Enterprise and Work Innovation Studies

Teamwork and Gendered Work Cultures:
The Case of Finland

Riitta Lavikka (Riitta.Lavikka@uta.fi), Work Research Centre, University of Tampere, Finland

Abstract

In this article I focus on women workers' experiences of transformation from line work to team-working in Finnish clothing companies in the 1990s and also show what happened after this transformation in the clothing branch. The undertone of it is rather melancholic. Following an initial period of intensive and successful development, clothing work was moved from Finland to countries of cheap labour, such as Estonia, Latvia, Lithuania and Russia, and even China. In this type of network manufacturing, the development of modern information and communication technologies played a central role. My aim is to present the standpoint of women clothing workers in this process. The main body of the empirical data of my study consists of dialogues with clothing workers, union representatives, supervisors and managers. I also make use of my fieldwork notes, memos and research diaries from three companies over a period of five years. Furthermore, in the background lie the action research material from Scandinavian type work conferences and the survey material of an extensive mail inquiry that covered the whole branch in Finland. My own research started in 1991 as a mail inquiry and then continued as a case study in companies from 1992 to 2000, by employing action research and ethnographic methodologies.

Introduction

Finnish manufacturing companies embarked on the process of technological and organizational reform earlier than companies in Central European countries. This was prompted by[5] successive economic crises, which meant that Finnish industry had to start restructuring as early as the late 1970s and early 1980s. These crises were triggered by the first oil crisis in the 1970s, the collapse of Soviet exports, which in the late 1980s still accounted for about one third of total Finnish exports, and finally the deep economic recession of the early 1990s. At the organizational level, there was a strong business drive towards increasing internationalization. Finnish businesses took over production facilities abroad and in this way both secured their position in key markets and purchased new advanced technological expertise in their branch all over the world. The product concepts and business philosophies of these companies were customized with the help of the 'just-in-time' concept. Their units were downsized, and gradually all processes except the crucial core areas of know-how were outsourced to subcontractors and system suppliers. Profit centres were formed around these core processes.

At the workplace level, organizational thinning was supported with the ideas of flexible and lean organization, the multi-skilling of workers, team-working at the shop-floor level and projects at higher hierarchical levels. The first teams or cells, as they were called, were introduced in the early 1980s in the engineering industry. In the clothing industry as well, team-working started relatively early in the latter part of the 1980s. Today, if one were to identify a 'Leitbild' for the development of Finnish industry, perhaps the leading image for organization and management in Finland would be 'process organization' or 'process management' (Alasoini 1999).

Designing or engineering cultures have been less important to Finnish business companies than seems to have been the case in some other countries (see pp.15-16, Kunda 1992, Casey 1995, Hochscild 1997, Sennet 1998). Finnish expertise has traditionally relied heavily on the knowledge of production and knowledge of technology, and the development from mass production to flexible production has proceeded from this perspective. The cultural sphere is something that has followed and sometimes painfully lagged behind technological and organizational changes (Kortteinen 1992, Niemelä 1996, Lavikka 1997, Kevätsalo 1999).

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[5] Manuel Castells and Pekka Himanen (2001, p. 141), however, remark that people in Finland have traditionally shown exceptional technology enthusiasm because of the harsh climate and sparse population, which have forced them to turn to technology in order to find sources of subsistence.

The garment industry as an 'avant garde'

I begin by describing the context of the Finnish clothing industry and its urgent need for flexibility to match its short series production. I then proceed to the cultural codes of women workers' work culture and demonstrate their homology with the economic rationale in business companies and their importance to the success of team-working. Finally, I turn to the present situation and look at it from the female worker's perspective, addressing the following question: What does a female worker think and feel when saying goodbye to her life's work in the branch?

Why then does the clothing industry present such an interesting research case? After all, it is no longer particularly important to the Finnish national economy, indeed, in employment terms it has become quite marginal. In the 1980s, there were about 48,000 people working for the clothing industry. In 2001, the whole clothing industry in Finland employed no more than around 4,300 people, some 2,900 of whom were shop floor workers. This figure includes workplaces with at least five employees. (Textile Industry Statistics 1984, 2001, 24)

The 1990s saw a fundamental transformation in the economic, political and social structures of advanced capitalist societies. Fordist production models based on mass production and mass consumption were superseded by a post-Fordist production pattern called flexible specialization. This meant that business firms concentrated on their strongest areas of know-how in design and manufacturing, but at the same time produced the widest possible range of individual models for their customers.

