Virkkunen & Ahonen (2007) and Ahonen (2008) considered the challenge of integrating local developmental interventions with management activity when they developed the Competence Laboratory as an application of the Change Laboratory (see Virkkunen, Engeström, Helle, Pihlaja, & Poikela, 1997; see also Engeström, 2007) based on the activity-theoretical approach. In the Competence Laboratories, the participants of the interventions and the managers had face-to-face encounters during critical stages of the intervention.

The second-order work needed for facing and resolving the change-related disturbances and breakdowns at the local level seems to be the more important the faster the transformations in the activity and service concepts are. It is essential that second-order work is systematised and crystallized in the learning systems of the organization as a means for managing change and developmental work at the local level (see Ahonen, 2008; Virkkunen & Ahonen, 2007; see also Pihlaja, 2005; Virkkunen & Ahonen, forthcoming). So-called "carriers of learning" are necessary (Miettinen & Virkkunen, 2006). Learning based on experimental learning and recall is not enough in the long term, when the present generation accompanied with the previous upheavals leaves the organization. Learning and local development must be crystallized as everyday practices in the organization and its work communities, for example, as the practices of documenting and articulating the problems or of using a shared timetable for developmental work.

# 7 Conclusion and Contributions

## 7.1 Conclusions on Subject Matter

In my dissertation, I have investigated changes in one Finnish retail bank and the experience of *impossibility* attached to those changes by the workers at the local level in one Branch Office. My investigation has been made from the viewpoint of work-related well-being and collective learning. A special challenge in my work has been to conceptualize the experience of impossibility as related to change, and as a starting point and tool of development work. The aim has been to understand the progress of developmental intervention for resolving *the impossible* as a shared learning process within the work community and to provide tools for perceiving and constructing local change. In the following, I will explore the contribution of my dissertation chapter by chapter.

**Chapter 2 began** the story of the research for this dissertation, which deals with work-related well-being in a changing work situation in the Bank. I first reviewed the research on well-being in change and its paradigms in order to shed light on this particular case. My empirical study situated to the research project "Work Units between the Old and the New", with the prime objective of developing a methodology for incorporating the well-being of workers as an integral component of organizational transformation and developmental efforts within the workplace (Launis, Kantola et al., 1998, 2005; Launis, Kantola, Niemelä et al., 1998).

Chapter 2 showed how the specific change in the Bank was planned, implemented, and finally realized at the local Branch Office, and how work-related well-being or non-well-being was constructed as an integral part of the change. My study of the Bank Organization pointed out the experience of impossibility in a change context as an outstanding challenge to feeling well-being in the change situation. Lack of local development work and the required tools for it seemed to aggravate non-well-being and the accompanying inability to share and solve the change-related impossibility in the work community. The impossibility that workers faced repeatedly was experienced as an essential problem impairing well-being at work.

From the methodological perspective, the mirror data of organizational change at the local work unit level picked up the talk about non-well-being at work as well as the talk about the impossibility related to the change situation. The stress-theoretical research (e.g., Beehr at al., 1995; Härenstam et al., 2000; Karasek, 1979; Lazarus & Folkman, 1984; Maslach, 1998) inspected in the Chapter had been placed on the loading factors on the individual level, whereas my research aimed to connect the conversation about non-well-being at work to the impossibility related to the real work context. The literature review (e.g., Graca & Kompier, 1999; Elo et al., 2002; Karasek, 1992; Karasek & Theorell, 1990; Kompier,

2002; Kompier et al., 2000; Kompier & Cooper, 1999; Ylikoski et al., 2002) made it evident that a new paradigm for understanding well-being in a change situation and transcending the problems of non-well-being was needed for combining the research and intervention and for producing the local knowledge related to the change situation. The employees needed models and tools for understanding the change process in their local community, for analysing the effect of transition on their own activity and loyalties, and for carrying out their own special and contextual solutions arising from their own history, culture and prevailing state of affairs.

When impossibility recurs, individual coping mechanisms seemed to lead to frustration and fatigue, because they did not solve the basic problem – the contradictions in loyalties that originated within the change process of the local work-activity system. The stress and well-being problems associated with workplace change arose from imbalances in the ever-changing local and unique set-up, and could not be understood by conducting well-designed and careful analysis based on an epidemiological research model (Launis et al., 2005). In terms of the development of stress interventions, the methodological gap was not the lack of properly designed longitudinal studies with randomized control groups. The problems and shortcomings were rather in the theoretical basis of dualistic (work-worker) epidemiological research models. Coping mechanisms are traditionally studied as different individual strategies or personal resources held by workers. Training in transition situations has also focused on the improvement of many kinds of individual qualities, such as mental resources and physical fitness. (Launis & Pihlaja, 2005, 2007; see also Engeström, 1988)

The Activity Theory (e.g., Chaiklin et al. (Eds.), 1999; Engeström, 1987, 2000a; Engeström et al. (Eds.), 1999, 2005) opened up an opportunity to transcend an individual interpretation and to perceive the problems of well-being at a collective work unit level. Instead of inquiring about individual coping mechanisms, I sought out the transition that took place within the activity process itself. The implication was that the problems related to well-being could be interpreted and treated as disturbances in the planning of the local change process (see also Launis, Kantola et al., 1998, 2005; Launis & Pihlaja, 2007). *Impossibility* seemed to be a promising intermediate-level concept – determined by ethnographic methods and set in an activity-theoretical framework – through which it was possible to incorporate workers' well-being as an integral component of organizational transformation and redesign in the workplace.

When proceeding to **Chapter 3**, I examined the concept of impossibility theoretically and as a stimulating conceptual tool for developmental work. This Chapter constituted the most important theoretical contribution of my dissertation and provided a preliminary theoretical and methodological background to my developmental work.