Economic growth also involves a trend towards growing reflexivity, or 'reflexive accumulation'. One of the principal forms of reflexive accumulation is that production is increasingly grounded in discursive knowledge. The distinctive characteristics of the clothing industry make it a good example of flexibility in industry. It is a kind of industrial 'avant-garde' of post-Fordism, clearly reflecting the change in people's way of life. The clothing industry also has some other advantages in building global, flexible strategies. Compared to heavy industries, it requires only very little capital investment. Its production machinery is relatively lightweight, which means that it is easy to transport from one country to another, if necessary. Its materials and products are also light. And what is more, all over the world there is an abundant supply of cheap female labour for the different needs of the clothing industry, both for low price mass production in Third World countries and for expensive quality production in advanced industrial countries. The concept of mixed production can be seen to be based on this resource. (Mitter 1986)

The clothing industry is better placed than other industrial branches to operate in the global market and to make use of global networks. Current fashions tend to be similar all over the world, which means that the same products can be marketed anywhere and everywhere. For reasons of competitiveness, the clothing industry makes effective use of cheap labour, information technology and also the most modern innovations in work organizations.

Over the past few years, many Finnish clothing companies have spread the industrial process of garment production to different parts of the world. Usually the division of labour between domestic production and foreign subcontracting means that only model production and immediate deliveries are retained in Finland, while larger batches with less pressing delivery dates are produced abroad. A medium-sized Finnish clothing company, for instance, might have its assembly production in Estonia, Latvia, Lithuania, Russia, Turkey, or China. The design and finishing of garments usually remain in Finland. During the past decade outsourcing by the Finnish clothing industry has increased very rapidly in the Baltic countries and Russia (Lavikka 1992; Lavikka, Teder and Varendi 1994)

The clothing industry lives off fashion, off people's desires and their way of life. For the clothing industry, new fashion trends mean new products that will sell and give the industry a profit. It has to fit together two highly conflicting aspects, the ever-changing products and the industrial production process. It has to be able to produce even a one-piece batch with industrial efficiency and yield profit. One way of doing this, it seems, is to create a manufacturing organization that is based on autonomous, reflexive teams of women workers in Finland and take longer batches abroad for assembly in cheap labour countries (Banke 1991; Wyatt 1988).

Flexibility: What does it mean in clothing companies?

In the situation today, it seems that the rationale of survival for Finnish clothing companies is captured in the requirement of flexibility and cost-effectiveness. This is associated with rapid changes in fashions, with consumers' individual and varying styles.

Demand for individual products is reflected in the growth of small batch production, in faster turnover of production lines and mounting pressure to ever shorter throughput times. The crucial aspect in striving towards flexibility in clothing production is thus work organization. Post-Fordist flexible specialization requires autonomous teams to substitute rigid line working to be able to respond to market demands.

At the operational level, flexible production means control over chaos. Expanding and ever more short-lived production ranges increase the number of variables at all stages of production, and companies take onboard sophisticated information technology to control these variables. Going international in production and implementing the JIT idea also cause increased pressure here. Purchases of raw material and accessories must be optimized or limited to the items necessary in the production of the batch ordered. The materials and accessories also need to reach their production points possibly in different parts of the world – at exactly the right time so that the orders can be met as agreed with the customers. (Dubois 1992.)

It is said that teamwork enriches the job of the industrial seamstress and makes it more autonomous, demanding and diverse. However, another key dimension in the new way of working is that direct overseeing and supervision are replaced by more indirect forms of controlling performance indicators, peer control and employee commitment to performance standards. The dimension of quick-response customer service that is present in teamworking can also be seen as a new form of control. Indeed it can be argued that the whole framework of control shifts from external control to situational, collective and personal choices by employees. This form of control is called 'info-normative' (Frenkel, Korczynski and Shire 1995, 774).

The trend away from routine work towards more creative, information and people-focused activity involving intellective and social skills is associated with higher levels of ambiguity and uncertainty. Frenkel, Koeczynski and Shire (ibid.) associate this trend with value-added innovation rather than cost-reduction strategies in the clothing industry. However, it can be argued that this trend is also evident in women's work in the clothing industry, which is traditionally understood as involving routine tasks with a low information content and skill level.

Theorizing on teamwork seems to lack an understanding of shop floor work culture, which I consider to be a crucial factor in team-working. To me it is important to stress the gendered nature of these cultures: the sex of the employees really does matter in this context. The change in work organization also calls for a change from resistance to trust in work culture.