The concept of impossibility has been perceived in this study as an intermediate-level concept (Engeström, 1995), which arose on the one hand from everyday talk about the experiences of impossibility related to different kinds of work tasks and work situations in the context of change. The workers had expressed impossibility repeatedly and in many ways in the earlier stage of the research: "it's not possible", "it's impossible to do this" or "we don't have the means". There had also been expressions of strong emotions and non-well-being at work in the context where *the impossibility* was being felt. Thus, the experiences of the impossibility were interpreted as experiences of non-well-being at work as well.

Such an intermediate-level concept has provided a two-way bridge between the general theory and specific practice (Engeström, 1995, 1999a) in my study. On the other hand, the concept was based on the activity-theoretical way of understanding the experienced impossibility as an expression of historically constructed tensions and contradictions in the work activity. By using Activity Theory (AT) and Developmental Work Research (DWR) as a theoretical framework for intervention, the idea was to transcend individual and situational interpretations of the impossibility and the process of solving it. This paradigm, as a theoretical-methodological framework, was orientated to resolving the impossibility by studying and analysing the everyday collective and object-oriented work activity as well as disturbances and breakdowns in it. The concept of an *impossible task* was interesting as an intermediate level concept when combining the experiences of the impossibility and well-being in my study.

The special contribution of the present study has been to take the experiences and the expressions of the impossibility as a research object on the one hand, and, as a basis for developmental work on the other. However, the concept of impossibility was not a ready-defined concept that could have been taken into use as a means for developmental work as such. Instead, the understanding of the concept became a creative endeavour during the entire intervention. The concept was understood both as a means of learning and as a concrete expression of something learnt (see also Gherardi, 2000).

When inspecting the intervention process later, it was obvious that there would have been several different possibilities of proceeding in the collective zone of proximal development of the work unit under scrutiny. What has been essential from the viewpoint of well-being in a change situation has been the multivoiced and shared way of arguing the opportunities and choices, and the conscious permission and opportunity to come back to the discussions and the decisions made before, if needed. Progression in a zone of proximal development is also the process of making and remaking choices.

In **Chapter 4**, I analysed how the work unit itself conceptualized *the impossible* on the local branch office level. The focus was on the first four intervention meetings when there occurred a meaningful turn in agency (Bacchi, 2005; Brunila, 2009; Davies, 1990; Ronkainen, 1999; Vehviläinen & Brunila, 2005) and the ori-

entation to passively waiting for solutions coming from the outside transformed itself into the proactive orientation and activity of second-order work. The employees and the work community were used to being the object of implementation in change situations, not an agency themselves. The first intervention meetings told the story of enabling an emergence of agency in developmental work through intervention.

Essential for breaking the circle of the implementation was the opportunity to question and challenge the prevailing work activity in the Bank Branch. The data and analysis showed that the challenge was made possible on the one hand, by distancing oneself from the everyday impossibility experienced (*the impossibility*) by conceptualizing it locally (as *the impossible*). On the other hand, enabling happened by collecting and analysing the mirror data of the everyday work activity. Simultaneously, the issue was about learning to do so-called *second-order work* (Hirschhorn, 1984), which was to scrutinize and analyse the local work activity in the Branch Office and to conceptualize it instead of implementing a well-planned intervention process. The idea was to make it possible for employees to define and give shared meanings to the impossible as a problem to be resolved during the dialogue, and to scrutinize it carefully. Thus, an important role of the intervention was to break down the logic of implementation and instead enable the construction of the logic of second-order work at the local work unit level. It was essential that the employees participate in defining the problem of the impossible, not merely in resolving it. Also, during an intervention process, there is a risk of the process itself becoming a miniature implementation, if it consists of well-planned intervention assignments without enough space for giving meanings. Based on my data and analysis it was not a question of given ready-made means (including the concepts) for developmental work, but of the employees and researchers constructing them together, and allowing space for dialogue (see also Engeström, 1999a; Lambert, 2006).

Refering to Virkkunen (2004)[39] of I perceive the intervention for resolving the impossible as a third-order intervention. It was neither a question of "incremental changes within the prevailing concept of the activity" (first-order intervention) nor "changing the concept of the activity in a conscious manner in accordance with a given concept" (second-order intervention).

> "Third-order change and intervention would be about developing the capacity of the practitioners to be aware of the present concept of their activity and to change it as events require and they see fit. For third-order change to take place new, meta-level conceptual tools are needed to describe the differences between activity concepts."

> *(Virkkunen, 2004, p. 52)*

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[39] Virkkunen (2004) based his ideas of a classification of forms of change intervention on Bartunek and Moch (1987).

In Chapter 4, I carefully explored one example of an important dialogical space that was needed in the intervention. That was the discussion about seeking a common and shared work object. That talk was an essential tool for trying to grasp the impossible and it was needed for giving meanings to and understanding the impossible. It was a question of seeking an epistemic object (Miettinen & Virkkunen, 2005; see also Engeström, 2005), the process of which, in fact, continued until the end of the intervention. At the same time, it was a question of transcending "the private ownership of the object" Engeström, 2008, p. 258).

However, the everyday talk was not analytical enough for understanding the impossible. Instead, it was a huge challenge for the researcher to get the participants to go behind the rambling talk, to document the impossible and scrutinize it. The work community was not capable of questioning the local way of activity and breaking through the borders of circumstances until the multiple mirror data of the everyday work was available and used as a means for dialogue. During this process it was necessary to make the impossible visible by using the mirror data (first stimulus) and conceptualizing it (second stimulus) (see Engeström, 1987, 2007; Vygotsky, 1978).

Later in **Chapter 5**, I analysed the intervention process in detail from the perspective of expansion. Essential questions were: Would an expansion be enabled during the intervention process? How would that happen? What would an expansion be like? I analysed the intervention process from the viewpoint of expansive learning (Engeström, 1987) and from the viewpoint of the concrete outcomes of the developmental work. Thus, not only the concrete outcomes and new practices, but also the new interpretations of the impossible and the new ways of doing second-order work (Hirschhorn, 1984) were considered as meaningful outcomes in the study.

The process of resolving the impossible was evaluated also from the perspective of learning. Naturally, the concrete outcomes, such as the model of Payment-Transactions Service and the shared timetable for back-office work, as well as expanding it to internal training, were repeatedly mentioned as meaningful results. In any case, it was significant that learning to do second-order work was emphasized in the data, instead of pure concrete solutions.

From the viewpoint of expansion, a substantial question was whether a customer was perceived in a qualitatively new way as an object of bank activity. In the beginning of the intervention, if anything, the profit seemed to be an object of the activity, instead of customers or customers service. Little by little besides the process of creating and experimenting with the new Payment-Transactions Service model customers became an object of the work. The clientele that had been unwanted earlier was now written down into the job description as well as a responsibility for developing the service of it.

A meaningful finding was that talk as such was not a sufficient tool for resolving the impossible: on the contrary, it could prolong the problem. In the Branch

Office, concrete tools were needed for making the impossible shared and visible as developmental tension and contradiction, and, thus for resolving the impossible and reorganizing the work activity jointly.

A particular perception was also the double-edged nature of the "good work unit" or "agreeable work unit". On the one hand, the good community can make it easier to grasp the resolving process based also on dialogue. It could be a strength for the intervention process and even start it. On the other hand, the agreeable work community could also contribute to tolerating problems too long without trying to resolve them, which can partly cause the impossibility. The open opportunity to air out frustration together can become an obstacle to improving the situation together and can stabilize the problematic situation.

At the end of the study, in **Chapter 6**, I interpreted the impossible and resolving it from the historical perspective of banking work and service concepts. Accelerating and divergent changes in the production and service concepts hampered both fluent service activity and work-related well-being in the Bank. Simultaneously with Vision 2000 as a specific change investigated in this study, several Post Offices offering banking services near the Branch Office were closed down, causing significant rush and queues at the Branch Office and experiences of the impossibility when trying to adapt the Vision to everyday service work.

I have interpreted the problem of the impossible as the *asynchronies* in transformation of service concepts based on Launis and Pihlaja (2005, 2007). They considered the problems of work-related well-being in a change situation as disturbances and breakdowns connected to transformation of the concept of activity and named these problems as asynchronies. They argued that promoting work-related well-being requires new theoretical approaches, research and analysis methods in order to be able to connect the whole organization with the disturbances perceived by the employees, rather than separate them into different (micro-macro) levels:

> "Novel conceptualizing, models and tools are needed to analyse and interpret transition processes and solve the ever increasing asynchronies and collapses in production and service concepts. In the rigorous transformation processes, ease of production and service processes improves both health and safety of the personnel, and productivity."
>
> *(Launis & Pihlaja, 2007, p. 104)*

The asynchronies in the Bank seemed to cause significant problems for the personnel's work-related well-being. The Vision as a new concept of service was not based on the analysis of the prevailing branch activity or of its customers, but on general trends instead. The Vision as a plan was far removed from the prevailing local service model and concepts, and caused a gap between goals and practice. Analysing and conceptualizing the problems in work-related well-being in the context of concept transformation proved essential when trying to develop a means for workplace health promotion.

In the Bank Organization, the asynchronies investigated were mostly *vertical* and obvious when implementing Vision 2000 as the specific change. When the branch personnel were still participating in training concerning Vision 2000, the new managers were no longer talking about the Vision. The renovation of the Branch Office was also a concrete example of a planned change at the local work unit level proceeding out of phase with the change ideas at the top management level.

The ideas of *discontinuity* presented by Poole, Van de Ven, Dooley and Holmes (2000) illustrate aptly the findings in the Bank case. Engeström et al. (2007) refer their interpretation of discontinuity against the idea of Poole et al.

> Poole et al. (2000: 237) characterize 'breakpoints' as 'junctures where the nature of the developmental progression changes suddenly due to a critical event or external shock'; they may be precipitated by 'temporal breaks, such as annual reviews or the closing of the fiscal year, or by external shocks, such as economic disruptions or top management decisions, or by internal events, such as a conflict or transition to a different task step'. We take a somewhat more modest view. For us, breaks are primarily stoppages, cessations of a process, when an effort is abandoned or just fades away. This kind of mundane discontinuity is pervasively common in organizations where change efforts are fragmented into various projects and punctuated by all sorts of deadlines and arbitrary timetables.

> *(Engeström et al., 2007, p. 3)*

Second-order work needed for facing and resolving the change-related disturbances and breakdowns at the local level seems to be the more important the faster the transformations of the concept of activity are. It is essential that second-order work is systematised and crystallized for use in the learning systems of the organization and as a means for managing change and developmental work at the local level (see also Ahonen, 2008; Virkkunen & Ahonen, 2007). So-called "carriers of learning" (Miettinen & Virkkunen, 2006) are necessary. Learning based on experimental learning and recall is not enough in the long term, when the present generation with its experience of previous upheavals leaves the organization. Learning and local development have to be crystallized as everyday practices in

the organization and its work communities, for example, as practices of documenting and articulating the problems or using a shared timetable also for developmental work.

During this journey, local development work became of utmost interest as a case study for managing change. Theoretically, this was conceptualized as so-called second-order work and this concept has been maintained all the way through the research process. Learning second-order work and constructing tools based on it have proved crucial for promoting well-being in change circumstances at a local work unit. The lack of second-order work had led to non-well-being and the inability to transcend the change-related sense of impossibility in the work community. Solving the impossibility, either individually or situationally, did not prepare the workers to solve problems of impossibility together, as a work community.

I chose change-related impossibility as a starting point for development work in the work community unit and as a target of conceptualization. While the intervention was in progress, the concept of the impossible started emerging as a stimulating tool for development work. According to my results, pivotal for a concept stimulating development was that it was closely connected with everyday talk about work and its change, and simultaneously connected with the theoretical framework of work development.

My dissertation has aimed to be a theoretically compressed story (Cicourel, 2002, see also 2006) about the journey of change, from its initial planning to its final, historical realization in daily banking work. In the course of telling the story, each chapter has given rise to a research question for the following chapter. Thus, theory and practice have alternated, even within one chapter. The structure of the story has varied; at some points theory has guided the telling and organized it, at other points, the empirical data and results of the analysis have helped to gain an understanding of the phenomenon as the target of research, and thus taken the story forward.