Good flexibility and bad flexibility

The sociology of work offers several different approaches to the concept of flexibility. There is, first, the notion of cultural transformation to the strategy of permanent innovation (Piore and Sabel 1984). The concept of flexibility can also refer to dimensions with different time perspectives of flexible production at the strategic, operational and shop floor levels of a company (Yilmaz and Davies 1987, cited in Vuori and Ylä-Anttila 1989). Furthermore, there are the flexible manpower strategies of functional, numerical and financial flexibility, which have also met with some sharp criticism (Atkinson 1984; NEDO report 1986; Pollert 1989, 1991). A heuristic tool for these approaches is provided by the notion of 'reflexive production' as introduced by Scott Lash and John Urry: it comprises production functions such as conceptualization, decision making, planning, responsibility taking, risk taking, information processing, control and monitoring, which are increasingly connected to the shop floor labour process (Lash and Urry 1994). All these different approaches are, in my opinion, intertwined with the multifaceted flexibility of the Finnish clothing industry.

Piore and Sabel's concept of flexible specialization refers to a strategy of permanent innovation, which allows business firms to adapt to constant change. Adaptation is indeed what businesses

need to do rather than try to control change. Piore and Sabel stress that this strategy calls for cultural change in the business enterprise in favour of innovation. In addition to a change in company culture, they maintain that this strategy requires a multi-skilled labour force and multi-use equipment. (Piore and Sabel 1984, 17.)

Yilmaz and Davis say that flexibility in production is the ability of the production system to respond to the changing demands of the business environment and the production process. They distinguish between different kinds of flexibility, viz. instant flexibility, delayed flexibility and long-term flexibility. Operational flexibility in production has to have all these qualities (Yilmaz and Davis 1987; Vuori and Ylä-Anttila 1989, 69).

Instant flexibility in production means the ability to resolve daily problems. Delayed flexibility may mean the ability to adapt to the manufacture of different products and rapidly changing models. Long-term flexibility, then, means the ability of a production system to adapt to changes in the direction of production in response to changes in demand (ibid.). To be able to function flexibly with all these dimensions, the system needs both individual and collective reflexivity that takes place within teams, between units of production, between employees and the firm, and between customers and the firm (Lash and Urry 1994, 63).

Flexible firms need new labour force strategies and new systems of working. According to John Atkinson, the three main forms of labour force flexibility are functional flexibility, numerical flexibility and financial flexibility (Atkinson 1984; NEDO report 1986).

By functional flexibility Atkinson refers to a way of working where multi-skilled employees can move quickly and smoothly between activities and tasks. As products and production methods change, functional flexibility implies that the same labour force changes accordingly, both in the short and medium run. A rapid learning curve among operators is essential in developing the problem-solving skills that are needed in responding to changes in production. But how can this functional flexibility for a production system be created? This requires a different perspective than that adopted by Atkinson, one in which the emphasis is on human and cultural aspects.

Numerical flexibility is sought, Atkinson writes, so that headcount can be quickly and easily increased or decreased in line with even short-term changes in the level of demand for labour. Workers are employed or laid off following changes in the quantity of production. For workers, this mode of flexibility means living with permanent contingency, with temporary employment, with lay offs and dismissals (ibid.).

The third form of business flexibility, i.e. financial flexibility, is based on the aim of hiring labour as cheaply as possible by searching the cheapest labour skilful enough to perform the required work either at home or abroad. (Atkinson 1984; NEDO report 1986.) For a clothing company, numerical and financial flexibility mean global and local strategies, such as building networks for outward processing and/or local subcontracting chains (See Phizacklea 1990 and Mitter 1992). Financial flexibility can also mean flexibility of wages. The Finnish Employers' Organization, for instance, has pursued a general agreement that would allow wages to be increased or reduced according to the firm's financial situation (Pohjola 1988).

There has been a lot of critical discussion on Atkinson's model of labour strategy in a flexible enterprise, where it is mainly the core group of male workers that enjoys the benefits of operational flexibility, i.e. enhanced skills and enriched work. The secondary worker groups outside this core are condemned under the strategy of quantitative flexibility, e.g. temporary employment and part-time work. Strategies on orbits still further removed from the core group are subcontracting at home or abroad, self-employment, labour leasing and other non-fixed employment strategies.

Anna Pollert and other critics say that this controversial model of flexible manpower strategies should be abandoned, accusing it of unjustified meta-generalizations and one-dimensional determinism: it lacks a sufficient empirical base in both the private and public spheres of working life. Pollert also goes on to argue that the flexibility strategy is merely super exploitation of workers on insecure contracts (Pollert 1988; Pollert 1991).

Because of the downside of flexible specialization – unemployment, income polarization and the fragmentation of the labour movement – flexible production is thought to adversely affect women's interests. For instance, the growth of part-time work among women can be seen as a form of

numerical flexibility. However, post-Fordism with its different flexibilities is seen as a gender-neutral employment system, but the terrain of working life is highly gendered and that is why the outcomes are not positive for women (Walby 1989; Walby 1992; Jenson 1989).

In the light of my material, however, operational, or to follow Atkinson,'functional' flexibility, in production might in fact also offer some benefits for female workers in the clothing industry, such as a more skilled and more meaningful way of working. These positive effects are not immediately apparent, however, and even if a mode of flexible work organization, i.e. teamworking, may help to resolve the problems of monotony in line working, it may raise a number of new problems. Above all, clothing workers may find that they have no job at all after they have finally got themselves a meaningful job.

From humanization of work to improvement of productivity

As Anna Pollert (1988, 1991) emphasizes in her critique of the 'novelty' of flexible strategies, flexible work organizations or autonomous teams are not in fact innovations of the 1980s or the 1990s. As early as the 1960s and 1970s, an active movement of researchers known as socio-technicians developed a theory concerning social and technical systems in industry. Centred around the Tavistock Institute of Human Relations in Britain, the movement pursued the idea of humanization in an attempt to make work more human and less monotonous. In the United States, the school of human relations made a distinction between the formal (or mechanic) and informal (or organic) dimensions of work organization. Job rotation, job enlargement, job enrichment and autonomous work groups were introduced by both movements as new work-design techniques to improve working conditions in Taylorized line working. The main focus was on responding to the needs of workers (Thorsrud and Emery 1971; Buchanan 1987, 40–44; Julkunen 1987, 37; Kasvio 1990, 87–97).

In spite of the popularity of these ideas of humanization among researchers, they did not gain a very strong foothold in the industry at the time. However, the Tavistock and human relations approaches and the humanization of work movement did inspire a number of interesting experiments. For instance, the successful cases of General Foods in Topeka and General Motors in Lordstown in the USA, Volvo Calmar car assembly in Sweden and the Hunsfoss paper mill in Norway became widely known. First in Norway and later in Sweden and in Germany, there were national programmes aimed at improving the quality of working life (Thorsrud and Emery 1971; Julkunen 1987; Kasvio 1990).

David Buchanan claims that the tidy accounts that were written after these events hide the hard work that made them happen. The same applies to the fact that even during these first experiments, the interest of management in developing new forms of work organization was sharply focused on the commercial end, on productivity and profitability. The renewed interest in autonomous team working in the 1990s, Buchanan says, is based on technological and strategic factors in enterprises searching for better productivity in their post-Fordist production (Buchanan 1987).

Raija Julkunen agrees with Buchanan and says that the early researchers, concentrating their argumentation on the psychological needs of workers and on their motivation, may even have given a distorted picture of what can be achieved by the new modes of organization. The importance of early social research on autonomous work organizations, Julkunen continues, lies in two main points: The research made visible the process of planning work in a situation where work was still organized on the basis of the remnants of technological solutions. Second, this research also proved that there were different ways of organizing work on a certain level of mechanization (Julkunen 1987, 64–65).

It is important that the early movement for the humanization of work revealed the difference and contradiction between the formal Tayloristic work organization based on narrowly understood economic rationality and the informal human side of the work process which is concentrated on people's sociability, cultural codes and emotions. The first, classic field research at the Western Electric Company known as the Hawthorne study (Roethlisberger, Dickson and Wright 1949, 567), which analyzed the interplay of the technical and social organization of the industrial plant, came to the conclusion that the worker's social codes, customs, and routines could not be

accommodated to the technical innovations introduced as quickly as the innovations themselves, in the forms of machines and processes, were created. "The codes, customs, and traditions of the worker are not the product of logic but are based on deeply rooted sentiments". The investigators argued that human collaboration and effective work relations were not possible without basic codes or conventions. However, the one thing they failed recognize and point out was that most of the shop floor people they had studied were women, and that the codes and conventions guiding their behaviour might be gender specific (Acker and Van Houten 1974).

The case of the clothing worker: "I feel like a killed worm…"

My case company is one of the biggest and most modern clothing companies in Finland, with a history dating back to the beginning of the twentieth century. It has earned a good reputation both for its products and its employment policy (no casual labour, full-time contracts and unionized personnel). Its brand names and trademarks are associated by domestic customers with quality, patriotism and export success. A lot has changed in the company over the years that I have been visiting it. Its former production system was a textbook example of Taylorized mass production and long batches well suited to line working. A good pieceworker could earn a decent pay in an extremely well-organized and polished line-work system using electronic conveyors.