Now, when studying the intervention process and the results of it afterwards, I can see that both the process and the results of the intervention have been meaningful. I am conscious of course that there is always the risk of a researcher perceiving the intervention as an *ameliorative* one (see also Gherardi, 1999). Although the time span for the intervention research in this study has been quite long and evaluation data was also collected afterwards, it has been impossible for the researcher to see all the possible effects of the process, either positive or negative. The data collected during the process, however, has revealed several critical incidents and discussions, making it necessary to question an ameliorative orientation. From an ethical view, the essential challenge was to create enough dialogical space for enabling the sense making of the participatants and strengthening them in agency, and not the possible ameliorative operations of the researchers.
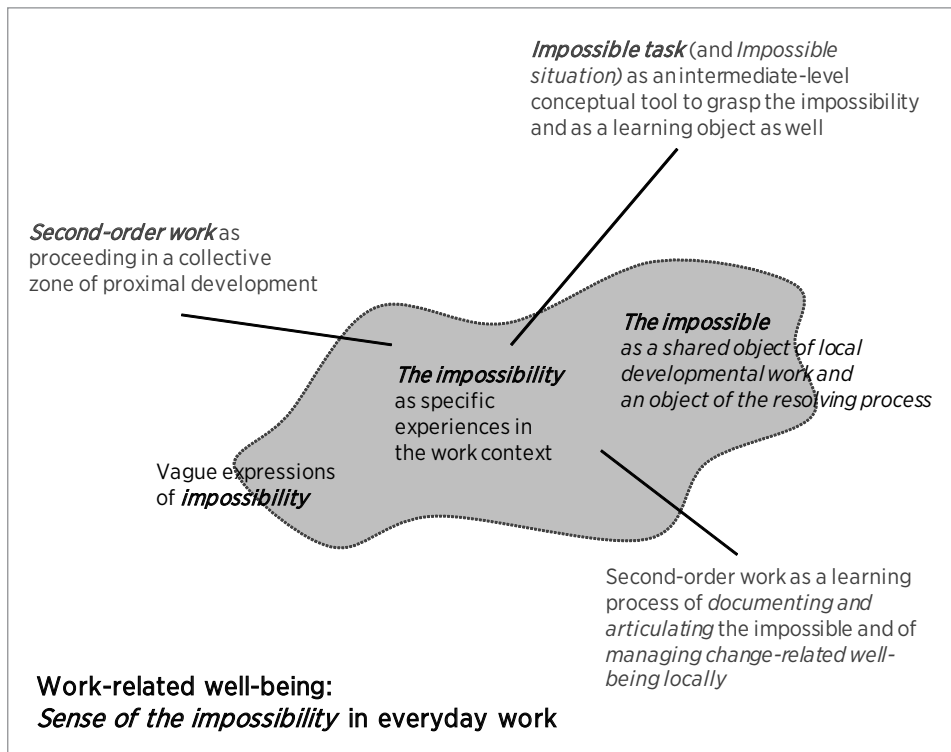
**Figure 5. Resolving the impossible as a collective zone of proximal development**

The illustration above crystallizes the central ideas in my study, that aims to bridge the consideration of changes at the macro and micro levels. The decisions and changes made at the macro level produce the work object and logic of activity for the micro level in the banking industry. Top-down changes bring with them feelings of impossibility and non-well-being, when there is a lack of tools for doing second-order work at the branch office level. Thus, there is a risk that new changes, such as new service concepts, do not reach everyday work and clients at the branch office level where multiple and even contradictory changes are taking place simultaneously.

Gradually, during the developmental intervention the Branch Office as a work community addressed impossibility. The vague talk and expressions about impossibility were transformed to a contextual understanding of the impossibility related to everyday work activity. When the work unit aimed to resolve the impossibility through local second-order work by scrutinizing and analysing the impossibility and by conceptualizing it, *the impossibility* became *the impossible* with the shared and conscious object of developmental work and a shared learning object as well.

The process of resolving the impossibility is perceived in my study as a learning process in its entirety. The concepts used to grasp the impossibility, such as the

intermediate-level concepts of an impossible task, are not ready-made concepts but instead objects of learning for the researchers and the participants. Second-order work can be seen as a learning process of documenting and articulating the impossible and of managing change-related well-being on a local level. The whole process of transcending the impossible is also a process of proceeding in *a collective zone of proximal development*.

My research has been based on the model of expansive learning created by Yrjö Engeström (1987), whose model I have used as an analytical method as well. I could have taken for basis of my research also some other models of organizational learning, when being interested in learning at collective level. Nevertheless, the starting point of my study was to understand the process of conceptualizing the impossibility and resolving it as a process of trying to identify and resolve the existing tensions and contradictions in the work activity. Therefore, the model of expansive learning based on AT and DWR manifested itself as an applicable framework taking the contradictions in the activity system as a basis for collective learning.

Also interesting would have been the well-known theory of organizational learning formulated by Argyris and Schön (1978, 1996) as a general model of organizational learning with its idea of *single-loop learning* and *double-loop learning*. An essential starting point and stimulus for learning based on their theory is the incompatibility between expected and real outcomes of an action. It would have been problematic, however, from the viewpoint of learning in the context of impossibility, to describe learning in ahistorical terms. In addition, in single-loop learning it is a question of recognizing the errors and disturbances and correcting them without questioning the basic default of activity, whereas in double-loop learning questioning is essential. The connection between single-loop learning and double-loop learning remains a bit unclear or seems to relate to the effort of an outside consultant. In the case of resolving the impossibility on the local work unit level, where second-order work and learning proved to be pivotal, the challenge for the intervention was in transcending the orientation of consultation and in creating learning space for second-order work done by the participants.