From the mid-1980s, the company was forced to give up line working as the mass markets gave way to more individual demands. After a stage of experimenting and piloting, teams were established around the turn of the 1980s and 1990s. Other organizational and technological changes have since followed this change of work organization. The whole business was re-organized in the early 1990s, with seven independent profit centres organized around their own designs and brand names. Administration and production functions were set up as two separate service centres supporting the profit centres.

Cindy (name changed), a seamstress at the clothing company, is a woman in her fifties. I had met her earlier, talking about her experiences of the early steps towards team working in the company. We now met in a strained situation: the company had informed its workers of major lay-offs scheduled for a few months ahead, but no names had as yet been announced. Cindy and I are about the same age: 'big sisters' born in large post-war families in the Finnish countryside, who left home to study and to work, then became working mothers, and finally working grandmothers. We belong to the same generation and our life courses have taken the same direction but different turns. Cindy has worked for the company ever since 1969. At about that time, I started my studies at the university. Cindy's career has proceeded from sewing one straight seam of trousers (an operation lasting a few seconds) to working as a member of a production team and to acquiring the multiple sewing skills needed in teams, and then to sewing entire model garments for marketing purposes in a model-team. Working in a model team is a highly demanding position, the pinnacle of a seamstress's career. My life has taken me to university to do academic research and to write a doctoral dissertation in the sociology of work. Our mutual interest over these years has been in factory work, the last ten years in teamworking. Factory work and its transformation is the everyday context of Cindy's work and life; for me it is a research theme.

I met Cindy in the union representative's small office just around the corner from the sewing hall. We had some privacy, although the hum of the factory was still there to be heard. When we met for the first time some ten years ago, there were a total of around 600 seamstresses; now, the number was down to 80. After we had exchanged greetings, Cindy told me how she now felt about her work:

"It's perhaps this situation... When people are under strain like we are in the hectic piece work, you often find they can't take much more. We've had a tough time in the production teams lately. We can't take much more of this; there is very much a sense that 'this is the last straw'. After my shift I've felt like a killed worm. On my way home I have to take many deep sighs to get rid of the weariness in me in order not to bring it home. At home they're not responsible for how I feel … As you know, negotiations are now ongoing about redundancies. We believe that in a month's time we'll be given the names of those who'll be laid off. I suspect that my name will be on that list as an over-aged worker. They have not yet told us the exact numbers, but usually the cuts have been quite heavy… A lot of production has already been moved abroad in search of cheaper workers, they do not need us here any more."

Even though I knew about the threat of redundancy hanging over the workers' heads, I was rather surprised by how low Cindy was feeling. What was happening in the company? In the last eight-nine years, the company had re-engineered its business and work organization in several waves. News about forthcoming redundancies is always sudden. People are frightened, but they do not somehow completely lose their optimism. I also remembered Cindy as a cheerful woman, indeed as rather enthusiastic about team work with all the new challenges it involved.

Cindy's job includes all the different operations and tasks involved in sewing several types of quality garments that belong to one of the company's brand names. The team does the assembly work on a garment. They get the cuttings and special instructions for the garment, including the standard times for operations, in a bunch of papers, and then are responsible for all the rest. They book the machines, make sure the necessary threads and other accessories are in supply, and generally organize their work. They are also responsible for the quality of the garments and repairing any mistakes. Besides the sewing operation, Cindy also has specialized in dealing with technical problems with several types of machines (about 13 different ones) that they use in the team and in programming embroidering machines. After more than ten years in Taylorized linework and performing one very short operation at a piece work pace, the transition to teamwork was an enormous challenge for her:

"I remember having nightmares. I thought I'd never learn it all, but still I did. It took just one month before working in a team started to feel like normal. I was lucky to have a very skilful person on my team who had worked in model sewing for a long time. She was a great teacher."

The social aspects of team work are crucial. Cindy tells me about the good co-operation they have in their team, and indeed with other teams. People ask and give advice, help one another. They have also learned that a friendly attitude makes team work more fluent:

"We've learned to appreciate others and to communicate among ourselves. Clearly our ability and need for communication has increased at work. If you're angry and hostile, it'll backfire sooner or later. If you ask somebody to put right a mistake she's made, you have to do it in a friendly way; you can't accuse or mock her. That way you get the work back sooner. A strained person can't put up with very much."

The change from monotonous line working to teams has also had an effect on Cindy's life outside work:

"In ten years I've changed my way of life altogether. I've practically turned everything around. And I see that I feel much better now than ten years ago, even if I'm ten years older. A more meaningful and variable job does not wear you out so much physically or mentally. It was the monotony of line work that used to cause permanent injuries to people. Since starting teamworking, I've also learned to think more highly of myself. I have the strength to exercise, to go dancing and to take care of myself in other ways in my free time. All this helps me to cope with the pressures at work."

When we talked about teamworking, Cindy's voice became livelier, and I saw a glimpse of her old happy self:

"Working on the team is really variable and interesting. And I must admit that I like it. I like challenges. But then, when I finally started to like our job, it seemed that it was being taken away from us."

Still, there is pressure and strain in teams as well. The company has not abandoned the stressful piecework system but developed a version whereby the total number of garments completed by a team is divided among its members as a basis for their pay. The pay system is based on standard times of operations. From Cindy's point of view, there is no need for the control that is involved in piece work:

"We're working just as diligently, carefully and effectively on an hourly basis as in piece work. The pace of work is the same. There's no difference. The only difference is that the stress of piecework drops out in an hourly payment system. You don't need to think all the time about how we are doing financially. It's our thinking that of course we do our best in hourly work, too, of course we do the work we are paid for. But perhaps those who are in favour of piece work think that we're tempted to start to slow down after all."

Piecework is not the only source of stress in the seamstress's job. Sometimes 'just in time' creates extremely busy situations in teams:

"This week we've been doing ten-hour days because the company's running late with its models. And we have to complete them before we can start our summer holidays. Sometimes a bunch of cuttings comes to the sewing team and we have only a couple hours to complete the job. Sometimes the guy's there, sitting in his car, waiting for the models from us. That really piles on the pressure."

ICT-mediated network

In the course of my fieldwork, I gradually came to gain a clearer understanding of the company's current situation. It was not at all as serious from the company's business point of view as it was from the workers' point of view, feeling as they were the threat of unemployment. Mainly what was happening was that the company was relocating more and more of its production abroad to strengthen its price competitiveness in the markets. Its order books had shrunk slightly during the previous season, and this was a compensatory step in the company's competitiveness game. What made Cindy feel so desperate was that she could no longer see any future for herself or for other seamstresses in the company, even if they could further improve their working practices. It used to be the perspective of saving their jobs that had encouraged them to strive to be more flexible and to acquire more skills. This perspective, it seemed, had now vanished into thin air. This latest turn in developments had meant that the industrial occupation of seamstress was no longer very much in demand at the company's Finnish sites. The jobs that were expected to remain were a few seamstresses here and there for the needs of flexible customer service and to assist in design. Even at the outset of the research project (1991-2000), most people employed by the company were in white-collar jobs, such as engineers, technicians, designers, and marketing people, and it seemed that this trend was now continuing.

In the past ten years the company has seen constant changes in its business strategy and a downsizing of domestic production. Hundreds of production workers have been made redundant in Finland, while production has been subcontracted to cheap labour countries such as Russia, China and the Baltic countries. The majority of those who have had to leave have been middle-aged seamstresses. They have found only very few job opportunities in the labour market, where skills requirements are completely different from those of the former seamstress who had no formal education or other vocational training other than their long work experience in the sewing room.

Today, instead of running an excellent production unit at its main site, the number one issue for the company both strategically and operationally is ICT. A unique, integrated ICT system has been developed for the company's operation and its co-operation with suppliers. The company's production nowadays is carried out in a network of production units dispersed across many countries on two continents. The company operates in a volatile marketplace with extremely fast-changing and variable production and with a mixed production concept. The network organization is composed of several profit centres together with a network of suppliers, subcontractors and customers. The key question for the company is how to guarantee the required level of certainty in the network operation. A smooth flow of information is considered to be one of the key assets here.

Good social skills, good knowledge of the company's own business and networked production system, and good ICT skills, in this order, are considered most important for company personnel. ICT skills are understood as skills that can be quickly taught and learned, while the skills of the other two groups develop much more slowly and require much more effort. All people who use ICT in the company (except the seamstresses) are trained on a continuous basis. However, it also requires an individual effort on the part of the workers to keep their skills up-to-date. Competence in ICT is considered an individual qualification that each individual is expected to maintain on his/her own initiative. For the time being, however, workers in sewing teams have only a marginal need for ICT. In a teamwork organization, social skills are more crucial in deploying other types of skills both in the office and on the shop floor.

One of the ways in which ICT affects seamstresses is through a deck of cards connected to the real-time production management system. Each seamstress has several plastic cards with a magnetic band containing different types of information in the form of a bar code, which one has to remember to feed into the system by swiping the card through an electronic reader. Cindy explained:

"We all have a personal electric card. For instance, in a production team, each member first has to svipe her personal card and, finally, a team card. For a lunch break, I have to pull out my card, and after mu lunch break, first my personal card and then the other cards in the same order again. For hourly pay you have a different card, for the inspection of products there is still another card. Put together, these cards add up to quite a thick deck."