Lave and Wenger (1991; see also Wenger, 1998) formulate the idea of learning in their book *Situated Learning: Legitimate Peripheral Participation*; they perceive both individual and organizational learning as taking place in the participation in social practices. Learning is understood as situated and practice-based, which offers a fruitful background to understanding the process of resolving the impossibility; it does not, however, necessarily offer any specific analytical means. The significance of participating in the practice – both the practice of first-order work and second-order work – can not be overlooked when considering the learning process in my case. I will come back to the thematic of identity connected to participation later when discussing the potential research objects in the future, the theme of which Gherardi (e.g., 2001) has also continued further.

I will also consider briefly Nonaka and Takeuchi's (1995) model of organizational learning. a model of innovation processes, central to which is an epistemological distinction between *tacit* and *explicit knowledge* (based on the ideas originally presented by Polanyi [1967]). The idea of knowledge conversion in *knowledge spiral* might have been a useful analytical tool in my research. Explicit knowledge can be seen as knowledge that is easy to articulate and express formally and clearly. Tacit knowledge, instead, is seen as more important in creating new concepts and innovations. Tacit knowledge can be understood as personal knowledge that is embedded in individual experience and involves intangible factors such as personal belief, perspective, and the value system. Documenting and articulating impossibilities could be understood and studied from the viewpoint of tacit and explicit knowledge as a process of knowledge conversion, and as learning acts involved in it.

In his dissertation, Pihlaja (2005) has discussed in detail the theories and models of organizational learning, comparing and trying to find the distinctions between the models of Argyris and Schön, Lave and Venger, and Nonaka and Takeuchi. I also found the article written by Paavola, Lipponen and Hakkarainen (2004) stimulating because it focuses on the features in common as well.

Gherardi's (e.g. 1999, 2001, 2006) critical writings on *organizational learning* (OL) and *learning organization* (LO) have inspired my work in many ways. She proposed the term learning-in-organizing (LIO) as replacement for OL and LO. According to her, the core of LIO is in a conception of knowledge as situated, distributed, provisional, pragmatic and mediated by artifacts (Gherardi, 1999, p. 118). Gherardi's consideration of learning *as activity* and *as passivity,* as well as, bringing out the distinction between *distal* and *proximal* views of organizational learning have opened up novel viewpoints on the discussions of organizational learning.

> Learning as passivity reintroduces the body, the emotions, the affective mode of understanding, intuition, receptiveness, empathy, introspection and aesthetic understanding. [...]

> Distal thought privileges results and consequences. It highlights boundaries and divisions; hierarchy and order. By contrast, proximal though grasps processes; all that is incomplete, continuous, ambiguous, unfulfilled, partial and precarious. [...]

> Organizational Learning takes place as much in people's minds as in the social relations among them, in the oral, written and ´visual` texts which convey ideas and knowledge from one context to another. In turn, knowledge is both social and material. It is always unstable and precarious, located in time and space (local knowledge), embedded in practices, and dis-embedded (theoretical knowledge). (Gherardi, 1999, p. 110–111)

## 7.2 Conclusions on Methods

Activity Theory (AT) and Developmental Work Research (DWR) have comprised the pivotal theoretical and methodological basis for my study, which I have explored in detail in Chapter 3. Especially important have been the concepts of activity system, expansive learning and collective zone of proximal development, which have guided the preliminary understanding of the experienced impossibility. These concepts have functioned as analytical tools as well. The significance of these concepts for the study has been considered in Chapters 4–5, in the context of the analyses. From the viewpoint of studying well-being at work and analysing the endeavours of promoting well-being, this research could be described as an orientation to overcoming an individualistic approach to coping with the impossibility and, instead, as transcending the impossibility in a long-term collective and developmental way.

Concepts used somewhat metaphorically, such as the concept of trajectory, have been important tools for my writing process as well. It has, of course, been essential to define and understand the core theoretical and methodological concepts in detail and try to conceptualize them myself. However, the concepts used metaphorically have guided my work and provided insights. They have been used more or less intuitively to guide my line of thoughts, but I have not followed them slavishly (see also Gergen, 2009).

The endeavour to describe and analyse the progression of the change and the developmental intervention involved in it has been a consistent idea throughout the study and has generated the structure of the dissertation. Multiple and various data and analytical tools (see Appendix D) have been used with the aim of describing and analysing the change process at organizational and local level and the intervention for solving the change-related impossibility as a learning process. Rather than the application of a particular procedure guided by a correct universally applicable methodology, I perceive my research as a continual process of learning, which was shared with the participants during the research process and especially during the intervention (see also Mäntylä, 2007). AT and DWR were significant methodological frames as they gave a strategic role to the participants, and not merely to the researcher, in the collection and analysis of data during the research process.

I perceive the primary method of my dissertation as an application of a *historically-situated narrative* (Gergen & Gergen, 2000) or *change narrative* and *case study* (see e.g. Yin, 2003). Although I have constructed the entire narrative by using diverse single methods that included, for their part, various small narratives, I do not want to call the method meta-narrative because meta-narratives have been criticized a great deal by postmodernism (see f.e., Lyotard, 1979) for ignoring the heterogeneity or variety of human existence. On the contrary, in this case the entire narrative gives abundant space for *micro narratives* and *local narratives* (see e.g. Gergen & Gergen, 2000). The central point in the entire narrative has been

that the entire story of change and the development process have been created by using diverse single data and methods that have varied in different chapters. Each of the micro narratives in the storytelling are not merely analysed as narratives in themselves; they have taken place as part of the entire story going on. (c.f. Czarniawska, 1998, 2004)

Chapter 2 is based mainly on multiple ethnographical data (see e.g. Cicourel, 1974, 2006) such as observations, theme interviews, group interviews/discussions and *stimulated-recall type interviews* (Cicourel, 1974; Engeström, R., 1999; Engeström et al., 1990; Jokinen & Pelkonen, 1996) in which the video data of customer service situations were exploited as a basis for the interviews. The change documents were an essential part of the data as well. The stimulated-recall type interview was the most important method for picking up the talk related to the experienced impossibility. Chapters 4 and 5 are based on intervention data such as written and verbal assignments, as well as the outputs and shared discussions based on them.