The cards are used to gather information for purposes of determining pay, but also for product throughput – each product has its own bar code – and for controlling and monitoring the work process. The card system allows the company to make sure that the work process is as transparent as possible. On a bad day, there is no place for the worker to hide, and if there is a problem in production, it can be quickly traced.

The autonomy of workers in teams is strictly limited to the flexible organization of assembly work among them and to orienting themselves to the attainment of the team target. Department-level organization of the workflow is in the hands of a supervisor, whose job is no longer the immediate and close foremanship of workers – these tasks are now taken care of by the workers themselves. The supervisor also has a PC for feeding in and checking information. One of the supervisors' new tasks is with the help of PC summaries and background information to produce reports on the achievements of her department for production management. Cindy's comments on the role of her supervisor underline the importance of mediating this information:

"If there is a problem with the model and we need to talk to the designer, for instance, then it is the supervisor whose job it is to address this problem. We rarely need her on the team at all nowadays."

The echo of new culture

The management culture and work climate in the company are traditionally known as 'fair'. This was the main reason why Cindy, like many others, has enjoyed working there for 29 years now. So how does this fairness show? Cindy stresses the importance of an open and free company climate in which hierarchies do not matter in everyday interaction:

"When I started here in 1969, I came from another clothing company. I was quite amazed at first by the open and equal atmosphere. Everyone, including the bosses, was called by their first names; even the CEO is Perry (name changed) to everyone… You can talk freely with anyone in the company's lunch cafeteria. Bosses and workers sit side by side, eat the same food, tell jokes and laugh together. It's like all of us are equal and appreciated in the same way. I've liked it here. This is a good company compared to the two others where I was employed before starting here. In the other workplaces the bosses were like semi-gods. You felt as if you had to bow and take off your cap in front of them, even if you weren't wearing a cap."

Cindy is not blind to the rude side of company politics dictating that people having served the company well for decades are ruthlessly laid off. After several waves of downsizing in Finland, she has grown used to the tough and cruel rules of the game that have been felt throughout the shrinking clothing industry in Finland over the past ten years.

A new 'American' business culture has struck root in the company with its rhetoric of arguing for flexibility and a committed work orientation. I heard its echoes when I talked with Cindy about the ideal types of foreman and worker, and about how these types have changed over time:

"The boss should have the courage to make independent decisions. If there's a tough problem with how to make ends meet, it should be the boss who makes the call and takes the responsibility. And she should be fair. Well, I'm lucky because I actually have never had a really bad boss. As to the ideal worker…the boss says that a seamstress should be able to cope with stress.

And of course the boss says the worker has to be hard-working and flexible, so flexible that she can do ten-hour days whenever asked to, and perform all the operations and do so quickly. A seamstress must not talk. This is the employer's wish… I think that to some extent we are in fact ideal workers. We are flexible, we are prepared to be flexible in pressing situations, such as this one in which the models were late. Each one of us has bent over backwards.

And we've all been in very good health… in that sense, too, we are good workers. And we have good skills and we're hard-working… But that we shouldn't talk to each other, that I can't agree with. I feel silly just sitting there quietly and sewing, not talking to anyone. Some of us live alone, and have nobody to talk to at home. I myself couldn't bear just having to sit there quietly. And we don't; we talk about 'The Bold and the Beautiful' and about stuff we have on our minds."

Cindy seems to have kept her character intact, despite her long career as a team worker. She knows where to draw the line, what is sensible in the management's demands, from her and her work mates' point of view. Perhaps it is the fact that her position on the shop floor is becoming marginal that gives her a clearer insight into the organization's policy and prevents her from giving up her autonomy in the sense of 'corrosion of character' (Sennet 1998).

On the other hand, Cindy's female boss, who for Cindy personifies management policy, seemed to have adopted the new culture's rhetoric of commitment and responsibility. Cindy did not agree with her:

"It's our boss's opinion that you should put everything else in your life second after work, even your private life. You should eliminate all possible disturbances that might interfere with your work. Your job's most important of all. I'm positive that this is not going to work. Everyone has personal things that sometimes mean they have to be absent from work. Yet the aim of our boss is to inspire a one hundred percent commitment among us… It's really hard on those people who still have small children at home. And the family and household matter to everyone. It's not right to demand that you should devote yourself to work and nothing else."

In the course of my fieldwork I also talked to Cindy's boss, who is a working mother of two children in her early thirties. I discovered that Cindy's description of her opinions was valid and accurate. The boss of the sewing department seemed to have adopted the flexibility ideology quite literally and uncritically and tried to organize not only the sewing department but also her own private life according to its principles. She was currently taking evening courses on management and ICT after a full day's work in the factory. When I wondered what her children thought of the mother's absence, she answered me cheerfully:

"*The children learn that it is work that is the most important thing in my life. They get used to it.*"

I think that she was a bit disappointed because I did not applaud her for this ideology. Instead, I felt sorry for her.

The company's survival game

The pressures of global competition can be seen in the company on several fronts: technological, organizational and cultural. Changes in the business environment – such as the demand for flexibility in new capitalism – provide the catalyst for both organizational and technical reforms in the company. The company was an early adopter of ICT and LAN, and it has also made use of the Internet and EDI for a long time. The company organization underwent several transformations during the 1980s and 1990s along with changes in the company's business environment. It is now striving to modernize its ten-year-old ICT system to develop an integrated system to fit in with its international networking. The first (automation), second (isolated systems) and third (integrated system) waves of ADP and ICT development characterize the technical development in the clothing company.

The challenges presented to the company's integrated ICT system are extremely demanding. ICT is needed in managing the information flows of the company's constantly changing production. It is the company's aim to get all relevant logistics information into a digital format as early as possible to cut costs and simplify the management of information flows. ICT is used whenever and wherever possible. The only problem is that the company's main production sites in Russia and the Baltic countries are very traditional factories and lack an ICT infrastructure. Therefore the conventional communication media (telephone, fax) are used for purposes of communication together with regular face-to-face contacts to co-ordinate and control quality and the timetable of subcontracted production. Even if all this does cause considerable stress for the people in charge, cutting costs is so important to the company that it will not consider moving its production back to Finland and its Finnish partners that have a good ICT infrastructure.

Besides flexibility, some rigidity is also needed in the company. In the management of information flows on the constantly changing production, it is crucial that there are strict rules and procedures in place to control the accuracy and reliability of the information. To avoid chaos, these rules and procedures have to be closely adhered to in the same way wherever information is fed into the system and where changes are made or mistakes corrected. There needs to be a hierarchy of access in the system, a system of different codes for different people with different degrees of authority in the company. The system is highly centralized; Foucault's 'Panopticon' has here been transformed into an electronic format. Still, ICT does not seem to have replaced face-to-face interaction, communication or meetings in the company, although it is used to deliver background information, calls, messages and notes, for example, to the people participating in these meetings and discussions. In horizontal and vertical teams, people need to have close face-to-face contacts to co-operate and manage the good social climate that is considered crucial for a well-functioning team. This cannot be achieved by means of ICT alone. The relationship between ICT and culture

might even be quite the opposite in the company, with the company culture and work cultures affecting the practices of ICT use. Rather than depending on ICT, cultural change in this case depends on the ideology of commitment that is making its way into the company following the new flexible dynamics of operation.

On the flipside of the survival game, there is always somebody that has to lose out. The fact that internal and external means of coping with occupational and market changes have been put into use in the company has to do with its exclusive concern with business goals. It is not in the company's interests to avoid exposure to social exclusion or to promote inclusion. It is not company policy to bear any responsibility for the exclusion/inclusion of the people for whom it no longer has any need. What happens to them after redundancy is considered to be the sole responsibility of the welfare state, the labour markets and the workers themselves. Rounding up my discussion with Cindy, I still asked her to name the biggest change that had had the greatest impact on workers' everyday life in the company:

"The biggest change is the threat of unemployment. Downsizing has been going on for almost ten years now. People have been sacked or made temporarily redundant. This is such a …sad thing; it has affected all of us. Even though I've been able to stay on this long after so many hundreds of people have been laid off, it hurts every time when things like this happen. It is a terrible source of stress to every one of us, even for those who can stay on. It's not easy. When we have worked together for years, even for decades, it's unbearable to see some of us having to go. And now it's hopeless to try and find a new job. That is… we are now waiting for the news on whose turn it is this time."

The personal experience of workers is crucial in dealing with this dilemma of flexibility, yet very often it has been completely overlooked. A type of flexibility is needed that takes account of the needs of operators to secure jobs in exchange for their responsible and flexible working in teams. To develop their work, they need to understand and be able to analyze their work as a part of the whole business concept which is based on their input as well as on the cheap labour of their colleagues abroad.

It is time now to revisit the once abandoned ideas of 'humanization of work movement' and to see whether it would be possible to develop a mode of flexibility on a global scale that would allow workers in teams to get more closely and personally involved in developing their work and the whole organization along the lines dreamt about by the idealists of the humanization of work movement in the 1960s and 1970s.

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