In Chapter 2, the story has been constructed on the basis of data representing the critical issues related to change and change-related well-being, although this was considered from the viewpoint of the concepts of activity system and expansive learning at the end of the chapter. This meant focusing on the tensions and contradictions found in the local activity. In Chapters 4 and 5, multiple intervention data was in focus and the themes and episodes emerging from the data kept the story going. Nevertheless, the story was compressed and compromised by the core idea of the model of expansive learning. Expansion was not taken for granted, and the proceeding of the intervention was not forced on that model. However, the theoretical idea of expansive learning functioned as a theoretical mirror for examining the intervention process. Among all, that meant keeping the focus on the opportunity to perceive the customer in a qualitatively new way, and on the qualitative changes in the ways of understanding the nature of the impossibility, as well as in doing second-order work. The concrete solutions, such as the new kind of working model or the new kinds of artifacts for implementing the new model were central to the story as well. In any case, there has been much space for local interpretations of the impossibility and of the process of intervention. Consequently, it is justified to say that the entire narrative here has been built on the combination of inductive, deductive and abductive argumentation (Peirce, trans., Lång, 2001; see also Patokorpi & Ahvenainen, 2009).

### 7.2.1 Validation of Reliability

In intervention research, an essential part of reliability is constructed, or left unconstructed, in the process itself. In my study the core idea and manner of action have been multivoicedness and dialogue, which has made it possible to take into account the participants' own representations during the research process. The work community investigated received the preliminary results of the study for the

discourse material even before the intervention stage. The work community participated in the study from the very beginning of the research project, when the field research at the Branch was being planned.

The Branch Office as a target work community taking care of its busy basic business in a result-oriented way would not have been committed to the developmental project if the community had not experienced it as meaningful. Consequently, the wish and the expressions of the wish to participate in the project in order to try to resolve the problems of change-related impossibility supported the earlier research results before the intervention, which emphasized impossibility as one of the critical elements affecting work-related well-being.

In my multidiciplinary study, the main idea has been to investigate change-related well-being and to resolve critical problems in the context of the collective learning process taking place in the everyday work activity. Methodologically, it has been essential that the multiple methods have formed an entirety enabling the description and analysis of a long-term progression. Thus, it is of more significance to evaluate the success of the research precess, instead of considering the separate methods.

The aim of the specific methods was to contribute to the entire narrative. The multiple methods and resulting triangulation (Becker, 2001; Stake, 2000), together with the multivoiced manner of realizing the study, have supported reliability during the whole research process. Cooperation with research colleagues and the participants in planning the study and, partly, in data collection and analysis, has been an essential element of triangulation. Working in the research group has been an important part of my work during the whole research project and intervention, and has continued afterwards in the follow-up evaluation of my intervention. The research group has been pivotal in creating the theoretical-methodological logic of my study, as well as in cultivating its validity and reliability. My role as an actor in the research group and the group's role in helping to produce the research data and analysis have been fruitful for reliability in many ways: the analysis for Chapter 2 was partly a mutual production, while the empirical data for Chapter 6 was collected in the follow-up project. During the first two years of the research project, the participants also read all the research reports and commented on them before they were published. In this sense, *multiple voicing* (Gergen & Gergen, 2000, pp. 1028–1029) was enabled during the entire research project.

My study of the intervention and evaluation of the process afterwards generated the question of its significance, and the possibility of a wider application of the results. It is not possible to reproduce a three-year process in a comparable temporal and situational context. Therefore, it would be challenging or even impossible to create a comparative framework for this kind of study. I have aimed to describe and analyse the progress over years, which is a contribution of value when verifying the feasibility of resolving the impossible. Thus, even the intervention itself could not be reproduced. However, it can indicate road signs and *critical incidents* (Flanagan, 1954) during the developmental process and the manner

of constructing well-being as an integral part of the developmental process. In my opinion in this type of situation, in which as this, where a work unit has worked at its extreme limits of well-being, a local intervention such as this would have been worthy of existence even if the multiple elements of any success and resolution would not have been evident.

### 7.2.2 Narrative as Mediating a Novel Voice of Change-related Well-being

The developmental dissertation has aimed to narrate and mediate a voice of local change and change-related well-being. When exploring over years the change process at the local work-unit level and the process of trying to resolve the change-related impossible, it became essential to pick up and strengthen the novel voice of change as rough, non-linear and tensioned instead of straightforward implementation. The dissertation has also tried to transcend the idea of implementation when realizing and exploring the intervention process. Therefore, also the story of it has been told by using the various and multivoiced material used during the developmental intervention. Strengthening the novel voice also has been a crucial idea when exploring the process of conceptualizing the impossible as a collective and mutual endeavour of the researchers and participants. I have given order and sense to my expericience as a researcher by narrating. The way of narrating the change intervention also has built up my identity as a developmental researcher as well.

> "When people tell stories, they give order and sense to their experience and construct their own identities and those of ofhers."
>
> *(Gherardi & Poggio, 2007, p. 45)*

The entire dissertation can be understood as a story of constructing an opportunity for transcending the impossible and of proceeding on the development path, which, as a paradozical setting, has also encouraged perceiving the research narrative in a novel way. The insights of both the researcher and the participants have been siginificant.

When evaluating the external validity of my *case study* (Becker, 1992; Yin, 2003), the sense of mediating a novel voice of change and change-related well-being becomes essential. Alasuutari (1995) emphasized that the aim of qualitative research is more that of questioning the old model and expanding the understanding of a single phenomenon than generalizing the results. He higlights local explanations as the most important task of qualitative research and the significange of historical and cultural relatedness in explaining the phenomena. Engeström (1995) considers the theme of generalizing as well, and points out an opportunity to recognize the potential for new forms of activity when examining tensions and contradiction in Developmental Work Research. The inner validity of my study

has been based first and foremost on the opportunity to collect long-term and diverse data very close to the research target and to its everyday activity, which has also enabled the recording of unexpected events taking place (see Becker, 2001; see also Koistinen, 2007).

### 7.2.3  The Position of the Researcher

The opportunity and power of the researcher in intervention research lies in providing an opportunity to bring different voices into the developmental discussion. The researcher has an opportunity to enable the creation of new kinds of learning spaces in the work unit and to bring in and create new means, for developmental work. I have not considered my position as an interventionist researcher very explicitly during this thesis. Nevertheless, I have aimed to make it visible throughout the intervention process by making my voice heard as one of the voices in the intervention discussions and in assignments as well.

I have thought of power often during the intervention process. As a researcher I was not a consultant of the management; therefore I had no real power to contribute to the concept of activity or to the concept of service. Nevertheless, I could support the work community as an agency when they were creating the novel model of activity based on second-order work. In Chapters 4 and 5, I have shown what kind of power has been manifested during the intervention.

In this kind of financial organization power seems to relate to the fact that new concepts of activity and service may be and often are developed even before the earlier one has become established. From this viewpoint, the power of the researcher is often quite limited and short-term. It can be swept away easily, unless it does not realize as a competence of second-order work in long term. Management can ignore it, and it is always possible to replace the prevailing model of activity with new solutions.

In the financial sector especially, the concepts of activity have changed, and there seems to be even less interest in the realistic content of everyday work. During the last 15–20 years, management style has become increasingly fiscal-led, especially when directed by stock market prices and quarterly results. When the management is far away geographically or alienated from everyday work activity, there is a risk that the resolutions and innovations that might emerge from everyday work situations could be disregarded. This could be significant also from the viewpoint of work-related well-being, if the space for local developmental work is not enabled.

# 8 Implications and Seed Ideas for Further Study

An interesting idea for further studies would be the *interweaving of individual and collective well-being at work*. It would be absorbing to analyse how work-related well-being at the individual level and at the work-unit level would construct each other. Potential conceptual tools for that could be the concept of a zone of proximal development and a collective zone of proximal development. Interesting research questions would be: how individual and collective zones of proximal development are intertwined with each other, how that would be related to well-being at work at the individual and collective levels, and, how these conceptual tools could carry on the ideas of well-being in a change situation at work. I suggest that an integration of these individual and collective levels would be meaningful for well-being.

*Identity construction related to developmental work* would be another interesting research theme in the future. Based on my study, it seems to me that participating in the process of resolving problems, such as the impossible under scrutiny (including defining the problems and creating the tools for second-order work done locally) could construct an agency and a new kind of identity alike. The aim of a further study could be to identify the mediating tasks enabling the identity construction processes of the participants as actors and their agency involved in second-order work as locally done developmental work. This is connected to the question of "learning as becoming" (Gherardi, 1999) and of identity as fluid and malleable. The developmental intervention could be considered as itself a mediator providing opportunities to support the identity construction process of participants.

From a practice-based perspective of learning, working, learning and innovating are closely bound up with each other in a work setting, in local practices, and in the culture of those practices (Gherardi & Nicolini, 2001). Learning is rather to be understood as something that is "an integral and inseparable aspect of social practice" (Lave & Wenger, 1991) which involves the construction of identities that differ from being just a receiver ("bank employee") or a distributor ("researcher" or "developer" or "consultant") of predetermined knowledge in consulting settings. It would be assumed that individuals learn by taking part in certain practices in developmental activity, in various ways and by experimenting with, adapting and developing identities while actively taking part in these practices (Ibarra, 1999; Handley et al., 2005).

Consequently, if learning and knowing are understood "as competent participation in a practice" (Wenger, 1998, p. 137), issues of central importance are: how do the participants become members of this kind of developmental activity and its practices? Thus, the effort to learn by developing would not be concerned only with developing new ways of "knowing" and "developing", but also with understanding who the participators are and what potential they would have when do-

ing local developmental work, such as resolving "the impossible". The identities of the participating learners refer, thus, to evolving (i.e., not fixed) accounts or narratives of who the participators are (Alvesson & Willmott, 2002). The narratives (of who we are) tell about something that is constantly changing and developing. The identities are in a process of emergence, in a state of becoming (see Gherardi, 1999; Bruni & Gherardi, 2001; see also Kantola et al., forthcoming 2010).

"Emergent" refers to new meanings and values, new practices, new relationships and kinds of relationships that are continually being created (see e.g., Cohen, 2006). Emergent patterns are, however, difficult to identify. Whereas elements of the residual (traditional ways of doing certain tasks) refer to earlier social practices which are familiar and thus identifiable ("basic work" or "first-order work"), the emergent patterns may be viewed as both (partially) new and destructive of the old. The emergent is harder to understand because it (often) has no prior existence, no common sense basis, nor any socially ratified reference points. Indeed, many would not even notice it. Furthermore, the common or shared object seems to be "running away" all the time, and could be understood as an "epistemic object" (Miettinen & Virkkunen, 2005). This was shown in the analyses in Chapter 4.

During this study, I have conceptualized local developmental work by using the concept of *second-order work*. However, I am aware that the concept of *agency* (Bacchi, 2005; Davies, 1990; Ronkainen, 1999; Vehviläinen & Brunila, 2005) or *empowerment* (Bhaskar, 1989; Cummins, 1999; Rappaport, 1984; Sen, 1999; Townsend, Zapata, Rowlands, Alberti & Mercado, 1999; Zimmerman, 1984) would also serve as a fruitful basis for analysing developmental work.

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# Appendixes

## Appendix A. Original quotation used in Aknowledgements

> Työ on ollut muovailua. Toivon, ettei jälki ole kuitenkaan muovinen vaan rosoinen, hengittävä, sykähdyttäväkin. Vielä tällä hetkellä teos uinuu jonkinlaisessa "idyllissä", enkä tiedä, onko sellainen sopivaa. Jossain pinnan alla on annos kauhua.
>
> *(Railo, 2005, p. 49)*

# Appendix B. Template of the near past

Work Units between the Old and the New / Research and development project, Spring 199
**The Branch Office of Martinlaakso / The second meeting, 3 March 1999, at 5.00 - 9.00 pm.**

The template for describing the near past (and a bit for the near future). Please, consider in advance the matters mentioned in the table and the changes related to them. Write down the changes that uppermost come to your mind, for taking off in working in the second session. Consider the matters from your own viewpoint, except it is a question of the entire work unit or the organization.

| Describe the changes taken place! <br> – the most significant that come to mind <br> – please date, if possible | 1990 | 1999 | 2000 |
|---|---|---|---|
| 1. Customers <br>    – number <br>    – quality | | | |
| 2. Your own modes of action <br>    – in customer service <br>    – in planning the own work and developing it | | | |
| 3. Space, facilities, tools (systems, other tools) | | | |
| 4. The number of people in the work unit, the division of labour, the ways and means of co-operation and the subjects | | | |
| 5. The most important parners <br>    – in Leonia Bank <br>    – outside the Bank | | | |

| | | | |
|---|---|---|---|
| 6. The most important rules and instructions that effect your work (a rule is meaning the one you consider a rule yourself) | | | |
| 7. The business profit of the Branch Office/ the team and monitoring it<br>– the outputs monitored by the managers (what are measured?; how the measurements have been changed?)<br>– your own evaluation of the business results (the experience of your own accomplishments; changes in it) | | | |
| 8. Change in your well-being at work and work-ability | | | |
| 9. How have you tried to solve the impossibility so far? | | | |
| 10. How has the way of implementing changes changed?<br>– in the Organization<br>– in the Branch Office | | | |
| 11. What else important comes to your mind from the near past? | | | |

## Appendix C. The slides, 14 April 1999

**The tasks that were arranged to be done by the meeting 14 April**

1) More spesific statistics and conclusions based on them: number of customers, waiting time, rush peaks, the customers given up (N4, N6)
>> *-> unfinished, will be postponed to 21 April*

2) Clarification of customer behaviour and of the basis of service needs: MYT (see p. 57) + customer interviews (each one)
>> *-> customer inquiry in addition*

3) Benchmarking the branch office of Myyrmäki (N7: on Friday; N3: on Monday)
>> *-> left undone, will be considered mutually on 14 April*

4) Drawing of the new model of activity: the places and the division of labour & stages (N6)
>> *-> left undone, will be postponed to 21 April*

5) The new model of activity described by the triangle (the model of activity system): (N3)

# Appendix D. Table of the data and analytical tools used in the dissertation

| Chapter | Data | | Analytical tools/ concepts |
|---|---|---|---|
| | Data | Data in detail | *Theoretical-methodological concepts and tools used for the entire narrative* <br> *– The entire intervention is based on Activity Theory and Developmental Work Research as theoretical-methodological background* <br> *– Historically-situated narrative/change narrative  is the main method using multiple data and analysis throughout the empirical chapters* |
| **Chapter 1: Introduction** | | | |
| **Chapter 2: Activity-Theoretical Approach Challenges Traditional Theories and Methods of Dealing with Stress** | Interviews (theme-interviews); group discussions | Audiotaped and transcribed interviews: <br> – Interview with branch manager (14 Apr. 1997) <br> – Interviews with branch employees (8 samples) <br> – Group discussion / interview on work ability in branch (22 Apr. 1997) | *Change narrative* <br><br> *Activity systems* and *expansive learning cycle* |
| | Documents | Written documents: <br> – Field notes (16 Apr. 1997, 30 Apr. and 28 <br> – Job descriptions (20 Nov. 1996)May 1997), <br> – Job descriptions related to profit (10/1995 and 1/1997) <br> – Marketing plans (20 Dec., 15 Apr., 14 May 1997) <br> – Follow-up data on Vision at branch unit level (17 Apr. 1997) <br><br> Other documents: <br> – Descriptions of personal work history written by employees <br> – Profit targets <br> – Reports on working hours <br> – Organizational and personnel journals <br> – Annual reports | |
| | Stimulated recall–type interviews | Audiotaped and transcribed interviews (8 samples, in 3/1998) to obtain the worker's interpretations of work situations and work processes that had been videotaped earlier (9-10/1997) | *Every-day work activity* as a basis for data collection |

| | | | |
|---|---|---|---|
| Chapter 3:<br>**"The Impossible" as Providing Stimulus for Development Work** | | | |
| Chapter 4:<br>**Conceptualizing "the Impossible" in the Local Work Unit** | Intervention sessions | Audio and/or videotaped, mostly transcribed intervention meetings at: 10 Feb., (1 hour), 3 Mar. (4 hours), 18 Mar. (2 hours) and 7 Apr. 1999 (4 hours); 11 hours in total | *Epistemic object* as a theoretical concept |
| | Written documents | Written assignments and tasks related to intervention made by workers and researcher | |
| Chapter 5:<br>**Transcending "the Impossible" through Intervention: Possibility for Expansion** | Intervention sessions (audio and/or videotaped) | Audio and/or videotaped, mostly transcribed intervention meetings between February and May 1999: 10 Feb. (1 hour), 3 Mar. (4 hours), 18 Mar. (2 hours) and 7 Apr. (4 hours), 14 Apr. (1 hour), 21 Apr. (1 hour), 5 May (1 hour), 20 May (2 hours), 1 June (1 hour), 9 June (2 hours), (19 hours in total) | Idea of *expansive learning* and *a collective zone of proximal development*<br><br>*Table/Template as basis for analysing expansive learning and outcomes of the intervention* |
| | Written documents | Written assignments and tasks related to intervention by workers and researcher | |
| | Interviews | Evaluation interviews (9 samples, 21-29 Sep. 1999) | |
| Chapter 6:<br>**From Service Institution to Money-Making Listed Company: "The Impossible" in the Context of Changing Service Concepts** | Documents<br><br>Literature on the banking history of Finland | Interviews and documents | *Concept of activity and concept of service model* |
| Chapter 7:<br>**Conclusion and Contributions** | | | |